MARCIO AUGUSTO PEREIRA DA SILVA CAMPOS

DIGITAL ECONOMY AND INTERNATIONAL TAXATION

The digital revolution and its impact on the discourse of international tax law.

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Supervisors: Valcir Gassen and Daniel Gutmann.

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DEDICATION

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CITATION

On me demandera si je suis prince ou législateur pour écrire sur la Politique ? Je réponds que non, et que c'est pour cela que j'écris sur la Politique. Si j'étais prince ou législateur, je ne perdrais pas mon temps à dire ce qu'il faut faire ; je le ferais, ou je me tairais.

Jean-Jacques Rousseau

ABSTRACT

The impacts of the economy's digitalisation process on taxation have become the central theme of international tax law in recent years, causing several reactions among actors in this field. The OECD has become the main forum for debate, causing government bodies, taxpayers, and academia to gravitate around the organisation's texts. Nonetheless, the digital economy tax debate has constantly changed, taking on new languages and adopting different perspectives. From a formal legal discussion concerned with characterising payments to apply international tax treaties, the debate moved to an economic perspective involving substance. Finally, it took on a manifest political connotation, resulting in a re-discussion of the international tax field itself. This thesis aims to understand how and why the digitalisation of the economy managed to impact the fundamentals that support the international tax field.

The work adopts a legal, realistic, and discursive perspective to achieve its objective, understanding international tax law as a field formed from historically identifiable events. In this case, while a social phenomenon, international taxation is the central object of a project that manifests itself both in the institutional and intellectual plane. In turn, the digitalisation of the economy results from a technological revolution characterised by the centrality of informational phenomenology. Such centrality is responsible for a social transformation process affecting the tax field's institutional and intellectual dimensions. In this scenario, actors in the field perceive their inability to deal with the new digital reality from the conceptual tools provided by the tax legal discourse. The result is a paradigm shift with the potential to affect not only the field's social practice but its very significance within an intellectual project for constructing the human dimension.

Keywords: Digital economy. Digital revolution. International taxation. International tax law. International tax discourse. International tax field. Informational phenomenology.

RESUMO

Os impactos do processo de digitalização da economia sobre a tributação se tornaram o principal tema do direito tributário internacional nos últimos anos, provocando diversas reações entre os atores deste campo. A OCDE se converteu no principal foro de debate, fazendo com que órgãos governamentais, contribuintes e a academia passassem a gravitar ao redor dos textos que a organização vem produzindo. Entretanto, este debate tem se modificado constantemente, assumindo novas linguagens e adotando perspectivas distintas. De um debate jurídico formal preocupado em caracterizar pagamentos para fins de aplicação de tratados tributários internacionais, a discussão migrou para uma perspectiva econômica envolvendo substância. Por fim, o debate sobre a economia digital assumiu uma conotação política evidente, redundando em uma rediscussão do próprio campo tributário internacional. O objetivo desta tese é compreender como e porque a digitalização da economia conseguiu impactar os fundamentos que sustentam o campo tributário internacional.

Para alcançar seu objetivo, a tese adota uma perspectiva jurídica, realista e discursiva, compreendendo o direito tributário internacional como um campo formado a partir de eventos historicamente identificáveis. Nesse caso, enquanto fenômeno social, a tributação internacional é o objeto central de um projeto que se manifesta tanto no plano institucional quanto intelectual. Por sua vez, a digitalização da economia resulta de uma revolução tecnológica caracterizada pela centralidade da fenomenologia informacional. Esta centralidade é responsável por um processo de transformação social que afeta não apenas o plano institucional do campo tributário, mas sua própria dimensão intelectual. Neste cenário, os atores do campo percebem sua incapacidade de lidar com a nova realidade digital a partir das ferramentas conceituais fornecidas pelo discurso jurídico tributário. O resultado é um giro paradigmático com o potencial de afetar não apenas a prática social do campo, mas seu próprio sentido dentro de um projeto intelectual de construção da dimensão humana.

Palavras-chave: Economia digital. Revolução digital. Tributação internacional. Direito tributário internacional. Discurso tributário internacional. Campo tributário internacional. Fenomenologia informacional.

RÉSUMÉ

Les impacts du processus de numérisation de l'économie sur la fiscalité sont devenus le thème central du droit fiscal international ces dernières années, provoquant plusieurs réactions parmi les acteurs de ce champ. L'OCDE est devenue le principal forum de débat, faisant graviter autour des textes de l'organisation les organismes gouvernementaux, les contribuables et l'académie. Cependant, ce débat n'a cessé d'évoluer, adoptant de nouveaux éléments de langage et des perspectives différentes. D'un débat juridique formel concernant la caractérisation des paiements pour appliquer les conventions fiscales internationales, la discussion est passée à une perspective qui met l'accent sur la substance économique. Enfin, le débat sur l'économie numérique a pris une connotation politique manifeste, remettant en cause le champ fiscal international lui-même. Cette thèse vise à comprendre comment et pourquoi la numérisation de l'économie a réussi à impacter les fondamentaux qui soutiennent le champ fiscal international.

Cette thèse adopte une perspective juridique, réaliste et discursive pour atteindre son objectif, concevant le droit fiscal international comme un champ formé d'événements historiquement identifiables. Dans ce cas, en tant que phénomène social, la fiscalité internationale est l'objet central d'un projet qui se manifeste tant au niveau institutionnel qu'intellectuel. À son tour, la numérisation de l'économie résulte d'une révolution technologique caractérisée par la primauté de la phénoménologie informationnelle. Cette primauté est responsable d'un processus de transformation sociale qui touche non seulement le plan institutionnel du champ fiscal mais également sa dimension intellectuelle. Dans ce scénario, les acteurs du champ perçoivent leur incapacité à faire face à la nouvelle réalité numérique à partir des outils conceptuels fournis par le discours juridique fiscal. Le résultat est un changement de paradigme avec le potentiel d'affecter non seulement la pratique sociale du champ, mais sa propre signification au sein d'un projet intellectuel de construction de la dimension humaine.

Mots-clés : Économie numérique. Révolution numérique. Fiscalité internationale. Droit fiscal international. Discours fiscal international. Champ fiscal international. Phénoménologie informationnelle.

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INTRODUCTION.

In 2012, the Group of Twenty (G20) declared the need to prevent tax base erosion and profit shifting (BEPS), announcing an interest in following the work of the Organisation for Economic Co-operation and Development (OECD) on the matter. In response, the OECD delivered a report in 2013 detailing its progress and calling for global action to combat BEPS. This report started what became known as the BEPS Project, an OECD and G20 joint effort divided into 15 actions, among which Action 1 addressed the tax challenges of the digital economy. To this end, this action gave rise to the Task Force on the Digital Economy (TFDE), which produced an intermediate report in 2014. In 2015, TFDE provided the Final Report that summarised how countries could adapt their domestic laws to address the identified challenges. Nonetheless, the conclusion was that these unilateral measures would not be needed since the other BEPS Project's actions should substantially impact the digital economy's BEPS issues.

The international tax community criticised the 2015 Final Report, claiming that it only repeated the 2014 report and limited itself to postponing TFDE's work until 2020. This situation contrasted with the other actions that offered both practical results embodied in new minimum standards as reviewing consolidated practices and approaches. Consequently, TFDE resumed its meetings in 2016, committing to deliver an interim report in 2018 and a new, more substantial final report in 2020. The meetings gathered an increasing number of participants, in part given the jurisdictions that joined the so-called Inclusive Framework on BEPS. However, despite the OECD's efforts and the countries' commitments to finding solutions and ending the discussion, one observed constant language changes and the debated object's expansion. In parallel with the enormous interest aroused in the general international tax community, the OECD debate has reached issues that had no connection with the first general notions about the digital economy.

After an initial concern with just adapting tax language to the digital economy, especially regarding the international treaties' categories, there was a migration towards substance matters. Such migration initially emphasised value creation, but it soon shed light on the tax phenomenon's political dimension, resulting in reviewing the very foundations of international taxation. Despite opinions arguing that this shifting represented the mere political

use of the tax debate, it is not clear how or why Action 1, and not the others, resulted in this attitude. The question is to identify how the digital economy and international taxation relate to each other to provoke these events. The main objective of this thesis is to make this identification from a discursive and realistic legal approach understanding international tax law as a field in which international taxation is its central object. This approach considers the digital economy as a socio-economic outcome resulting from the digital revolution, as this introduction demonstrates in detail below.

Context and field.

The transformations experienced by the international tax debate involving the digital economy mentioned above did not occur in a vacuum. They are part of a historical process resulting from the interaction of several actors, with greater or lesser capacity to influence the final result of this process. Far from an object whose constitutive substance does not depend on that which forms the subjects who analyse it, the digital tax debate is an expression of the actors who criticise it and therefore lies in the context formed by these actors' relationships. Consequently, acknowledging the debate's changes means recognising that the very tax actors are responsible for constantly transforming how they interact about the digital economy. Given that this interaction occurs through a discursive activity, the mentioned transformations correspond to changes in the international tax discourse on the digital economy. The question is to identify which actors have the most significant impact on shaping this discourse and what elements are involved in this process.

The fact that there is a tax dialogue about the digital economy demonstrates that the interlocutors have a relatively common way of observing the object discussed. Sharing this perspective allows the participants to identify who is in and out of the international tax debate. Likewise, this shared vision reveals which actors are more at the centre or more on the periphery according to their ability to influence the results of this process. By superimposing the information revealed by the shared world view, a web of relationships between actors and objects emerges, forming a reality that only makes sense to its inner participants. In the case under analysis, this reality refers to a community of experts in international taxation, and the shared

view corresponds to its dominant paradigm. In other words, the international tax community is the consequence of the existence of a dominant paradigm from which actors can identify each other, their objects, and the mode of interaction between subjects and between them and the objects.

For the present work's purposes, the interaction process between the actors forming the community of specialists in international taxation, comprising the inter-subjective and the subject-objects relations, gives rise to the international tax field. This field, in turn, corresponds to the context in which the debate on the digital economy promoted by Action 1 of the BEPS Project arose. The process that resulted in the formation of this field stems from several events whose historicity is sometimes presented independently, sometimes related to other events. The result is the emergence of a pluralistic tax field in which its interaction process involves actors from different traditions, giving it a multidisciplinary feature. Notwithstanding, several contingent factors have caused the Action 1 debate on the digital economy to assume a predominantly economic and legal character. This subchapter aims to present the theoretical foundations of the above statements, introducing the corresponding intellectual categories employed throughout the work.

The tax community.

Identifying the field has double importance for the present work, meaning clarification concerning the object of the present research and an assumption of the adopted theoretical and methodological foundations. It turns out that a particular research methodology only makes sense when it proves helpful to answer a given question, and the questions are only relevant when the field in which they arise establishes so.[1] This finding leads to the assumption that the importance of research questions may vary depending on whether they belong to one or another field of investigation. A new dominant paradigm may appear when one changes from one field to another, influencing the investigation processes and the deemed valid responses. The conclusion is that the dominant paradigm in a given field is responsible for how its actors interact

[1] For this reason, Brownsword suggests that the methodological discussion only makes sense after posing the questions and formulating the hypothesis. See BROWNSWORD, R. Field, Frame and Focus: methodological issues in the new legal world. In: Gestel, R. v., Micklitz, H.-W. and Rubin, E. L. (Ed.). **Rethinking Legal Scholarship: a**

to solve their problems. In other words, the paradigm is responsible for establishing the system of ideas from which actors in a field develop their social practice.

As a result of merging several related but independent historical trajectories, the international tax field emerges from the intersection of several other fields. This fact is responsible for forming an international tax community composed of actors from different intellectual traditions. This fact makes the international tax field assume a plural character, causing a central paradigm to emerge from the tensions between the different peripheral paradigms related to the origins of its actors. What unites these actors is a common interest in international taxation, whether as an object of a social practice or mere intellectual speculation. Despite their different backgrounds, the tax actors can dialogue in a mutually understandable way about different categories, causing them to self-identify as belonging to the same epistemic community. Such a relatively common understanding of international taxation, regardless of the actor's intellectual origins, implies both an international tax social practice and an international tax discourse.

Linguistic studies present different theoretical proposals to understand language, sometimes highlighting its character as a system or code, sometimes emphasising the agents' attitude. In the latter sense, some authors adopt the expression "discourse" instead of "language" to reinforce that their approach does not have aspirations of neutrality.[2] In this sense, from this point onwards, "discourse" will be preferred instead of "language" in this work. This adoption aims to emphasise that international tax practice is not apart from the choices made in the field by international tax actors, regardless of whether they possess a conscious attitude. While, on the one hand, these explanations show that the idea of an international tax discourse involves a specific attitude, on the other, it is not evident to identify how the relationship between the tax aspect and the international character occurs. The discursive perspective opens space for both an internationalist attitude towards taxation and a tax attitude towards internationalisation.

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transatlantic dialogue. New York: Cambridge University Press, 2017, pp. 112-172, p. 114.

[2] This distinction is central in the agenda of Critical Language Studies (CLS). The word "discourse" is employed to evidence that, for CLS, language is considered a form of social practice. It departs from traditional approaches centred on the analysis of the individual's use ("parole") or the systematic aspects of the language ("langue"), as theorised by Ferdinand de Saussure. See Chapter Two 'Discourse as a Social Practice' in FAIRCLOUGH, N. **Language**

The international community.

The possible linkages between the epistemic community, taxation, and the international character become most perceptible from a theoretical exercise contrasting it to an utterly domestic situation. In this sense, let us suppose that internationalisation could refer either to the tax actors as the field's subjects or to taxation as its object. In the first case, the transition from the domestic to the international plane would produce an international community of specialists in domestic taxation. This description comes close to a definition, although not very precise, of comparative taxation since it presupposes an interest in how taxation occurs in other jurisdictions.[3] In the second case, internationalisation would produce several national epistemic communities of specialists in international taxation. Such a result is close to the most widespread perspective in the tax field, according to which international taxation is nothing more than an expression of domestic taxation restricted to the presence of certain elements.[4]

Notwithstanding, the mentioned international tax debate on the digital economy also reveals both an interaction between actors from different jurisdictions and a preoccupation with taxation that is not limited to the domestic sphere. In other words, the international aspect reveals itself both in the epistemic community's subjects as in the field's object. Therefore, this debate presupposes an international discourse on international taxation, i.e., a discourse shared by an international community of experts treating taxation as a global phenomenon. In this case, it is possible to speak of a shared international paradigm that gives a meaning of unity to the actors in the field, despite their different origins. In a highly multifaceted environment, the existence of a dominant system of ideas presupposes actors with the power to make a given paradigm predominate over others. This conclusion leads to another relevant assumption of this work associating a given discourse's dominance with the power relations between the actors in the field.

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and Power. London, New York: Longman, 1989, pp. 17-42.

[3] Thuronyi argues that comparative tax law is not just about "descriptions of the tax systems of particular countries". See THURONYI, V. Studying comparative tax law. In: Gustaf, L., Lodin, S.-O. and WiInan, B. (Ed.). **International Studies in Taxation: Law and Economics**. London: Kluwer Law International, 1999, pp. 333-340, p. 333. However, the idea of a group of international tax lawyers discussing countries particularities is closer to comparative tax law than to what is traditionally called international tax law.

[4] This view usually presupposes that international taxation refers to "international aspects of the income tax laws of particular countries", relegating the study of international tax treaties to something that could be called "the international public law of taxation". See ARNOLD, B. J. **International Tax Primer**. 2nd ed. Alphen aan den Rijn:

Critical discourse analysts have traditionally dedicated themselves to understanding how one can instrumentalise language to preserve a given paradigm to the detriment of others. Such an instrumentalization necessarily involves the power relations between the field's actors so that the predominance of a given discourse results from the configurations of force at a given moment.[5] The realisation that the international tax debate on the digital economy revolves around the OECD's work situates this organisation at the centre of the project for building the field's discourse. Therefore, identifying the particularities of this work corresponds to identifying how power relations have developed historically in the tax field. On the other hand, from the perspective of the knowledge behind the field's social practice construction, its multifaceted nature includes actors from different traditions. Despite this multiplicity, lawyers and economists have historically played a leading role in shaping the international tax field's intellectual dimension.

Economists and lawyers.

To claim that economists and lawyers interact in the same epistemic community means to assume that these actors share the same system of ideas about a specific object. Thereby, lawyers and economists not just employ related expressions but think similarly about international taxation, allowing them to understand each other when they utilise the intellectual categories of the field.[6] This mutual understanding reveals an interaction process built over time, resulting in the self-perception of each group as specialists in international taxation. Hence, sharing a specific tax paradigm between economists and lawyers has its historicity, with identifiable episodes and protagonists. Besides speaking and thinking similarly, lawyers and economists get involved in the same social practice by identifying similar problems, suggesting approximate solutions, and adopting such-like criteria for validating responses. Thus, it is possi-

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Wolters Kluwer, 2002.

[5] It is important to say that the so-called critical discourse analysis is not a homogeneous entity, encompassing distinct approaches. Nonetheless, the consensus surrounds two elements: "A more or less political concern with the workings of ideology and power in society; and a specific interest in the way language contributes to, perpetuates and reveals these workings." See BREEZE, R. Critical Discourse Analysis and Its Critics. **Pragmatics,** v. 21, n. 4, pp. 493-525, 2011, pp. 494-495.

[6] However, understanding that experts in law and in social science underestimate the degree to which they are actually talking past one another, see MERTZ, E., FORD, W. K. and MATOESIAN, G. M. **Translating the Social World for Law: linguistic tools for a new legal realism**. New York: Oxford University Press, 2016.

ble to infer an international tax discourse based on a dominant paradigm, despite the pluralism of this field.

On the other hand, identifying a social practice comprising actors with distinct backgrounds raises several issues related to their different processes of intellectual formation as specialists in taxation. The mere adoption of a shared paradigm does not erase the fact that economics and law correspond to two separate fields, not limited to taxation as their object.[7] Consequently, the international tax field comprises actors who share the same system of ideas while also belonging to diverse epistemic communities. This circumstance is what characterises the meaning attributed to the notion of complexity in the international tax field. More than just "complicated", this field's complexity means receiving contributions of actors whose training process involves related but distinct intellectual traditions. Hence, such complexity arises from the tension between the actors' paradigms of origin, related to the specific areas from which they come, turning the international tax paradigm into the outcome of a conflict of perspectives.

The present work is committed to the legal perspective, aiming to offer a reading from the tensions between the international tax paradigm and the law as an intellectual tradition. The complexity of the tax field prevents this commitment from resulting in the isolation of the law, making the narrative presented here oscillates between the general and the specific. The actor's self-recognition as an international tax specialist, but whose training process belongs to the legal tradition, imposes a dual attitude. Such an actor should acknowledge that the international tax field comprehends intellectual categories not identified in other areas of its original domain. At the same time, there is a constant necessity to determine what contributions a tax lawyer can offer to the other specialists in international taxation, justifying the field's multidisciplinary character. This justification demands a better understanding of what it means to be an international tax lawyer and what elements are peculiar to this actor, as the following items will show.

[7] Consequently, for reasons of efficiency, lawyers and economists have complementary roles in the field, for what a specific international tax legal field may exist.

International tax lawyers.

Some lawyers joining the TFDE faced a peculiar situation: eager to help the group deliver a more concrete answer than the 2015 Final Report, they arrived with a wealth of practical background following years of experience in international taxation. However, these tools and techniques did not seem to help them when faced with the new challenges posed by the digitalisation of the economy. According to their worldview concerning the legal activity, it seemed there was no point from which they could begin carrying out their work. The TFDE had an obvious political connotation, making many understand that it would not yet be the time to talk about legal categories. On the other hand, there were clear economic elements that dialogued with these categories, giving the impression that lawyers would only be "translators", adapting them to the legal jargons used in international treaties. An anecdote heard in a seminar's coffee break may synthesise the feelings experienced by these lawyers.

A well-known international tax law professor, invited to write a paper about the tax challenges raised by the digital economy, called on a colleague to join him in this endeavour. In his response, the colleague was straightforward: "I am sorry, but if you do not give me a statute or a court decision to criticise, I do not know in what I may be useful". This answer sheds light on a fascinating aspect of lawyers' practice and opens many questions concerning the nature of the legal activity. The main question concerns its limits, whether such activity consists of exclusively providing comments to statements previously elaborated. A possible reaction to this question is to agree with the idea that lawyers can only orientate themselves and base their opinions on relevant legal sources such as the Constitution, legislation, case law, treaties, and codes. Therefore, lawyers' difficulties would derive from the fact that TFDE's work would not have a legal nature, situated in a pre-legal moment involving exclusively political considerations.

Consistent with the above mindset, the actual legal activity should be exercised after the end of the TFDE's work and only in the hypothesis that such work resulted in changes in some country's legislation. Lawyers' activities, therefore, would be limited to the analysis of utterances belonging to a specific legal system modified by TFDE's work. This way of seeing the legal activity, which is far from being a peripheral position in the field, is responsible for making the expression "international tax law" a misnomer. Following this logic, there

would be no international character in "international tax law" since this field would be no more than a branch of (domestic) tax law, comprehending impositions on cross-border situations. However, such a position does not help an international tax lawyer involved in the TFDE's work. There would be no point in bringing years of experience in making sense of abstract categories belonging to a specific legal system to solve problems at the international level considered unprecedented.

The problem of diversity.

The debate's analysis demonstrates that legal elements have become arguments to orientate the normative interpretation of the digital economy's effects on international taxation. The actors involved, and not only lawyers, were concerned with respecting the fundamental principles of taxation at the international level, the idea of fiscal jurisdiction, property rights, among other legal categories.[8] If one considers the OECD's debate a political starting point, the TFDE should not be concerned about respecting categories considered established by the statutory law. Furthermore, this attitude raises questions about what statutory law should be the reference, giving sense to the legal categories. In a scenario of multiple legal systems, working with the categories of law is bound to result in meaning conflicts. The idea of a genuinely international dialogue would fall apart if lawyers could only understand the categories of the field from the meaning existing in their local epistemic communities.

The diversity amongst how lawyers situated in distinct jurisdictions perceive legal categories has been an object of analysis for a long time, mainly in comparative law.[9] Some more radical thinkers state that since the law is a local culture's product, an accurate comparison between civil law's and common law's categories would be impossible for these sys-

[8] See "Chapter 2. Fundamental principles of taxation" in OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2015 Final Report**. OECD Publishing: Paris. 2015a. For a sample of that discussion in a concrete dimension, see the public consultation occurred in Berkeley, CA, in November 2017 available in https://www.youtube.com/watch?v=PcJMt75wDgM&index=5&list=WL&t=29s. Accessed in 1/Mar./2019.

[9] A very sophisticated way to demonstrate such diversity is by using the notion of "legal formants". See SACCO, R. Legal Formants: A Dynamic Approach to Comparative Law. **American Journal of Comparative Law,** v. 39, pp. 1-34, 1991 1991 and SACCO, R. Diversity and Uniformity in the Law. **American Journal of Comparative Law,** v. 49, pp. 171-190, 2001.

tems' incompatibility.[10] Such a position belongs to an ancient tradition of criticising the so-called functional approach to comparative law.[11] According to this approach, the comparison between different legal systems should consider the function performed by the legal institute under analysis.[12] Notwithstanding, looking at the TFDE's work and its correlated literature, no cultural problem concerning understanding the legal expressions manifests itself. What is verified is a genuinely international debate about the impacts of the digital economy on international taxation, presenting, among others, an easily identifiable legal perspective.

Mere participation in an international tax event demonstrates empirically that lawyers from different traditions can discuss the digital economy. Even the 2018 Interim Report shows that, although countries disagreed about the digital tax challenges, they agreed that they disagreed, i.e., the countries acknowledge their divergences.[13] The conclusion is that international tax lawyers can reliably share the field's categories, regardless of their different cultural backgrounds. Something allows that group of actors to understand the digital economy debate in a relatively similar way, diverging to a certain extent but not rendering the dialogue itself unfeasible. The arising question is: how and why might lawyers from different legal traditions debate, in a language different from their own, about tax issues not yet converted into legislation or a court decision? The answer lies in what unites these actors in constituting their epistemic community, making the process of forming lawyers worthy of a closer look.

The formation process.

Law students, at some point, were probably introduced to the paradoxical expression on the relationship between knowledge and law: *ignorantia juris non excusat*.[14] The

[10] See LEGRAND, P. and MUNDAY, R. **Comparative legal studies: traditions and transitions**. New York: Cambridge University Press, 2003.
[11] This tradition is explained in DANNEMAN, G. Comparative Law: Study of Similarities or Differences? In: Reimann, M. and Zimmermann, R. (Ed.). **The Oxford handbook of comparative law**. New York: Oxford University Press, 2006, p. 389.
[12] Functionalism is much more complex than this narrow definition and entails different concepts. For a reconstruction and evaluation of functionalist comparative law, see MICHAELS, R. The functional method of comparative law. In: Reimann, M. and Zimmermann, R. (Ed.). **The Oxford handbook of comparative law**. New York: Oxford University Press, 2006.
[13] See OECD. **Tax Challenges Arising from Digitalisation – Interim Report 2018: Inclusive Framework on BEPS**. OECD Publishing: Paris. 2018b, pp. 171-172.
[14] According to Garner, this translates as "ignorance of the law excuses no one" See GARNER, B. A. **Black's Law**

paradox here lies in the fact that although the knowledge of the law is assumed, linguistic barriers prevent outsiders from understanding legal categories, mainly in fields that presuppose a technicality like international tax law. When international tax lawyers face an argument articulating "fixed margins" with "arm's length", they undergo a cognitive process that excludes interpretations based on geographical locations or distance measurements. These expressions invoke a historical background, demanding access to the lawyers' previous experiences in their social practice. This idea is not revolutionary and could be easily applied to any domain to explain the process of maturing in that field. In the case of the law, however, it is unclear what constitutes the process by which someone becomes a lawyer.

A typical view of the field's formation is that law schools aspire to make students think like a lawyer,[15] while students endeavour to repeat the old habits of the field.[16] This type of training does not provide a critical view of the field, and this logic of teaching has traditionally led to two pairs of possible attitudes towards the law. The first relates to the position that the actor may assume about the possibility of the law to be a "value-relevant form of human activity".[17] Such criterion produces two antagonistic professional archetypes, the client-oriented lawyer, aiming to obtain a victory for the clients, and the jurist, an actor not attached to anyone's immediate or particular interest. The second attitude deals with the positions that the actor may assume concerning the law's theoretical foundations, which relates to an old tradition of opposing the law in the academy against the legal practice.[18] The other two sorts of professional archetypes are, on one side, the legal scholar, on the other, the legal practitioner.

The matrix formed by the archetypes mentioned above allows identifying fundamental tax positions and corresponding legal actors. The notion of a client-oriented lawyer,

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Dictionary. St. Paul, MN: Thomson Reuters, 2009, p. 815.

[15] See SCHAUER, F. F. **Thinking Like a Lawyer: a new introduction to legal reasoning**. London: Harvard University Press, 2012.

[16] The student is exposed to how lawyers deal with their issues so that he or she may mimic their behaviour. See BROWNSWORD, R. Field, Frame and Focus: methodological issues in the new legal world. In: Gestel, R. v., Micklitz, H.-W. and Rubin, E. L. (Ed.). **Rethinking Legal Scholarship: a transatlantic dialogue**. New York: Cambridge University Press, 2017, pp. 112-172.

[17] This is discussed in WALKER, N. The Jurist in a Global Age. In: Gestel, R. v., Micklitz, H.-W. and Rubin, E. L. (Ed.). **Rethinking Legal Scholarship: a transatlantic dialogue**. New York: Cambridge University Press, 2017, pp. 84-111.

[18] The American experience shows that literature has been concerned with the gap between academia and legal practice. See NEWTON, B. E. Preaching What They Don't Practice: Why Law Faculties' Preoccupation with Impractical Scholarship and Devaluation of Practical Competencies Obstruct Reform in the Legal Academy. **South**

associated with the dichotomy inherent in the modern idea of taxation, evidences the fiscal and taxpayer interests. The detachment regarding the immediate interests of these actors results in concern with the integrity of the tax legal discourse itself. Tax practice relates to how the international tax law is institutionalised in a given social context and may involve the most diverse types of interest. The academy, in turn, represents the intellectual equivalent of this practice, having a proper institutional dimension that is not to be confused with that of law as an instrument for social organisation. Although the reality does not present characters that fit entirely in the above description, the relations amongst this mosaic of actors according to their potential attitudes constitutes the field of international tax law, as the next item will demonstrate.

International tax law as a field.

It is reasonable to assume that economists and lawyers could offer different contributions to the field of international taxation, and such assumption derives from an argument of efficiency. Considering that lawyers and economists experienced separate formation processes and developed entirely distinct skill sets, it would be inefficient to perform the same function. Therefore, recognising the centrality of both means acknowledging that their particularities are complementary and valuable for the field. Nevertheless, it remains unanswered whether one could also conclude that there is an international tax legal field and what the implications of its existence would be. The previous item both has demonstrated being possible to advocate a legal perspective on international taxation as has identified the archetypes representing the possible positions of the actors in the field. The question is to verify if these elements permit to deduce a specific legal field embedded in the international tax community.

The archetypes, as mentioned previously, form a system of relationships from which it is possible to identify some specific roles expected from the tax actors. Although it is challenging to list, *a priori*, what interests the archetypes could comprehend, it is possible to deduce that all of them will revolve around the way taxation manifests itself in social life. On the one hand, the possible instrumentalization of taxation can subject it to specific purposes external to the concerns of the international tax community. On the other hand, the preservation of taxa-

tion in its very terms benefits actors whose social recognition correlates to this aspect of social life. Therefore, it is possible to conclude that the relationships among these actors may involve conflicts of interest and create antagonistic positions. Nonetheless, the satisfaction of these interest cannot exceed certain boundaries, under penalty of destroying the very system of relationships responsible for the social identification of the international tax actors.

Notwithstanding, the above assertion does not mean advocating normative limitations of metaphysical order that the actors must acknowledge and respect in an ethical or moral sense. The very process that led these individuals to become international tax lawyers was responsible for subjecting them to thinking and acting in a way that reiterates their social roles. It turns out that the already mentioned system of relationships only makes sense within a specific social world, becoming at the same time its cause and consequence. This dual relation permits one to speak in an international tax legal field, structured from the social relations that it helps to establish. Therefore, this field is a network of objective relationships constituted from subjective interests oriented by a rationale stemming from the field's social values. Such a complex relationship between the legal practice and its specific rationality is the basis of the duality involving the social and intellectual dimensions of the law.

The social dimension refers to how the law manifests itself at the phenomenological level as an instrument for organising life in society. In this sense, the legal phenomenon corresponds to a specific social practice gravitating around the law as an act emanating from a deemed legal source, although not necessarily limiting itself to this condition. In turn, the intellectual dimension corresponds to the cognitive elements responsible for leading legal actors to behave in a way that preserves those social practices. Although this dimension encompasses the same social practice objects, it also has the very legal phenomenon and actors as its objects, giving it a distinctive reflexive character. Hence, the process of institutionalisation of the law corresponds to two separate events, depending on whether it is about its social or intellectual dimension. Law's institutionalisation as a social practice occurs through legal institutions in a strict sense, while its intellectual dimension's institutionalisation occurs within the academy's scope.

The relationship between the social and the intellectual dimensions of the law, and the institutionalisation processes that each has undergone, allow the visualisation of

three conceptually distinct moments in the legal field's formation. Initially, it is possible to speak of laws as the expression of the will of the authority, consisting of the consequence of the exercise of power. These laws give rise to a specific social practice in a second moment, implying new actors, objects, and relationships between them. Such relationships are subject to institutionalisation in particular social environments, producing institutions considered to be legal. These events favour a legal way of thinking but do not necessarily imply constructing an independent intellectual project nor its institutional environment. This construction occurs when the actors develop a specific perception about the law's intellectual dimension, and the institutionalisation of this dimension corresponds to the third stage of the legal field's formation.

These new categories presented in the last two paragraphs make it possible to end the speculations previously made about the possible effects of internationalising the legal tax field. At a first level, internationalisation must reach the tax phenomenon while the result of the exercise of power by a given authority. This already internationalised taxation gives rise to a specific social practice whose actors may or may not identify themselves as belonging to an international community of specialists in international taxation. From the moment that this practice becomes institutionalised at the international level, the notion of an international community becomes inevitable. On a third level, the social practice of this international community is subject to the intellectual dimension of the law, becoming the object of academic speculation. Because of the absence of specific tax legal institutions at the international level, an autonomous international tax legal field stems from internationalisation's effects on the intellectual dimension of the law.

Therefore, the current international tax legal field did not arise from institutionalising a specific social practice in an environment dedicated exclusively to international tax legal matters. Lawyers, economists, and other international tax actors have constantly shared the same institutional space at the international level, and such cohabitation contributes to an eternal tension between economics and the law. The international tax legal field reveals itself from the international tax community due to its peculiar intellectual dimension. Such peculiarity is the outcome of the historical process that resulted in a paradigm that both allows lawyers to dialogue with other tax specialists as preserves an inherently legal character. Notwithstanding, such a paradigm has not continued the same throughout developing the international tax legal

field. Several events, both specifically legal as tax in general, brought about changes in this paradigm, causing successive shifts in lawyers' attitudes towards the objects of the field.

However, regardless of the attitudes assumed, one thing has never changed: legal activity expresses itself through words, and the mastery of legal language is the best demonstration of excellence in the field. Unlike other domains in which the actor's maturity presupposes mastering equipment, manual methods, or complex calculations, international tax lawyers shall master the field's language.[19] The experience of lawyers (responsible for their social identification in the legal field) is necessarily linguistic. Consequently, if different attitudes of lawyers imply different legal activities, and if the legal activity implies using legal language, then it is necessary to conclude that the way legal language is employed depends on the attitudes assumed. Put in another way, legal language is not neutral but correlates with the choices made by the actors in the field. Thus, international tax lawyers from different legal traditions are mutually understandable because they present similar attitudes towards international taxation.

The last paragraph's conclusions bring a new reading on the tension between the legal and tax paradigms mentioned in the last item. As a result, the different lawyers' attitudes towards the legal phenomenon produce nuances in the international tax paradigm, which are particularly important for this thesis. The client-oriented lawyer versus jurist dichotomy involves the very purpose of the law, something constantly debated in the scope of legal theory. On the other hand, although the legal scholar versus practitioner dichotomy also raises philosophical issues, it offers more objective questions regarding the legal methodology. In sum, although there are several ways of understanding the digital economy's impacts on international taxation, this work is concerned with those that affect the international tax legal discourse. Such concern makes it necessary to identify how it is possible to comprehend digitalisation and taxation from a legal discursive perspective and what questions arise from this framing, as seen next.

Framing the object.

Growing public interest in the BEPS Project made it possible, from 2013

[19] Mellinkoff's most quoted sentence is probably "The law is a profession of words". See MELLINKOFF, D. **The Language of the Law**. Eugene, Or: Resource Publications, 2004.

onwards, to identify a new topic within the international tax field: the digital economy. Hence, new categories became part of the international tax specialists' vocabulary, associated with an entirely new agenda. The discussion on the impacts of new technologies on international trade has been present at the international fora since the end of the twentieth century. However, from the TFDE's work onwards, categories like "value creation", "data mining", "digital presence", "user's participation", among others, began to be effusively referred to in articles and heard in seminars and conferences. Therefore, the BEPS Project's Action 1 was responsible for putting the digital economy debate at the centre of the international tax agenda. Although the debate has gained autonomy and even moved away from the objectives outlined initially, it still intellectually gravitates around the categories initially employed by the TFDE.

Nonetheless, identifying the digital economy's tax challenges leads to many possible outcomes, depending on which perspective is favoured. The debate could focus on different objects, such as the statutory changes as a response to new business models or the difficulty posed by the digital economy to characterising the new digital events. Likewise, it could involve the change in states' and international organisations' agenda to face the digitalisation process or the constitutionality or legality regarding the national implementation of the BEPS Project's proposals. So, merely stating that digitalisation has challenged international taxation could imply different things since both expressions offer many potential connotations. This multitude of interpretations explains why the substantial collective effort to contribute to the TFDE's project points to divergent directions. Thus, understanding the relationship between "digital economy" and "international taxation" depends on the meaning attributed to both expressions.

This thesis belongs to the above-mentioned collective effort since it deals with the relationship between the digital economy and international taxation. However, it departs from the mainstream debate since the questions raised here presuppose assumptions not currently observed in other texts. The work refers to the digital economy as a specific manifestation of a broader dynamic phenomenon: the digital revolution. In turn, international taxation is not a synonym for international tax law but a phenomenon object of different fields of knowledge. Since this work assumes that the choice for one or another field is paramount in analysing the objects of enquiry, the questions to solve result from the fact that this thesis belongs to the legal field, as

the last subchapter has demonstrated. Notwithstanding, before framing the object of analysis, it is essential to detail this work's proposal of seeing the digital economy and international taxation from a discursive realistic legal perspective.

Digital economy.

According to the OECD, the digital economy corresponds to the outcome of a transformative process brought by information and communication technologies (ICTs). Such a process has made technologies cheaper, more powerful, and widely standardised, improving business processes and bolstering innovation across all sectors of the economy. In its task of identifying the new tax challenges associated with this new scenario and establishing an agenda to address them, the OECD has adopted an entirely new language to face what has been called "the process of the digitalisation of the economy". Thus, in the OECD debate, the digital economy has been understood while the result of a specific transformative process. However, such a process is still underway, submitting its outcomes to a state of continuous transformation. Therefore, to understand it better, the digital economy should be framed within a transformative or dynamic context, like a photo of an event in motion.

The digitalisation of the economy is nothing more than a facet of a long-standing transformation of the economy and society caused by technological changes. The OECD itself bases its definition on a possible perspective proportionated by the relationship between technological developments and the economy. In this sense, there would be no reason to see the digital economy differently, given the eternal and intimate relationship between economy and technology. The digital revolution associated with ICTs would be just one among the several industrial revolutions observed throughout history, which did not necessarily challenge the foundations of international taxation. Notwithstanding, the digitalisation process has affected the economy with intensity and pervasiveness never seen before, creating new forms of production and revamping traditional processes. Furthermore, the intrinsic aspects concerning how these transformations are taking place reveal structural characteristics that deserve a more detailed look.

The economy's transformation due to digital technologies goes beyond

just changing traditional transformative processes and permitting producing more with the same or the same with less. The notion of digitalisation presupposes fundamental alterations in a dimension not restricted to matters of efficiency. As witnessed in the past few decades, technological changes concerning communication and information have had a massive impact on many cultural institutions, values, and interests. Such impacts steamed from the ICTs' closer connection to elements traditionally recognised as belonging to the human dimension. Consequently, the impacts caused by the digital revolution do not respect the cognitive boundaries built to separate the economic from the social sphere, making it very difficult to isolate its analysis in an exclusively productive context. Nonetheless, the international tax debate has focused on the notion of a "digital economy", making some semantic agreements necessary.

The digitalisation process.

Although "digital economy" has become the predominant term in the international tax debate, this thesis is interested in investigating the "process of digitalisation of the economy". Thus, unless stated otherwise or the context indicates the process's result instead of the process itself, "digital economy" and "digitalisation of the economy" will be treated here as synonyms. Accordingly, it will be fundamental to distinguish, on one side, the digitalisation process from the technological perspective and, on the other, the economic impacts of those technological changes. Such is not an easy task since it demands a clarification of what should be understood by technology and how it differs from the economy. The difficulty lies in the fact that the economic discourse has incorporated technology as a constituent element of the wealth generation process. Nonetheless, without an accurate definition of technology, it would not be possible to comprehend the difference between the digitalising agent from the digitalised object.[20]

OECD's efforts have primarily concentrated on identifying the features of the process by focusing on the behaviour of companies. The mandate received by the TFDE is part of the BEPS project, which is manifestly concerned about the positions that the mul-

[20] This work adopts the expression "digitalised" in place of "digitised" for two reasons: the first is because it seems to have been sanctioned by use in the international tax field; the second is because "digitised" is more connected to turning objects into a digital format (like scanning documents), while this work aims to address the fundamentals of digital phenomenology.

ti-national enterprises (MNEs) could take to minimise their tax burden.[21] Consequently, a whole language has emerged to explain the digitalisation of the economy from the specific features of the new deemed digitalised business models. This new language has been central to countries' actions to face the alleged challenges raised by the digital economy, demonstrating an undeniable practical utility.[22] However, such utility does not undermine the idea that identifying these business models only reveals a small snapshot of a more significant event developing at high speed. In addition to these temporal limitations, this mode of analysis restricts the economy to a merely business perspective, neglecting other critical economic categories.

In short, the definition of the digital economy based on the identification of the characteristics of the business models that comprise it consists of a temporary accomplishment. The continuity of the digitalisation process means that today's identifications do not correspond to the characteristics of tomorrow, preventing the adoption of effective measures to react to its economic implications. In addition, this approach would transform the notion of digitalising the economy into digitalising the business models. The economy is not limited to business, so its submission to the mentioned process presupposes the digitalisation of other elements, which imposes a broader view on the digital economy's notion. On the other hand, this opening would lead to a myriad of possible analyses given the immensity of categories belonging to the economic universe. However, for this work's purposes, the most critical category corresponds to taxation, being necessary to identify its new circumstances in the face of the digitalisation of the economy.

Impact on taxation.

Taxation is a fundamental element of the economy, whether considered in

[21] In introducing the BEPS Project, OECD has stated that: "Globalisation has resulted in a shift from country-specific operating models to global models based on matrix management organisations and integrated supply chains that centralise several functions at a regional or global level. (…) These developments have been exacerbated by the increasing sophistication of tax planners in identifying and exploiting the legal arbitrage opportunities and the boundaries of acceptable tax planning, thus providing MNEs with more confidence in taking aggressive tax positions." See OECD. **Action Plan on Base Erosion and Profit Shifting**. OECD Publishing: Paris. 2013a, p. 7.

[22] A good critical analysis about how the United Kingdom is placing itself in this regard may be seen in GRINBERG, I. User Participation in Value Creation. **British Tax Review**, n. 4, pp. 407-421, 2018. See also "Chapter 2. Digitalisation, business models and value creation" in OECD. **Tax Challenges Arising from Digitalisation – Interim Report 2018: Inclusive Framework on BEPS**. OECD Publishing: Paris. 2018b.

its social dimension or as a merely speculative object. Tax policy constitutes the economic policy in the same manner that taxation, as a conceptual construction, is part of the economy whilst an economics' intellectual category. From this perspective, there would be no doubt that putting the adjective "digital" in front of the noun "economy" should result in something fundamentally crucial for the meaning of taxation. What is not so evident is why the notion of an economy's digitalisation process does not imply the "digitalisation of taxation", whatever meaning this expression could possess. Although the transformations that occur within the whole do not necessarily imply changes on its parts, this exception deserves empirical verification. Such verification demands methodological and conceptual efforts to associate the idea of digitalisation with that of taxation, from which it would be possible to deduct its potential implications.

Even without detailing what digitalisation means, it is possible to affirm that its virtual character is the first to be perceived, being the most prominent in the tax debate. This character's popularisation correlates with the Internet's ubiquity as with the specific culture resulting from its transition from the public to the private sphere. Virtualisation is generally associated with a new mindset according to which there is a virtual universe of relationships between persons and objects that contrasts with the physical one. In turn, the decrease in the importance of the physical element contributes to making digitalisation a phenomenon that does not respect the borders between countries. Thus, there is no theoretical reason to consider the impacts of digitalisation on the economy unless from a global perspective. Although it might eventually be justified for a specific practical reason, limiting digitalisation to a strictly domestic context would undermine its accurate understanding.[23]

The cross-border nature of the digitalisation process implies that the analysis of its impacts on taxation also deserves a global approach instead of a domestic one. There would be no need to impose borders to taxation when these restrictions do not make any sense in the context of the transformative process to which one intends to frame it. Consequently, and similarly to the treatment given to the expressions "digital economy" and "digitalisation of the economy", the expressions "taxation" and "international taxation" will appear almost inter-

[23] For example, in order to offer an analysis centred not on the phenomenon itself, but in one specific legislation. See DOUET, F. **Fiscalité 2.0, fiscalité du numérique: économie collaborative, financement participatif, monnaies virtuelles, entreprises du numérique: start-up-entreprises innovantes, localisation des entreprises du secteur numérique, TVA**. Paris: LexisNexis, 2018.

changeably throughout this narrative. This identity of meanings will emerge naturally since this work is not based on any specific state's tax legal system but refers to an international environment. Therefore, unless expressly manifested or the context says otherwise, "taxation" will assume both a domestic and cross-border sense. However, since this work does not rely on provisions of the statutory law, there is a need to clarify the meaning of the term "taxation", be it international or *tout court*.

International taxation.

The English expression "international taxation" and its equivalents in other languages (such as *fiscalité internationale* in French or *tributação internacional* in Portuguese) may be understood differently, leading to distinct interpretations. However, at least among lawyers, there is a tendency to understand these expressions from a particular legal perspective. This perspective has the tax norm as its core element, building the idea of taxation from the legal relationship established between a specific state and its taxpayers. Thus, international taxation would necessarily be a synonym for international tax law (and, in the other respective mentioned languages, for *droit fiscal international* and *direito tributário internacional*).[24] When treating these expressions as synonymous, the objective is more than emphasising their evident legal character but restrict them to this perspective. Sometimes such perspective is so deep-rooted that the expression, although sanctioned by use, is deemed imprecise for not expressly indicating the legal dimension.[25]

To those who see some utility in using the expression, "international taxation" may refer to the global tax rules that apply to transactions between two or more countries in the world. Such rules would encompass all tax issues arising under a country's income tax laws

[24] An example of this perspective may be verified from the following passage: "I refer to 'international taxation' and 'international tax law' because those are convenient references to the application of domestic tax laws to cross-border transactions, investments, and other matters. In fact, there is no such a thing as 'international tax law' - no supranational body of accepted rules, no world tax court, nothing beyond each country's application of its own laws'. See ROSENBLOOM, H. D. Teaching International Taxation. In: Bizioli, G. (Ed.). **Essays in International and European Tax Law**. Napoli: Jovene, 2010, pp. 1-9, p. 1.

[25] Torres, when talking about the norms that would regulate situations concerning international fiscal aspects has claimed that such an expression is employed without the intend of sustaining any sort of "international taxation", calling it a "lay and inaccurate expression". See TÔRRES, H. T. **Pluritributação Internacional sobre a Renda das Empresas**. 2ª ed. São Paulo: Revista dos Tribunais, 2001, p. 49.

that include some foreign element.[26] It is noteworthy that even this effort to talk about global rules ends by basing them on domestic tax systems and limiting it to income tax law. The result would be that international taxation would not consist of the phenomenon itself but the tax rules that cause it. On the other hand, there is also a belief that international taxation could, regardless of the principles of domestic taxation, be submitted to specific principles, contrasting to the assumption that it necessarily refers to domestic rules.[27] The problem is in finding a justification that is, at the same time, compatible with this view dependent on domestic legislation and that manages to attribute a certain degree of universality to the international tax principles.

This state-centred viewpoint is problematic since it overlooks the multidimensional character of international taxation, tending instead to summarise it to a strictly legal or economic condition. Such reductionism ignores two possible and significant meanings the expression "international taxation" may possess, which are central for this work's purposes. Taxation may be considered a social and historical phenomenon; otherwise, archaeologists, anthropologists, and other social researchers could not identify it empirically, especially in times that preceded the emergence of the law. Besides, international taxation also consists of an abstract category, an object of intellectual speculation in specific discourses from different fields of knowledge. With that in mind, the impacts of the digital economy on international taxation may involve two complementary dimensions. The first regards the international tax phenomenon itself, while the second concerns the intellectual constructions about that phenomenon.

The tax phenomenon.

Taxation's phenomenological dimension is undeniable, and its impacts on individuals are not limited to those who consciously deal with the tax incidence. This fact occurs because the consequent submission of individuals to the status of taxpayers is not limited to a

[26] See ROHATGI, R. **Basic International Taxation Vol. 1: Principles of International Taxation**. Volume I. 2nd ed. Richmond: Richmond, 2005, p. 1.

[27] "This approach does not preclude new administrative or legislative measures, or changes to existing measures, relating to electronic commerce, provided that those measures are intended to assist in the application of the existing taxation principles, and are not intended to impose a discriminatory tax treatment of electronic commerce transactions. Any arrangements for the application of these principles to electronic commerce adopted domestically and any adaptation of existing international taxation principles should be structured to maintain the fiscal sovereignty of countries (…)". See OECD. **Taxation and Electronic Commerce: implementing the Ottawa taxation**

condition thus formally recognised, reaching everyone who bears the tax burden. However, this does not mean that taxation corresponds to an alien and distant event from those who do not integrate a specific tax relation. People suffer several effects of the tax choices, from the reduction of their material well-being to the offence to any sense of justice resulting from the lack of equal treatment. Thus, taxation is part of the social reality since its presence alters people's conditions, not only in a material sense but also concerning the very construction of this social reality in which taxation emerges.[28] On the other hand, as it is not just an abstract concept, the question is to understand what constitutes the claim that taxation corresponds to a social phenomenon.

The tax phenomenon consists of a particular manifestation within a broader phenomenology involving all aspects of the social world. In other words, taxation emerges from the contrast of particular elements of the social phenomenology vis-à-vis others considered "non-tax". Such a boundary between both aspects depends on previously established criteria that allow constructing a tax narrative based on the association of specific phenomenological elements. In this sense, taxation only exists as an independent phenomenon because of a previous notion about comprehending a given set of social happenings. This conclusion paradoxically brings the phenomenological dimension of taxation closer to its discursive dimension, making both depend on the beholder-subject. This approach correlates with how social phenomenology emerges from the natural world and demonstrates that taxation stems from denaturalising some events, favouring building a distinguished social reality.

Adopting a phenomenological approach highlights taxations' condition as a phenomenon in contrast to the tax discourses while approximating these two dimensions. Such an attitude both identifies as helps to constitute the discursive dimension since it also offers a particular tax narrative. This peculiar situation shows these two dimensions' inseparability so that their contrast does not stem from their intrinsic features but an intellectual effort. It happens that the actor able of effecting this separation is necessarily part of the tax phenomenon's social

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framework conditions. OECD Publishing: Paris. 2001e, p. 228.

[28] Concern with the relationship between the tax phenomenon and the (Brazilian) social and economic reality led Gassen to separate the idea of a tax system (traditionally associated with formal and abstract debates) from that of a "tax matrix". In this sense, the tax matrix corresponds to the result of the choices made at a given historical moment in the field of social action about the tax phenomenon. See GASSEN, V. Matriz Tributária Brasileira: uma perspectiva para pensar o Estado, a Constituição e a tributação no Brasil. In: Gassen, V. (Ed.). **Equidade e Eficiência da Matriz Tributária Brasileira**. Belo Horizonte: Arraes, 2016, pp. 1-15.

construction, and it is not possible to escape from this condition. The very ability to recognise taxation as a distinct element stems from belonging to the tax epistemic community, as it is the greater or lesser mastery of language that allows a more or less accurate view of the phenomenon. Consequently, the tax phenomenological approach highlights the complexity involving subject and object, revealing a double existential relationship emphasising this duality's conventional nature.

Complexity and digitalisation.

Stating that taxation emerges from a preconceived notion can lead to the false idea of a necessary superiority of the subjects over objects. In this sense, taxation would be an exclusive result of the actors' discourse, so a narrative change would be enough to give a new configuration to the phenomenon. However, although built from a subjective notion, taxation is composed of an infinity of social phenomena, on which the actors have no capacity for direct agency. The notion of complexity correlates with to this multitude of factors whose assembling produce infinite phenomenological results, making subjects slaves to their phenomenical circumstances. Such circumstances result from the construction of these actors' social world, making this submission occur in a context that the subjects themselves produced. Since these subjects constitute an epistemic community, the complex relationship between the tax phenomenon and its discourse expresses itself in the relationship between the tax field and its object of analysis.

The complex relationship between the tax field and its object will be responsible for a semantic option adopted throughout the present work. In the absence of a more specific nomenclature, the term "taxation" will refer to both the field and its primary object, which is especially important in analysing the processes to which it has historically undergone. The first one concerns the already mentioned internationalisation of taxation, referring both to the tax phenomenon as its discourses (and, consequently, to the tax field). In this sense, the expression "international taxation" will refer both to the tax phenomenon seen from a global perspective and the cross-border tax epistemic community. The second concerns digitalisation, dialoguing with the possibility of deducting a "digitalisation of taxation" from the economy's digitalisation. The recognition of the possibility of this deduction raises new doubts about the poten-

tial effects of digitalising both the international tax phenomenon and its discourse.

Once digitalisation corresponds to a socio-economic outcome of the digital revolution, it undoubtedly operates on the phenomenological dimension of the social universe. In this way, it directly affects the raw materials used to construct international taxation as a social phenomenon. On the other hand, the inseparability between the phenomenological and discursive tax dimensions leads to an inevitable advance of these impacts in the field of international taxation. Hence, there would be no intrinsic distinction between digitalising the tax discourse or the phenomenon of taxation. Therefore, adopting a phenomenological approach imply that any impacts of digitalisation on international taxation necessarily presuppose impacts on the international tax epistemic community itself. This approximation between digitalisation and taxation provided by the phenomenological approach is the basis of the investigation proposed in this work, as the following item will show.

Central and preliminary questions.

The last items have demonstrated that the present work is about the interaction between two objects of analysis: international taxation and the digitalisation of the economy. For reasons clarified throughout the work, this interaction is part of the international tax field's agenda. Such a field comprehends an epistemic community of specialists in international taxation sharing both a system of ideas as a mutually intelligible language. Economists and lawyers are central in constructing this field's discourse, and despite their affinity concerning tax matters, these actors come from distinct discursive traditions. Consequently, slightly different approaches emerge as one adopts a legal or economic perspective to address the interactions between digitalisation and taxation. After adopting a legal perspective, the second step deals with the object of inquiry, which demands fidelity to the paradigms that govern the actors' behaviour and determine the problems to solve and the deemed legitimate solutions.[29]

On the other hand, before discussing the solutions, it is necessary to frame

[29] Although, as it will be shown, the legal field presents several problems concerning methodology, "paradigm" is employed here in a similar way to the one used by Kuhn when talking about what he calls "normal science". See The Route to Normal Science in KUHN, T. S. **The Structure of Scientific Revolutions**. 2 ed. Chicago: University of Chicago Press, 1970, 210 pages.

the research questions driving the enquiry, since depending on the field and the paradigm applied, the problematisation may have no sense.[30] The change in perspective is responsible for providing evidence for some issues and hiding others, and the relevance of these research questions lies in the fact that they belong to the legal field.[31] Notwithstanding, the work's primary argument stands on assumptions that are not part of the orthodox vocabulary of international taxation. As a result, two preliminary questions concerning the international tax law and the digital revolution demand response before addressing the central one. This item's intention is more than just presenting the questions, but to provide some arguments on why they are relevant and what their answering presupposes. Such clarification legitimises this work as a contribution to its field, justifying its methodological choices and theoretical assumptions.

As already stated, placing this work in the legal field sheds light on specific issues at the expense of others, and such issues correlate with the values considered central for the law and derive from debates historically held by the legal actors. Consequently, this analysis starting point concerns the attitudes legal actors may assume towards the legal phenomenon. However, depending on the attitude assumed, a completely different perspective of the field reveals itself, and a specific type of language gains priority to the detriment of the others. Such fact occurs because the legal activity is an activity of words, and this instrumentalization of the legal language demonstrates that its use is a matter of attitude. Employing the expression "discourse" instead of "language" emphasises this characteristic, highlighting that language use is not neutral. Therefore, for this work's purposes, "discourse" has a definite theoretical sense, not just assuming a specific meaning but also evidencing what is at stake in the proposed analysis.

The object contextualisation allows presenting the central question: "how digitalisation impacts the international tax legal discourse?" However, applying the categories

[30] Talking about questions referring to retinal imprints, Kuhn says that "… such questions are parts of normal science, for they depend upon the existence of a paradigm and they receive different answers as a result of paradigm change." See KUHN, T. S. **The Structure of Scientific Revolutions**. 2 ed. Chicago: University of Chicago Press, 1970, 210 pages, p. 129.

[31] The field's importance before posing questions is remarked by Brownsword: "Before we get the methodology we need some questions; but, before we have questions, we need what? The answer is that we need some field of human action or activity that attracts our cognitive attention and interest; we need to frame the phenomena within the field so that we can articulate, at least in a general way, the questions of our inquiry; and, we need a focus, or a number of focal points, within the field for our inquiries." See BROWNSWORD, R. Field, Frame and Focus: methodological issues in the new legal world. In: Gestel, R. v., Micklitz, H.-W. and Rubin, E. L. (Ed.). **Rethinking Legal Scholarship: a transatlantic dialogue**. New York: Cambridge University Press, 2017, pp. 112-172, p. 114.

introduced so far and adopting the premises they presuppose, it is possible to reformulate the question. The point is to identify: "the impact of a revolution resulting from the advances of communication and information technologies on the international tax lawyers' attitudes towards the relationship between their language and the international tax phenomenon". Though the entire work intends to answer this question, chapter three will focus on offering a direct response to this issue. Nonetheless, this central question comprises categories that are not obvious for the legal field, either for entailing ideas lacking a universal agreement or simply not being familiar to the legal audience. So, in order to solve the central question, it is necessary to address two critical preliminary questions, one concerning the digital revolution and the other involving the legal discourse.

The analysis of the impacts of digitalisation on international tax law implies identifying what the digital revolution means and how it relates to the legal discourse. For an audience of international tax lawyers, categories such as "the digital economy", or "the process of the digitalisation of the economy", are not evident. This fact explains why the legal actors usually concentrate on describing business models deemed highly digitalised. Moving the debate towards expressions like "revolution resulting from the advances of communication and information technologies" would make it harder for international tax lawyers to understand and participate. The expression "digital revolution" is not even frequently present in the legal tax field, and when it is, its meaning is more a kind of metaphor for a mere transformation than a revolution in a more sophisticated sense.[32] This unfamiliarity is why, in the quest for answering the central question, there is a need to answer this first preliminary question regarding digitalisation.

Nonetheless, although it is reasonable to presume the digital economy's impacts on international taxation in its economic perspective, it is not evident why it would also be relevant from a legal perspective. Since the digital economy results from the digitalisation of the economy, it becomes necessary to understand how such a process relates to the legal discourse. Chapter two is dedicated to answering this question, describing the digital revolution's main features and relating its consequences to the legal discourse on international taxation. Hence, it will be essential to comprehend the features of the digitalisation process concerning the

[32] See VALENTE, P. Digital Revolution. Tax Revolution? **Bulletin for International Taxation,** v. 72, n. 4a, 26 Mar 2018b.

economy or any other object. Since digitalisation derives from a specific form of technological development, the point is to identify digital technologies' peculiarities and explain how they distinguish themselves from other technologies. More deeply, it will be necessary to understand what technology is and how it can be related to the economy.

Understanding the impacts of the digitalisation of the economy on the legal discourse implies that a helpful definition of technology cannot rely on an economic approach. In this sense, the technology must be defined "from the inside", i.e., from a technological perspective. Notwithstanding, this definition's usefulness and the way to approach the technology depends on how one perceives the legal phenomenon. Such a dependency leads to the other preliminary question to answer: "what constitutes the legal discourse on international taxation?" Whereas the first preliminary question responds to the lack of familiarity international tax lawyers have regarding technological categories, the second preliminary question justifies itself by other reasons. Although the expression "international tax law" should be very familiar to an international tax lawyer, the typical divergences that characterise the history of the legal field impose clarifying how the expression is employed.

Defining "international tax law" becomes even more critical since this work's assumptions are not frequently present in the tax discourse. The notion of international tax law as a field constituted by actors that share a system of ideas is not radical but does not belong to the current international tax lawyers' vocabulary. Such an assumption raises several doubts, and the first concerns the very origin of the legal discourse on international taxation. Once the word "discourse" emphasises the attitudes of international tax lawyers towards the law, there would be as many discourses as there are lawyers' attitudes. Conversely, considering that these actors are mutually understandable, it is possible to conclude that the discourse of international tax law preserves some core characteristics, even when the actors assume multiple attitudes. Such characteristics permit identifying the differences between international tax lawyers and domestic tax lawyers, tax and non-tax lawyers, and between lawyers and other actors.

Therefore, the preliminary question involving the legal discourse may be unfolding in three other questions regarding "what makes international tax law 'international'", "why tax law is different from other legal domains", and "what makes the law 'legal'". Answer-

ing these questions demands an in-depth analysis of the international tax legal field's peculiarities, as chapter one will demonstrate. Such an endeavour involves a narrative of significant events in constructing the international tax legal field to reveal the dominant attitudes that have historically forged the legal discourse on international taxation. It is paramount to recognise the actors' characteristics to identify the discourse itself since the latter is an expression of the firsts. In order to answer these questions, as well as the others previously presented, the work opted for particular methodological choices. These choices will also imply adopting assumptions and theoretical frameworks necessary to carry out this task, as shown below.

Establishing focal points.

The last two sub-chapters have established the theme and the object of the thesis, situating them in a debate that only makes sense in the light of a specific field. Hence, the research questions concern the relationship between the digital economy and international taxation against the background of the history and development of the legal tradition. Nonetheless, this field characterises itself by a paradigmatic plurality resulting from the various intellectual projects that seek to make sense of the very idea of the law. Accordingly, elaborating the questions to be answered already indicates the preference for one particular perspective to the detriment of others. In this case, the option was to adopt a legal perspective that could most benefit from the competing theoretical proposals. The choice for a discursive approach to understanding international tax law indicates which methodological tools will be available to resolve the issues presented and informs the attitude towards the present research object.

Conversely, besides being conditioned by the methodological tools adopted, the inquiry conduction also subjects itself to how one presents the research questions. Hence, when considering that the legal discourse on international taxation encompasses all types of contributions resulting from the debate involving the digital economy and international tax law, this work faces a self-referential situation. It occurs that the attitude adopted towards the international tax legal discourse in its entirety also applies to this work as its specific manifestation. In this sense, a deemed rigorous analysis of the object necessarily requires a critical view of the very analysis proposed here. Such a "meta-analysis" should consider both the personal cir-

cumstances involving the researcher as the context surrounding the research work. The purpose is to identify, considering the interests of the international tax field itself, the expected attitudes of those who occupy the academic space and the potential reasons for a particular individual to occupy it.

When applied towards a specific investigation, the discursive perspective implies that even methodological decisions are a matter of attitude. With this in mind, the theoretical foundations and the presuppositions assumed must be in harmony with the field's practice and with the personal choices adopted by the actor, in this case, the researcher. Accordingly, this subchapter highlights the personal and academic context that influences the author's and, consequently, the work's assumptions. The first objective is to demonstrate that although some uncertainties stem from the researcher's maturation process, others derive from the legal field's methodological inconsistencies. The second is to highlight the unavoidable methodological issues that arise from adopting a realistic approach, which affects the very direction of the research. Finally, this subchapter exposes the structure of the work and the content of its chapters, exhibiting an overview that helps in understanding the intellectual proposal here presented.

Methodological aspects.

As this introduction has previously clarified, the personal perspective is unavoidable and consists of a fundamental premise of this work. Nonetheless, recognising the actor's perspective is not the same as defending academic arbitrariness, but just considering that the location in the field constrains the observation of its objects. Hence, the positions assumed will affect the perspective about the field and the issues considered relevant for the debate, which express themselves through the research questions. Solving this problematisation requires adopting methods paradigmatically capable of providing a satisfactory answer according to what this same paradigm establishes. However, the legal field itself is subject to several ontological and methodological crises, especially regarding the role of academia and the nature of its production. Nevertheless, even before addressing the methodological choices, it is important to clarify two attitudes that will directly influence choosing the theoretical foundations of this work.

The first attitude relates to this work's scientific utility so that it must offer

something useful for the benefit of international tax scholars. Accordingly, placing this work in a tradition will be a constant effort, which does not relate exclusively to the discussions on the digital economy and international taxation fostered by the BEPS Project. Instead, the objective is to recognise the digital tax debate as another stage of a long-running discussion on issues that have historically affected the law.[33] Thus, the idea of offering something to other researchers and practitioners correlates with this work's view about their role in the long tradition of the legal field. Such a vision presupposes identifying at least two different albeit equally relevant audiences to which this work targets. The first and more immediate one comprises the jury members responsible for deciding the author's admission to the academic universe, while the second, a more general audience, is composed of all actors belonging to the field of international taxation.

The second attitude concerns the preoccupation with this work's social utility, in the sense that this thesis must repay the investment of the taxpayers who financed it. This type of approach implies a certain scepticism about the international tax legal field itself, questioning the usefulness of maintaining a whole environment of discussion on themes this field promotes. This concern pushes the work towards an effort to find a sort of openness of its results, i.e., making its contribution not limited to issues that make sense exclusively to the tax field's participants. In other words, this work aims to offer society something considered valuable by parameters that are not primarily legal but rely on what academic legal researchers may produce. This endeavour will lead to the controversial but unavoidable task of interpreting what society expects from legal academia. Ultimately, the premise is that it is possible to give a reasonable answer to the social concerns both from a conceptual as a pragmatic perspective.

Doctrinal versus non-doctrinal.

The dichotomy between the Anglo-American and the continental European traditions illustrates the debate about academia's ability to deliver results that are not useful to the legal field exclusively. One may observe two distinct positions, the first concerning the

[33] This issue belongs to a broader discussion about the nature of the law itself, whether it could be considered induction and formal logic or should necessarily consider facts and experiences. An excellent example of this debate is the one between Holmes and Langdell, as described in GESTEL, R. v., MICKLITZ, H.-W., EUROPEAN UNIVERSITY, I. and LAW, D. **Revitalizing doctrinal legal research in Europe: what about methodology?** European University Institute: Florence, p.38. 2011, p. 4.

so-called doctrinal legal scholarship in opposition to the second regarding the interdisciplinary approaches.[34] These traditions offer interesting insights by which one might understand the legal phenomenon, but both are also subject to criticisms. Doctrinalists suffer the accusation of being "intellectually rigid, inflexible, and inward-looking", whilst interdisciplinary research bears the label of an "amateurish dabbling with theories and methods the researchers do not fully understand".[35] The result in the European academic environment is an attack on doctrinal legal research, which has produced much self-criticism. Notwithstanding, this attack ironically occurs when American realism began to emphasise the importance of doctrinal research.[36]

Thus, given its importance, as recognised even by its critics, doctrinal legal scholarship must be contemplated within the methodology here adopted. This fact turns the "law and language" (L&L), in its non-formalistic perspective, into the best interdisciplinary approach for this work's purposes.[37] Avoiding formalism means avoiding the temptation of justifying the work's conclusions exclusively from its theoretical assumptions. Instead of just delivering a systemically cohesive discourse, this work intends to offer one that is open to criticism of substance, even coming from outside the legal field. This position is even more critical in an inherently interdisciplinary domain such as international tax law, by which this work avoided the more obvious option of using "law and economics" (L&E) as its theoretical foundation. Besides being widely used in the tax field, L&E fails to provide a critical view of the legal methodology

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[34] See SMITS, J. M. What is legal doctrine: on the aims and methods of legal-dogmatic research. In: Gestel, R. v., Micklitz, H.-W. and Rubin, E. L. (Ed.). **Rethinking legal scholarship: a transatlantic dialogue**. New York: Cambridge University Press, 2017, pp. 207-228 and SMITS, J. M. Law and Interdisciplinarity: On the Inevitable Normativity of Legal Studies. **Critical Analysis of Law,** v. 1, n. 1, pp. 75-86, 2014. For an international point of view, see SHAFFER, G. and GINSBURG, T. The Empirical Turn in International Legal Scholarship. **American Journal of International Law,** v. 106, n. 1, pp. 1-46, 2012.

[35] See VICK, D. W. Interdisciplinarity and the Discipline of Law. **Journal of Law & Society,** v. 31, n. 2, pp. 163-193, 2004, p. 2.

[36] See SMITS, J. M. What is legal doctrine: on the aims and methods of legal-dogmatic research. In: Gestel, R. v., Micklitz, H.-W. and Rubin, E. L. (Ed.). **Rethinking legal scholarship: a transatlantic dialogue**. New York: Cambridge University Press, 2017, pp. 207-228, p. 207 and POSNER, R. A. The State of Legal Scholarship Today: A Comment on Schlag Essay and Responses. **Georgetown Law Journal,** v. 97, pp. 845-856, 2008.

[37] When talking about law and language, it is essential to distinguish between two sorts of integrations concerning the two domains: the first regards the legal theory concerning the language used by law, the second refers to how positive law treats the use of the language. Despite all the importance of this second theme (the 15th edition of the Congrès International de Droit Comparé has dedicated itself in no small part to people's right to language), this work is concerned with the first one. See JAYME, E., ACADÉMIE DE DROIT INTERNATIONAL DE LA HAYE and ACADÉMIE INTERNATIONALE DE DROIT COMPARÉ. **Langue Et Droit: XV Congrès International Du Droit Comparé, Bristol, 1998 : collection des rapports**. Bruxelles: Bruylant, 2000.

and is incomplete in addressing meaning and interpretation, limiting itself to efficiency matters.[38]

However, it is essential to note that the mere adoption of a discursive perspective does not automatically convert the present thesis into a work of L&L. Such research would require methodological mastery and specific theoretical knowledge not customarily found in the international tax field. The objective of this work is limited to acting as a sophisticated consumer capable of appropriating the knowledge produced in that field to satisfy specific theoretical demands.[39] This type of connection does not seem to have been made yet and could bring some valuable contributions to the field of international tax law.[40] The reverse is also true: L&L could profit from the particularities of international tax law, such as its close relationship to economics, its genealogical connection with the political economy, and its international character.[41] Nonetheless, since L&L offers various approaches, it is crucial to state that this work focuses on the critical discourse analysis theoretical assumptions, emphasising the language's role as an instrument of power.

The system of ideas.

Focusing on the instrumental use of language becomes even more relevant given that the law necessarily expresses itself through words. Therefore, it is possible to say that language has been the vehicle by which the legal phenomenon traditionally makes itself visible, which became more evident from the rise of a specific legal language.[42] However, since lan-

[38] See RUBIN, E. L. The Practice and Discourse of Legal Scholarship. **Michigan Law Review**, n. 86, pp. 1835-1905, August 1988, p. 1897 and MALLOY, R. P. Law and Market Economy: The Triadic Linking of Law, Economics, and Semiotics. **International Journal for the Semiotics of Law,** v. 12, n. 3, pp. 285-307, September 01 1999.

[39] This idea of "sophisticated consumer" is found in RING, D. M. The Promise of International Tax Scholarship and its Implications for Research Design, Theory, and Methodology. **St. Louis University Law Journal,** v. 55, n. 1, pp. 307-329, 2010a and in SHAFFER, G. and GINSBURG, T. The Empirical Turn in International Legal Scholarship. **American Journal of International Law,** v. 106, n. 1, pp. 1-46, 2012.

[40] In a research conducted between 12nd and 15th November 2018, it was possible to verify that international tax law is not object of concern by law and language field. The research comprised: the Multicultural association of law and language; the International Association of Forensic Linguists (IAFL); the International Academy of Linguistic Law; the International Journal of Legal Discourse; The International Journal of Law, Language & Discourse; The International Journal of Speech, Language and the Law; The International Journal for the Semiotics of Law - Revue internationale de Sémiotique Juridique.

[41] The international field is not deeply studied by law and language. The few exceptions are restricted to issues on translation and transplant of concepts.

[42] About how language has traditionally been employed as an essential medium in formulating rules to govern social

guage is not neutral, an inherently legal discourse implies that lawyers take attitudes concerning power. This idea is not novel, and even the more formalistic and scientifically ambitious legal approaches recognise the imperative character of the law as a manifestation of power.[43] What appears as a novelty is a perception that the relationship between the law and power is not exclusively limited to this instrumental aspect but also encompasses the meanings of the norm related to the acts of will.[44] In other words, it is not only the legal discourse's application that relates to power but the very process of constructing the sense of the field's intellectual categories.

The above conclusion leads to a double relation between power and the legal discourse insofar as the latter is both a cause and a consequence of the former. In this sense, transformations occurring amid power relations will inevitably lead to reformulations of the structure of the legal discourse.[45] The flip side of this coin is that eventual changes in the sense of the legal categories also cause power imbalances, turning the control over legal discourse into a form of power in itself. On the other hand, what makes discourses intelligible in a given epistemic community is the system of ideas shared by that community's members. So, at the centre of the relationship between legal discourse and power relations lies a system of ideas responsible for connecting one extreme to the other. Therefore, to identify the digital revolution's impacts on the discourse of international tax law, one needs to investigate how the system of ideas shared by the members of the epistemic community of international tax lawyers is affected by the alterations generated by that revolution.[46]

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relations and behaviour see GOODRICH, P. **Reading the Law: a critical introduction to legal method and techniques**. Oxford, New York: B. Blackwell, 1986 and KELLY, J. M. **A Short History of Western Legal Theory**. Oxford: Oxford University Press, 1992.

[43] "Kelsen always recognised and acknowledged the sense in which law was a set of imperatives directing human behaviour. Law, for Kelsen, was power, and his definition of the legal norm fully recognised its coercive aspect." See GOODRICH, P. **Legal Discourse: studies in linguistics, rhetoric, and legal analysis**. New York: St. Martin's Press, 1987, p. 71.

[44] This distinction between legal norm as an imperative command vis-à-vis the legal norm as a result of meaning relations is also observed in Kelsen: 'Norm is the meaning of an act by which a certain behavior is commanded, permitted or authorised. The norm, as the specific meaning of an act directed toward the behavior of someone else, is to be carefully differentiated from the act of will whose meaning the norm is…". See KELSEN, H. **Pure Theory of Law**. Berkeley: University of California Press, 1967, p. 5.

[45] "If there is a shift in power relations through social struggle, one can expect transformation of orders of discourse. Conversely, if power relations remain relatively stable, this may give a conservative quality to reproduction." See FAIRCLOUGH, N. **Language and Power**. London, New York: Longman, 1989, p. 40. This idea explain the need for a historical narrative about the political environment in which the discourse of international tax law appeared and evolved.

[46] Such is an arduous task for an outsider in this field. This situation explains why this analysis fits better to someone belonging to the international tax legal field, even relying on the intellectual tools elaborated by discourse ana-

Adopting the theoretical foundations of critical discourse analysis goes beyond merely methodological aspects, reaching the assumptions of this work. This research presupposes that it is possible to recognise the sequence of events that shaped the historical relationship connecting the exercise of power, the system of ideas, and the dominant legal discourse. Such recognition is necessary for defining the meaning of "the legal discourse on international taxation" and how the digital revolution could impact it. The objective is to demonstrate that the development of information and communication technologies can affect the relations of power and the system of ideas that shape (and are shaped by) the discourse of international tax law. This relationship represents a specific event of a more significant and unprecedented phenomenon: the digital revolution. Notwithstanding, before detailing the chapters' structure and reveal this demonstration, it is necessary to address this work's reflexivity and explains how it constrains the analysis proposed.

Reflexivity.

This work could not avoid considering the personal perspective since the individual circumstances affect every academic legal research. Nonetheless, given factors related to the context of the elaboration of a doctoral thesis in law, the personal and material conditions of the researchers converge to a roughly comparable standard. PhD researchers typically present a similar profile in terms of age, experience in the field, or professional expectations, resulting in relatively similar attitudes towards the legal field and its objects. This kind of standardisation of profiles strengthens a repetition of routines that can be confused with the legitimation of a specific academic procedure. Notwithstanding, there is no sense in presupposing a universal methodology, an "a priori procedure" that could resolve all legal problems. The methodology should serve as a satisfactory proposal of solving a contingent problem given by the field, not constituting an end in itself.[47]

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lysts, which ensures that the present work belongs to international tax law, not to the field of law and language.

[47] In fact, the legal field seems to be moving in the opposite direction from a universal methodology, which led Brownsword to say that "(i)t is not simply that the context or scope of inquiry is changing but that the ground is shifting under our feet." See BROWNSWORD, R. Field, Frame and Focus: methodological issues in the new legal world. In: Gestel, R. v., Micklitz, H.-W. and Rubin, E. L. (Ed.). **Rethinking Legal Scholarship: a transatlantic dialogue**. New York: Cambridge University Press, 2017, pp. 112-172, p. 115.

Therefore, the methodology is more connected to the questions posed than to any methodological ideal concerning the phenomenon of international taxation that everyone could adopt. As already seen, these questions are directly related to their specific field, being conditioned by the position the actor occupies. Depending on the position, this parallax effect will cause the academic to consider specific questions and not others and, consequently, seek certain methodologies. However, in admitting that legal activity (including the academic type) is discursive, and that discursive activity is a matter of attitude towards the field, the methodological aspects concerning the academy will also relate to how the actor reacts to the field's reality. In this sense, all academic work arises from an attitude by which the legal researcher positions him or herself concerning the field. The conclusion is that the academic legal research is not neutral, resulting from a specific attitude towards the legal phenomenon as an object of intellectual speculation.

The sense presented above justifies the statement that the methodological aspects of this work cannot avoid the personal perspective. Consequently, it is not about claiming that methodological choices have a potential for arbitrariness or do not adhere to quality requirements. Instead, this work will focus on recognising the author's position in the field and, based on this recognition, try to offer the most helpful contribution to the digital tax debate, instead of what the other researchers' position already allow them to offer. Accordingly, this is why clarifying and understanding this work's context and the author's circumstances are so critical. There is an evident preoccupation with this thesis' academic rigour, but providing evidence of the researcher's position better protects the quality of legal work than merely identifying and adopting a specific methodology. The mere application of a methodology does not ensure the tax legal academic quality since scientific rigour is also a matter of attitude.

Personal context.

The author is a tax lawyer, a national and international bureaucrat, coming from a domestic environment dominated by positivism and legal doctrine, and who decided to bring to the academic world an object already dealt with in the professional context. Besides, this academic work occurs in the scope of an international agreement between two public universities

funded by Brazilian and French taxpayers. The question that arises is why these taxpayers should fund this work again since they already financed Brazilian tax administration's and OECD's work on this same topic. Hence, it is essential to identify the university's possible contributions to the debate concerning the digital economy and international taxation. Such contribution may be formal (based on the idea that the PhD consists of a rite of admission in a field of knowledge) or have a material (or substantive) meaning. However, simply answering that the PhD is a requisite for becoming a professor is not a satisfactory answer.[48]

From a formal point of view, i.e., merely giving the actor a privileged place in the field, the movement towards the academy is useless. Although the literature recognises the powers involved in the academic environment, the fact is that an international bureaucrat already has means of speaking and being heard in the field.[49] It is undoubtedly easier to impact the academic tax world from the Task Force on the Digital Economy than the inverse.[50] Therefore, except for seeking some personal prestige, an exclusively formal approach leads to the conclusion that pursuing a PhD would be redundant. As a result, there must be a material reason for it, which raises a new question concerning how the university differentiates itself from an international governmental body. The university must offer more than just serving as a "place of speech" for this shift to make sense, being necessary to assess the academy's role in the tax field and questioning the content of academic education in a more profound sense than just "teaching to think like a tax lawyer".[51]

The problematisation presented above is not new since the legal field entails many parallel debates on the essence and objectives of the academic activity. These debates relate to the investigative activity while connecting with the in-depth discussions regarding the legal phenomenon's definition as its object. Hence, the best alternative would be to transform these uncertainties into this work's object, address and solve them, for then move further. None-

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[48] Such a pragmatic response would not be helpful since it would just change the perspective keeping the essence of the question: Why is it necessary to have a PhD to teach? Is it just a matter of a formal procedure, or would it improve materially the candidate for teaching (what would lead to the material perspective)?

[49] For a good view on how the "academic power" may manifest itself in the context of the French establishments of higher education, see "Types of Capital and Form of Power" in BOURDIEU, P. **Homo Academicus**. Stanford: Stanford University Press, 1988, pp. 73-127.

[50] As will be reiterated, this thesis presupposes that TFDE's work is responsible for fostering the debate, including within the academy.

[51] On how the academy teaches students how to think like lawyers see BIRKS, P. **Examining the law syllabus:**

theless, it seems not feasible to solve historical dilemmas on the nature of the law in a few pages, whereas the tax debate should not depend on unresolved disputes about legal theory and methodology. Thus, several methodological difficulties will haunt this work: some of them resulting from the typical mistakes of those still maturing in the academic research practice, while others derive from the very methodological uncertainties of the legal field.[52] In this sense, besides the questions relating to the personal context, it is also essential to understand the academic context in which this work occurs.

Academic context.

The methodological uncertainties in the legal field mean that, in addition to the personal anxieties, one also observes general anxiety pervading legal academic activity.[53] However, besides addressing the methodological or "how" question, there is a "why" question concerning the academy's objectives. This question is related to legal research and teaching, and this type of debate leads to two already mentioned positions concerning the lawyer's possible attitudes. The first concerns the lawyers' activity in protecting their clients' interests, whomever these clients could be, while the second concerns the preoccupation with the law itself.[54] Nonetheless, this work cannot assume an academic posture defending the author's "clientele interests", and there are two reasons for this. The first refers to efficiency issues since the bureaucratic position already allows such a defence, while the second connects with the deemed social expectations involving the academy, potentially undermining the international tax field's very interests.[55]

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beyond the core. Oxford: Oxford University Press, 1993.

[52] For a critique on law's methodological problems, see RUBIN, E. L. The Practice and Discourse of Legal Scholarship. **Michigan Law Review**, n. 86, pp. 1835-1905, August 1988 85 and RUBIN, E. L. On Beyond Truth: A Theory for Evaluating Legal Scholarship. **California Law Review**, n. 80, 1992 86. About how such uncertainties seem to be part of legal researchers' routine, Ring states that "(…) legal scholars are often comfortable with messier and less stylized models that may imperfectly but more comprehensively reflect the world (…)". See RING, D. M. The Promise of International Tax Scholarship and its Implications for Research Design, Theory, and Methodology. **St. Louis University Law Journal,** v. 55, n. 1, pp. 307-329, 2010a, p. 327.

[53] The expression is extracted from BANKOWSKI, Z., DEL MAR, M. and MICHELON, C. **The Anxiety of the Jurist: legality, exchange and judgement**. Farnham (Surrey): Ashgate, 2013.

[54] This "pro-client" position explains the typical dichotomy of the tax field regarding tax administration's vs taxpayers' interests, which is superficial, especially at the international level, as this work will demonstrate in item "3.3.1. Rethinking the actors".

[55] By recognising that some people legitimately expect different behaviour from who talks from an academic posi-

On the other hand, adopting the position of protecting the law itself is not the end, but the beginning of the task, since it is still necessary to face another academic crisis concerning its scientific aspirations. This crisis, which does not necessarily concern the law as a whole, is related to the kind of academic research needed for a legal work to be considered genuinely academic. Such a debate has brought two already mentioned approaches to conducting legal research into a collision course. In Europe (and Brazil), the doctrinal research prevails, usually associated with the closure of the academic legal discourse in its inner intellectual constructs. In contrast, in the Anglo-American law schools, several efforts emerged to render legal research more open, allowing it to communicate with other fields of knowledge. Although it is questionable to sustain genuinely scientific research on an exclusively doctrinal basis, the lack of definition of how to deal with methodological aspects may lead to the ineffectiveness of the interdisciplinary approach.[56]

Taking the attitude of seeking something beyond mere empty rhetoric in the academic environment is an excellent departure point. Such attitude leads to the view of academic law as a set of mental representations on various aspects of a broad field of social phenomena such as, in this case, international taxation. Nonetheless, it is essential to keep in mind that academic law is only part of the law as a social phenomenon. The law involves controversies and clashes of views about the world and the desirable social order, all of which are part of the human experience. Tax law is too relevant to rely exclusively upon empty constructs and intellectual formalisms, and despite the difficulties, it is necessary to seek the right measure between abstraction and substance.[57] The present work is committed to understanding international tax law's social results, avoiding the search for "quick intellectual victories" at the expense of the elements historically built by the field, and this spirit guides its argumentative structure as the next item will show.

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tion, using the academy to defend this author's client's interest would border on an intellectual fraud, for reasons explained during this work.

[56] "Americans often view European legal scholarship as old-fashioned and inward-looking due to its continued engagement with doctrine, whereas many Europeans see American scholarship as amateur social science that has lost contact with the realities of legal practice and judicial institutions". See GESTEL, R. v., MICKLITZ, H.-W. and RUBIN, E. L. Introduction. In: Gestel, R. v., Micklitz, H.-W. and Rubin, E. L. (Ed.). **Rethinking legal scholarship: a transatlantic dialogue**. New York: Cambridge University Press, 2017, pp. 1-27, p. 2.

[57] For a view on the international context, see RING, D. M. The Promise of International Tax Scholarship and its Implications for Research Design, Theory, and Methodology. **St. Louis University Law Journal,** v. 55, n. 1, pp. 307-329, 2010a.

The structure.

The present work exhibits a structure composed of this introduction, three chapters addressing the research objects, and the conclusions. The idea is to present international tax law and the digital revolution in the first two chapters from a discursive perspective and confront these objects in the third chapter against the background of the debate on the digital economy within the scope of the OECD. The adoption of the discursive perspective reveals a realistic attitude towards the objects of research. The aim is to understand their manifestation at the historical and social level instead of choosing an arbitrary and exclusively conceptual definition. Accordingly, the narrative will borrow contributions from fields traditionally committed to this realistic reading, such as history and sociology. The result is an argument that, although transdisciplinary, does not depart from the basic assumption of the legal field regarding the dual relationship between power exercise and the law, which preserves the legal character of this thesis.

Chapter one decomposes the expression “international tax law”, investigating the significance of the three elements that constitute it. The idea is to understand its international character, tax aspect, and legal quality, identifying the historical process responsible for bringing all these elements together in the same social practice. Therefore, an attitude of estrangement concerning categories usually taken for granted by those who belong to this field will be needed. In other words, it will be necessary to adopt a sceptical attitude towards the international tax legal field, avoiding the temptation to consider its existence as evident given the diffusion of its social practice. This field emerged from somewhere, necessarily having specific historicity that connects it to identified or identifiable events and characters. In the same way, this activity is distinguished from other social practices, raising questions about what is unique in international tax law and how this field manifests itself at the social level.

Chapter two investigates the particularities surrounding the digital revolution responsible for a process of economic and social transformation whose implications have reached the field of international taxation. Because its origin lies in the technological plane, the digital revolution raises several questions about how communication and information technologies can impact the social sphere. In the same sense, it is necessary to understand why other

technological developments have never provoked a revision of the international tax discourse. These questions demand understanding what technology is, how it evolves, and how this evolution relates to its socioeconomic context. From this understanding, it is possible to develop a broader view of the digitalisation process, going beyond the mere analysis of business models considered highly digitalised. The result is a transformation process, both material and cognitive, of the assumptions on which the liberal social order establishes itself.

Chapter three reframes the objects described in chapters one and two into the context of the debate promoted by the Task Force on the Digital Economy. The idea is to identify how the digital revolution can impact international tax law and how the leading tax actors have reacted to these impacts. Thus, the chapter analyses the evolution of the international tax discourse associated with the digital revolution, recognising changes resulting from the transformative process brought about by digitalisation. It is not just a matter of considering this process's material impacts but its implications on the system of ideas shared by the epistemic community of tax experts. The result is a paradigmatic change that explains the aforementioned discursive transformations and allows anticipating future events arising from digitalisation. The chapter will demonstrate that, more than simply adapting the tax discourse to a new economic reality, the digital revolution requires rethinking both the social as the intellectual dimension of the international tax law.

The final chapter presents the findings of each of the previous three chapters and the general conclusions of the thesis, besides discussing methodological aspects. The arrangement of the chapters' conclusions in the final part intends to give an overview of the progress of research, allowing the reader to see how the chapters are linked together into one single chain of reasoning. This chaining leads to this work's main conclusion: the existence of an informational phenomenology on wealth generation evidenced by the digital revolution. The chapter also explores the possible consequences of this conclusion, especially regarding the need to rethink the tax phenomenon at the international level. Finally, the chapter discusses the research limitations, presenting the results of the methodological choices made in this introduction. Such methodological aspects still include recommendations extracted from the research results and suggestions for future research on relevant aspects not sufficiently explored in this work.

CHAPTER 1 THE LEGAL DISCOURSE ON INTERNATIONAL TAXATION.

The introduction has demonstrated that field identification is the first step in understanding the questions concerning a given object of analysis. As far as the present work is concerned, the relationship between the digital economy and international taxation lies within the social and intellectual tradition that resulted in the current field of international tax law. Therefore, any questions raised and responses offered must harmonise with the debates that this field has traditionally promoted. This fact shows the importance of recognising the main actors responsible for the march of the field and understanding the agenda they pursue. Such an agenda depends on instruments designed to achieve specific objectives, all of which steaming from the paradigms guiding the practice of the field. This practice, however, is not constant over time nor homogeneously taken over by all the actors, resulting in the need to understand a field of international tax law immersed in all its idiosyncrasies.

Therefore, the international tax law to which this chapter refers does not consist of an ideal category, but a historical experience marked by episodes and characters responsible for its current features. Thereby, although this is not a historical work, understanding the characteristics of the field depends on the ability to identify the episodes that form its historicity. Likewise, this is not a work of philosophy, so the concepts used here must be restricted to the context and objectives of the arguments raised. Thus, this chapter does not seek to develop an abstract concept of law, taxation, or internationalisation but only to identify how these phenomena have historically articulated to form the field of international tax law. Hence, the narrative proposed here is internal to the international tax legal field, encompassing its historical events and their perception by the actors. It aims to analyse the evolution of the field's discourse, identifying the trajectories of the social and intellectual dimensions of the international tax law.

This chapter aims at presenting a narrative about the main events and actors responsible for shaping the field of international tax law. The hypothesis is that this field results from the internationalisation of the historical encounter between the legal and the tax discursive traditions. The premise is that understanding this process requires identifying three fundamental categories expressed in this chapter's subdivisions: the legal quality, the tax aspect, and the international character. Subchapter 1.1 presents a historical narrative that lists legal and

non-legal events responsible for the genesis and development of the legal field. Subchapter 1.2 presents a similar narrative concerning the tax field, identifying the transformations that resulted in the modern idea of taxation that marked the formation of tax law. Subchapter 1.3 describes the process of internationalisation experienced by the tax field that affected both its object and its actors, resulting in the current international tax law.

1.1. Identifying the legal field.

The introduction has shown that the concern about building a precise definition of "legal" corresponds to much more than an excess of terminological zeal, presenting double importance for this work. Firstly, such a definition regards the methodological aspects of this thesis since this work aims at analysing the relationship between the digital economy and international taxation from a legal perspective. Thus, legal is a property expected from the approach adopted in this work and, consequently, a criterion to evaluate it. The second importance relates to constructing the argument employed advocating the empirical existence of a legal field. Considering that international tax law is a legal subfield, its discourse should reflect the legal characteristics of the broader field to which it belongs. On the other hand, discourses represent the actors' attitudes towards the objects of their fields, making it necessary to understand what attitudes differentiate the lawyers from actors belonging to distinct fields.

Identifying what makes the lawyers' social practice a particular behaviour corresponds to discovering what makes the law itself legal. Such a topic constitutes one of the most significant debates in the legal domain, and it is unreasonable to attempt to solve centuries of discussions in a few pages. The extreme difficulty in defining law lies in proposing a concept not excessively restricted to the tax debate or overly inclusive. The first situation invalidates the definition for not being able to encompass other debates traditionally recognised as legal, while the second is worthless for losing the very purpose of offering a legal perspective distinguishable from other approaches. However, the already mentioned sceptical attitude implies discovering what the legal tradition has historically been instead of offering a metaphysical concept of law. So, the importance lies in identifying how lawyers perceived that what they did was distinct from the other social practices and what attitudes they assumed from the consciousness of this distinc-

tion.

This subchapter presents a historical narrative listing legal and non-legal events responsible for the genesis and development of the law. The premise is that this field possesses an institutional and an intellectual dimension, reflecting its social practice and the articulation of its abstract categories. The hypothesis is that the transnational perspective of the legal phenomenon affected both dimensions, initially reiterating the universality of the law and then challenging its possible international character. Item 1.1.1 describes how the combination of the Greek philosophy with the Roman law by emerging power groups resulted in the consolidation of the two legal dimensions during the eleventh century. Item 1.1.2 presents the existing structural conflicts between successive intellectual propositions for understanding the law and offers a paradigmatic alternative of unification. Item 1.1.3 shows how these intellectual projects affected the transnational perspective, describing the international efforts of institutionalising the legal phenomenon.

1.1.1. Rationality, legal forms, and emerging interests.

The legal discourse did not arise in a vacuum since the law is a social phenomenon and is susceptible to suffer all kinds of influence that changes in the human experience may exert. Consequently, paradigm shifts, the dominance of some specific world view, or the emergence of any new ideology may impact how the law is intellectually perceived and socially practised. In this sense, like any other discourse, the legal was born and has developed in the same environment of ideas originated from different discursive traditions, being genealogically more connected to ones than others. Some of these closer discursive traditions were responsible for offering the raw materials from which lawyers could build the legal field. For being associated with forming the legal discourse, such traditions are present within the very genetic code of law's intellectual categories. Therefore, comprehending the system of ideas underlying the discursive traditions that have influenced the law facilitates understanding the legal discourse itself.

This item assumes that the contemporary legal discourse, at least in the West, has its roots connected to the rise of philosophy in ancient Greece. At that moment, a new

proposal to explain the social reality employed a self-considered rational discourse that intended to face the power problem in the polis. On the other hand, the law has its origins in ancient Rome, when a new approach to solve problems in social life, now recognised as legal, emerged. Nevertheless, the Roman legal practice had no aim of becoming an intellectual systematisation project, limiting itself to applying its forms to solve practical problems on a case-by-case basis. The modern legal systems, in turn, emerged and developed when some groups used the forms created by Roman law to meet their emerging interests, following the tradition of providing allegedly rational arguments for solving political issues. The pioneer was the canon law, the Catholic Church's legal project, followed by several other secular projects for modifying social reality through legal discourse.

This item aims at evidencing the three historical elements that formed the modern Western legal systems: the Greek rational project, the Roman legal forms and institutions, and the institutionalisation of the interests of emerging power groups. The premise is that the systematisation of Roman forms based on the rationality offered by Greek philosophy has unified the legal field. The hypothesis is that this unification was responsible for consolidating the social dimension of the legal field and developing its transnational intellectual dimension. The item begins by presenting the changes that have taken place in Greek society related to the emergence of the polis' institutions. Afterwards, it shows how legal practice has developed in Rome through a dichotomy between the social and intellectual dimension of the law. Finally, it explains how the systematisation of legal systems resulted in the consolidation of the social dimension and the development of an intellectual dimension in the legal field.

The emergence of the discourse.

Some historical analyses on the development of legal thinking have ancient Greece as the beginning of the succession of events that have culminated with modern law.[58] Given this work's concern with the discursive dimension and the rational aspiration of the

[58] Kelly starts his book by dedicating the first chapter to the Greeks, justifying the choice by arguing that the "reason why Greece has a special place in the history of civilization is(…) because the Greeks were the first people-at any rate, the first of whom Europe retains any consciousness-among whom reflective thought and argument became a habit of educated men; a training for some, and a profession and vocation for others, not confined to observation of the physical world and universe(…) but extending to man himself, his nature, and his place in the order of things, the character of human society, and the best way of governing it." And he concludes that "it was among the Greeks

legal phenomenon, the events that occurred in Greek society becomes even more critical. A transformation was experienced by the Greek civilisation when new proposals to deal with social life conflicted with the tradition that preceded the emergence of the polis institutions.[59] Previously, the polytheistic religion was responsible for forming the consciousness of Greek society and, consequently, the reference for the exercise of authority and social organisation. This social conscience understood that the questions related to social life and the events of nature belonged to the same dimension. The Greeks considered social and natural phenomena as arising from a shared social and physical order established by the gods.[60]

Nevertheless, along with the emergence of the polis's institutions also emerged the perception that this event would enable new instruments of social organisation. Political issues, i.e., issues concerning the polis, became the object of a discursive activity, turning the language into a tool of command and domination over other people.[61] More than a simple rite or a form, discourse became the discussion, the argumentation and, mainly, the measure of persuasiveness. In other words, from a mere conductor of the exercise of power, the discourse became one form of power manifestation.[62] As a result, the transformation undergone by the discursive activity aroused the perception that a new form of social action based on argumentation and contradictory debate would be possible. Some of the first to realise these new possibilities were the sophists, who went down in history as the teachers of those who wanted to achieve high positions in the polis's administration through discourse and personal action.[63]

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that the objective discussion of man's relation to law and justice became an activity of the educated mind and was recorded in a literature which has been part, ever since, of a more or less continuous European tradition. It is therefore with the Greeks that the history of reflective jurisprudence in the West, or European legal theory, must begin." See "Greece as a Starting- Point" in KELLY, J. M. **A Short History of Western Legal Theory**. Oxford: Oxford University Press, 1992, p. 1.

[59] The most important institution was the direct democracy, according to Meier, the unique institutional alternative to tradition. See MEIER, C. **The Greek Discovery of Politics**. Cambridge, Mass.: Harvard University Press, 1990, p. 110.

[60] Vernant presents the impact of the polytheistic religion in the Greek's world view, as well as the role of the poets in transmitting oral tradition. See "Mythe, rituel, figure des dieux" in VERNANT, J.-P. **Mythe et Religion en Grèce Ancienne**. Paris: Points, 2014, pp. 17-30.

[61] According to Meier, the Greeks called "politikos" the issues concerning the polis, understood as the city identified from the citizens that constitute it. "Politikos", therefore, was understood as opposed to "private", "personnel", "selfish". See MEIER, C. **The Greek Discovery of Politics**. Cambridge, Mass.: Harvard University Press, 1990, p. 25. The new forms of social action, however, did not represent a complete abandonment of the tradition. Vernant explains how the religious system was profoundly reorganised to face the changes in the polis. See "La religion civic" in VERNANT, J.-P. **Mythe et Religion en Grèce Ancienne**. Paris: Points, 2014, pp. 41-50.

[62] See VERNANT, J.-P. **Les Origines de la Pensée Grecque**. 8ème ed. Paris: PUF, 2000, pp. 44-45.

[63] The term "sophistês" already existed meaning "skilled craftsman" or "expert". From the end of the fifth century

Therefore, the attitude of the sophists was to oppose the polytheistic religious tradition as a criterion for conceiving the world and solving the typical problems of the polis's institutions.[64] Such opposition has meant a fundamental transformation in the conception of how to organise society. However, this paradigm shift could lead to an environment of incertitude since the sophistic position was a proposal that considered the laws as an inconstant and fortuitous object. This attitude had the potential to subject the laws to moral considerations that could result in entirely different conclusions according to one's ability to master the discourse.[65] If the discourse ceases to be a driver of the authority's power to be a kind of power itself, political decisions would be subject to personal circumstances. The polis institutions would depend on the individual capacities to master the techniques and elements of sophistry, resulting in the submission of the political issues to a genre of relativist rhetoric lacking a concrete meaning.[66]

Philosophical attitude and the power problem.

While an intellectual project, the philosophy shared with the sophistry the search for alternatives to the religious tradition as a criterion for solving political issues. Notwithstanding, the philosophers have condemned the sophists' relativism, not abandoning the use of discourse as a political tool but searching for a substance complement to what they considered the use of mere empty rhetoric.[67] A doctrine based on the moral dimension of politics has re-

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BC onwards, however, it came to be associated with the paid teaching of wisdom, rhetoric, and persuasion. See "'Sophist': Name and Concept" in FREEMAN, K. **The Pre-Socratic Philosophers**. Oxford: Basil Blackwell, 1946, pp. 341-342.

[64] Such was not just an intellectual opposition since the sophist movement represented a project of social change through the education of future generations of rulers that clearly aimed to replace the traditional race-based aristocracy with a new intellect-based one. See "The Sophists: their position in the history of culture" in JAEGER, W. W. **Paideia: the ideals of Greek culture**. Volume I - Archaic Greece The Mind of Athens. 3rd ed. Oxford: Basil Blackwell, 1946, pp. 286-298.

[65] According to Kelly, sophists understood the laws as merely accidental, contingent, and variable conventions. This attitude "had however the effect of fixing law itself with the character of relativity and indifference, and thus of floating it off from the moral moorings which provide the sense of duty to obey it." See "The Emergence of Legal Theory: Origin of the State and of Law" in KELLY, J. M. **A Short History of Western Legal Theory**. Oxford: Oxford University Press, 1992, pp. 12-17.

[66] This sort of rhetoric is commonly called moral or ethical relativism and traditionally associated with the sophists. Arguing that this image of the sophists is false, see BETT, R. The Sophists and Relativism. **Phronesis,** v. 34, n. 2, pp. 139-169, 1989.

[67] It is noteworthy that there is some discussion on the historically constructed view about sophistry. The caricature portrayed here is usually accused of being anachronistic as well as deeply influenced by the Aristotle's view on the sophists. Thus, as pioneers in offering systematic instruction in the domain of discourse, sophists should be understood in the intellectual, political, and artistic context of Greece from the fifteenth century BC. On the other hand, for the purposes of this work, the more academically accurate versions of these events are less important than the

sponded to the debate centred on obtaining and maintaining power. Such a doctrine advocated that the exercise of power must seek to achieve good for the subordinate, not for the ruler.[68] Accordingly, duty replaced interest as the central element in state affairs while the moral dimension imposed the exercise of virtues to guarantee happiness instead of material gains. This depreciation of the material dimension resulted in the conception of an ideal state, whose character derives from being based on expertise and driven to a rational social organisation.[69]

Another crucial philosophical alternative opposed both the sophist argument as the idealistic philosophical project, privileging social conduct as a central element. This movement favouring a practical approach conceived not just a social organisation considered good in absolute terms but also others thus considered in a given circumstance.[70] Such a plural perspective emphasised rhetoric as a means of constructing the form for human conduct in responding to the questions involving searching for the good or the just. However, this emphasis on the rhetoric did not mean a return to sophistry, but the use of discourse necessarily associated with conduct considered good.[71] This philosophical project was not restricted to the intellectual development of the good as an abstract category but encompassed solving the political puzzle from the social practice.[72] This practice, be it a linguistic or an institutional one, has removed the political issues from the ideal world and brought them to the human relations level.

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historically dominant views on this debate that was responsible for the creation of metaphors embodied in the Western legal culture. On how scholars have viewed the sophists' ideas from notions of form and content, see SCENTERS-ZAPICO, J. The Case for the Sophists. **Rhetoric Review,** v. 11, n. 2, pp. 352-367, 1993. A contextualised view of sophistry can be seen in JARRATT, S. C. F. **Rereading the Sophists: classical rhetoric refigured**. Carbondale, IL: Southern Illinois UP, 1991.

[68] On the relationship between the philosophy and the politics in Plato, see "Morale et politique" in LUCCIONI, J. **La Pensée Politique de Platon**. Paris: Presses Universitaires de France, 1958, pp. 107-118. "The Republic" is the work in which Plato best articulates his project of social organisation from the submission of politics to the moral dimension. The version adopted in this research is PLATO. **The Republic of Plato: translated with notes and an interpretative essay by Allan Bloom**. 2nd ed. New York: Basic Books, 1991.

[69] Klosko argues that the theoretically constructed state in "The Republic" was part of Plato's realistic political project. See KLOSKO, G. Implementing the Ideal State. **The Journal of Politics,** v. 43, n. 2, pp. 365-389, 1981.

[70] According to Schollmeier, Aristotle divides theoretical and practical wisdom. The first concerns immutable divine things, while the second refers to human deliberative things. Practical wisdom presents two functions concerning practical knowledge: an intuitive function, represented by practical intuition, concerning the end of our actions; and a discursive function, represented by deliberation, referring to the means to our ends. See SCHOLLMEIER, P. Aristotle on Practical Wisdom. **Zeitschrift für philosophische Forschung,** v. 43, n. 1, pp. 124-132, 1989.

[71] McAdon argues that Aristotle places rhetoric as part of his philosophical project, developing it as an unfolding of dialectic, but without returning to the sophistic tradition. See MCADON, B. Rhetoric is a Counterpart of Dialectic. **Philosophy and Rhetoric,** v. 34, n. 2, pp. 113-150, 2001.

[72] On how Aristotle's theory of action occurs at the individual level, and on the difficulties of its extension to the collective dimension, see FREDE, D. The Social Aspects of Aristotle's Theory of Action. **Philosophical Topics,** v. 44, n. 1, pp. 39-57, 2016.

Such philosophical projects represented two alternatives to deal with the power problem since neither sophistry nor mythology had offered a critique of the use of violence for organising life in society.[73] Both approaches offered theoretical formulations on organising life in the polis from a paradigm of rationality, although they also raised some concerns. There is always a risk that the rational solutions provided by the experts do not correspond to the best answer for the political issues, at the same time that pluralism may undermine the efforts of building a collective endeavour, making social practice distant from rationality. In the first case, an excessive submission of the individual to the technocratic decision could lead to authoritarianism.[74] In the second, the result could be the passionate defence of individual values, bringing society back to the pre-sophistic situation.[75] Despite these dangers, these philosophical projects have given the first move to build a rational society concerned with the solution of the power problem.

Roman law's dimensions and limitations.

Although initiating a new way of thinking about solving the problems of social life, the Greeks did not put into practice the abstract constructions developed by the philosophers, so that philosophy never served as a basis for the government of the polis.[76] These forms remained confined within the scope of the intellectual confrontation between philosophical ideas and traditional religious custom. Besides, there was no specific field of philosophy concerned with the laws in Greece, not even existing a Greek expression corresponding to the idea of law as an abstract concept. Therefore, the interaction of philosophy with practical concerns did not produce social institutions or an intellectual project that one could identify as legal.[77] The

[73] According to Vaz, the problem of the relationship between theory and practice throughout the development of Western thought has reflected a permanent conceptual tension between the Platonic and the Aristotelian model of political life. See "Ética e Direito no Pensamento Clássico" em VAZ, H. C. d. L. **Ética e Direito**. São Paulo: Landy & Loyola, 2002, pp. 215-226.

[74] On the risks of an excessive submission of the society to the government of experts, see MURLEY, J. C. Plato's "Republic", Totalitarian or Democratic? **The Classical Journal,** v. 36, n. 7, pp. 413-420, 1941.

[75] According to Yack, Aristotle himself considered opposition and conflict as central in the idea of a political community. See YACK, B. Community and Conflict in Aristotle's Political Philosophy. **The Review of Politics,** v. 47, n. 1, pp. 92-112, 1985.

[76] Plato indicates, in Epistle VII, how he initially imagined that the early experience of Athens could have led to his dreamed ideal state ruled by the philosopher-king while recounting his unsuccessful attempt to put into practice in Sicily his political project. See PLATO. **Timaeus. Critias. Cleitophon. Menexenus. Epistles.** Cambridge, MA: Harvard University Press, 1929, pp. 462-565.

[77] Writing about a possible influence of Greek legal thinking on Roman law, Kelly estates that "(t)his impact was

Romans were the first to give concrete practicality to some of the intellectual constructions of philosophy through the law. During the Roman republic, this new kind of social practice has emerged as an alternative to deal with the problems of social life.[78]

The creation of the praetorship allowed citizens to present claims before the praetor, a magistrate responsible for setting the preliminaries and the issue between the parties. Afterwards, the *iudex*, an arbitrator who was not a magistrate but a private person specially appointed, became entrusted to analyse the issue.[79] In the exercise of its authority, the praetor received opinions, or counsels, from intellectuals belonging to Rome's aristocracy known as the *iuris consulti* or persons consulted about the law. They formed a professional class of lawyers who, although guided by a pragmatic approach, developed not just a debate but a whole literature on the legal phenomenon.[80] Therefore, Roman law presented an institutional character consisting of the exercise of authority by the praetor, considered the most critical magistracy for the study of Roman law. In turn, the dialectical approach employed by the *iuris consulti* in solving the issues of the polis represented the intellectual dimension of the law.[81]

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nil, or virtually nil. It was the one area in which the Greeks had nothing to teach their intellectual captives. (…) the Greek cities had laws, and traditions of lawgiving. But nowhere was there a legal science or any very sophisticated legal technique. (…) Even in Athens we do not know the name of a single person who worked as a legal adviser (rather than as a court orator), or who taught law to students, nor the name of a single book on legal subject." See "The Greek Impact on Roman Law" in KELLY, J. M. **A Short History of Western Legal Theory**. Oxford: Oxford University Press, 1992, pp. 48-52.

[78] Traditionally, the argument that the Romans inaugurated an intrinsically legal thought that was not developed by the Greeks lies in the idea that they were the first to create a legal discourse independent of moral or religious elements. Thus, although legal institutions have been present since the Monarchy, it was during the Roman republic that the rise of a "science of law" is usually recognised as opposing to the rules of the ancient i*us civile*. See "The Science of the law in the Republican Period" in GIRARD, P. F. **A Short History of Roman Law**. Toronto: Canada Law Book Company, 1906, pp. 90-99. See also "Legal Science" in TELLEGEN-COUPERUS, O. E. **A Short History of Roman Law**. London: Routledge, 1993, pp. 60-62. Kantor advocates an "exaggeration" in the opposition between the isolation of law in the Roman republic and the Hellenistic period, albeit he recognises that this isolation became more pronounced from the fifth-century codifications. See KANTOR, G. Ideas of Law in Hellenistic and Roman Legal Practice. In: Dresch, P. and Skoda, H. (Ed.). **Legalism: anthropology and history**. Oxford: Oxford University Press, 2012. Chapter 1, pp. 55-83.

[79] See JOLOWICZ, H. F. **Historical Introduction to the Study of Roman law**. 2nd ed. Cambridge: Cambridge University Press, 1952, p. 46.

[80] See "Jurists" in JOHNSTON, D. **Roman Law in Context**. Cambridge: Cambridge University Press, 1999, pp. 5-8.

[81] Jolowicz stresses the academic importance of the praetor. See JOLOWICZ, H. F. **Historical Introduction to the Study of Roman law**. 2nd ed. Cambridge: Cambridge University Press, 1952, p. 15. On the intellectual dimension of the legal practice, Berman says that it "was in its Stoic form, with the writings of Plato and Aristotle in the background, that Greek dialectics was imported into Rome in the republican period (second and first centuries B.C.). There it was taken by the educated classes, including jurists, who applied it for the first time to prevailing legal institutions. The Greeks have never attempted such an application." See BERMAN, H. J. **Law and Revolution: the formation of the Western legal tradition**. Cambridge and London: Harvard University Press, 1983, p. 134.

On the other hand, and despite all these social innovations proportionated by the legal practice, Roman law had a relatively limited impact on society. The emergence of such a practice did not imply an overwhelming transformation of social relations since the polytheistic religion remained a critical source for solving social affairs.[82] In addition to this, the modification of social conduct through Roman law was constrained by the practical difficulties implicated. These difficulties involved, among other things, access to legal knowledge, the activation of procedures, besides doubts concerning the quality and impartiality of magistrates and judges.[83] Finally, Roman law did not correspond to an effort to continue the theoretical endeavour of philosophy, nor was it a means for carrying out the social project elaborated by the philosophers.[84] Roman law had no organisation based on broader philosophical principles, being essentially casuistic and lacking a conceptual system to provide cohesion to the law as a whole.

Law as an instrument of power.

From the arguments presented thus far, it is possible to verify the differences in how the Greeks and Romans dealt with the categories elaborated by the philosophy and the law, respectively. Greek idealism had metaphysical foundations, consisting of an ambitious project of social organisation based on rationality and aiming at revealing what would be good under any circumstances.[85] Thus, the differences are associated with the distinct purposes for which legal and philosophical forms were intellectually constructed. Even in its more socially oriented version, Greek philosophy did not deviate from identifying the good as the ultimate end that justifies all human action, even admitting its circumstantial character.[86] These concerns did

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[82] On how the Roman senate, as the great "Council of State", was concerned with matters affecting the state religion, see JOLOWICZ, H. F. **Historical Introduction to the Study of Roman law**. 2nd ed. Cambridge: Cambridge University Press, 1952, pp. 40-41.

[83] For an analysis of several topics regarding the procedural practice of Roman law, see "Vindication of Rights in Practice" in JOHNSTON, D. **Roman Law in Context**. Cambridge: Cambridge University Press, 1999, pp. 122-132.

[84] "These jurists pursued a science which was the opposite of theoretical. The formulation of great first principles and grand generalities was quite foreign to them." KELLY, J. M. **A Short History of Western Legal Theory**. Oxford: Oxford University Press, 1992, p. 49.

[85] The idea of the good is the most fundamental of the metaphysical elements upon which this project of social organisation bases itself. See DEMOS, R. Plato's Idea of the Good. **The Philosophical Review,** v. 46, n. 3, pp. 245-275, 1937.

[86] Grönroos presents an explanation on the implications of rational or merely volitional elements on the virtuous activity aiming to pursuit the human good. See GRÖNROOS, G. K. J. Wish, Motivation and the Human Good in

not exist among the Romans, so the forms used by Roman law were not intended to construct a metaphysical theory of the good. The formalism developed by the Romans was pragmatic in its objectives, not corresponding to a kind of conceptual formalism.[87]

On the other hand, this pragmatic formalism was responsible for allowing specific groups to utilise the Roman law for their benefits. Thus, Roman law stood side by side with the traditional culture in establishing social divisions maintained by the exercise of power.[88] Only the praetor, precisely who developed the institutionalised law, exercised the *imperium* (prerogative to use force) regularly within the city. Except for the dictator itself, who was extraordinarily appointed, and the consuls, who used their troops mostly in external wars, the rest of the magistrates had no *imperium*.[89] In this sense, the political exploitation of Roman law's pragmatic formalism became an instrument for the liberation of traditional situations of social exclusion, notably the plebeians'. This liberation movement became more accentuated with the importance acquired by Roman law from the development of a discourse on social relations based on the idea of property conceived without the interference of divine commands.[90]

In sum, there was no direct influence of idealistic philosophy on Roman thought to spark attempts of metaphysical systematisation of the legal forms.[91] Roman law was

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Aristotle. **Phronesis,** v. 60, n. 1, pp. 60-87, 2015.

[87] This conceptual formalism has later become the paradigmatic alternative found in order to build a legal tax field with scientific aspirations. This will be presented in the item "1.2.3. The legal discourse on taxation".

[88] This traditional culture, in turn, was strongly influenced by the polytheistic religion. This influence persisted even after the rise of Christianity as the official Roman religion. See BEARD, M., NORTH, J. and PRICE, S. **Religions of Rome**. Volume 1 - A History. Cambridge: Cambridge University Press, 1998, 454 pages.

[89] "Strictly speaking, the praetorship was not an office sharply distinguished from the consulship. The praetor was rather conceived as a kind of junior colleague of the consuls. He was vested with the same imperium, although the imperium of the consul was considered as maius (greater)". See WOLFF, H. J. **Roman Law: a historical introduction**. Norman: University of Oklahoma Press, 1951, p. 33. The magistracies were the consulate, the praetorship, the aedileship, the quaestorship, the censorship, the tribunate, the dictatorship and the minor magistrates. See JOLOWICZ, H. F. **Historical Introduction to the Study of Roman law**. 2nd ed. Cambridge: Cambridge University Press, 1952, pp. 43-56.

[90] On how the plebeians raised in power through access to higher magistracies, replacing the old patrician aristocracy, see JOLOWICZ, H. F. **Historical Introduction to the Study of Roman law**. 2nd ed. Cambridge: Cambridge University Press, 1952, p. 15. On the importance of the new institute of property for the new Roman social relations, see "Property" in FRIER, B. W. and KEHOE, D. P. Law and Economic Institutions. In: Scheidel, W., Morris, I. and Saller, R. P. (Ed.). **The Cambridge economic history of the Greco-Roman world**. Cambridge: Cambridge University Press, 2007, pp. 113-143, pp. 134-137.

[91] Kelly attributes this formalism to the influence that Stoic philosophy had on educated Romans. Instead of seeking action guided by abstract values, this philosophy resulted in an attitude of indifference in the face of good or misfortune, contenting itself with the reconciliation of social life with the "rationality of nature". See "Rome's Encounter with Greek Culture" in KELLY, J. M. **A Short History of Western Legal Theory**. Oxford: Oxford University Press, 1992, pp. 45-48 611.

formal, to the extent that it helped establish abstract forms to cope with political issues pragmatically. These abstract legal forms provided emancipatory movements, mainly concerning the social rise experienced by plebeians, but they also instituted a new configuration of the exercise of power. The Roman legal practice had the potential to be philosophically systematised, but it was just a set of independent forms, some with substantive meaning, others presenting just a procedural character.[92] Thus, in elaborating their legal forms, the Romans had no aspiration to advance towards the solution of the power problem, having developed just another way of exercising power. However, as a set of intellectual and institutional practices, Roman law has modified the power problem in a way that could be copied and replicated in other societies.[93]

Law as a system.

The solution to the power problem in Roman (and, subsequently, European) society took on a new connotation since the rise of Christianity. Unlike the Roman polytheistic religions, Christianity has developed a dualism between the universe of social institutions and the transcendental relationship of the individual with God.[94] Therefore, on the level of social organisation, Christianity aimed to transform the world's reality through its religious project. The Christians, since very early, sought to organise themselves socially, an effort that resulted in the rising of the Church as their institutional representation.[95] However, the transcendental dimension was the primary motivation for the Christian endeavour, imposing an accessory condition on the institutional social project. This characteristic made Christianity assume a critical position

[92] In this way, the individual forms generated by Roman law did not result in a system of precedents. Metzger explains that the decisions produced by the Roman procedure did not bind future judgments. See METZGER, E. Roman Judges, Case Law, and Principles of Procedure. **Law and History Review,** v. 22, n. 2, pp. 243-275, 2004.

[93] The enactment of the Corpus Iuris Civilis of Emperor Justinian marked the end of the Roman imperial period, the last phase of a process of concentration of power in which the making of the law became strongly centralised, and jurisprudence lost its prestige given the rise of the absolutism of the imperial system. See "The Post-Classical Period of Roman Law" in MOUSOURAKIS, G. **The Historical and Institutional Context of Roman Law**. Milton: Taylor and Francis, 2017, pp. 349-395.

[94] According to Weber, this dualism is a feature of religions that have an ethical orientation and corresponds to a project of theoretical and practical self-denial of the world. See "Religious Rejections of the World and Their Directions" in WEBER, M. **From Max Weber: essays in sociology**. New York: Oxford University Press, 1946, pp. 323-359.

[95] MacMullen explains that such religious project began from individual evangelising efforts to persuade the pagan population and resulted in a sophisticated propaganda and coercion structure from the conversion of Constantine in AD 312. It was soon after becoming the official state religion that Christianity exploded in numbers and reached the intellectual class of the time. See MACMULLEN, R. **Christianizing the Roman Empire A.D. 100-400**. Volume I. New Haven: Yale University Press, 1984, 183 pages.

concerning both the practices as the context that influenced the power problem, an attitude that resembled the social project intellectually developed by the mentioned Greek philosophers.[96]

Thus, Christianity was responsible for rescuing an ideal associated with the Greek philosophy concerning the dichotomy between introspective and social life. Doing so has induced an attitude of depreciation of the world as it exists, implying the devaluation of the social order established by the exercise of power.[97] When advancing to the West, the Christians adopted the language and rationality of their addressees, allowing the influence of the European elite over Christian thought. This process of Hellenisation of Christianity resulted in constructing the Christian discourse from the intellectual elements of philosophy.[98] However, from its institutional perspective, such discourse was not limited to the contributions obtained from philosophy but encompassed the intellectual forms elaborated by Roman law. Amid the Christian institutional project, Roman law has combined with the metaphysical doctrines developed by the Greek philosophers, giving rise to the canon law.[99]

Canon law, however, was not limited to ecclesiastical liturgy, having inaugurated the efforts of systematisation of the law in the European experience. Differently from Roman law, canon law became more principled, dynamic, and identified as the positive law of the Church.[100] This institutional dimension had the company of an intellectual project of con-

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[96] Löhr argues that the self-image spread by Christianity as a philosophical practice must be interpreted in the traditional sense of the word. See LÖHR, W. Christianity as Philosophy: problems and perspectives of an ancient intellectual project. **Vigiliae Christianae,** v. 64, n. 2, pp. 160-188, 2010.

[97] This duality is explained in "De l'individu-hors-du-monde à l'individu-dans-le-monde" in DUMONT, L. **Essais sur l'Individualisme: une perspective anthropologique sur l'idéologie moderne**. Paris: Éd. du Seuil, 1991, pp. 35-71.

[98] This process is described in JAEGER, W. W. **Early Christianity and Greek Paideia**. Cambridge, Mass.: Harvard University Press, 1961, pp. 26-46.

[99] The canon law was the first modern legal system, the first to be created or, at least, systematised. On the role of Roman law in this process, Berman says that "ecclesiastical laws, both in the West and in the East, were heavily influenced by Roman law. Various concepts and rules of classical and postclassical Roman law were carried over, especially in matters of property, inheritance, and contracts." BERMAN, H. J. **Law and Revolution: the formation of the Western legal tradition**. Cambridge and London: Harvard University Press, 1983, pp. 199-200.

[100] The importance of the emergence of the canon law is argued by Berman: "(…) there was a time when what is known today as a legal system - a distinct, integrated body of law, consciously systematized - did not exist among the people of Western Europe, and that at the end of the eleventh century and in the early twelve century and thereafter legal systems were created for the first time both within the Roman Catholic Church and within the various kingdoms, cities, and other secular polities of the West." BERMAN, H. J. **Law and Revolution: the formation of the Western legal tradition**. Cambridge and London: Harvard University Press, 1983, p. 49. In contrast, Roman law was casuistic, immutable, and not considered the positive law of any polity in the West. See BERMAN, H. J. **Law and Revolution: the formation of the Western legal tradition**. Cambridge and London: Harvard University Press, 1983, p. 204.

structing the legal discourse nurtured by the rediscovery of the Roman legal texts. Such a project resulted in the rise of an unprecedented transnational debate in which the central object was the legal phenomenon.[101] Nevertheless, different reactions to this institutionally Catholic and formally Roman law resulted in a fragmentation of the European experience that marked the entire development of the Western legal culture. The context related to the power struggles of the various emerging groups led to the birth of the two most critical Western Legal traditions: the English common law and the continental European civil law.[102]

Legal traditions and their intellectual dimension.

In Britain, the new legal culture was received differently from the European continent, both in its institutional and intellectual dimensions. Albeit a former colony, there was no continuation of the Roman system on the local administrative organisation after the fall of the Western empire, allowing the Catholic Church to assure its position on the island.[103] After AD 1066, this ecclesiastical influence had to compete with the Normans, which dominated the English society in the following centuries. This competition resulted in the political segregation of the Roman Catholic Church and its law, leading the Normans to develop the common law.[104] Legal forms were adapted, or variants were created based on feudal principles modernised and adapted to confront the doctrines and principles of Roman and neo-Roman law. Following the weakening of the monarchy before local power groups, concerns on the autocratic and centralising spirit associated with Roman law led English lawyers not to import in bulk the Romans' legal forms.[105]

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[101] According to Berman, this debate was set within the European universities and resulted in the birth of a "transnational legal science". See BERMAN, H. J. The Origins of Western Legal Science. **Harvard Law Review,** v. 90, pp. 894-943, 1976.

[102] David refers to them as the leading legal "families" in the contemporary Western world. See DAVID, R., JAUFFRET-SPINOSI, C. and GORÉ, M. **Les Grands Systèmes de Droit Contemporains**. Paris: Dalloz, 2016. Our premise is that the tension between elements belonging to the traditions of common law and civil law exerts an enormous influence on the current legal perspective on international taxation, as it will be shown.

[103] While there is much debate about how and when the influence of the Western Roman Empire over Roman Britain came to an end, there is some agreement that the Catholic church occupied the space neglected by the Byzantine empire's inertia in claiming its inheritance. On how the Roman legacy remained in Britain in a religious rather than a political sense, see PETTS, D. Christianity and the End of Roman Britain. **Theoretical Roman Archaeology Journal**, pp. 86-95, 16 Apr 1999.

[104] This process is explained in "English courts from the Conqueror to Glanvill" in VAN CAENEGEM, R. C. **The Birth of the English Common Law**. 2nd ed. Cambridge: Cambridge University Press, 1988, pp. 1-28.

[105] The reaction to the Roman forms led to the myth that "democratic England rejected the authoritarianism of Ro-

Meanwhile, secular legal systems emerged in the European continent competing with canon law, a division that did not imply an absolute systemic separation. These varieties of medieval law corresponded to projects strategically carried out by different groups given their diffused interests and practical objectives concerning social and economic changes.[106] Although having political consequences, these were also legal projects since they based on the development of one inherently legal discourse. These systematisation efforts came to understand the division between positive and natural law as a dissociation between *lex* and *ius*, i.e., between enacted law and the system of justice.[107] This separation has offered an object for the legal field and resulted in a legal agenda shared by the academic studies developed in the European universities. The intellectual dimension of this new transnational legal field has consolidated from the rise of the scholastic dialectic as the prevalent method within the academic environment.[108]

The medieval consolidation of the intellectual dimension of the law meant a complement to its institutionalisation process during the Roman republic, but it presented its particularities. Such an event signified a historical break between the legal practice and the intellectual speculation of categories that may or may not have equivalents within the social institutions. Hence, this autonomous way of thinking, composed of its framework of knowledge, freed the jurists from their subordination to the casuistry imposed by social practice. This liberation is at its height in a new institutionalisation process related to the law, but this time involving only its intellectual dimension. Legal actors' object of speculation was no longer the law exclusively as an instrument for the social organisation identified in a specific place and time. This new law

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man law", making English lawyers search for inspiration in the Anglo-Saxon customs that existed before the Norman conquest. See "Explanations: Authoritarian Roman Law and Democratic England?" and "The Divergent Paths of Common Law and Civil Law" in VAN CAENEGEM, R. C. **Judges, Legislators and Professors: chapters in European legal history**. Cambridge: Cambridge University Press, 1987, pp. 73-83 and 113-126.

[106] "Like ecclesiastical law, secular law was considered to be a reflection, however imperfect, of natural law and, ultimately, of divine law. It was subjected to reason and conscience. It was rooted in divine revelation. Indeed, the very division between the ecclesiastical and the secular presupposed the mission of the church to reform the world, and consequently the mission of all Christians (but especially those in holy orders) to help make imperfect secular law conform to its ultimate purpose of justice and Truth." See BERMAN, H. J. **Law and Revolution: the formation of the Western legal tradition**. Cambridge and London: Harvard University Press, 1983, p. 274.

[107] According to Berman, the sacredness of these great systems called juridical bodies (*corpus iuris Romani*, *corpus iuris canonici* etc.) implied the subordination of the positive law to the natural law, given the secular character of the first and the divine of the later. See "The Application of the Scholastic Dialectic to Legal Science" in BERMAN, H. J. The Origins of Western Legal Science. **Harvard Law Review,** v. 90, pp. 894-943, 1976, pp. 921-930.

[108] Haskins holds that, despite some slight differences between the methods practised in the different schools, it is reasonable to say that all corresponded to species of scholasticism. On how the glossators were responsible for maintaining the scholastic method in the legal field despite its weakening in philosophy, see "The Medieval Professor" in HASKINS, C. H. **The Rise of Universities**. New York: Henry Holt and Company, 1923, pp. 37-78.

was a timeless and ubiquitous object, associated with the idea of a central order, managed from the tools that scholasticism offered, and located in the institutional environment provided by the European universities.

Conclusions.

The present item has demonstrated that the perception that language could stop being a vehicle for exercising power to become a type of power in itself occurred alongside the rise of politics. This environment allowed the emergence of linguistic attitudes concerning the themes of social life that resulted in the discourses of sophistry and philosophy. Although the latter has elaborated an agenda about power and violence in society, it has not produced social institutions, or an intellectual project considered legal. Law appeared only in the Roman republic, constituting itself from abstract forms that reconfigured the power problem. These first genuinely legal forms allowed new emerging power groups to develop social organisation projects based on their articulation, inaugurating a systemic view of the law. The first and most successful group was the Catholic Church, producing its canon law from the union of Roman legal forms with the intellectual categories developed by the Greek philosophers.

The different reactions to the emergence of canon law in Europe triggered events that marked the construction of the legal field, giving it some characteristics that are still present today. The first was the fragmentation of the Western legal tradition between the British common law and the continental civil law, resulting in different attitudes regarding the relationship between law and central authority. The second was the various secular projects associated with emerging power groups that rivalled with canon law. Notwithstanding, this rivalry did not result in denying the basic foundations of canon law, causing all legal projects to revolve around the notion of universal order. Such a tendency towards law's universality became even stronger with the rediscovery of the Justinian Code and the predominance of scholasticism. All these factors found in the European universities' emergence a possibility for institutionalisation, not of law as a social practice, but of its intellectual dimension.

Therefore, scholasticism and the competition between different legal projects stimulated the search for new legal forms considered in their practical and intellectual utili-

ty. Groups with a well-developed and socially prestigious theology or stable metaphysical concepts could build broad and coherent legal systems. The result was a revolutionary transformation in legal studies, mainly from the rise of universities in Europe. Thus, the rediscovery of the ancient Roman law texts, the rationale provided by scholasticism, and the context offered by the universities produced a transnational legal debate called here jurisprudence. This debate had its very institutional dimension, the academy, which was not necessarily in line with the institutional projects that have traditionally seen the law as a mere means to attaining emerging interests. Jurisprudence represented an intellectual complement to the institutional dimension of the law and a borderless power instrument conferred to lawyers, as the next item will show.

1.1.2. Jurisprudence as the intellectual dimension of the law.

The last item has presented a narrative proposing an interpretation of the historical process that culminated in the first Western legal systems' creation and early development. The idea was that emerging power groups had combined philosophical rationality with Roman law's intellectual forms and social institutions. The rise of Christianity was responsible for an institutional process of influencing the world from a religious perspective, resulting in what became known as canon law. The different ways England and the European continent reacted to canon law resulted in a division of the Western legal tradition, opposing the common law to the civil law. The subsequent emergence of other power groups resulted in secular legal projects that competed with canon law but maintained universalistic aspirations. In turn, the rise of legal studies in European universities, based on the rediscovery of the Roman legal texts, resulted in a transnational legal enterprise called here jurisprudence.

Jurisprudence, therefore, resulted from the emergence of the first European universities in the context of the systematisation projects carried out by emerging power groups. Thus, although strongly influenced by the interests of these groups, jurisprudence constitutes a specific debate that presented the legal phenomenon as the central element. In this sense, although it is undeniable that the Western legal systems result from the clash between different projects of social organisation, the idea of a legal field implied the existence of a legal agenda. The perception that lawyers could carry out legal studies regardless of the utilisation of

law as a political instrument has resulted in practical tension. On the one hand, the conspicuous finding that the law depends on external sources of power to drive the social organisation process. On the other, the side effect of legal studies' emergence: a sense of self-preservation resulting in identifying the mastery of legal discourse as an instrument of power.

The purpose of this item is to produce a narrative identifying, in general lines, what kind of concerns have occupied the legal debate arising from the emergence of jurisprudence. The premise is that the analysis of the conflicts between the three main branches of jurisprudence reveals what lies at the centre of the legal agenda. The hypothesis is that only a realistic approach to the legal field can encompass the entire debate of jurisprudence without the need to annul the contributions of its branches. Thus, the item demonstrates how jurisprudence's emergence has initiated a debate that led to a conflict between Christian and rational natural law. Afterwards, it shows the reaction of legal positivism against using metaphysical foundations in legal discourse and the subsequent response given by modern natural law. Finally, the item shows how a realistic attitude based on the rejection of merely abstract legal arguments can offer a broad view of the legal discourse.

Christian jurisprudence and universalism.

Although the last item has situated jurisprudence within the rise of universities in Europe, there was already an intellectual structure similar to natural law in ancient Greece. Stoic philosophy, inherited by the Romans, alluded to a general law responsible for ruling the whole universe.[109] Nevertheless, such a finding is not sufficient to hold that the Roman jurists had developed a systematic study of the natural law. As previously said, the Roman pragmatic formalism did not open space for efforts of systematisation, which only has occurred

[109] Early Stoicism (mainly from the teachings of Zeno) attributed the course of nature to natural laws, and not to chance. Besides, both in Stoicism as in eighteenth-century theology, there was a lawgiver who was also a beneficent providence, designing the whole to secure certain ends by natural means. Such ends were to be found in the life of men since everything had a purpose connected with human beings. See "Stoicism" in RUSSELL, B. **A History of Western Philosophy: and its connection with political and social circumstances from the earliest times to the present day**. New York: Simon and Schuster, 1945, 895 pages, pp. 252-270. The similarities between Stoicism and Christianity resulted in a debate about a possible genetic link between these two traditions. For an analysis of this possible relationship based on the concepts of God, Man, and Providence, see STOB, R. Stoicism and Christianity. **The Classical Journal,** v. 30, n. 4, pp. 217-224, 1935.

when canon law has appropriated this formalism.[110] However, the Catholic Church opted for not appropriating the forms deriving from rhetoric since this adoption could undermine the consolidation of the ecclesiastical authority. Jurisprudence, otherwise, adopted these forms in conjunction with the scholastic dialectic, establishing an environment in which the European humanists were later able to systematise continental law by classifying and analysing legal concepts and principles.[111]

In the seventeenth century, the weakening of the Catholic doctrine opened space for a new standard of rationality, meaning an alternative to the Platonic or Aristotelian worldview. Natural philosophy offered new metaphysical foundations, forming an essential intellectual pillar of what later became known as enlightenment.[112] Such new foundations were transferred to the social organisation domain, impacting legal practice, legislation and, mainly, jurisprudence. The new rational natural law aimed to apply the same cognitive pattern observed for the laws of nature to the social sphere and aspired to the same certainties found in mathematical proofs.[113] Such new rationality contrasted with the Christian tradition of medieval natural law for not necessarily using God as the central element for constructing its discourse.[114] This movement has implied a transformation in natural law's discourse, introducing new intellectual

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[110] In this sense, Roman formalism corresponds to what Weber calls concrete formalism. It differs from logical formalism in that it is more concerned with the obedience of specific rites and symbolisms than with the logical analysis of abstract legal concepts. See "The Categories of Legal Thought" in WEBER, M. **Economy and Society: an outline of interpretive sociology**. Berkeley: University of California Press, 1978, pp. 654-658.

[111] On how the context of defending freedom and humanism has rescued the rhetorical tradition, see "Rhetoric and liberty" in SKINNER, Q. R. D. **The Foundations of Modern Political Thought**. Volume One - The Renaissance. Cambridge: Cambridge University Press, 1978, pp. 23-48. According to Berman, the impact of the fusion of rhetorical forms with scholastic dialectics within the scope of Jurisprudence was most significant among German jurists, leading to what he named "the technical and the logical shift of the legal science". See "The Systematic Stage of Legal Science: *usus modernus protestantorum*" in BERMAN, H. J. **Law and Revolution II. The impact of the Protestant Reformations on the Western legal tradition**. Cambridge (MA): The Belknap Press of Harvard University Press, 2003, pp. 108-111.

[112] On how natural philosophy meant a break with both the Platonic doctrine of the five elements and the Aristotelian theory of a hierarchically organised cosmos, see "Nature and Natural Science" in CASSIRER, E. **The Philosophy of the Enlightenment**. Revised ed. Princeton: Princeton University Press, 2009, pp. 37-926.

[113] In this sense, see WIEACKER, F. **A History of Private Law in Europe: with particular reference to Germany**. Oxford: Clarendon Press, 1995, pp. 199-204. Wilson, however, adverts that the "law of the nature" concept is not a necessary implication of the notion of a universal physical law of the nature but the encounter of separate and independent strands resulting in a nomological image of nature. See WILSON, C. From Limits to Laws: the construction of the nomological image of nature in early modern philosophy. In: Daston, L. and Stolleis, M. (Ed.). **Natural Law and Laws of Nature in Early Modern Europe Jurisprudence, Theology, Moral and Natural Philosophy**. New York: Routledge, 2016, pp. 13-28.

[114] Finnis explains that while it is common to attribute to Grotius the paternity of this rupture, the roots of this separation date back to the mid-fourteenth century. See "Clarke's Antecedents" in FINNIS, J. **Natural Law and Natural Rights**. 2nd ed. New York: Oxford University Press, 2011, pp. 42-48.

forms more adapted to the rational times and the new ways of justifying legal arguments.

The social contract metaphor has appeared as a suprapositive postulate capable of justifying the establishment of the social order. Since grounded in the human dimension, such a formal scheme could become an instrument to impose limitations on the authority's acts.[115] Likewise, natural law has abandoned the debate on the different forms of government and their capacity in contributing to the materialisation of the good. Alternatively, natural lawyers began to use concepts such as the "sovereign power", "legislative power", the articulation between "sovereign", its "general will" and "the prince", as well as the "Legislative", understood as "the unified will of the people".[116] Finally, in the debates involving the doctrines of natural law, the lawyers have constructed arguments in terms of natural rights, later transformed into human rights. In reshaping the concept of natural law, they attributed a subjective meaning to the traditionally objective notion of *ius naturale*, accelerating the individualisation of the legal phenomenon.[117]

Rational and modern natural law.

The subjectivation of law led to a gradual replacement of the Greek idea of virtue in favour of natural rights as the quality equally present in each human being.[118] Such a change concerns the rupture between natural law, associated with the idea of order, and natural rights, a category that privileges the individual dimension. Thus, the traditional conception, according to which natural law corresponds to the search for what is naturally just, was superseded by the protection of personal freedom to act. The result was the emergence of a tension between two opposing views of the legal phenomenon, as the expression of a central order and as a tool

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[115] See "Natural law in early modern Europe" in BIX, B. Natural Law Theory. In: Patterson, D. M. (Ed.). **A Companion to Philosophy of Law and Legal Theory**. Chichester: John Wiley & Sons, Ltd., 2010. 13, pp. 209-227, pp. 215-218.

[116] Castro states that the adoption of these forms characterises the new discourse of natural law, representing the treatment of the problem of power under this new paradigm. Thus, there is the emergence of a discourse defending the necessary supremacy of an authority that, although supposedly desiring the good, can, paradoxically, practice violence. See "Do Humanismo ao Jusnaturalismo" in CASTRO, M. F. d. **Formas Jurídicas e Mudança Social: interações entre o direito, a filosofia, a política e a economia**. São Paulo: Saraiva, 2012, pp. 107-127.

[117] For a comprehensive account on this process, since the works of the Church's lawyers in the early days of jurisprudence, see TIERNEY, B. The Idea of Natural Rights-Origins and Persistence. **Northwestern University Journal of International Human Rights,** v. 2, pp. 2-13, 2004.

[118] The historical process that led to the emptying of the idea of virtue is reported in MACINTYRE, A. C. **After Virtue: a study in moral theory**. 3rd ed. Notre Dame: University of Notre Dame Press, 2007.

for individual empowerment.[119] This new duality has made room for theorisations about the social order grounded on the rationality of the citizens, breaking with the traditional organic explanations of the formation of life in the community. This idea of natural rights, rationally identifiable and independent from the sovereign's will, has entirely modified the debate on the power problem.[120]

The European rationalisation movement went beyond the humanisation of intellectual production, reaching the very social organisation. This process resulted in a tension involving the potential erosion of the ethical core established by the Christian natural law and the subsequent ideological impacts that humanisation could cause on social life.[121] The intellectual speculation resulting from humanistic rationalisation has also produced significant practical results in how the legal discourse continued to develop. Previously, lawyers had a central role in recognising forms as legal by importing them from the Roman legal texts or other sources and adapting them to the metaphysical precepts of Christian natural law.[122] Later, lawyers started to shape the legal discourse from legal forms obtained as the logical outcome of applying the new metaphysical legal doctrine.[123] This practice remained the dominant way of constructing the legal discourse until the positivist movement against metaphysical legal arguments.

From the twentieth century on, the modern natural law theories presented a different focus: understanding law as a social institution or a social practice.[124] In keeping the

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[119] According to Villey, the idea of subjective natural rights as an instrument of power and freedom of the individual originates from William of Occam's nominalism, being logically incompatible with traditional natural law. See "La Genèse du Droit Subjectif chez Guillaume d'Occam" in VILLEY, M. **La Formation de la Pensée Juridique Moderne**. 2ème ed. Paris: Presses Universitaires de France, 2013, pp. 240-268.

[120] Influenced by this process of humanistic individualisation, Hobbes decided to make a defence of monarchical absolutism ignoring traditional theories about the divine origin of royal power and privileging the construction of a discourse centred on the human dimension. This defence has inaugurated a new conception of freedom within the polis that, breaking with Roman tradition, influenced the later Enlightenment debate on the role of the state. See SKINNER, Q. R. D. **Hobbes and Republican Liberty**. Cambridge: Cambridge University Press, 2008.

[121] See WIEACKER, F. **A History of Private Law in Europe: with particular reference to Germany**. Oxford: Clarendon Press, 1995, pp. 213-221.

[122] Berman explains that the commitment to the project of creating legal discourse from adaptation to Christian metaphysics went beyond the interests of political practice. Since God was considered the law itself, the elaboration of a legal systematisation corresponded to an effort that was not only intellectual but stemming from Christian morals. See "Royal Law and Canon Law" in BERMAN, H. J. **Law and Revolution: the formation of the Western legal tradition**. Cambridge and London: Harvard University Press, 1983, pp. 516-519.

[123] See STOLLEIS, M. The Legitimation of Law Through God, Tradition, Will, Nature and Constitution. In: Daston, L. and Stolleis, M. (Ed.). **Natural Law and Laws of Nature in Early Modern Europe: jurisprudence, theology, moral and natural philosophy**. Farnham (GB): Ashgate, 2008, pp. 45-56.

[124] See "Modern Natural Law Theory" in BIX, B. Natural Law Theory. In: Patterson, D. M. (Ed.). **A Companion to**

historical tradition of dealing with moral or analytical problems, these new theories appeared as responses to the attack provided by legal positivism. Based on the intellectual confrontation between actors from both branches, this agenda has made the argumentative structure of modern natural law very different from previous natural law theories.[125] Although it was a debate involving several issues, two are central to understanding this confrontation of ideas. The divergences lie in whether the law has an inherent moral character and whether the lawyers should interpret and apply particular laws solely according to the will and intent of the lawmaker. Therefore, just as legal positivism consists of a reaction to natural rationalism, modern natural law theories can only be understood from the analysis of the positivist attack.[126]

Reactions to metaphysical legal arguments.

From the eighteenth century on, there was a movement against natural law resulting from the rejection of metaphysical categories as the foundation of the legal discourse. This rejection gave rise to several projects of legal positivism sharing their methodological aim of excluding moral speculation as a means of elaborating legal forms.[127] Initially, these projects have developed politically opposing orientations, emulating the dichotomy between the view of law as an instrument of the will of the central order and as an individual guarantee. On the one hand, the codification process in the nineteenth century gave rise to an idea of law identified as the manifestation of the authority's will.[128] On the other, arguments defending the supremacy of

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Philosophy of Law and Legal Theory. Chichester: John Wiley & Sons, Ltd., 2010. 13, pp. 209-227, pp. 218-226.

[125] Two somewhat emblematic examples of the construction of modern natural law arguments in terms of responses to legal positivism are the so-called "Hart-Fuller" and "Hart-Dworkin" debates. See HART, H. L. A. Positivism and the Separation of Law and Morals. **Harvard Law Review,** v. 71, n. 4, pp. 593-629, Feb 1957, FULLER, L. L. Positivism and Fidelity to Law - a reply to Professor Hart. **Harvard Law Review,** v. 71, n. 4, pp. 630-672, 1958, BAYLES, M. Hart vs. Dworkin. **Law & Philosophy,** v. 10, pp. 349-381, 1991.

[126] For an analysis of the divergences that remain between the two branches of jurisprudence, see "The search for primacy" and "Positivism and natural law as complementary theories" in BERMAN, H. J. Toward an Integrative Jurisprudence: politics, morality, history. **California Law Review,** v. 76, n. 4, pp. 779-801, 1988, pp. 782-788. The exception to the idea that modern natural law is a response to positivism is John Finnis, who frames his argument by rescuing of the ancient tradition of natural law. See FINNIS, J. **Natural Law and Natural Rights**. 2nd ed. New York: Oxford University Press, 2011.

[127] See "The reaction against natural-law theory" and "Codification and the concept of law" in KELLY, J. M. **A Short History of Western Legal Theory**. Oxford: Oxford University Press, 1992, pp. 271-277 and 311-315.

[128] The main intellectual movement that represents this process is the Exegetical School and its defence of logical abstractions as the primary legal method to determine the will of the legislator in applying the law to the specific case. See BOUCKAERT, B. Exegetical School. In: Gray, C. B. (Ed.). **The Philosophy of Law: an encyclopedia**. New York: Garland, Volume I, 1999, pp. 276-278. On how submission to authority in contrast to the search for broad legal rationality sets it apart from the ancient glossators and pandects, see COING, H. Trois Formes

the utility as the informing principle of legal rationality gave greater freedom to the interpreter of texts.[129] Despite this initial divergence, the different positivist legal projects converged on a legal discourse centred on the state's authority and isolated into its inner categories.

The theory of law as a command has evidenced the role of positivism as a tool for maintaining the established order, understanding law as an instrument of the sovereign's power and associating it with state and punishment.[130] This theory defended an idea of law no longer as an outcome of a social contract but as an emanation of the state's sovereignty. Since it derives from the will of the state, the law acquired absolute supremacy, leading lawyers to confine themselves to analysing only formal aspects of the legal norm.[131] This fact has excluded any considerations about the content of law (justice, opportunity, utility) from this formalistic knowledge. Positivism also connects to the idea that it would be possible to identify legal features that would be universal, not in a natural law sense, but according to something that would always be present in the law, regardless of place and time. This idea has implied the conclusion that there would be something of a purely legal nature, which should be in the centre of the study of law from a scientific perspective.[132]

Positivism has offered another facet also grounded on the idea that law is a set of rules, albeit considering the importance of social acceptance for their determination. This concern implies that, in any society where there is law, a particular complex of social facts constituting a rule of recognition determines the criteria any norm must satisfy to count as a legal.[133]

Historiques d'Interprétation du Droit: glossateurs, pandectistes, école de l'exégèse. **Revue historique de droit français et étranger,** v. 48, n. 4, pp. 531-543, 1970.

[129] This thought found more acceptance in the common law universe and is closely associated with Jeremy Bentham and John Stuart Mill. See POSTEMA, G. J. Bentham's Early Reflections on Law, Justice and Adjudication. **Revue Internationale de Philosophie,** v. 36, n. 141 (3), pp. 219-241, 1982.

[130] This view present in Austin's work. On how Hart reacted to the theory of law as a command as well as for a critique of this reaction, see MOLES, R. John Austin Reconsidered. **Northern Ireland Legal Quarterly,** v. 36, pp. 193-221, 1985.

[131] This process is explained in "O formalismo jurídico: positivismo legalista e positivismo conceptual" in HESPANHA, A. M. **Cultura Jurídica Europeia**. Coimbra: Almedina, 2012, pp. 394-398.

[132] The idea that legal norms form a natural reality has led Kelsen to support the existence of a pure theory of law. This opened space for the defence of a legal science devoted to the content of legal norms in which its central problem is the discovery of specific principles within a range of possible meanings. See KELSEN, H. The Pure Theory of Law - Its method and fundamental concepts. **Law Quarterly Review,** v. 50, pp. 474-498, 1934.

[133] The rule of recognition is an essential argument concerning the consistency of legal systems. See "The Foundation of a Legal System" in HART, H. L. A. **The Concept of Law**. 3rd ed. London: Oxford University Press, 2012, pp. 100-123. By expanding the process of determining the legality of the legal rule to the social realm and, consequently, diminishing the centrality of the role of authority, this aspect of positivism is called "soft", as opposed to

Such a rule of recognition is no more than a particular instance of a more general phenomenon, a broader social rule of recognition that differentiates the distinct norms existing. From this perspective, the legal quality is not linked to a universal feature of the norm but relates to some criteria of recognition used by society.[134] The legal quality of the law, in this case, depends on a process of social recognition as such, a procedure applicable to the legal actors themselves. This position departs from the idea of the law as a command or a formal hermetic system and makes room for considerations involving the social context.[135]

Naturalistic and realistic reactions.

Although this "soft" version of positivism has narrowed its distance from the general claims of natural law, some structural differences have remained. Incorporating the social element mentioned above was insufficient to avoid criticism of the positivist project's ability to separate law and morality.[136] According to this argument, the mere pursuit of systemic coherence and a division between law and non-law consists of an inescapable moral principle. Likewise, in addition to the moral principle that calls for the separatist project, it is necessary to adopt a moral theory that informs a separation criterion as a condition for the legal practice itself.[137] In other words, the very exercise of legal practice, regardless of any pursuit of systemic coherence, would result from a specific moral choice. Finally, the tension between law and morality reached arguments concerning the possibility of an entirely immoral legal order, a thought

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the previous one considered "hard". On the confrontation between these two positions, see "The Hart/Dworkin Debate and the Hart/Raz Debate" in LEITER, B. Beyond the Hart/Dworkin Debate: the methodology problem in jurisprudence. **American Journal of Jurisprudence,** v. 48, pp. 17-52, 2003, pp. 19-30.

[134] According to Leiter, positivists diverge on the extent of this "social thesis", whether it is limited to establishing the existence conditions for the rule of recognition or if also states a constraint on its content. For an analysis of the implications of this divergence, see "Legal Positivism" in LEITER, B. Legal Realism and Legal Positivism Reconsidered. **Ethics,** v. 111, n. 2, pp. 278-301, 2001, pp. 285-288.

[135] Wittgenstein's philosophy of linguistic analysis has deeply influenced this new perspective, which considers that the idea of rule has both an individual and a social dimension. Thus, the norm seen in this double context contrasts also with the proposal for a pure theory of law and its defence of a purely formal analysis of the content of legal norms. See "The Concept of Law" in KELLY, J. M. **A Short History of Western Legal Theory**. Oxford: Oxford University Press, 1992, pp. 402-409.

[136] Fuller accuses Hart of not even trying to solve the problem resulting from the fact that law is only made possible by non-legal rules. According to Fuller, Austin has indicated sovereignty as a possible answer while Kelsen based the solution on the "basic norm" legal fiction. See "The Moral Foundations of a Legal Order" and "The Morality of Law Itself" in FULLER, L. L. Positivism and Fidelity to Law - a reply to Professor Hart. **Harvard Law Review,** v. 71, n. 4, pp. 630-672, 1958, pp. 638-648.

[137] That is, legal practice has a purpose assigned to it in a process that Dworkin calls "constructive interpretation". See "A First Look at Interpretation" in DWORKIN, R. M. **Law's Empire**. Cambridge: Harvard University Press,

empirically reinforced by the rise and fall of the Nazi regime.[138]

The interpretation was also a target of criticisms contesting the differentiation between words or expressions that belonged to a penumbra zone while others had a generally accepted central meaning. The argument is that interpretations are not directed to words but to sentences, paragraphs, or whole pages, which would not have a general meaning.[139] The role of principles in the legal system also becomes a source of criticism since the idea of law as a set of rules would, by the very definition, exclude them. As a result, it would not be evident how such principles would be subject to the criterion of social validation of legal norms or an internal validation by the legal actors.[140] Finally, the search for the meaning of the concepts employed by the lawyers became an object of attack before the different proposals of interpretation that these concepts usually entail. The so-called semantic theories consider that lawyers employ identical criteria to identify the veracity of legal propositions, diverging, however, as to what this criterion would be.[141]

Amongst positivists, there was also the perception that a different type of attack had challenged their ability in developing an agenda centred on legal rules. Rule-scepticism designates a stereotype of a supposed critical position defying the very debate on legal rules, sustaining that the law consists of court decisions and the ability to predict them.[142] A variant of this scepticism criticises the belief that the content of the legal rules con-

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1986, pp. 49-53.

[138] These arguments connect to one of the general ideas that guide the present work related to the role of law in solving the problem of power. See "The Problem of Restoring Respect for Law and Justice after the Collapse of a Regime that Respected Neither" in FULLER, L. L. Positivism and Fidelity to Law - a reply to Professor Hart. **Harvard Law Review,** v. 71, n. 4, pp. 630-672, 1958, pp. 648-657. We will return to these arguments repeatedly throughout the chapters.

[139] Even when it comes to the analysis of a single expression, the problem of knowing where a zone of penumbra begins or not remains, raising other questions related to the change in the meaning of the expressions as the context changes. See "The Problem of Interpretation: the core and the penumbra" in FULLER, L. L. Positivism and Fidelity to Law - a reply to Professor Hart. **Harvard Law Review,** v. 71, n. 4, pp. 630-672, 1958, pp. 661-669.

[140] According to Dworkin, principles and rules are logically different. Norms' validity is given by the source that emanates them, while the evaluation of principles necessarily depends on their content. See "Rules, principles, and policies" and "The rule of recognition" in DWORKIN, R. M. **Taking Rights Seriously**. Cambridge: Harvard University Press, 1977, pp. 22-28 and 39-45.

[141] Dworkin maintains that, by adopting a criterion, lawyers would be making choices that are not only factual but moral. He also presents a critique comparing Austin's "theory of law as a command" and Hart's "recognition rule". See "Semantic Theories of Law" and "The Real Argument for Semantic Theories" in DWORKIN, R. M. **Law's Empire**. Cambridge: Harvard University Press, 1986, pp. 31-44.

[142] Hart claims to have identified this stereotype in its different versions. See "Formalism and rule-scepticism" in HART, H. L. A. **The Concept of Law**. 3rd ed. London: Oxford University Press, 2012, pp. 124-154.

strains the conduct of magistrates by arguing that the law does not necessarily condition the judicial decisions. Thus, besides a conceptual scepticism related to the indeterminacy of the legal rule, empirical scepticism criticises the relationship between law and court decisions.[143] Although the described criticisms do not seem to be associated with any known debate in the field, the description intends to refer to legal realism.[144] However, this movement presents complexities ignored by the above caricature, having an ancestry that dates back to the early stages of positivism.

Reactions to empty abstractions.

Except for the last paragraph, this item has attempted so far to synthesise a historical debate between natural law and legal positivism. This duality stands on the legal thought that considers the laters as the two main branches of jurisprudence from the nineteenth century on.[145] Nevertheless, in returning to that moment, one would see that legal positivism's supposed main antagonist, natural law, was in a hibernation period, manifesting itself very punctually in the institutional plane of the Catholic Church.[146] Such a situation did not implicate the absence of a potential antagonist during the rise of legal positivism. Another branch of jurisprudence was already perceived, a branch whose origins many authors associate to Montesquieu and his alleged defence of a historical, social, and cultural approach to the legal phenomenon. The rise of the historical school demonstrates the pervasiveness of this thinking as it offers a substantial critique of the excess of abstractions employed by the naturalistic and positivist

[143] In addition to these two, Leiter identifies in Hart's explanation the existence of a third variant of the stereotype, related to the defence of the complete absence of legal rules. See "Varieties of rule skepticism" in LEITER, B. Legal Realism and Legal Positivism Reconsidered. **Ethics,** v. 111, n. 2, pp. 278-301, 2001, pp. 288-290.

[144] According to Leiter, the exception would be empirical scepticism, against which Hart would not have produced counterarguments. It is based on the empirical scepticism that Leiter holds the compatibility between positivism, as a theory of law, and legal realism, as a descriptive theory of adjudication. See "Empirical Rule Skepticism" in LEITER, B. Legal Realism and Legal Positivism Reconsidered. **Ethics,** v. 111, n. 2, pp. 278-301, 2001, pp. 293-300. For an explanation of the diversity of American realism, see LEITER, B. Rethinking Legal Realism: toward a naturalized jurisprudence. **Texas Law Review,** v. 76, n. 2, pp. 267-316, 1997.

[145] "In the course of the last few centuries, two main rival philosophical traditions have emerged about the nature of legality. The older one, dating back to late medieval Christian scholarship, is called the natural law tradition. Since the early 19th century, natural law theories have been fiercely challenged by the legal positivism tradition promulgated by such scholars as Jeremy Bentham and John Austin." Marmor, Andrei and Sarch, Alexander, "The Nature of Law", The Stanford Encyclopedia of Philosophy (Fall 2015 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2015/entries/lawphil-nature/>. Accessed in 29/Jul./2019.

[146] Kelly explains that this preservation of natural law within the Catholic Church was associated with maintaining the Aristotelian-Thomist tradition. See "Natural Law in Hibernation" in KELLY, J. M. **A Short History of Western Legal Theory**. Oxford: Oxford University Press, 1992, pp. 333-334.

views.[147]

Thus, for being grounded on the relationship between law and its social and economic circumstances, the historical school considered the law as an unintended outcome of social forces. This position has opened space for condemning the engagement in excessive abstraction and defending the importance of historical and comparative evidence in the speculations about the law.[148] Likewise, the historical school considered the role of custom and the contest for power as central elements in the development of law. It explained the evolution of law as a policy of force and led to the possibility of observing the legal phenomenon as an instrument for attaining social ends.[149] This position defied the cult of logic, claiming that concepts exist for the sake of life and not the contrary. Such an idea conceived the law not limited to the state, resulting in what became known as the sociological jurisprudence, an approach that emphasises teleological aspects of the law and observes it as a tool for accomplishing social purposes.[150]

The idea of a changing law as a means to an end in a changing society has become the theoretical basis of what became known as legal realism. This movement has created a whole agenda concerning the relationship between law and society's culture and organisation, emphasising the conflicts that this process may generate.[151] However, it is essential to make a

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[147] For a narrative of the evolution of the historical school associating its roots to Montesquieu's thought, see See "The Third Branch of Jurisprudence" in TAMANAHA, B. Z. **A Realistic Theory of Law**. Cambridge: Cambridge University Press, 2017, pp. 12-37. See also "The Rise of the Historical School" in KELLY, J. M. **A Short History of Western Legal Theory**. Oxford: Oxford University Press, 1992, pp. 320-325. For an analysis elaborated contemporaneously to the rise of the Historical School, see FREUND, E. Historical Jurisprudence in Germany. **Political Science Quarterly,** v. 5, n. 3, pp. 468-486, 1890.

[148] Concerned with preserving what he understood to be the scientific character of law, Savigny highlights the difference between the political and the technical elements of this historical process. See "De la genèse du droit positif" in SAVIGNY, F. C. v. **De la Vocation de Notre Temps pour la Législation et la Science du Droit**. Paris: Presses Universitaires de France, 2006, 224 pages, pp. 53-56. The construction of legal arguments based on the historical development of ideas is what Maine proposes in his work. See MAINE, H. S. **Ancient Law: its connections with the early history of society and its relation to modern ideas**. London: John Murray, 1908.

[149] Jhering elaborated a connection between objective and subjective law to maintain that its social fulfilment integrates the very nature of law. See "The Assertion of One's Rights a Duty to Society" in JHERING, R. v. **The Struggle for Law**. 2nd ed. Chicago: Callaghan and Company, 1915, pp. 69-96.

[150] Jhering condemned the idea of law as a system conceived only from an intellectual perspective and highlights as its function that of realising itself both materially and formally. See JHERING, R. v. **L'Esprit du Droit Romain**. Paris: Aîné, 1877, pp. 46-56. The genealogical relationship between sociological jurisprudence and the historical school is presented in "Continuity of Sociological Jurisprudence" in TAMANAHA, B. Z. **A Realistic Theory of Law**. Cambridge: Cambridge University Press, 2017, pp. 21-24.

[151] On how the core insights of legal realists substantially overlap with the views of the historical jurists in the American experience, see TAMANAHA, B. Z. Understanding Legal Realism. **Texas Law Review,** v. 87, n. 4, pp. 731-785, 2009. For a brief narrative on the European realism see HART, H. L. A. Scandinavian Realism. **The Cambridge Law Journal,** v. 17, n. 2, pp. 233-240, 1959.

difference between legal realism viewed as a proposition of legal theory and as a distinct view of the phenomenon.[152] Legal theories are concerned with issues related to what the law is and what it does, so that, if legal realism is another legal theory, it will clash with the two hegemonic theories that preceded it. In this case, the realist would incur the same attitude that this perspective allows criticising: the utilisation of empty abstractions to understand the legal phenomenon. The alternative is to understand legal realism as a material complement to these abstractions, not necessarily offering empirical results but showing a willingness to receive contributions from other domains.[153]

Features, integration, and reflexivity.

So, despite generally seen as rivals, each one of the three branches of jurisprudence, in isolation, cannot offer satisfactory answers to the legal problems.[154] Natural law has traditionally better dealt with universalistic proposals, albeit without developing categories that allow understanding the boundaries of the legal field. Its migration from a religious base to natural rationalism (later transformed into a social one) converted the natural law from an instrument of universal authority into a tool to limit arbitrariness. The categories of positivism corroborate the self-perception of the legal field and the identification of the actors forming this debate. Positivism, however, does not contribute to identifying the possible outcomes of the legal enterprise, so the field's boundaries also serve to isolate lawyers from other actors. Although dependent on the categories of positivism and the values of natural law, legal realism offers an efficient connection with the legal phenomenon that is not possible through merely abstract con-

[152] That is, legal realism as legal philosophy versus legal realism as jurisprudence. Jurisprudence is not necessarily a synonym for legal philosophy since the speculations it proposes about the legal phenomenon are not necessarily of a philosophical nature. Besides, albeit connected to the rise of universities, jurisprudence here is closer to the speculative attitude than to academic rigour in the modern sense. See COTTERRELL, R. Why Jurisprudence is not Legal Philosophy. **Jurisprudence,** v. 5, n. 1, pp. 41-55, 8 Jul. 2014.

[153] Although legal realism has variations as distinct as the American and Scandinavian traditions, both have in common the attitude of denial of metaphysical arguments and formalisms as foundations of legal discourse. In this sense, see PIHLAJAMÄKI, H. Against Metaphysics in Law: the historical background of American and Scandinavian legal realism compared. **The American Journal of Comparative Law,** v. 52, n. 2, pp. 469-487, 2004.

[154] Berman highlights the importance of each of these three branches of jurisprudence individually. Albeit he refers specifically to the historical school instead of legal realism in a broad sense and treats the other sub-branches of legal realism as forms of positivism, he proposes a jurisprudence that combines the three branches. See BERMAN, H. J. Toward an Integrative Jurisprudence: politics, morality, history. **California Law Review,** v. 76, n. 4, pp. 779-801, 1988.

structions.[155]

While perspectives, the three branches of jurisprudence propose distinct visions of the legal phenomenon, but each of them suffers from blind spots. The only way to solve this problem is to conjugate the normative dimension present in natural law, the tools offered by legal positivism, and the contextualisation that realism proposes. However, adopting a different perspective corresponds to adopting a different paradigm, with all the implications that a paradigm shift may imply. If one admits the incommensurability of paradigms, the adoption of one branch will automatically exclude others since one paradigm cannot incorporate another.[156] Notwithstanding, in the legal field, the differences between the branches of jurisprudence are not as excluding as paradigmatic changes in the field of natural sciences. The conclusion is that the reduction of the three branches to their discursive dimension allows understanding natural law, positivism, and legal realism as intellectual constructions historically and socially contextualised.

Natural law or legal positivism do not offer this sort of reflexivity, which places legal realism in a favourable cognitive condition. The realist position can understand the others in their discursive dimensions while considering itself circumscribed in a given context.[157] Besides, the openness to other fields facilitated by the realistic perspective harmonises with the academic proposal of the present work that is not limited to the analysis of court decisions. The conception of empiricism drawn from the rule-sceptical debate, centred on judicial decisions, offers no adequate tools for dealing with international taxation from a transnational perspective.[158] Therefore, the adoption of a realistic perspective helps harmonise the legal traditions between themselves and contributes to connecting the legal discourse to distant fields like that of technology. This perspective is also the most useful for understanding how the development of

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[155] Thus, instead of talking about competing views, it would be better to understand them as complementary perspectives of a broader jurisprudential project. This proposition is also found in "Three contrasting-complementary angles on law" in TAMANAHA, B. Z. **A Realistic Theory of Law**. Cambridge: Cambridge University Press, 2017, pp. 30-32.

[156] Kuhn presents a comprehensive explanation of paradigm shifts and their context. Concerning the competition between paradigms, Kuhn argues that it is not a debate related to proofs since the proponents of competing paradigms disagree on the very the list of problems that should be solved. See "The Resolution of Revolutions" in KUHN, T. S. **The Structure of Scientific Revolutions**. 2 ed. Chicago: University of Chicago Press, 1970, 210 pages, pp. 144-159.

[157] This suggestion is proposed by Tamanaha. See "Realistic perspectives of legal theories themselves" in TAMANAHA, B. Z. **A Realistic Theory of Law**. Cambridge: Cambridge University Press, 2017, pp. 32-35.

[158] Berman suggests that only an integrative approach would have this capacity. See "Integrative jurisprudence as a key to understanding the development of world law" in BERMAN, H. J. Toward an Integrative Jurisprudence:

jurisprudence deals with international law' particularities.

Conclusions.

The present item has demonstrated that the emergence of jurisprudence as the intellectual dimension of law produced a genuinely legal discourse subjected to successive transformations. Initially linked to the Christian universalism of canon law, it soon developed a rationalist, humanistic, and individualistic aesthetic. However, this discourse did not break with the metaphysical foundations of legal arguments and has become the object of attack by legal positivists. The counterattack came from new naturalist authors who have mainly criticised the positivist proposal of interpreting norms and the separation between law and morals. Even before this attack, the legal discourse excessive abstraction was already the target of criticisms from authors who linked the law to its historical and social context. This attitude, which emerged in the nineteenth century, resulted in the different forms of legal realism that have in common the rupture with the closing of the law in its self-referenced categories.

More important than identifying this debate's possible winners and losers is comprehending what dissatisfactions encouraged legal actors to maintain this agenda of mutual attacks. At the centre of the discussion is the relationship of the law with the exercise of power and the very reason for maintaining a discourse considered legal vis-à-vis other discourses. The first case is related to the eternal tension between the law as a discourse with rational aspirations and the authority that gave it this condition. The second refers to identifying both the legal discourse's beneficiary as this discourse's capacity to deliver the proposed results. Despite numerous contributions to the formation of an abstract theory in order to explain law under a transcendental perspective, the fact is that there is already a geographically and historically identified legal experience. The purpose of this work is to avoid building yet another idealised view of the law, starting from a conception of the legal phenomenon based on this identification.

Therefore, jurisprudence has consolidated the intellectual dimension of the law and has facilitated its institutionalisation process within European universities. These two factors have permitted the production of a European legal debate that did not necessarily respect

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politics, morality, history. **California Law Review,** v. 76, n. 4, pp. 779-801, 1988, pp. 797-801.

the limitation of the countries' borders. On the other hand, this institutionalisation of the law's intellectual dimension did not comprehend its social practice. Consequently, although the legal discourse has acquired a transnational characteristic, the same cannot be said of its social dimension. Initially, the universalism of jurisprudence has facilitated the emergence of a specific narrative about the legal phenomenon considering it from a transnational perspective. Notwithstanding, the emergence of positivist reactions to the idea of one natural metaphysical order has put this narrative in check, weakening the very intellectual foundations of a law considered international, as the next item will demonstrate.

1.1.3. From natural order to international law.

The last two items explained the process that led to the emergence of the first Western legal systems and the transnational legal debate that followed. Competing emerging power groups employed models of rationality offered by the Greek philosophy to manage legal forms and institutions developed from the categories of Roman law. The most significant among these groups was the Catholic Church and its canon law, whose tension with secular power groups has fragmented the European legal tradition, resulting in the common and the civil law. The rise of the European universities has provided a forum responsible for carrying out a systematised transnational study of that legal systems called here jurisprudence. Jurisprudence has developed an independent legal agenda, giving rise to a specific debate influenced by successive intellectual movements. By fostering a transnational discussion, jurisprudence offered a global perspective to understanding the legal phenomenon, giving rise to international law.

For this work's purposes, international law is not a set of rules or principles of controversial origin, nor a mere collection of abstract constructs created to resolve practical problems of international relations. International law has arisen only after the systematisation efforts and the transnational intellectual movement initiated by jurisprudence from the eleventh century. Thus, international law means both the legal subfield as its object, namely, the legal phenomenon viewed from a transnational perspective. Lawyers have traditionally offered normative and analytical narratives on the global legal phenomenon and its interactions with non-legal categories. The result was the formation of a historical debate that, associated with the

intellectual results of conflicts between the branches of jurisprudence, has impacted the very lawyers' attitudes towards the legal field. Although narrower in scope, this debate connects to a broader discussion on the law's limits, potentials, and objectives.

This item aims at demonstrating the different attitudes lawyers have been taking towards international law, as a field and as an object. The premise is that such different attitudes result from institutional and intellectual transformations associated with the transition of international law from the classical to the modern period. The hypothesis is that the prevalence of the positivist paradigm associated with its inability to deal with the global environment's reality has led to a sense of crisis in the field. The item starts by showing how international law has separated from natural law and transformed itself from the secularisation process at the beginning of modernity. Afterwards, the item shows how the rise of positivism has launched international law in its pragmatic period, consolidated from the outbreak of the First World War. Finally, the item contrasts the crisis sentiment in the field with a realistic attitude towards international law, considering it not as a formalistic category but as part of the social-legal tradition.

International law's christian origins.

As part of the social-legal tradition, international law consists of one of the offsprings of the debate provoked by the rise of jurisprudence.[159] Thus, in addition to being chronologically situated after the emergence of systematised legal studies from the eleventh century, the roots of international law are geographically located in Europe. Therefore, in the European context, the Christian natural law provided elements to support one universal order, an idea that had existed since the Stoics.[160] Such universality has long been empirically supported by the Catholic Church's legal project, providing a mechanism for resolving conflicts on the international plane. Although there were tensions of canon law with other legal systems, they reflected the confrontation between local political authority and universal ecclesiastical authority. The power problem at the international level had an obvious answer, based on the divine author-

[159] As an idea, international law arose when it gained intellectual autonomy and dissociated itself from the broader concept of natural law. Thanks to the work of the Belgian legal historian Ernest Nys, the period of the Salamanca School became recognised as the moment when this dissociation began to occur. See KOSKENNIEMI, M. Colonization of the 'Indies': the origin of international law? In: Chopo, Y. G. (Ed.). **La Idea de América en el Pensamiento Ius Internacionalista del Siglo XXI**. Zaragoza: Institución Fernando el Católico, 2010, pp. 43-63.

[160] This was presented in the last item. See "1.1.2. Jurisprudence as the intellectual dimension of the law".

ity of the Pope over all Christians and the legal supremacy of the clergy over the secular authorities.[161]

Nonetheless, the contact with the peoples of the new world resulted in a theoretical problem for natural lawyers since the word of God had never reached that continent. The first to build a mental model to deal with this new situation was Francisco de Vitoria, inaugurating an intellectual movement known as the School of Salamanca.[162] Vitoria has presented an explanation to drive the relationship between Spaniards and Indians that did not rely on the universal authority of the Pope but a secular perspective offered by natural law.[163] Paradoxically, while developing his rhetoric in defence of the condition of the natives, Vitoria presented situations that would justify the use of violence. His main argument presupposed a natural right to trade and travel, an idea that harmonised with the prevailing economic thought at that time.[164] The problematisation that resulted from the colonial encounter appeared while Europe was experiencing a shift from the feudal production model to the mercantilist model.

In mercantilism, long-distance trade, and precious metal accumulation, called bullionism, came to play central roles in the international agenda.[165] Notwithstanding, it is essential to highlight that Vitoria's justification did not involve the Spanish Empire exclusively but also reached individuals' performance. As seen, in this period, the traditional arguments about the existence of an objective law concerning central order began to be replaced by a dis-

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[161] Nothing better exemplifies this supremacy than the episodes following the Gregorian Reformation. The excommunication of Henry IV and his subsequent public humiliation highlight the tensions that existed between local political authorities exercised by Kings and emperors and the universal divine authority of the Catholic Church. See "The origin of the western legal tradition in the papal revolution" in BERMAN, H. J. **Law and Revolution: the formation of the Western legal tradition**. Cambridge and London: Harvard University Press, 1983, pp. 85-119.

[162] Although there is a reasonable consensus around Vitoria's pioneering in the field, there were several interpretations about the mental model he created. For a presentation of different arguments related to Vitoria's contribution to international law, see "The School of Salamanca" in KOSKENNIEMI, M. Colonization of the 'Indies': the origin of international law? In: Chopo, Y. G. (Ed.). **La Idea de América en el Pensamiento Ius Internacionalista del Siglo XXI**. Zaragoza: Institución Fernando el Católico, 2010, pp. 43-63, pp. 45-47.

[163] This change was possible thanks to the recognition that the natives had some degree of rationality. It was this rationality that allowed Vitoria to build an idea of universality independent from the authority of the Catholic Church. See "Vitoria and the problem of universal law" in ANGHIE, A. Francisco de Vitoria and the Colonial Origins of International Law. **Social & Legal Studies,** v. 5, n. 3, pp. 321-336, 1996, pp. 323-327.

[164] Vitoria placed the idea of trade as a central element in the discourse of international law, transforming it into a value that must necessarily be recognised by the rationality of the Indians and whose violation is considered an act of war. See "The colonial origins of international law" in ANGHIE, A. The Evolution of International Law: colonial and postcolonial realities. **Third World Quarterly,** v. 27, n. 5, pp. 739-753, 2006, pp. 742-746.

[165] A description of mercantilist economic thought and how it was closely associated with war issues can be found in SILBERNER, E. **La Guerre Dans la Pensée Économique du XVIe au XVIIIe Siècle**. Paris: Librairie du

course privileging a subjective natural right associated with the liberty to act.[166] Accordingly, Vitoria was not upholding the supremacy of the natural order but the prevalence of an individual and universal right to the practice of long-distance trade. A potential violation would allow individuals to wage a just war against violators who, by reason, should be aware of this right, knowing it or not.[167] Unlike the currently prevailing idea, international law was not originally an outcome of the relationship between countries but a practical result of the universal right to trade.

The secularisation of international law.

The protestant reformation impacted the political, religious, and intellectual power of the Catholic Church, while the rationalising of natural law implied the search for new metaphysical foundations.[168] However, what did not change was the tradition of confronting universal natural rights concerning international free trade to the efforts of local forces to intervene in these activities. Such practice constituted the context in which the intellectual production bequeathed by the School of Salamanca has integrated the rational natural law discourse.[169] This discourse was not limited to inter-nation relations since the international actors' role was not restricted to what one understands today as states. The idea of state and commercial interests as an unfolding of the division between public and private affairs was not present in the discourse of the rational natural law.[170] The legal debate did not involve the confrontation between political and business interests but between individual natural rights and their potential disrespect.

Recueil Sirey, 1939.

[166] See item "1.1.2. Jurisprudence as the intellectual dimension of the law".

[167] Interestingly, in this case, Vitoria rescues the Christian tradition, not to use it as the foundation of the discourse on just war but submitting it to the secular argument that he developed. Thus, as ambassadors of the Christian peoples, the resistance of the Indians to the incursion of the Spanish would not offend the divine law, but the *jus gentium* itself. See "War, sovereignty and the transformation of the Indian" in ANGHIE, A. Francisco de Vitoria and the Colonial Origins of International Law. **Social & Legal Studies,** v. 5, n. 3, pp. 321-336, 1996, pp. 327-331.

[168] The impacts of both the sixteenth-century German Lutheran reform as well as of the rise of Calvinism from the seventeenth-century English Glorious Revolution on the legal field are presented in BERMAN, H. J. **Law and Revolution II. The impact of the Protestant Reformations on the Western legal tradition**. Cambridge (MA): The Belknap Press of Harvard University Press, 2003.

[169] For an exposition on how Grotius, Hobbes and Pufendorf have received this legacy when elaborating their approach to the legal phenomenon in an international context, see KINGSBURY, B. and STRAUMANN, B. The State of Nature and Commercial Sociability in Early Modern International Legal Thought. **Grotiana,** v. 31, pp. 22-43, 2010.

[170] For a historical narrative on the intimate relationship between the state and corporate interests in international trade, see MCLEAN, J. The Transnational Corporation in History: lessons for today lecture. **Indiana Law Journal,** v. 79, pp. 363-378, 2004.

Thus, the defence of the right to free international trade was present in the international legal debate, almost always accompanied by a legal abstraction, a state action, or both to secure its protection. This relationship of complementarity between economic expansion by trade and political interference by force supports the existence of an informal and a formal dimension of imperialism, respectively.[171] For not constituting direct intervention, informal imperialism implied intellectual categories representing the conditions for protecting the natural right to free trade. This situation explains the prestige acquired by the School of Salamanca since its vocabulary favoured the process of individualising commercial interests at the international level.[172] Hence, the commitment to international commerce and the protection of fundamental rights became the central values of the field of international law.[173] Therefore, the capacity of recognising and respecting such universal values became the measure to solve the power problem at the international level.

These hypothetical universal values soon became a criterion for separating more developed peoples capable of identifying them and acting accordingly, while others would need assistance. This attitude of protecting other people from their presumed deficiencies is what scholars call the civilising mission, an analytical framework that justifies colonialism.[174] Consequently, the necessity for external intervention has become a function of the civilisational level of the peoples concerned. The more civilised the people of a given territory, the less need for direct intervention, ultimately culminating in their recognition as a sovereign state.[175] This gravita-

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[171] Such dissociation has no ontological nature, being explained exclusively by differences in levels of intervention. Using nineteenth-century British Empire as a touchstone, the evidence demonstrates a direct relationship between favourable economic conditions to British companies and the Empire's perception about no need for intervention, by the use of force, on local territories in which its companies performed. Conversely, when local issues threatened British companies, the Empire used to rise its interference level, reaching the territory annexation if needed. See GALLAGHER, J. A. and ROBINSON, R. E. The Imperialism of Free Trade. **The Economic History Review,** v. 6, n. 1, pp. 1-15, 1953.

[172] Koskenniemi explains how this vocabulary was responsible for naturalising the process of international trade expansion. See KOSKENNIEMI, M. Empire and International Law: the real Spanish contribution. **University of Toronto Law Journal,** v. 61, n. 1, pp. 1-36, Winter 2011.

[173] This prevalence resulted in the submission of natural resources to an agenda of international appropriation and exploitation. See PORRAS, I. Appropriating Nature: commerce, property, and the commodification of nature in the law of nations. **Leiden Journal of International Law,** v. 27, n. 3, pp. 641-660, 2014.

[174] This expression corresponds to the most developed peoples' mission in rescuing those more backward, savage and underdeveloped. See "The Structure of Colonialism: the civilizing mission" in ANGHIE, A. and CHIMNI, B. S. Third World Approaches to International Law and Individual Responsibility in Internal Conflicts. **Chinese Journal of International Law,** v. 2, n. 1, pp. 77-103, 2003, pp. 84-86.

[175] Westlake, considered one of the most significant international lawyers of the nineteenth century, defended this criterion for the recognition of sovereignty. See "John Westlake on the title to sovereignty" in CURTIN, P. D. A.

tion around the sovereignty idea and the making of a universal discourse that legitimate the exercise of power was the international law's keynote during its classical period. This situation was relatively stable for a long time since international actors were economically and culturally homogeneous, reinforcing the universalist argument proposed by the rationalism of natural law.[176]

Pragmatic turn.

The processes of independence of the European colonies in the Americas have introduced new actors in the international relations environment. Given the cultural ties between European and American countries, however, the rise of these new states has resulted in no significant heterogeneity in the international environment.[177] Using nineteenth-century British imperialism as an example, it is possible to conclude that there was a high identification between British interests and the economic reality in the Americas. This identification explains in part why the British Empire did not use force in the new world while, at the same time, annexed China and India.[178] Culturally, the new American peoples (or at least their ruling elites) were so Europeans as their ancient rulers. Therefore, although the emergence of the new American states resulted in some influence concerning intellectual categories and institutional practices, this first decolonisation process had no structural impact on international law discourse.[179]

Parallel to the emergence of the new sovereignties on the American continent, however, there were significant intellectual changes regarding international law discourse.

Imperialism. New York: Harper & Row, 1971, pp. 46-63.

[176] Malanczuk asserts that, albeit the Europeans recognised the Mogul Empire in India, the Ottoman Empire, Persia, China, Japan, Burma, Siam, and Ethiopia as established political entities, they were aware that these states did not play a significant role in global affairs. See "Colonization and the relation to non-European powers" MALANCZUK, P. **Akehurst's Modern Introduction to International Law**. New York: Routledge, 1997, pp. 12-14.

[177] According to Obregon, international law, as a discipline, emerged in the nineteenth century with the concern of dealing with the problem of the submission of uncivilised political communities to the imperium of civilised European or American States, which were responsible, in the first place, for define who were or were not civilised. OBREGON, L. The Civilized and the Uncivilized. In: Fassbender, B. and Peters, A. (Ed.). **Oxford Handbook of the History of International Law**. Oxford: Oxford University Press, 2012, pp. 917-939.

[178] According to Gallagher and Robinson, another possible reason could be the Monroe doctrine. However, they defend that it was not sufficient to avoid the British investments in Brazil and Argentina and intervention in Guatemala, Colombia, Mexico and Honduras. See GALLAGHER, J. A. and ROBINSON, R. E. The Imperialism of Free Trade. **The Economic History Review,** v. 6, n. 1, pp. 1-15, 1953, p. 10.

[179] The contributions offered by the "international law of Latin America" are presented in ESQUIROL, J. L. Latin America. In: Fassbender, B. and Peters, A. (Ed.). **The Oxford Handbook of the History of International Law**. Oxford: Oxford University Press, 2012, pp. 553-578.

The first was the fundamental structural transformation concerning the very choice of the expression to designate this field and its object.[180] It was not just a proposal to modify the terminology but an intellectual project seeking at altering the perception of the legal phenomenon from an international perspective. International law came to be considered an inter-state law, a revisiting that ended up implying two barriers that have haunted international lawyers for the centuries to come.[181] The first was theoretical, consisting of the dichotomy between a domestic and an international system that led to the split between private and public international law. The other was ideological and related to the necessity to build a theory that encompassed everything, implying the division between international and state law and condemning the first for not deriving from the latter.[182]

The new discourse of the field associated with momentous events occurring in the twentieth century has led to the end of the classical period and inaugurated modern international law. The consolidation of two long processes has transformed the debate involving sovereignty, impacting the international environment.[183] The first was the rise and the predominance of legal positivism, which eventually reversed the relationship between sovereignty and universal values. The ability to emulate universal values was no longer the measure for recognising a nation as sovereign, but the pursuit of these values became a result of the discretionary

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[180] The term "international" is used by Bentham as opposed to "internal" and is justified by the alleged ambiguity of the term "law of nations" which, "were not for the force of custom, it would seem rather refer to internal jurisprudence". See "Jurisprudence, internal and international" in BENTHAM, J. **An Introduction to the Principles of Morals and Legislation**. Oxford: Clarendon Press, 1907, pp. 326-327. For an analysis of the implications deriving from Bentham's position, see JANIS, M. W. Jeremy Bentham and the Fashioning of International Law Notes and Comments. **American Journal of International Law,** v. 78, n. 2, pp. 405-417, 1984.

[181] Tamanaha attributes to Jeremy Bentham the responsibility for the dominance of this view. See "Bentham's vexatious legacy" in TAMANAHA, B. Z. **A Realistic Theory of Law**. Cambridge: Cambridge University Press, 2017, pp. 152-155. Such barriers have led to a debate on whether international law is, or not, law. See "International law as 'law'" in MALANCZUK, P. **Akehurst's Modern Introduction to International Law**. New York: Routledge, 1997, pp. 5-7. See also HATHAWAY, O. A. and SHAPIRO, S. J. Outcasting: enforcement in domestic and international law. **Yale Law Journal,** v. 121, pp. 252-349, 2011.

[182] Paul argues that the theoretical barrier made private international law exclude questions of global public policy, such as the role of multinationals on social and economic development, grounding itself in separate principles based on the municipal legal system. See PAUL, J. R. The Isolation of Private International Law. **Wisconsin International Law Journal,** v. 7, n. 1, pp. 149-178, 1988. The ideological barrier is present in Austin's argument according to which, international law is not a law in a strict sense, but a sort of positive moral rule imposed by general opinion, being styled as law by an analogical extension. See AUSTIN, J. **The Province of Jurisprudence Determined and the Uses of the Study of Jurisprudence**. London: Weidenfeld and Nicolson, 1954, pp. 140-141.

[183] Historians use to assert that, from the First World War on, international law ended its classical period entering the period known as modern, in which the central question shifted from sovereignty to the ban on the use of force. See "The European Foundations of the United Nations Community of States and International Law" in OTTO, D. Subalternity and International Law: the problems of global community and the incommensurability of difference.

exercise of sovereignty.[184] The second concerns the rise of new characters in the international arena, especially after the Second World War. The global environment, traditionally composed of a group of European nations that shared history, customs, and religion, was severely shifted after the second wave of decolonisation.[185]

The decolonisation process.

The emergence of the socialist bloc associated with the second wave of decolonisation had a significant impact on the structure of the international environment.[186] These two events have resulted in the erosion of the absolute control of the West over international issues, particularly in the United Nations. Firstly, because of the apparent numerical effect of decolonisation on the assemblies of various international organisations. Secondly, because of the absence of a shared ideology, a cultural identity or even a similarity of economic development levels, which resulted in an unprecedented diversity of sovereign characters in the realm of international law.[187] In the past, this heterogeneity could justify the claim that these new players were not sovereign peoples since they did not reflect the standard of Christian European civilisation. Nonetheless, under the new paradigm, these differences must be understood as necessary elements of the international field since they stem from the recognition of the new states as sovereigns.[188]

Social & Legal Studies, v. 5, n. 3, pp. 337-364, 1996, pp. 339-344.

[184] For a presentation on the intellectual transformations promoted by this process, see "Theory: Naturalists and Positivists" and "The Theory of Sovereignty" in MALANCZUK, P. **Akehurst's Modern Introduction to International Law**. New York: Routledge, 1997, pp. 15-18.

[185] Two caveats are necessary. Firstly, this process of decolonisation began from the weakening of Europe caused by the First World War. However, since this event was not enough to end European control over the League of Nations, it was from the Second World War that this process had impacted the international society. Secondly, the idea of new states only makes sense from the perspective of the history of the legal field. Some of these so-called "new" states are older than traditional European and American actors and should be considered new as independent players in the field of international law. These arguments are found in ANAND, R. P. **New States and International Law**. 2nd ed. Gurgaon: Hope India Publications, 2008.

[186] For an explanation of how the cold war and the rise of the idea of a "third world" redefined the global order, see FRASER, C. Decolonization and the Cold War. In: Immerman, R. H. and Goedde, P. (Ed.). **The Oxford Handbook of the Cold War**. Oxford: Oxford University Press, 2013, pp. 472-482.

[187] A resume of the impact of these new heterogeneous actors is presented in "Decolonization and change in the composition of the international community" in MALANCZUK, P. **Akehurst's Modern Introduction to International Law**. New York: Routledge, 1997, p. 28.

[188] The passage from one paradigm to another is presented in STEIGER, H. From the International Law of Christianity to the International Law of the World Citizen. **Journal of the History of International Law,** v. 3, n. 2, pp. 180-193, 2001.

In this scenario, both the new states as, to a lesser extent, Latin America, began to quarrel their binding to a legal reality developed to its default. These actors have accused international law of failing to account for the reality of the time and basing on customs sedimented in the light of an outdated paradigm.[189] Such claim presented some results, especially given the preoccupation of the Western countries with the possible approach of the Third World with the communist bloc.[190] Given the heterogeneity of the new states and the potential relativisation of the traditional universal values, multilateral treaties emerged as a critical legitimating mechanism in international law. Besides making the customary rules more precise, multilateral instruments offered a sense of participation in the construction of the international law discourse. This process of recognising the new states as active actors in the field through the codification of international law meant the realisation of the old idea of an international community.[191]

Nonetheless, the traditional actors have answered the efforts of the Third World countries with accusations aiming at reducing the effects of decolonisation. The arguments considered that there was a tension between decisions grounded on economic rationality and others deriving from excessive politicisation of the international organisations.[192] According to this idea, the excess of members has generated a dangerous automatic majority resulting from the alliances based on colonial ties, or from a merely opportunistic move, demonstrating the irresponsibility of the new members in conducting the world's problems.[193] This situation only has changed after the fall of the Soviet bloc since the bargaining power of the new sovereign

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[189] For a description on how this movement occurred, see "Third World offensives" in BEDJAOUI, M. **Towards a New International Economic Order**. New York: Holmes & Meier, 1979, pp. 133-144.

[190] Although their heterogeneity did not allow Third World countries to form a bloc in the strict sense, their shared characteristics such as poverty and exclusion from the process of creating the discourse of international law have allowed for an identity of interests capable of influencing the realm of international relations. See "Attitudes of Third World states towards international law" in MALANCZUK, P. **Akehurst's Modern Introduction to International Law**. New York: Routledge, 1997, pp. 28-30.

[191] On the role of treaties as legitimating instruments, see "Codification of international law" in MALANCZUK, P. **Akehurst's Modern Introduction to International Law**. New York: Routledge, 1997, pp. 60-62. On the long debate concerning the construction of an international community, see LACHS, M. Legal Framework of an International Community Essay. **Emory International Law Review,** v. 6, n. 2, pp. 329-338, 1992.

[192] The sense of universality brought about by this economic rationality harmonises with the efforts of oneness present in international law. See "The counter-attack of the industrialized States" and "The global nature of the world economy and the unity of international law" in BEDJAOUI, M. **Towards a New International Economic Order**. New York: Holmes & Meier, 1979, pp. 144-167 and 243-261.

[193] In the first case, the new nations would only represent the interests of their former rulers. See "Persistence of the phenomenon of 'clientèle'" in BEDJAOUI, M. **Towards a New International Economic Order**. New York: Holmes & Meier, 1979, pp. 147-150.

states has decreased. The result was that this pluralistic environment had weakened the idea of universality that has accompanied international law from its inception. The difficulty in defending uniform values applicable to such different states led several authors to hold the decay or a crisis concerning international law.[194]

A realistic alternative to the crisis of international law.

The sentiment of crisis in international law stems from the premise that the loss of the universalist character implied a decadence resulting from the failure of the project of unifying international law. This thinking is associated with a critique according to which state and law theories are sustainable insofar as they remain together and mutually support one another.[195] However, this criticism only sustains itself insofar as the positivist paradigm is adopted, a problem that a change to a pluralist perspective could solve.[196] Therefore, this crisis is merely anthropological since it does not concern the field's object but the attitudes adopted by some actors when failing to undertake the positivist project. In addition to this, the confrontation between international law and state law is not conceptually appropriate since the first does not present an archetypical and an empirical dimension. The misconception consists of attempting to offer a comparison between a description of a historical and social phenomenon with an abstract category.[197]

The fact that international law does not represent a unified system based on the power of a central authority has also been a matter of concern. However, this was never a

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[194] On the other hand, from the Second World War on, the proliferation of international organisations has compensated the loss of universal normative references. See "Universality and the challenge to the unity of international law" in MALANCZUK, P. **Akehurst's Modern Introduction to International Law**. New York: Routledge, 1997, pp. 30-32.

[195] Carty argues that this state theory derives from nineteenth-Century European nationalism, being the completeness of the legal order no more than a hypothesis, concluding that international law must choose between its theory of the state and its comprehensive jurisprudential claims. See CARTY, A. **The Decay of International Law: a reappraisal of the limits of legal imagination in international affairs**. Manchester: Manchester University Press, 1986, p. 10.

[196] A sample of how this change would take place is presented in GÜNTHER, K. Legal Pluralism or Uniform Concept of Law? Globalisation as a problem of legal theory. **Journal of Extreme Legal Positivism,** v. 5, pp. 5-21, 2008.

[197] In other words, international law and its historical idiosyncrasies contrast with state law as a legal form that exists only in the minds of theorists. In the case of domestic law, it is clear that we are talking about two distinct objects: a category (state law) and an element of this category (the Brazilian, the French, or the British state law). See "Confusion of category and system" in TAMANAHA, B. Z. **A Realistic Theory of Law**. Cambridge: Cambridge University Press, 2017, pp. 178-180.

universal quality attributable to the law as a whole but a specific theoretical project that is less than two centuries old.[198] The prevalence of this positivist view also explains why international treaties prevail as the most important sources of contemporary international law, while more traditional sources are deprecated.[199] Nevertheless, it is precisely the prevalence of international treaties that leads to an absence of systematisation since it is, among the sources, the one with the lowest potential for this. Such a situation entails a real paradox, since it leads to the idea that treaties create international law, and not the opposite, without answering why such treaties should be considered valid in the first place.[200] Therefore, the mentioned crisis is only apparent and stems from lawyers' attachment to intellectual abstractions rather than taking a realistic attitude towards international law.

The attachment to intellectual abstractions is also responsible for an apparent conflict in the field of international law related to the so-called monist and dualist theories. In considering law as a set of norms, these theories aim to solve the problem of oneness resulting from the confrontation between the domestic and the international system.[201] Notwithstanding, this supposed conflict only came into being after the rise of positivism as the dominant paradigm in the field. The application of international norms precedes the emergence of international courts and organisations so that the institutionalisation of international law has always based on domestic structures.[202] Therefore, monism and dualism are not conflicting theories that propose a description of international law but categories that reflect positions taken by the actors, which does not exclude their importance.[203] Such categories, however, are not external forces

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[198] These concerns with the lack of a central authority in international law are raised in "Analogies of form and content" in HART, H. L. A. **The Concept of Law**. 3rd ed. London: Oxford University Press, 2012, pp. 232-237. As seen, a pluralism of projects has marked the emergence of the first legal systems in the eleventh century. See "1.1.2. Jurisprudence as the intellectual dimension of the law".

[199] The other sources are principles, judicial decisions, and customary law. See "Not a Unified, Hierarchical System" in TAMANAHA, B. Z. **A Realistic Theory of Law**. Cambridge: Cambridge University Press, 2017, pp. 183-187.

[200] Allott explains that although treaties have a "totem-sanctity" in the field, they are also inimical to the existence of autonomous law in international society. The problem is that treaties are a product of law, a formalisation of the States's will, and not the contrary. See "McDougal - A New Way of Finding International Law?" in ALLOTT, P. Language, Method, and the Nature of International Law. **British Yearbook of International Law,** v. 45, pp. 79-133, 1971, pp. 121-133.

[201] Holding, in the light of the positivist paradigm, that this problem is not only theoretical, see STARKE, J. G. Monism and Dualism in the Theory of International Law. **British Year Book of International Law,** v. 17, pp. 66-81, 1936.

[202] For a narrative about the historical domestic institutionalisation of international law, see "Not separate systems" in TAMANAHA, B. Z. **A Realistic Theory of Law**. Cambridge: Cambridge University Press, 2017, pp. 187-191.

[203] Monism and dualism may explain critical issues related to the field's practice, for example, the practical differ-

constraining the possibilities of international law but concepts belonging to the discourse of the field.

Knowing how to differentiate what is an external limitation to international law from what is only an attitude taken by the actor is fundamental to understand the potentialities of the field. International law's historical analysis has shown that this field's crisis did not occur at the institutional but the intellectual level and resulted from paradigmatic changes.[204] The pioneers of international law constructed their discourses from global phenomena, not from legal conceptions linked to the authority of the state. Their ability in constructing a universal narrative demonstrates the importance of adopting a transnational perspective capable of dealing with cross-border phenomena.[205] Understanding international law as part of a transnational law guides the legal phenomenon to react to cross-border events such as the digitalisation of the economy.[206] This event has demanded regulatory efforts as a social reaction to the global expansion of business activities fostered by the development of communication and information technology.

Conclusions.

This item has shown that international law's secularisation process did not affect the universalist assumptions built on Christian natural law. It was only from the turn of the classical into the pragmatic period that a feeling of crisis emerged, calling into question the very possibility of conceiving an international law. This crisis has concentrated on the law's intellectual dimension, ignoring the consolidated social practice within national and international institutions' scope. However, after the Second World War, the decolonisation process attributed a

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ences between jurisdictions that apply one approach or the other. See SACHDEVA, S. Tax Treaty Overrides: a comparative study of the monist and the dualist approaches. **Intertax,** v. 41, n. 4, pp. 180-207, Apr 2013.

[204] Galindo observes the historical approach as much more than a methodological issue, advocating the need to recognise and take seriously what he calls the "historiographical turn in international law". According to the author, the trigger for this shift was the work of Martti Koskenniemi: "The Gentle Civilizer of Nations". See GALINDO, G. R. B. Martti Koskenniemi and the Historiographical Turn in International Law. **European Journal of International Law,** v. 16, n. 3, pp. 539-559, 2002.

[205] Because it is oriented by the events to be controlled, the transnational perspective rescues the individualistic tradition of international law and moves away from the state-centred paradigm. See COTTERRELL, R. What is Transnational Law? **Law & Social Inquiry,** v. 37, n. 2, pp. 500-524, Spring 2012.

[206] Tamanaha states that this change allows the liberation of international law from its doctrinal and institutional limits and places it in a much broader cooperative and competitive social space. See "International law and transnational law and regulation" in TAMANAHA, B. Z. **A Realistic Theory of Law**. Cambridge: Cambridge University

pluralist character to the geopolitical level, affecting the international law's social dimension. The conclusion is that the supposed crisis could not be attributed to the law itself but to a perception that the international political dimension prevailed over its deemed technical character. International law's preservation depended on reconstructing its universalism in an unprecedented heterogeneous context, marked by actors who did not participate in the initial construction of its discourse.

On the other hand, the universalism in contemporary international law cannot be understood in the same way as it was at the time of Christian or rational natural law. The pragmatic turn in international law in the twentieth century does not allow metaphysical categories to be employed to justify the submission of sovereign peoples to deemed universal values conceived by faith or by the reason. However, this same turn was responsible for the institutionalisation of international law through international organisations. A realistic approach should not start from an abstract definition of international law but from the social practice performed in this institutional dimension. The most considerable difficulty lies in the intellectual dimension of the field and concerns the construction of the content of the abstract categories employed by the actors. Regarding tax law, however, the idea of taxation, as the central category of this field, has both a history and a phenomenology not limited to the legal debate.

The phenomenon of taxation is the starting point for elaborating the discourse and establishing the agenda of international tax lawyers. Regardless of efforts to build a legal discourse from an international perspective, taxation itself consists of a global social-legal phenomenon. Hence, tax law has a universalist vocation since its central category has a historical experience not circumscribed to the local legal experience. Notwithstanding, such a quality poses significant challenges to tax lawyers, which must reflect on their real role as actors in the tax field. By focusing on the political and economic aspects of taxation, the lawyers risk of assuming a position with the potential to distance them from their discursive tradition, while by enclosing in legal abstractions they risk developing a discourse unable to deal with the social reality. A realistic attitude towards taxation requires understanding how, why, and to what extent other tax discursive traditions differ from the tax legal discourse, as the next subchapter will show.

Press, 2017, pp. 191-193.

1.2. When the legal discourse meets the tax tradition.

The previous subchapter has demonstrated that what this work calls "legal" is the quality of belonging to a tradition of solving problems of the social life from the forms elaborated by the Roman law. Such tradition has an intellectual dimension influenced by the Greek rationality and acquired a systematic character from the efforts and in the interest of emerging power groups. This intellectual dimension has found in the rise of European universities a *locus* from which could develop a transnational debate on the legal phenomenon called here jurisprudence. Such debate incorporated metaphysical categories from other traditions, finding two resistances in scientific positivism: one defending the exclusive use of legal categories, and another combating formalism. The transnational character of jurisprudence has offered an international perspective to understand the legal phenomenon. However, the reactions to metaphysical arguments in the legal discourse have transformed this transnational perspective, resulting in the loss of its universal character.

A second discursive tradition, related to the phenomenon of taxation, can also be identified, and the historical meeting of these two traditions is the origin of the legal tax field. On the other hand, the relationship between the laws and taxation is as ancient as the origins of civilisation itself. Therefore, it should be clear from the outset that this subchapter does not hold the absence of a remote ancestry of the legal tax field. It is evident that it exists an old vocabulary employed by the legal field to refer to taxation and that the modern tax legal discourse has resumed such vocabulary in order to describe similar contemporary events. However, although there is an aesthetic influence of ancient intellectual forms on current narratives regarding taxation, these narratives belong to entirely distinct paradigmatic contexts. The tax discourse underwent fundamental transformations that made modern taxation very different from the old forms of domination built to satisfy the material needs of specific power groups.

This subchapter aims at presenting taxation as a phenomenon which is socially institutionalised and intellectually perceived according to the dominant paradigm in a given historical moment. The premise is that projects with technical rhetoric have impacted the construction of the modern discourse on that phenomenon without, however, abandoning the moral

foundations they criticised. The hypothesis is that the legal tax discourse has incorporated the liberal project of social organisation, attributing a technical character to moral choices. Item 1.2.1 demonstrates how different ideas about taxation converged to a debate on the property, the role of the state, and wealth generation. Item 1.2.2 explains the impact of Adam Smith on the modern idea of taxation evidencing the events responsible for the consolidation of the tax field. Item 1.2.3 describes the formation of the legal tax field, its constant tension with economics, and the crises and paradoxes this tension has produced at the international level.

1.2.1. A genealogical view of taxation.

The effort to present the genealogy of taxation does not imply admitting the existence of any sort of determinism concerning the evolution of tax thinking. The idea is that there is a dialectical relationship between the material and the intellectual dimension of the tax phenomenon responsible for the transformations on the tax discourse. The first dimension exists at the social level and depends on the material conditions while the second derives from the dominant cognitive paradigms of the time. The premise is that there is a tension between the two dimensions so that while the interests of emerging power groups exert ideological influence, the tax phenomenon's context poses material limitations to its possibilities. This tension between the intellectual and material plane has transformed the tax field from a historical process of sophistication of its discourse. The result was that different narratives about the tax phenomenon converged to a specific discourse involving the themes of property, political participation, and economic freedom.

The sophistication of the tax discourse is associated with an intense process of convergence of different ideas during the Enlightenment. In addition to just attempting to describe the phenomenon or theorise about its legitimacy or not, the new tax discourse comprehended complex arguments related to the way taxation should occur. Therefore, although the phenomenon of taxation is not a European exclusivity, it was on this continent that a more sophisticated discourse on this phenomenon has arisen. Such production did not necessarily take place within the legal or economic field but have come in the wake of the various broad intellectual transformations experienced in that period. More specifically, ideas about property, the rela-

tionship between rulers and ruled, and the origin of the wealth had a central role in shaping the tax discourse. This fact implies that not just economic arguments but the whole moral project of social organisation carried out by the philosophers of Enlightenment have influenced modern tax thinking.

The purpose of this item is to describe the process of sophistication of the tax discourse, highlighting its ideological foundations. The premise is that the context's material and intellectual conditions have historically affected both the tax phenomenon and its discourse. The hypothesis is that the current idea about the tax phenomenon was ideologically influenced by a liberal project that has opposed absolutism and challenged the foundations of mercantilism. This item starts by showing that this ideology is a recent construction since taxation has been perceived differently throughout history. Afterwards, it demonstrates how these different historical perceptions converged to sophisticated theorisations connecting arguments concerning the idea of property to the legitimacy of the sovereigns during the Enlightenment. Finally, it argues that such theorisations resulted in an explanation of the wealth generation that not just assumed that public and private spheres are distinct realities, but that advocated necessary freedom to trade.

Different tax discourses in the antiquity.

Although it is common to think about taxation as the extraction of private assets to bear public expenses, this definition employs categories with different meanings over time. The division between private and public economic spheres is a complex intellectual construction identified with a recent period of history.[207] However, the phenomenon of taxation is associated with times or places in which the use of these categories would make no sense. The question that arises is why historians or archaeologists identify as "taxation" certain social phenomena that occurred in historical moments when it would not be possible to employ such categories.[208] One possible answer would be that this identification is necessarily anachronistic since

[207] According to Schumpeter, these categories are articulated in a modern view of state activity that sees taxation as the fiscal equivalent to the market system. This implies that this idea of taxation emerged simultaneously with the modern idea of the state itself, making the expression "tax state" a sort of pleonasm. See "The Crisis of the Tax State" in SCHUMPETER, J. A. **The Economics and Sociology of Capitalism**. Princeton: Princeton University Press, 1991, pp. 99-140. This theme will be resumed throughout this item.

[208] In a book aimed at an unskilled audience, Adams invokes the historical relationship between tax collectors and

the idea of taxation requires the separation of economic spheres. Nonetheless, for not turning the idea of taxation in antiquity into a *contradictio in terminis*, it is necessary to separate the material dimension of taxation from its ideological interpretation.[209]

In all its forms and expressions, the phenomenon of taxation necessarily presupposes a relationship of submission between individuals or group of individuals. This idea of submission, in turn, does not necessarily presuppose the use of force nor is it associated with an idea of discredit by the one who bears the tax, but to being subject to a given condition for the most diverse reasons.[210] The phenomenon is also associated with specific events or particular behaviours expected as consequences of the above relationship. These events depend on the nature of the necessities that justify the tax incidence according to the material conditions that constrain their possible modes of satisfaction.[211] A third determining factor concerns the question of the periodicity in which the tax phenomenon will manifest itself. From the emergence of the great civilisations, this issue becomes even more sensitive when considering the necessary pre-

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taxpayers to conclude that taxation has been so crucial in the history of civilisation that life itself corresponds to a tax dispute. He provides a narrative on taxation since ancient Egypt claiming that such a relationship has not changed so much in the past six thousand years and defining taxes as government taking money, property, or even services, without paying for it. See "Taxes: What They Are and Where They Began" in ADAMS, C. W. **For Good and Evil: the impact of taxes on the course of civilization**. 2nd ed. Lanham, Md.: Madison Books, 2001, pp. 1-73.

[209] Considering it a political institution, Menéndez concludes that it is not possible to speak of taxation in a proper and complete sense before Modernity. For him, therefore, the social phenomena identified by historians and archaeologists as taxation correspond to institutions that precede taxation (pre-history of taxation), having similar objectives but based on different political paradigms. See "Before the Tax State" in MENÉNDEZ, A. J. **Justifying Taxes: some elements for a general theory of democratic tax law**. Dordrecht: Kluwer Academic Publishers, 2001, pp. 87-91. As we understand that taxation has a material dimension, it is on this base that we refer to the events of antiquity and the Middle Ages.

[210] More than 5000 years ago, there was an idea according to which peoples defeated in the war should pay a consideration. This idea, however, was not enough to prevent the dominant people from also being submitted to some payment, which added to voluntary donations to the sovereign. Voluntary donations, as well as contributions *in natura* known as dimes, were the primary sources of sovereign's revenue in some theocratic political organisations. The voluntary donations existed among Chaldeans, Assyrians, and Babylonians. The Hebrews, albeit refractory to taxes, adopted the practice of dimes. See FOURNIER DE FLAIX, E. **L'Impôt Dans les Diverses Civilisations**. Paris: Guillaumin, 1897, pp. 5-7 and 11-16.

[211] The complex fiscal structure of Egypt presented taxes on purchases, consumption, and inheritance, besides developing a system of registration. This system was the result of the complex social, political and economic context in which Egyptian accounting practices took place during the Middle Kingdom. See "The socio-political, administrative and economic settings of the Middle Kingdom" in EZZAMEL, M. Accounting and Redistribution: the palace and mortuary cult in the Middle Kingdom, ancient Egypt. **The Accounting Historians Journal,** v. 29, n. 1, pp. 61-103, 2002, pp. 64-71. Later, such practices have influenced and were influenced by the new dominant peoples. See "Seconde époque de la civilisation égyptienne. Nouvel empire. Conquêtes des Perses, des Macédoniens, des Romains" in FOURNIER DE FLAIX, E. **L'Impôt Dans les Diverses Civilisations**. Paris: Guillaumin, 1897, pp. 25-34.

dictability for the control of complex social organisations.[212]

Both the events' ability to meet material needs and the periodicity's effects on the social organisation relate closely to the material circumstances of a given time. Notwithstanding, the idea of a relationship of submission involves aspects closely linked to the dominant ideology, being more easily affected by intellectual projects designed to create specific narratives.[213] As a result, the conditions of both the beneficiary of taxation and that on which the exaction falls have become affected by social projects committed to interests that go beyond the tax issue. As, on the social plane, the most important interests are related to the power problem and the issue of social organisation, the subject of the tax relationship was attracted by these debates.[214] The tax discourse has incorporated the conflicts of power in the social sphere through a debate involving the idea of legitimacy. It was against this background that tax discourse began to take shape during the Middle Ages in Europe.[215]

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[212] The eventual character of war payments or voluntary donations called for a tax mechanism able to provide a regular income, which was associated with the idea that taxation was a sign of subservience under the sovereign's rule. Whether a particular source is occasional or regular is at the heart of the distinction that historians and archaeologists make between the concept of tribute and taxation. The Persian Empire (between 538-330 BC) maintained the tributes derived from the submission of new peoples but developed a regular empire-wide tax system. This system was not homogeneous throughout the empire but was mainly based on land or precious metals, according to the material conditions of the region. See KLEBER, K. Taxation in the Achaemenid Empire. **Oxford Handbooks Online**, 12 November 2015.

[213] In Rome, when the empire was overwhelmingly agricultural, the property tax was only on land. Such a situation has changed from the increase in wealth brought about by trade development, which has led to new forms of property taxation on ships, money, clothing, and jewellery. See SAMSON, W. D. History of Taxation. In: Lymer, A. and Hasseldine, J. (Ed.). **The International Taxation System**. Boston: Kluwer Academic Publishers, 2002. Chapter 2, pp. 21-41, p. 23. Among the Dorians prevailed a colonial system that applied the archaic imposition in natura on the result of the production of settlers. In Lacedemonia, as well as in Crete, family protection, education, and taxation were all based on laws derived from the military and aristocratic tradition. Such tradition has made the Spartans only obliged to contribute in natura as far as necessary and in exceptional circumstances. See FOURNIER DE FLAIX, E. **L'Impôt Dans les Diverses Civilisations**. Paris: Guillaumin, 1897, p. 72.

[214] Taxation in Athens was not only conditioned by the organisation and fiscal mechanisms but by the social environment and its institutions. The struggle between merchants, small proprietors, speculators, and the democratic institutions resulted in the constant use of taxation as a method of maintaining the polis's institutions, especially at the expense of the richest. See FOURNIER DE FLAIX, E. **L'Impôt Dans les Diverses Civilisations**. Paris: Guillaumin, 1897, pp. 121-122. The Athenian political and economic context resulted in a more sophisticated way of understanding the tax on the property so that no longer just the land but slaves, cattle, furniture, and money themselves became elements to be in determining taxable wealth. See SAMSON, W. D. History of Taxation. In: Lymer, A. and Hasseldine, J. (Ed.). **The International Taxation System**. Boston: Kluwer Academic Publishers, 2002. Chapter 2, pp. 21-41, p. 23.

[215] Menéndez maintains that the Roman administration's collapse replaced the existing idea about the state with a patrimonial conception of the kingdom as a family affair. In this sense, the king's resources were not so different from those of the nobles at the same time that the demonetisation of the economy transformed the way of paying contributions. See "The Low Middle Ages and Feudalism" in MENÉNDEZ, A. J. **Justifying Taxes: some elements for a general theory of democratic tax law**. Dordrecht: Kluwer Academic Publishers, 2001, pp. 90-91.

The debate on legitimacy.

The constant changes in the balance of power between the medieval European kings, the clergy, and the nobles initially led to the spreading of something similar to the inheritance tax called relief. With the kings' weakening in continental Europe, the relief survived only in England during the period of the Norman invasion, when the monarchy was still stable.[216] The subsequent weakening of this monarchy has allowed the nobles to revolt which, combined with other factors, has resulted in the Magna Carta.[217] The different approaches to the tax phenomenon deriving from contextual changes show that the characterisation of a tax as a duty, a submission, a price, or even a robbery, only makes sense in a given context. This context, in turn, has been influenced by historical power conflicts involving different positions concerning the legitimacy of the tax phenomenon. Discourses of legitimacy have provided arguments justifying taxation, whereas contrary discourses have been defying the tax incidence, its magnitude, or its form.[218]

The tax legitimacy based on devotion has been central in many theocratic societies in which the church and the state had similar roles. However, devotion was not limited to theocratic political organisations, having justified tax incidence in Rome until Diocletian's

[216] The relief consisted in that the heir of a noble landowner had to pay the king when the noble died. Besides the relief, two other developments correspond to a kind of inheritance tax re-emergence. The first was the practice of nobles in seizing the vassal's most valuable property when he died. The second was the Church's claim concerning decedent's property, under the justification that he had probably not paid his annual tithing obligation. See SAMSON, W. D. History of Taxation. In: Lymer, A. and Hasseldine, J. (Ed.). **The International Taxation System**. Boston: Kluwer Academic Publishers, 2002. Chapter 2, pp. 21-41, pp. 26-27. For an explanation on how the tax institutes inherited from the Romans started to disintegrate in conjunction with the erosion of central government and the rise of regional end local centres of power in medieval continental Europe, see "Verdun" in GRAPPERHAUS, F. H. M. **Taxes, Liberty and Property: the role of taxation in democratization and national unity 511-1787**. Zutphen: De Walburg Pers/Kluwer, 1989, pp. 15-60.

[217] Magna Carta understood not as one document but as a process that led to the production of various documents by successive monarchs, demonstrates how the institutionalisation of interests of a specific group can be reinterpreted as a universal benefit. On how Magna Carta meant a power dispute involving nobles, kings, and clerics, see CARPENTER, D. Magna Carta 1215: its social and political context. In: Goldman, L. (Ed.). **Magna Carta: history, context and influence**. London: School of Advanced Study, University of London, 2018, pp. 17-24. For how this episode was later reinterpreted with aspirations of universality, see GARNETT, G. Sir Edward Coke's Resurrection of Magna Carta. In: Goldman, L. (Ed.). **Magna Carta: history, context and influence**. London: School of Advanced Study, University of London, 2018, pp. 51-60.

[218] This duality accompanies the history of taxation since the rise of rational argument employing the speech as a tool for the exercise of power. See "Propos Introductif" in AYRAULT, L. and GARNIER, F. **Histoire du Discours Fiscal en Europe**. Bruxelles: Bruylant, 2014, pp. 7-9.

fiscal revolt in the third century.[219] Discourses of legitimacy, however, have lost their sectarian character to become widely accepted from the rise of the modern states and the use of taxation as their condition of maintenance. The result was that the legitimacy of tax incidence was embodied in a broader concept of power to tax, considered a necessary feature of the modern state.[220] In the legal tax field, the rise of the legal positivism and the idea of justification by legality was responsible for turning the debate on tax legitimacy into a formal debate. Currently, the general idea that taxes are ordinary resources, and not extraordinary as in other eras, shows how taxation became associated with the maintenance of the state and its incidence unnecessary to be justified.[221]

On the other hand, although the questioning of tax incidence has become marginal, the discourses of contesting the way taxation occurs have developed quite complex rhetoric. This process is associated with an imbalance of power from a central authority in favour of emerging power groups, notably, the bourgeoisie.[222] These new emerging groups were responsible for articulations that later culminated with the liberal revolutions, which consecrated ideas developed during the previous century. The complexity of the debate has led to a rather sophisticated discourse on taxation within the intellectual movement known as the Enlightenment.[223] For the first time, the tax discourse faced a concept of property that did not rely on force

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[219] In parallel, there was a discourse that challenged both the property tax's generalisation as the procedures for its collection. See LAQUERRIÈRE-LACROIX, A. Le Discours Fiscal dan L'Antiquité Tardive. Doléances fiscales et légitimité de l'impôt. In: Ayrault, L. and Garnier, F. (Ed.). **Histoire du Discours Fiscal en Europe**. Bruxelles: Bruylant, 2014, pp. 11-22.

[220] Explaining the British experience, Gustav Cohn says that the evolution of the right to tax and of the liability of the individual members of the community, goes on pari passu with the evolution of the state itself, since the conditions of their developments are the same. See "The Right to Tax and the Obligation to Pay Taxes" COHN, G. **The Science of Finance**. Chicago: University of Chicago Press, 1895, pp. 285-291.

[221] The questioning of the tax incidence itself is not popular even within the libertarian rhetoric. The exceptions are Robert Nozick and Murray Rothbard whose arguments, in turn, have not been echoed by other libertarian intellectuals. See FESER, E. Taxation, Forced Labor, and Theft. **The Independent Review,** v. V, n. 2, pp. 219-235, Fall 2000.

[222] Although this is a process that has hit Europe as a whole, we are more focused on the events that took place in France and England. It was in the internal context of these two countries that the liberal discourse on taxation gained greater prominence, developing normative rhetoric related to the distribution of the tax burden that is still present in the current tax discourse. See "The Liberal Tax State: ad rem taxes" in MENÉNDEZ, A. J. **Justifying Taxes: some elements for a general theory of democratic tax law**. Dordrecht: Kluwer Academic Publishers, 2001, pp. 93-101.

[223] Although there is some discussion involving its specific period as well as the events that it encompasses, Enlightenment is considered here as the period from 1688, with the Glorious Revolution, until 1799, with the introduction of the first income tax in England. It is in this period that we will observe the consolidation of ideas that will become central in the field of taxation: subjecting public expenditure to parliamentary law, annual budget approval, equality of citizens before tax law, etc. Therefore, although Adam Smith plays a central role in the tax field, his ideas did not emerge in a vacuum but resulted from the theoretical universe of the Enlightenment. See

or divine origin but on the role that the sovereign plays in protecting its subjects' interests.[224] As the issues concerning property involved the very sovereign's power's justification, taxation became a central element within the debate involving the rise of the modern state.

The convergence of tax discourses.

Although the emergence of a sophisticated discourse on taxation is associated with the Enlightenment movement, several previous factors have contributed to the formation of the theoretical basis of tax thinking. Even before that period, the theme of legitimacy and sovereignty was already taking over European thinking, especially in Britain.[225] The result was the insertion of the human element as central in the intellectual construction of the state and the society, which can be seen by the allegory of Hobbes's Leviathan. During the Enlightenment, however, a discourse condemning the absolutist monarchy as a necessary form of government has put the Hobbesian argument in a new context.[226] Although emanating from a specific class, the bourgeoisie, this liberal discourse presented ambitions of universality that became interpreted as true absolute principles.[227] The pervasive idea that the protection of the interests of the bourgeoisie corresponded to the protection of the interests of all humanity, placing property as one of its central values, has led to two significant results.

FRECKNALL-HUGHES, J. The Concept of Taxation and the Age of Enlightenment. In: Tiley, J. (Ed.). **Studies in the History of Tax Law**. Oxford and Portland (Or): Hart, Volume 2, 2007, pp. 253-286.

[224] The thinker usually most associated with this idea is John Locke. For a narrative on Locke's theory of property and its importance for the debate on the phenomenon of taxation, see SNAPE, J. and FRECKNALL-HUGHES, J. John Locke: property, tax and the private sphere. In: Harris, P. and de Cogan, D. (Ed.). **Studies in the History of Tax Law**. Oxford: Hart, Volume 8, 2017, pp. 1-35.

[225] The social contract metaphor, employed by the theorists of natural law in its various forms, has begun to take the ideals of the time. See "The basis of the state and of government" in KELLY, J. M. **A Short History of Western Legal Theory**. Oxford: Oxford University Press, 1992, pp. 208-219.

[226] Hobbes conceived the cover of his magnum opus as a giant made up of people. According to Skinner, Hobbes's humanistic background influenced his interest in the visual representation of his political ideas. See "Hobbes and the Humanist Frontispiece" in SKINNER, Q. R. D. **From Humanism to Hobbes: studies in rhetoric and politics**. Cambridge: Cambridge University Press, 2018, pp. 222-315. Explaining Hobbes's doctrine on the duty of submission to sovereigns, Russell says that he admitted one limitation: the right of self-preservation was absolute and opposable even against monarchs. This conclusion corresponds to a logical derivation since Hobbes has made self-preservation the motive for instituting government in the first place. See "Hobbes's Leviathan" in RUSSELL, B. **A History of Western Philosophy: and its connection with political and social circumstances from the earliest times to the present day**. New York: Simon and Schuster, 1945, 895 pages, pp. 546-557.

[227] Russell affirms that the most vigorous and influential politicians held Locke's theoretical philosophy and shared his political opinions. His work embedded the American and the 1871 French Constitution, and his doctrines were the British Constitution's basis until the end of the nineteenth century. See "Locke's Theory of Knowledge" in RUSSELL, B. **A History of Western Philosophy: and its connection with political and social circumstances from the earliest times to the present day**. New York: Simon and Schuster, 1945, 895 pages, pp. 604-617.

In the field of state theory, the argument sustaining a necessary separation between individuals naturally born to be ruled vis-à-vis a hereditary elite ceased to make sense. One of the primary outcomes of the debate on the idea of property was the development of a discourse attacking the divine origins of the sovereign's power.[228] In opposition to the absolutist tradition, the new argument conditioned the ruler's legitimacy to its ability in preserving the interests of the subjects. Such interests reflected the emergence of the bourgeois class and its moral project of a social organisation based on a metaphysical right to property.[229] This project favoured individuals who did not have a noble origin, allowing them to rise to prominent positions in the public administration from a discourse that advocated a rational orientation for state activity. This process has culminated in the emergence of a new bureaucratic elite that, even when originating in the context of absolutist interests, could develop an independent agenda.[230]

The second result of the rise of the property debate occurred in the field of economic thinking, resulting in a discourse of separation between the public and the private spheres. This separation consists of a logical derivation of the assumption that property results from various individual elements such as personal effort, self-sovereignty, and the free exercise of one's ability.[231] It is important to remember that this discourse was in opposition to the traditional explanation according to which all property belonged to the sovereign.[232] Both the ances-

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[228] On the role of the human element in the intellectual construction of the state, see "The conception of the state and its basis" in KELLY, J. M. **A Short History of Western Legal Theory**. Oxford: Oxford University Press, 1992, pp. 253-258. Religious fragmentation and the rise of the high bourgeoisie has substantially driven the new discourse. Russell states that the defeat of theories of divine right, in England, derived both from religions' multiplicity as from the conflict for power between the monarchy, the aristocracy, and the higher bourgeoisie. See "Locke's Political Philosophy" in RUSSELL, B. **A History of Western Philosophy: and its connection with political and social circumstances from the earliest times to the present day**. New York: Simon and Schuster, 1945, 895 pages, pp. 617-640.

[229] See "The theory of property" in KELLY, J. M. **A Short History of Western Legal Theory**. Oxford: Oxford University Press, 1992, pp. 229-232.

[230] Presenting an empirical study of Prussia in the Old Regime, Rosenberg narrates the process of transformation undergone by the civil bureaucracy into a new social elite, from its origins as an arm of the absolutist monarchy to its emancipation as a real independent political oligarchy. See ROSENBERG, H. **Bureaucracy, Aristocracy, and Autocracy: the Prussian experience, 1660-1815**. Cambridge: Harvard University Press, 1958.

[231] According to Murphy and Nagel, this assumption is the basis of the deontological thinking about property dating back to John Locke. For an explanation of the topic, see "Consequentialism and Deontology" in MURPHY, L. B. and NAGEL, T. **The Myth of Ownership: taxes and justice**. Oxford: Oxford University Press, 2002, pp. 42-45.

[232] According to the tradition, God would have bestowed the kingly power upon Adam. From Adam, such power descended to his heirs. Ultimately, this explains why property reached the various monarchs of modern times. Locke's *First Treatise on Government* is a reply to Sir Robert Filmer's *Patriarcha: or The Natural Power of Kings*. Filmer was a devout upholder of the divine right of kings. See "The Hereditary Principle" in RUSSELL, B. **A History of Western Philosophy: and its connection with political and social circumstances from the earliest times to the present day**. New York: Simon and Schuster, 1945, 895 pages, pp. 617-623.

tral origin of property and traditional monarchies relied on the power of the Catholic Church, weakened by the rise of Protestantism. This idea of property rights independent from the sovereign implied a new universe of production whose foundation was not necessarily the state activity. This separation has become the central element of industrial capitalist thought emerged after and as a result of the Enlightenment and which characterises modern taxation.[233]

Tax debate during the Enlightenment.

The political and economic implications of the complexity assumed by the property debate also made the tax debate during the Enlightenment more complex. Going far beyond the old discourses that merely attempted to criticise the tax incidence as a whole, several authors elaborated tax theories in this period.[234] The growing awareness of the importance of preserving the natural characteristics of the idea of property has led to a discussion agenda about how the distribution of tax burdens should take place. Notwithstanding, this agenda had not yet developed the currently known dichotomy between the ability to pay and benefit principles but offered a discourse articulating elements present in both.[235] In this sense, one must pay more taxes by the simple fact of having more means to do it since the one who has wealth necessarily benefits more from the state. It is a formulation based on the benefit that each one has concerning the public peace deriving from the possibility of enjoying one's patrimony.[236]

This first principle was the starting point of an effort of systematisation developed through an aesthetic employing the elaboration of canons concerning the phenomenon

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[233] According to Schumpeter, recognising the existence of a private sphere was a necessary element for the birth of capitalism and the modern state. See "The Crisis of the Desmesne Economy at the Close of the Middle Ages" in SCHUMPETER, J. A. **The Economics and Sociology of Capitalism**. Princeton: Princeton University Press, 1991, pp. 102-108.

[234] A summary of the tax thought of Locke, Johnson, Hume, Smith, Burke, Paine, and Bentham can be seen at FRECKNALL-HUGHES, J. The Concept of Taxation and the Age of Enlightenment. In: Tiley, J. (Ed.). **Studies in the History of Tax Law**. Oxford and Portland (Or): Hart, Volume 2, 2007, pp. 253-286.

[235] Andrade holds that the origin of this formulation goes back to the middle of the seventeenth century, in William Petty's most relevant work: *The Treatise of Taxes and Contributions*. There, the principle of distribution of the tax burden, presented as evidence, is the aforementioned combination of the principles of benefit and ability to pay. See "O Princípio da Repartição" in ANDRADE, F. A. P. R. d. A Tributação do Rendimento no Pensamento Económico Antes de Adam Smith. **Boletim de Ciências Económicas,** v. LVII, n. I, pp. 305-350, 2014, pp. 307-315.

[236] According to Seligman, the foundations of Petty's theory had already been developed from the different arguments involving the need to repay the benefit offered by the state. These arguments were developed by Hobbes, Grotius, Pufendorf, and Sully. See "The Benefit Theory Leads to Proportion" in SELIGMAN, E. R. A. **Progressive Taxation in Theory and Practice**. Princeton: American Economic Association, 1908, pp. 158-180.

of taxation. This aesthetic is usually associated with the work of Adam Smith, although it has precedents in the European continent.[237] The development of a tax theory through the elaboration of general maxims is in line with a broad application to general situations, not limiting itself to local boundaries. This mechanism presented the potential for developing a theory of transnational distributive justice, encompassing what later came to be known as international taxation.[238] Nonetheless, one must contextualise these efforts to impose taxation on wealth in the light of the dominant economic paradigm of that time. It is important to emphasise that the economic separation between the public and private spheres, at least in the period before the physiocrats', consisted of a discourse directed to the internal relations between the state and the citizens.[239]

According to the economic view of the time, the wealth taxed domestically resulted from the state activity performed internationally. Since gold and silver were not just instruments of trade but measures of wealth, the process of wealth generation was limited to the activity of accumulating precious metals.[240] Such characteristic implies that the very idea of "generation" of wealth within the mercantilist thinking has a peculiarity. The mercantilist doctrine conceived wealth in a static sense, in such a way that the role of the state was to appropriate a deemed constant wealth and redistribute it at the domestic level.[241] This conception favoured the indirect measurement of individual wealth, making indirect taxation of consumption, especially of luxury products, be considered more compatible with the defence of freedom. The presupposition that indirect taxation was less impacting on taxpayers, besides allowing the limita-

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[237] Adam Smith's four maxims on taxation, then repeatedly cited as guiding principles of an ideal system of taxation, have two continental antecedents, in Italy and Germany: Pietro Verri and von Justi. See "Os Princípios do Sistema Tributário" in ANDRADE, F. A. P. R. d. A Tributação do Rendimento no Pensamento Económico Antes de Adam Smith. **Boletim de Ciências Económicas,** v. LVII, n. I, pp. 305-350, 2014, pp. 334-345.

[238] For an argument on the applicability of Grotius' thought in the elaboration of a distributive justice theory applicable in the field of international taxation, see SNAPE, J. Tulips and Jute: Grotius, Smith and an enlightenment ethos in international taxation law. **Irish Yearbook of International Law,** v. 4-5, pp. 29-70, 2009-2010.

[239] At the international level, the highly interventionist mercantilist model prevailed and placed the state as the central character in the process of generating wealth. See MAGNUSSON, L. Freedom and Trade: from corporate freedom and jealousy of trade to a natural liberty. **Keio economic studies,** v. 49, pp. 19-30, 2013.

[240] This definition of mercantilist thinking, according to Spector, was constructed from the critique offered by Smith (as will be seen in the next item). See SPECTOR, C. Le Concept de Mercantilisme. **Revue de métaphysique et de morale,** v. 39, n. 3, pp. 289-309, 2003.

[241] Although not referring specifically to wealth, Heckscher says that the mercantilist paradigm understood economic resources as a finite quantity in which the gain of one would necessarily represent the loss of the other. See "Static conception" in HECKSCHER, E. F. **Mercantilism**. Volume 2. 2nd ed. London: Geordе Allen, 1955, pp. 23-28. The contrast between foreign and domestic trade is responsible for a dichotomy that combined principles of trade justice at the local level and belligerent behaviour at the international one. For an explanation of this dichotomy and the view of the foreigner as an enemy, see "L'art du commerce comme art de la guerre" in SPECTOR, C. Le

tion of the power of the sovereign, has resulted in the rejection of global taxation of income.[242]

Cameralism and the technical tax discourse.

Proposals for general and proportional taxation of income came during the Enlightenment, and the first and most striking of them was that of Vauban. This proposal, however, did not mean an intellectual advance in the discourse on taxation, since it was disconnected from efforts of systematisations and lacked a theory able to explain the origin of wealth.[243] However, in parallel, some projects aimed to offer alternatives to challenge the mercantilist way of looking at the production and management of state wealth. It was the cameralism of Germanic origin the first to attempt to offer an alternative to the mercantilist paradigm concerning the systematisation of public accounts.[244] While a pragmatic model of administration, cameralism is closely linked to the above-mentioned process of strengthening experienced by the civil bureaucracy at the beginning of the modern period. Therefore, more than an intellectual movement, cameralism presented a practical concern regarding the efficiency of the administrators of the state.[245]

Cameralism, however, was not a project without theoretical bases but was accompanied by intellectual instruments aiming at improving the practices of the bureaucrats. It

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Concept de Mercantilisme. **Revue de métaphysique et de morale,** v. 39, n. 3, pp. 289-309, 2003, pp. 303-308.

[242] This lesser impact on taxpayers involves different arguments. It would be more just since each one would pay what enjoys. It would be more economical since it favours prudence. It would combat double taxation since no one would buy the same thing twice. However, many mercantilist authors highlighted "fiscal anaesthesia" as a quality associated with indirect tax, treating it as less impacting from this perspective. The defence of freedom, in turn, is associated with the possibility of avoiding payment of the tax by merely refusing to consume, which would not be possible in the case of direct taxes. For a more detailed presentation of these and other arguments, see "A tributação indirecta do consumo" in ANDRADE, F. A. P. R. d. A Tributação do Rendimento no Pensamento Económico Antes de Adam Smith. **Boletim de Ciências Económicas,** v. LVII, n. I, pp. 305-350, 2014, pp. 325-334.

[243] Andrade explains that the Dîme Royale (Royal Tithing) proposed by Vauban, although very bold for the time in his attempt to impose a universal tax, was based more on the optimism of its creator than on a robust foundation for its universality. Based on a simplistic comparison with religious tithing, the tax had no significant influence on the development of tax thinking. See "A tributação directa" in ANDRADE, F. A. P. R. d. A Tributação do Rendimento no Pensamento Económico Antes de Adam Smith. **Boletim de Ciências Económicas,** v. LVII, n. I, pp. 305-350, 2014, pp. 315-325.

[244] This project, however, was not limited to the German reality. About how cameralism had significant influence in Sweden, Denmark, Russia, Portugal, together with other parts of Europe, see SEPPEL, M. and TRIBE, K. **Cameralism in Practice: state administration and economy in early modern Europe**. Woodbridge: The Boydell Press, 2017.

[245] Cameralism should be seen more as a theory or technique of government than a project dedicated to speculating on fundamental questions of pure economics. For a detailed analysis of this argument, see "Introduction to Cameralism" in SMALL, A. W. **The Cameralists: the pioneers of German social polity**. Kitchener, Ont.: Batoche, 2001,

is possible to identify the rise of an academic cameralism both as cause and as a consequence of the practical aspects arising from the process of ascension of the state bureaucracy.[246] Cameralism, seen as a broad discipline, was therefore intended to create an overview of the knowledge needed by the public administrator. The action of the bureaucrats was not necessarily aimed at satisfying the sovereign's will but was the result of a project of rationality that governed the field in which they operated.[247] It is noteworthy that cameralists were a heterogeneous group that served not only the interest of the state but also the growing cadres of academics, scientists, and technology experts. The rationality guiding the cameralist action, therefore, stemmed from the effort to address both the state needs and the interests of the emerging bureaucratic elite.[248]

In this sense, albeit created as a branch of the monarchical absolutism, the institutional and intellectual elements of cameralism were responsible for the independence of the tax bureaucracy. A discourse of field rationality would have the power to create a collective identity to this mass of actors with different interests.[249] This new discourse represented the first attempt of an alternative to mercantilism, defending the substitution of the entire production process through internalisation. Nonetheless, despite making the first move away from traditional thinking, cameralism, as far as the wealth generation is concerned, was seen as a German version of mercantilism.[250] Furthermore, its agenda was not concerned with the debate involving

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pp. 19-32.

[246] For a narrative on how the academic branch of cameralism supported the pragmatic project, see TRIBE, K. Cameralism and the Science of Government. **The Journal of Modern History,** v. 56, n. 2, pp. 263-284, 1984.

[247] Concerning budget issues, this rationality involves the development of processes of learning accounting techniques. On how this process of bureaucracy training took place, see FORRESTER, D. A. R. Rational Administration, Finance and Control Accounting: the experience of cameralism. **Critical Perspectives on Accounting,** v. 1, n. 4, pp. 285-317, 1990.

[248] Wakefield argues that the literature on cameralism has diverged on the type of relationship between the cameral sciences and cameral practice. The higher or lesser emphasis given to academic interests in the face of meeting the needs of the sovereign has resulted in opinions ranging from the complete separation between a self-contained academic discourse vis-a-vis the bureaucratic practice to the symbiotic relationship between these two. See WAKEFIELD, A. Books, Bureaus, and the Historiography of Cameralism. **European Journal of Law and Economics,** v. 19, n. 3, pp. 311-320, 2005.

[249] Several factors (the most important of which was the civil war in England) resulted in quite different situations for the fiscal bureaucracy in seventeenth-century Prussia compared to the English experience. For an analysis of the contexts that led to different fiscal bureaucratic discourses in Prussia and England, see BRAUN, R. Taxation, Sociopolitical Structure, and State-Building: Great Britain and Brandenburg-Prussia. In: Tilly, C. (Ed.). **The Formation of National States in West Europe**. Princeton, NJ: Princeton University Press, 1975, pp. 243-327 1546.

[250] Since the seventeenth century, the defence of import substitution appears as an alternative model of economic development. This model, however, did not represent a break with the paradigm of rivalry between nations that marked the mercantilist period. For an analysis of the political and intellectual impacts of Seckendorff's work on the topic, see REINERT, S. A. Cameralism and Commercial Rivalry: nationbuilding through economic autarky in Seckendorff's 1665 'additiones'. **European Journal of Law and Economics,** v. 19, n. 3, pp. 271-286, 2005.

the origin of the wealth of the state, leaving aside the tax debate to devote to the use of state resources themselves to obtain revenue for the sovereign. This attitude, however, was enough to provide an innovative technical language and new fiscal rationality associated with the nascent tax bureaucracy.[251]

Physiocracy and the privatisation of wealth.

The first real attempt to combat the mercantilist paradigm appeared in France from the theoretical arguments offered by the physiocrats. However, this was not a clash between two economic schools but a first effort to create an economic agenda where there was only a commercial one.[252] In this way, the main contribution of the physiocrats consisted of the new concept of wealth deriving from agricultural production and no longer from metal accumulation. Such a division is associated with the idea that there would be productive and unproductive work, as they were capable of generating or only redistributing wealth.[253] This idea represented the first theorisation about the existence of a surplus, making room for an understanding of the wealth from a dynamic perspective.[254] The conception of "net profits", or of "net income", implied the idea of interdependence between economic sectors and gave an economic purpose to the division between private and public spheres generated from the debate on property.

The contribution of physiocrats resulted in that the debate on wealth no longer had to be limited to the public sphere but should reach the private activities that generate it. This "privatisation" of wealth resulted in defence of direct taxation, mainly because the land was considered the source of this wealth.[255] Presuming that natural laws governed the economic

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[251] Backhaus points out that cameralists focused on the debate about the advantages and disadvantages of the excise tax, considered more effective than taxing land or income to raise revenue. In this context, the cameralist discourse developed around the idea of imposing limits on taxation, producing a set of rules or tax principles that allegedly would promote the prince's interests. Thus, tax rates should be low so as not to discourage economic activity; revenues should be used for beneficial and urgent purposes, while the administration of taxes should be non-corruptible and straightforward. See "State revenues" in BACKHAUS, J. G. and WAGNER, R. E. The Cameralists: a public choice perspective. **Public Choice,** v. 53, n. 1, pp. 3-20, 1987, pp. 8-13.

[252] Mercantilism had no general principle to explain the economic activities, which were primarily commercial. See "Physiocracy: the first economic model" in GORDON, S. **The History and Philosophy of Social Science**. London: Routledge, 1991, 690 pages, pp. 88-99.

[253] See "A Fisiocracia e o modelo das ciências naturais" in CORAZZA, G. Ciência e Método na História do Pensamento Econômico. **Revista de Economia,** v. 35, n. 2, pp. 107-135, maio/ago 2009, pp. 112-113.

[254] See "The French Economists or Physiocrats" in COHN, G. A History of Political Economy. **The Annals of the American Academy of Political and Social Science,** v. 4, n. 6, pp. 1-142, Mar 1894, pp. 21-29.

[255] Thus, a reform proposal would support the need for a single land tax, not as an act of justice but as a conse-

relations and that these laws should be respected, physiocrats argued that the single tax on land was the only tax that conformed to nature.[256] Hence, all other taxes would be necessarily arbitrary and harmful to the peoples and the sovereign, being the capital and labour employed in manufactures sterile in the sense that they generate no more product than was employed in production. The result was that the physiocrats did not attribute to the capitalists any participation in the distribution of newly created wealth. Besides, the taxation they proposed implied the elimination of the personal exemption enjoyed by the aristocrats and the clergy concerning direct taxation.[257]

Conclusions.

Many narratives about taxation present an apparent contradiction, describing it from intellectual categories developed in modernity while identifying its occurrence in other eras. This fact demonstrates existing one taxation as a social phenomenon not confused with the discourse produced about it. The European experience has witnessed a prolific production of different tax discourses to justify the tax incidence and contest it, whether wholly or just the way it takes place. The Enlightenment was responsible for making these diverse narratives converge for a debate involving the origin of property, the sovereign's legitimacy, and its relationship with its subjects. At this time, the discourse on the legitimacy of taxation has become more complex, articulating concerns about the distribution of the tax burden and the wealth generation process. Nonetheless, this generation corresponded only to obtaining pre-existing wealth on the part of the state and its internal redistribution before its citizens.

The complexity involving the state's role in the wealth distribution process in compliance with the new discourses on the tax burden demanded a bureaucracy capable of handling the fiscal categories. This demand was met from the emergence of cameralism, a state

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quence of the idea that land alone would be responsible for the production of a net income. This idea rescues the Lockean argument according to which, in the end, all taxation would be levied on the land. See HARSIN, P. La Théorie Fiscale des Physiocrates. **Revue d'histoire économique et sociale,** v. 36, n. 1, pp. 7-17, 1958.

[256] See DELMAS, B. Les Physiocrates, Turgot et "Le Grand Secret de la Science Fiscale". **Revue d'histoire moderne et contemporaine,** v. 56, n. 2, pp. 79-103, 2009.

[257] Such is because the taxation of the sterile class of manufactures would end up being passed on the owner while taxing the productive class if it is not passed on in the same way, harms the creation of agricultural wealth. See ANDRADE, F. A. P. R. d. A Tributação do Rendimento no Pensamento Económico Antes de Adam Smith. **Boletim de Ciências Económicas,** v. LVII, n. I, pp. 305-350, 2014, p. 322.

and academic project that, among other results, produced a fiscal bureaucratic elite that consolidated a new tax social practice. The various transformations that cameralism brought about represented a first attempt to move away from mercantilist commercial practices. However, such an attempt did not produce a new discourse on the wealth generation process, making cameralism just a specific type of mercantilism. The break with the model of static wealth advocated by mercantilists arose only with the notion of net income instituted by the physiocrats. This notion allowed for an unprecedented separation between sterile production processes from others that generated new wealth, contrasting genuine value creators with merely value extractors.

The physiocratic argument, contextualised in the rise of Enlightenment thinking, replicated much of the moral theories and interests of the new power groups. The aesthetics of emulating models of laws of nature, as well as favouring the position of the rising bourgeoisie against more traditional social classes, made physiocratic thinking an adequate alternative to the mercantilist mode of production. However, the physiocrats were closely associated with the French agrarian class, which did not correspond to the reality of all European countries. The result was that this position was countered by Adam Smith, which rescued the role of trade in generating wealth, but in a different sense. The metaphor of the invisible hand denotes that Smith, like the physiocrats, also saw the generation of wealth as something detached from the state action. Nevertheless, for Smith, the separation between public and private spheres, and the resulting idea of a market society, is not just a possibility but a condition for wealth generation, as the next item will demonstrate.

1.2.2. The birth of the tax field.

The previous item has demonstrated how the tax phenomenon was socially and intellectually perceived in different ways in the antiquity, according to the material and cognitive conditions of the time. The transition to the Middle Ages, in the context of power disputes between nobles, kings, and clerics, resulted in the prevalence of the debate on the tax legitimacy. The Enlightenment ideas about property offered new views on the political and economic field, benefiting the rise of new power groups. These ideas implied the sophistication of the tax debate, generating theories that were not limited to the issue of the tax legitimacy but that fostered pro-

posals of an alternative to the mercantilist model. The cameralistic proposal, associated with the emancipation of the state bureaucracy, has symbolised a political and academic effort that resulted in a specific fiscal language. However, it was the physiocrats who first were successful in offering a theory of wealth generation from the defence of a bourgeois project of social organisation.

The physiocrats' proposal, however, was strongly associated with the French agrarian elite and did not address the wishes arising from the industrial revolution. Such longings echoed in the theories developed by Adam Smith whose work was responsible for considerable transformations in the foundations of political economy. The consolidation of the idea of separation between public and private spheres served as the basis for a specific type of tax discourse that marked Smith's legacy. This discourse gained autonomy and was subsequently impacted by the process of re-emergence of the cameralistic thinking, resuming a tax agenda concerned with the state's financial activity. The difference in the degree of impact of cameralism in the different European countries was responsible for the emergence of quite different tax academic projects. These projects, in turn, were not immune to the prevailing scientific aspirations of the positivist movement in the nineteenth century, inside and outside the field of economics.

This item presents the formation of the tax field, from the transformations caused by Smith until the beginning of the legal discourse's independence. The premise is that this formation grounds on a process that turned the bourgeois project of social organisation into a technical argument within the tax discourse. The hypothesis is that Smith's influence on the field of political economy has made the tax discourse acquire the forms now recognised. So, this item provides an argument on how Smith's theory on wealth generation has transformed a moral project of social organisation into economic theory. After, it relates the rise of the fields of public finance and the science of finance to the distinct ways the Smithian tradition faced the strengthening of bureaucratic institutions in Europe. Finally, it demonstrates why the marginalist revolution and the scientific positivism in the late nineteenth century caused the obliteration of the moral and political dimension of taxation favouring a self-considered technical narrative.

The moral origins of the modern tax discourse.

The field and idea of a political economy have a tradition that predates the Smithian propositions, directly relating to the theoretical assumptions that dominated thought in the period. Its concerns regarding production, circulation, and distribution of material goods, as well as the determinant elements that constrain them, were discussed in light of distinct paradigms.[258] Not all of these discussions, however, represented proposals for systematising political economy, or even for theorising about the paradigms that drive the field's agenda. The result was a paradigmatic plurality in the field that permitted the rise of a vision on political economy that was in line with the traditional mercantilist practices.[259] Albeit this vision allowed the defence of free trade, this freedom concerned long-distance commerce within the context of the old international law tradition. Domestically, although the defence of a planning state was not entirely accepted, the initial political economy was closer to this position than to a wholly independent private sphere.[260]

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[258] Antoine de Montchrétien introduced the term in 1615 in his book "Treaty of Political Economy" (Traité de l'œconomie politique) having been repeated by Jean Jacques Rousseau in 1755 (Discours sur l'économie politique). However, as Marc Loudet tells us in the introduction of a modern version of the work, it seems that neither Rousseau, François Quesnay, nor Adam Smith has read the work of Montchrétien, probably even ignoring its existence. See MONTCHRÉTIEN, A. d. **Traité de L'Œconomie Politique**. Paris: Classiques Garnier, 2017. Adam Smith himself dedicates the entire Book 4 of his masterpiece "An Inquiry into the Nature and Causes of the Wealth of Nations" (hereinafter referred to as "The Wealth of Nations") to what he called the mercantile and agricultural systems of political economy. The print versions used in this work are SMITH, A. **An Inquiry into the Nature and Causes of the Wealth of Nations. Books I-III**. London: Penguin Books, 1999a, SMITH, A. **An Inquiry into the Nature and Causes of the Wealth of Nations. Books IV-V**. London: Penguin Books, 1999b.

[259] The different attitudes toward a possible paradigmatic systematisation of the field led Cohn, employing the typical vocabulary of the nineteenth century, to argue that the political economy of what Smith calls "mercantile system" would lie merely within the realm of economic history, ascribing to the physiocrats the merit of having founded the science of economics. See "The preparatory period of scientific political economy" in COHN, G. A History of Political Economy. **The Annals of the American Academy of Political and Social Science,** v. 4, n. 6, pp. 1-142, Mar 1894, pp. 11-20. The pioneer in the English-speaking world's political economy, and the most influent book before Smith's, is Sir James Steuart's An Inquiry into the Principles of Political Economy (1767). The print version used in this work is STEUART, J. D. **An Inquiry into the Principles of Political Economy**. London: Pickering & Chatto, 1998. For James Steuart's influence and an unorthodox explanation about his ideas, see YANG, H.-S. **The Political Economy of Trade and Growth: an analytical interpretation of Sir James Steuart's Inquiry**. Aldershot: Elgar, 1994.

[260] The defence of free trade was a matter of state within the international commercial rivalry that characterised the mercantilist period. The extending of this freedom to the individuals was still limited to the discourse of natural law, not taking part in the political economy debate. For a more in-depth analysis on the topic, see MAGNUSSON, L. Freedom and Trade: from corporate freedom and jealousy of trade to a natural liberty. **Keio economic studies,** v. 49, pp. 19-30, 2013. About how Steuart has articulated the obtaining of wealth (that is, the means of purchasing) and international trade, see "Economic growth and foreign trade" in YANG, H.-S. **The Political Economy of Trade and Growth: an analytical interpretation of Sir James Steuart's Inquiry**. Aldershot: Elgar, 1994, pp. 134-162.

Smith's thinking has innovated the field of political economy since it brought the question of free trade to the internal economic relationship between state and citizens. For Smith, free trade had an importance that went beyond morality, constituting the economic argument on which he explained the process of wealth generation.[261] This argument, in turn, derived from the theoretical dissociation between public and private economic spheres, which was not employed by the mercantilist or physiocratic arguments concerning wealth. Smith's effort was to attack the mercantilist premise according to which wealth could not be generated but only appropriated from the accumulation of precious metals.[262] Smith defended a social organisation based on the market, arguing that wealth generation arises from exchanges between individuals with no state intervention. The result was that only after Smith's theory of wealth creation that a theoretical discourse and political agenda related to income taxation have emerged.[263]

Smith's assumption, however, did not stem from any process of inference but the intentional adoption of a specific moral philosophy. The incorporation of this philosophy into his wealth generation theory, in turn, had the potential to universalise what belonged to his philosophical project.[264] By assembling, in his theory of wealth creation, the effects of the division of labour, the separation of private and public spheres, and his views on the nature and pro-

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About how Steuart conceived the international trading system as a product of state action, and not a "natural process", see MENUDO, J. M. Sir James Steuart on the Origins of Commercial Nations. **Journal of the History of Economic Thought,** v. 40, n. 4, pp. 561-578, 2018.

[261] The defence of free trade derives from the rise of discourses involving natural rights in the context of the fight against absolutist monarchies and, according to Magnusson, Smith is merely repeating a moral philosophy that was already being appropriated by French economists. See MAGNUSSON, L. Freedom and Trade: from corporate freedom and jealousy of trade to a natural liberty. **Keio economic studies,** v. 49, pp. 19-30, 2013, pp. 28-29.

[262] There are contrary opinions that deconstruct this stereotypical view of mercantilist thinking according to which wealth would be equal to money and bullion, blaming Smith for the spread of this idea. A presentation on this debate is found in "The creation of wealth" in MAGNUSSON, L. **The Political Economy of Mercantilism**. London; New York: Routledge, 2015, pp. 101-108. However, as this is not a work on the history of economic thought, what interests us is the view on mercantilism consecrated in thought and influencing the tax discourse.

[263] On how the mercantilist and physiocratic arguments did not allow the development of a theory of income taxation, see ANDRADE, F. A. P. R. d. A Tributação do Rendimento no Pensamento Económico Antes de Adam Smith. **Boletim de Ciências Económicas,** v. LVII, n. I, pp. 305-350, 2014.

[264] According to Musgrave, Smith's moral bases are more easily found in another text: "Smith's view of the world may be read between the lines of the Wealth of Nations, but is developed in detail in his earlier work, The Theory of Moral Sentiments (1759). It is in this earlier work that Smith the moral philosopher presents an extremely complex and subtle structure of human interaction. Comprising a multiplicity of forces and motivation, individuals guided by the invisible hand are led to interact so as to produce a socially desirable outcome. In this interaction, benevolence as well as self-interest has an important role to play." See "Adam Smith" in MUSGRAVE, R. A. A Brief History of Fiscal Doctrine. In: Feldstein, M. and Auerbach, A. J. (Ed.). **Handbook of Public Economics**. Burlington: Elsevier, Volume 1, 1985. 1, pp. 1-59, pp. 3-5 For Smith's moral bases, see SMITH, A. **The Theory of Moral Sentiments**.

pensity of human beings, Smith merged technical, political, and moral arguments. Thus, in developing his discourse on taxation, Smith opted for presenting a list of undesirable state conducts instead of analysing the features of the tax phenomenon.[265] This option manifests itself by the adoption of a prescriptive language, which contrasts with his detailed description of the human nature and propensity.[266] It is no coincidence that, despite the sophistication employed in his argument on wealth generation, taxation merited only the elaboration of canons as biblical commandments.

Smith's legacy.

What was witnessed in the decades following the transformations brought about by the Smithian thought was an influence that was not limited to its theoretical foundations. The structure of The Wealth of Nations has become an aesthetic reference for the following literary production in the field of political economy.[267] On the other hand, the phenomenon of taxation has gained more importance than previously given by Smith, both in terms of space and prominence. Notwithstanding, this primary emphasis given to taxation did not necessarily entail an improvement of the discourse about the phenomenon.[268] Whilst arguments involving

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Cambridge: Cambridge University Press, 2002.

[265] In his introduction to Stuart's work, Noburo Kobayashi states that this author, unlike Smith, presents a tax policy proposal related to the development of commerce and industry. See STEUART, J. D. **An Inquiry into the Principles of Political Economy**. London: Pickering & Chatto, 1998, p. lxxxiii. The phenomenology involving the social division of labour has some peculiarities that distinguish it from the exclusively moral premises adopted by Smith. Chapter 2 will resume this theme in the context of the debate concerning technology.

[266] Unlike when dealing with other themes, The Wealth of Nations does not offer a systematic narrative related to taxation. Chapter 2 in Book V only states the need to obtain funds for the sovereign, and casually indicates the three possible sources of income. Smith's only generalisation refers to the four maxims, or limitations, applicable to all taxes in general. For an analysis of the descriptive and prescriptive languages of The Wealth of Nations, called, by the author, scientific and normative elements, respectively, see BITTERMANN, H. J. Adam Smith's Empiricism and the Law of Nature: I. **Journal of Political Economy,** v. 48, n. 4, pp. 487-520, 1940.

[267] As Smith, John Stuart Mill presents taxation in his work's Book 5 entitled "On the Influence of Government". He offers some general principles of taxation; the same Smith already has described. The print versions used in this work are MILL, J. S. **Principles of Political Economy: with some of their applications to social philosophy Books I-II**. Indianapolis: Liberty Fund, 1965a, MILL, J. S. **Principles of Political Economy: with some of their applications to social philosophy Books III-V and appendices**. Indianapolis: Liberty Fund, 1965b. From a formal point of view, Ricardo's book is also remarkably similar to Smith's. The print version used in this work is RICARDO, D. **Principles of Political Economy and Taxation**. Kitchener, Ontario: Batoche Books, 2001.

[268] Ricardo has placed taxation on the title of his work, dedicating 10 out of the 32 chapters to tax issues. He goes further on the division between public and private spheres, recognising the importance of government affairs but concentrating on the effects of taxation on the private sector. This concentration has led Musgrave to express his disappointment with Ricardo's work when compared to Smith's contribution to the fiscal doctrine. See "David Ricardo" in MUSGRAVE, R. A. A Brief History of Fiscal Doctrine. In: Feldstein, M. and Auerbach, A. J. (Ed.). **Handbook of Public Economics**. Burlington: Elsevier, Volume 1, 1985. 1, pp. 1-59, p. 5.

direct and indirect taxes developed, the concern with the rise of the early socialists has shifted the disciples of Smith to protect the liberal doctrine. The result was that, although there was an attempt to build a supposedly technical narrative about the tax phenomenon, the absence of more sophisticated tools forced Smith's disciples to explicitly defend the liberal moral agenda through political and legal arguments.[269]

The process of wealth generation became the central element around which the field and, consequently, the tax debate revolved. The necessary separation between public and private spheres was no longer a theoretical assumption but an indisputable fact employed to define the phenomenon of taxation.[270] Interestingly, the adoption of a criterion dependent on a political project did not represent the recognition of the necessary political or legal perspectives in understanding the phenomenon of taxation. Paradoxically, the justification for the exclusion of the legal dimension of the tax debate within the political economy presupposed arguments based on legal concepts.[271] This denial of the legal character of taxation goes beyond a matter of theoretical foundation, excluding the debate about theories of justice from the political economy's agenda. On the other hand, even issues concerning the moral behaviour of tax officials have sustained arguments regarding the level of tax rates.[272]

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[269] Mill devoted much of his effort to the question of socialism, and the way he reacted to the socialist thinkers of his time led to a real debate about the conflicts between his position as a defender of liberties and certain sympathies he expressed about positions considered socialist. On how scholars have viewed these conflicts with some perplexity, see CAPALDI, N. Mill and Socialism. **The Tocqueville Review/La revue Tocqueville,** v. 33, n. 1, pp. 125-144, 2012. Arguing that this perplexity depends on the concept of socialism adopted, see MCCABE, H. Mill and Socialism: a reply to Capaldi. **The Tocqueville Review/La revue Tocqueville,** v. 33, n. 1, pp. 145-164, 2012. The tension between the argument of progressive taxation and income (re)distribution (supported by the theory of diminishing marginal utility of money) vis-à-vis the defence of property rights demonstrates the importance Mill attributed to moral principles. Although being a utilitarian, Mill understood that property rights are usually worthy of protection as a matter of justice. See CLARK, B. S. and ELLIOTT, J. E. John Stuart Mill's Theory Of Justice. **Review of Social Economy,** v. 59, n. 4, pp. 467-490, 2001.

[270] Jean-Baptiste Say's "A Treatise on Political Economy" is subtitled as "The Process, Distribution, and Consumption of Wealth". Taxation occupies its Book III dedicated to consumption. According to Say, taxation is the transfer of national products from individuals to the government in order to meet public consumption or expenditure. The reference to products, however, does not give a "material" nature to the taxation since, according to Say, its object concerns the product's value. See "Of the Effect of All Kinds of Taxation in General" in SAY, J.-B. **A Treatise on Political Economy**. New York: Augustus M. Kelley, 1971, pp. 446-460.

[271] After stating that taxation must be considered a matter of fact, and not of right within the field of political economy, Say admits as a premise that taxation is the taking from individuals a part of their property. SAY, J.-B. **A Treatise on Political Economy**. New York: Augustus M. Kelley, 1971, p. 446 and 449.

[272] Abandoning the tradition, inaugurated in the Enlightenment, of theorising about the distribution of the tax burden, Say states that his work does not inquire in whom the right of taxation is or ought to be vested. On the other hand, after expatiating about an exaction considered "more than is fairly due" Say argues that "[t]he revolution had abolished this official and fiscal severity; but it was revived by the imperial government and has been acted upon

Nonetheless, the rise of the bourgeoisie and its agenda dedicated to expanding the private sphere occurred in parallel to a movement of strengthening of the state dimension. It was in the nineteenth century that the bureaucracy asserted itself as an indispensable element in the characterisation of the modern state.[273] Conversely, the political economy was committed to moving further away from these issues in order to build a "real science" based on the principle of free competition.[274] This departure resulted in a cognitive vacuum, subsequently appropriated by the intellectual project that became known as public finance. However, this project did not offer a theory explaining the process of wealth generation but maintained the premises of the political economy. These events have culminated in the separation between the discourses related to the process of wealth generation, which continued to be central within the realm of the political economy, and the new discourse of public finance more focused on the state financial activity.[275]

Public finance.

The separation between the discourses on wealth generation and on public finance implied different attitudes towards the object of each field, leading to different agendas. This situation meant that the emergence of public finance, as an autonomous discipline, represented the prevalence of the ideal of separation between the public and private spheres, at least as far as the process of wealth generation was concerned.[276] The conceptual allocation of this process as belonging to the field of political economy was a result of the consolidation of the liberal

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ever since. A clerk or officer has no chance of promotion, unless he shows a disposition on all occasions to postpone the interests of the public to those of the exchequer." SAY, J.-B. **A Treatise on Political Economy**. New York: Augustus M. Kelley, 1971, p. 446 and 451. It is noteworthy that Say's view of the state does not reach the aforementioned revolutionary government that abolished the exaction.

[273] The nineteenth-century bureaucracy was the main instrument of social control and social organisation after the industrial revolution. Chapter 2 will resume this theme in the context of the debate concerning the relationship between technology and society.

[274] Cohn explains that no one better personifies this scientific ideal than John Stuart Mill. See "The Followers of Adam Smith Down to the Time of John Stuart Mill" in COHN, G. A History of Political Economy. **The Annals of the American Academy of Political and Social Science,** v. 4, n. 6, pp. 1-142, Mar 1894, pp. 41-51.

[275] In the preface to the first edition of his work, Bastable resents that, in Great Britain, this separation did not result in an abundant bibliographic production dedicated to the theme of public finances if compared to the European continent. BASTABLE, C. F. **Public Finance**. 3rd ed. London: Macmillan and Co, 1932, pp. xi-xii. We will return to this distinction between the field of public finance in Britain and on the continent below.

[276] In a didactic effort to present a definition of public finance, Plehn states that it stands in somewhat the same relation to the state as the political economy stands to the individual. However, Plehn projects this difference into the past and claims that, as a science, public finance is much older than political economy. See "Introduction" in PLEHN, C. C. **Introduction to Public Finance**. New York: The Macmillan Company, 1900, pp. 1-16.

paradigm. The same paradigm has made public finance give more attention to the bureaucratic aspects concerning state revenue and expenditure.[277] Taxation, seen as a necessary mechanism for transferring wealth from the private to the public sphere, has gained prominence in this new environment. The result was the emergence of a technically sophisticated discourse that was not limited to establishing metaphysical barriers to the phenomenon of taxation, but that brought it into the new social reality under construction.[278]

The recovery of the importance of the state dimension in the discourse on taxation gave a multidisciplinary character to the tax debate. However, the different ideas about the state and its relationship with individuals have led to diverse views on this new public perspective on taxation. These differences are more pronounced when one compares the outcomes of this economic thinking within the common law tradition vis-à-vis the civil law countries. The first difference concerns the very label used since anglophone writers preferred the term "public finance" while the continental Europeans' adopted expressions equivalent to "science of finance". [279] The second concerns the propensity to avoid the influence of other fields of knowledge since Anglo-Saxon public finance was more attached to the path taken by the political economy than its continental counterparts.[280] Notably, in the United Kingdom, public finance represented a continuity of the liberal tradition that dominated the political economy, although making room for some change in perspective.

The emergence of public finance in Britain resulted from the centrality

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[277] Lutz divides the subject of public finance into financial management, public revenue, and public expenditure, criticizing the latter's omission in the French school debate. He claims that it is not intelligent to obtain revenue without an idea of the volume of the state's needs and the various forms of proposed expenditure. See "Meaning and Development of Public Finance" in LUTZ, H. L. **Public Finance**. New York and London: D. Appleton-Century Company, 1947, pp. 1-10.

[278] Cohn sees the emergence of the science of finance as the prevalence of a vision grounded on practical experience whose realism supersedes the doctrinalism that marked the eighteenth century. See COHN, G. **The Science of Finance**. Chicago: University of Chicago Press, 1895, pp. 23-24.

[279] A rare exception in the United States is ADAMS, H. C. **The Science of Finance**. New York: Henry Holt and Company, 1909. Such exception, however, harmonises with Cohn's argument concerning the influence of the German doctrine on American fiscal thinking. See "Modern Financial Science" in COHN, G. **The Science of Finance**. Chicago: University of Chicago Press, 1895, pp. 24-36. Considering the structural and ideological differences, we will employ the expression "public finance" to refer to the British tradition and "science of finance" to the continental European's.

[280] Musgrave informs us that the British tradition, based on the Lockean model, sees "the market as the rule and the public sector as the exception", meanwhile the continental tradition (mainly German authors) understand the economic sector in "dual terms". MUSGRAVE, R. A. A Brief History of Fiscal Doctrine. In: Feldstein, M. and Auerbach, A. J. (Ed.). **Handbook of Public Economics**. Burlington: Elsevier, Volume 1, 1985. 1, pp. 1-59, p. 7.

acquired by the tax debate promoted by the disciples of Smith. However, if Ricardo and Mill gave taxation more attention than Smith in the scope of the political economy, McCulloch proposed an intellectual systematisation of the state activity.[281] Nonetheless, public finance was more than a closer look at the state dimension but the beginning of an ideological tension with the foundations of the Smithian paradigm. While political economy focused on the evils of taxation, public finance has developed a discourse that emphasised both the public expenditures and the means to finance them.[282] Such shifting has resulted in changes concerning the very problems considered central in the field of public finance and was responsible for raising the problematic of the debate. There was a need to identify the field's object, whether the state, since it is "public" rather than "private" finance, or the individuals, given that wealth was deemed produced in the private sphere.[283]

Science of finance.

This new perspective brought by public finance was able to rescue old debates about the phenomenon of taxation obliterated during the formation of the field of political economy. Chief among them was the question about the distribution of the tax burden, which was influenced by the aforementioned methodological debate related to the real object of the field.[284] The result was the fragmentation of the old principle elaborated during the Enlightenment according to which more wealth necessarily presumed more state benefit. Such fragmenta-

[281] McCulloch discusses general principles of taxation, direct, and indirect taxes, inaugurating a tradition in the field of economics that has come down to the present day. See MCCULLOCH, J. R. **The Principles of Political Economy: with a sketch of the rise and progress of the science**. Edinburgh: William and Charles Tait, 1825, MCCULLOCH, J. R. **A Treatise on the Principles and Practical Influence of Taxation and the Funding System**. Edinburgh: Adam and Charles Black, 1863.

[282] What illustrates this shift in perspective is the way the field's manuals are structured today, reflecting the reaction to attempts to subordinate state financial activity to the liberal paradigm of political economy. About how current manuals are different from the Smithian paradigm in the context of the top ten graduate economic programs in the United States (according to the 2009 ranking by U.S. News & World Report), see BOHANON, C. E., HOROWITZ, J. B. and MCCLURE, J. E. Saying Too Little, Too Late: public finance textbooks and the excess burdens of taxation. **Econ Journal Watch,** v. 11, n. 3, pp. 277-296, Sept 2014.

[283] Seligman explains that the three problems economists have discussed concerning public finance are the subject (the state or the individuals), the relations of the state to the individual, and the fiscal principle involved (benefit or ability to pay). These problems involve more fundamental considerations concerning, among others, the nature of the social groups involved, the character of public wants, and the meaning of the state and fiscal relations. See "Introduction" in SELIGMAN, E. R. A. The Social Theory of Fiscal Science I. **Political Science Quarterly,** v. 41, n. 2, pp. 193-218, 1926, pp. 193-195.

[284] Jèze goes so far as to say that the problem of the discipline refers to the distribution of public burdens among individuals. See JÈZE, G. **Cours de Finances Publiques 1927-1928: professé a la faculté de droit de l'Université**

tion was the origin of the traditional tax dichotomy between the principle of ability to pay and the principle of benefit.[285] The problem is that the idea of a benefit that is not just about acquiring wealth collides with the premise that the primary state function is not to interfere with individual freedom. The rise of the benefit principle removed the merely instrumental character of state bureaucracy and led the science of finance to follow a different path from public finance.[286]

Notwithstanding, within the science of finance, there were distinct outcomes from the emergence of the benefit principle and the political speculations that it allowed. The more or less significant influence of cameralism on distinct local cultures resulted initially in different reactions to the political character of the financial problems.[287] The cameralistic tradition on German culture led to the elaboration of a sophisticated discourse on the phenomenon of taxation capable of articulating political categories. Systematic studies were published consolidating the process of emancipation of the science of finance not only before the political economy but from the broader science of administration.[288] This situation also encompassed other countries either by the direct influence of the cameralistic tradition or by the later influence of German science of finance.[289] The exception was the French science of finance, developed without the influence of German culture but also associated with the rise of a bureaucratic elite.

The French version of cameralism emerged long after its German equivalent from the creation of the *Académie des sciences morales et politiques*. This delay was re-

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de Paris pendant le deuxième semestre 1927-1928. Paris: Marcel Giard, 1928, pp. 4-7.

[285] Although the imposition of progressive tax rates has older roots tied to the presumption of some benefit of any sort, the expression "ability to pay" only gained independence in the tax field in the late nineteenth century. See "The ability to pay doctrine" and "The compensatory theory" in SCHEVE, K. and STASAVAGE, D. **Taxing the Rich: a history of fiscal fairness in the United States and Europe**. Princeton: Princeton University Press, 2016, pp. 26-40.

[286] For a narrative about the different path taken by "continental public finance" (corresponding to what we call "science of finance"), see BACKHAUS, J. G. and WAGNER, R. E. From Continental Public Finance to Public Choice: mapping continuity. **History of Political Economy,** v. 37, pp. 314-332, 2005. For a narrative that emphasises differences rather than similarities between continental traditions, see KAYAALP, O. **National Element in the Development of Fiscal Theory**. New York: Palgrave Macmillan, 2004.

[287] For a presentation of this different reactions, see "The Historical Development of the Science of Finance" in COHN, G. **The Science of Finance**. Chicago: University of Chicago Press, 1895, pp. 15-36.

[288] This process of autonomy is due to authors such as Karl August von Malchus, Ludwig Heinrich von Jakob and Karl Heinrich Rau. Specifically, the work of Rau, profoundly diffused by Adolph Wagner, has become a classic book and worldwide repercussion. See ATALIBA, G. **Apontamentos de Ciência das Finanças, Direito Financeiro e Tributário**. São Paulo: RT, 1969, p. 31.

[289] Seppel explains that, besides the German principalities and Austria, cameralism has had a great influence also in Sweden, Denmark, Russia, Portugal, and in other parts of Europe. See "Cameralism in Practice" in SEPPEL, M. and TRIBE, K. **Cameralism in Practice: state administration and economy in early modern Europe**. Woodbridge:

sponsible for giving a new configuration to this project, making the development of the French administrative elite constrained by the liberal paradigm resulting from the influence of Smith and the French physiocratic tradition.[290] The French science of finance was initially refractory to the political aspects of the state activity and accused the German authors of not respecting the frontiers of the domain. Nonetheless, at the beginning of the twentieth century, the field has witnessed a direct attack on this position of denial of the political character of the state's financial activity.[291] The tensions involving taxation's political aspects have challenged the field's liberal foundations and contributed to its later fragmentation.[292] However, besides this specific debate involving the multidisciplinary dimension of taxation, broader epistemological changes impacted the whole field of economics.

Scientific positivism in economics.

Although the moral and political dimensions of the phenomenon of taxation were evident, there were attempts to limit their importance. These efforts did not happen by chance but were the result of the rise of scientific positivism as the dominant paradigm of nine-

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The Boydell Press, 2017, pp. 1-16.

[290] The influence of the liberal ideology over the *Académie* is presented in "A la croisée de multiples réseaux d'expertise" in DELMAS, C. **Instituer des Savoirs d'État : l'Académie des sciences morales et politiques au XIXème siècle**. Paris: L'Harmattan, 2006, pp. 231-280.

[291] "In giving this definition, we separate, in particular, from the German scientists who have written, with so much care and erudition, on the science of finance. (…) Our plan is not the same as that of these three works: it is less extensive. The three German writers begin by dwelling at some length on the essence of the state, its attributions and the consequent expenditures. Dr. Rau devotes no less than a hundred pages to this order of considerations in his fourth edition; Dr. Lorenz de Stein is not more prolific on this point; but Dr. Wagner dedicates a hundred and eighty-eight pages in it: he studies carefully all the expenses and gives his opinion on each of them. We did not think it necessary to enter this order of studies. Of course, it would also have been easy for us to discuss the essential and secondary attributions of the State, the functions which it must assume, and those which it must abandon to citizens and free associations. But this kind of research does not, in our opinion, belong to the science of finance; it belongs to the pure political economy or even of politics: it is necessary to know how to respect the boundaries which separate the various categories of human knowledge". See LEROY-BEAULIEU, P. **Traité de la Science des Finances**. 7 ed. Paris: Guillaumin et Cie, 1906, p. 2. In free translation.
In his work's foreword, Jèze directly attacks Leroy-Beaulieu's position and argues that "the budget is essentially a political act." See JÈZE, G. **Cours de Science des Finances et de Législation Financière Française**. Paris: Marcel Giard, 1922. However, this is not enough to affirm that Jèze was a champion of the politicising conception of financial issues. For an image of Jèze as a proponent of a legal technical approach to tax matters, see "Jèze consacre la « juridicité » des questions financières in PELLET, R. L'Enseignement des Finances Publiques à l'Université. **Revue du droit public**, n. 4, pp. 957-995, 2013, pp. 965-967.

[292] In his critic to Bastable's work, Seligman affirms that the author sought to maintain the "golden mean" between the earlier English liberal theories and the German authors "radical doctrines" from the end of the nineteenth century. See SELIGMAN, E. R. A. Bastable's Public Finance. **Political Science Quarterly,** v. 7, n. 4, pp. 708-720, 1892.

teenth-century thought.[293] The search for reducing the subjectivity in scientific production is illustrated by the endeavour of the new social sciences to emulate the natural sciences. The purpose of this procedure was to remove from the field of action any elements considered metaphysical in order to foster the general development of the social sciences.[294] In this way, while, within the science of finance, the authors advocated moral neutrality before the political economy, the whole field of economics was being impacted by the new attitude aroused by the scientific positivism.[295] The search for the scientific character presupposed a departure from the fundamentals of philosophical and political order that influenced the emergence of the field of economics.

In addition to the new paradigm brought about by scientific positivism, the economic field has experienced profound internal changes. The marginalist revolution was responsible for the prevalence of new ideas over classical theories of value that impacted the field of economics.[296] The revolution did not consist of an individual discovery but a series of various theoretical contributions that have underpinned a new approach to economics that became known as marginalism. By abandoning the traditional explanations based on labour and other production costs, the marginalist theory associates the idea of exchange value with the personal needs of individuals and the marginal utility of the good.[297] Given that the marginal utility decreases with quantity, the determination of the value of a good demands more than a rudimentary degree of mathematical knowledge. Albeit economics is currently associated with complex calculus, such

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[293] For a description about the impact of scientific positivism on social sciences, see "French positivism and the beginnings of sociology" in GORDON, S. **The History and Philosophy of Social Science**. London: Routledge, 1991, 690 pages, pp. 271-304.

[294] Nobody better represents this ideal as Auguste Comte's "Law of the three stages" and its corollary "The classification of the sciences", first and second lessons, respectively, in his course on positive philosophy. See COMTE, A. **Philosophie Première: leçons 1 à 45. Cours de Philosophie Positive**. Paris: Hermann, 1975.

[295] "Following Comte's lead, the English positivists adopted as an important part of their programme the combating of what they considered to be the deleterious influence of classical political economy on English social thought." See GORDON, S. **The History and Philosophy of Social Science**. London: Routledge, 1991, 690 pages, p. 299.

[296] The expression "marginal revolution" is associated with the contemporary but independent works of William Stanley Jevons, Carl Menger, and Léon Walras involving the principle of diminishing marginal utility. For a critique of both the expression and its image as a paradigmatic change, see "When is a revolution a Revolution?" in BLAUG, M. **Economic Theory in Retrospect**. 5th ed. Cambridge: Cambridge University Press, 1997, pp. 289-291.

[297] For the idea that there was no discontinuity in the economic thought and that economic theory has embodied one continuous discipline from Smith until today, see "Utility, the Paradox of Value and 'all that' and Classical Economics" in BOWLEY, M. **Studies in the History of Economic Theory Before 1870**. London: Macmillan, 1973, pp. 133-157. For a debate contemporary to the marginalist revolution about the limits of the applicability of this idea, see MACVANE, S. M. Marginal Utility and Value. **The Quarterly Journal of Economics,** v. 7, n. 3, pp. 255-285, 1893.

association occurred from the paradigm shift triggered by the marginal revolution.[298]

Without a paradigm informing which problems to solve and the solutions considered legitimate, there would be no room for any mathematical turn. So, it was the marginalist paradigm that demanded the translation of concepts historically constructed from ordinary language into a mathematical vocabulary.[299] This translation, in turn, could only make sense from the complete rupture of the economic field with any metaphysical elements capable of undermining its scientific aspirations. Nonetheless, the marginalist denial of the philosophical foundations from which political economy emerged did not presuppose an exclusion of the moral assumptions employed by Smith and his followers.[300] The marginalists opted for elaborating a reductionist reinterpretation of Smith's work in order to recreate a definition of human being that harmonised to the new mathematical instruments available. It was in this context that the marginalists were able to develop a scientific agenda with a potential for being intrinsically economic.[301]

Scientific positivism in the law.

In the legal field, there were also efforts to identify a fundamentally legal method that did not necessarily rely on moral considerations. These efforts, as legal spinoffs of the nineteenth-century scientific positivism mindset, consisted of two attitudes that lawyers be-

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[298] The central issue is the use of differential calculus to determine the value of a good against a certain quantity, making room for abstractions that result from mathematical speculation. Mirowski sustains that the change on economic discourse (towards a mathematical language) is an element more relevant than the very utilitarian theory of value for characterising the discontinuity provoked by the marginalists. See MIROWSKI, P. Physics and the 'Marginalist Revolution'. **Cambridge Journal of Economics,** v. 8, n. 4, pp. 361-379, 1984.

[299] About the impact of the mathematical language on the economic discourse, see DENNIS, K. G. Economic Theory and the Problem of Translation. **Journal of Economic Issues,** v. 16, n. 3, p. 691, 1982.

[300] A lengthy debate involved the so-called "Adam Smith problem", that is, the issue of relating the philosophical arguments with the economic ones, whether there would be unity or a break in the formation of the economic field. The solution adopted by the marginalists was to forward the Smithian project presented in The Wealth of Nations, ignoring all the moral foundations presented in the Theory of Moral Sentiments. For a presentation of the "Adam Smith problem" and an explanation about the marginalist attitude, see GANEM, A. Adam Smith e a Explicação do Mercado como Ordem Social: uma abordagem histórico-filosófica. **Revista de Economia Contemporânea,** v. 4, n. 2, pp. 9-36, jul./dez. 2000.

[301] The marginalists' human being is characterised by rationally orienting its social action towards the maximisation of its utility. See "Rationality and marginal utility" in KAUDER, E. **A History of Marginal Utility Theory**. Princeton: Princeton University Press, 1965, pp. 116-126. Fischer goes far as to say that the efforts of Jevons, Walras and Menger in building a research programme in a Lakatosian sense explain why the marginalist ideas became dominant only from the end of the nineteenth century despite being available since previous centuries. See FISHER, R. M. **The Logic of Economic Discovery: neoclassical economics and the marginal revolution**.

gan to adopt.[302] In one sense, a new discourse about the relationship between the lawyers and the legal texts raised the legal norms, cases, and doctrine to a central position in the field. The analogies made between the lawyer's library and other scientists' laboratories exemplifies the relevance acquired by documents and bibliographical sources for the legal practice.[303] Going in the opposite direction, but still offering an alternative to the moral perspective, there was a process of approximation between the law and the emerging social sciences. This process led to a vision with aspirations of neutrality regarding the legal phenomenon, considering it a social fact, and attaching importance to empiricism as not yet witnessed in the legal field.[304]

These events contributed to turning the moral and political aspects of taxation in orphans of a domain able to deal with them comprehensively. In the science of finance, as mentioned, some efforts were initially made to banish the moral and political considerations to the field of political economy.[305] Political economy, now renamed economics, became involved in problems that the new instruments provided by mathematics could face and that the post-marginal revolution's agenda recognised as relevant. What was once the political dimension of the economics became considered an object belonging to the field of political science, which did not articulate the political issues with the traditional aspects concerning production, distribution, and consumption.[306] In the legal field, the process of codification that took place in the nineteenth century has reinforced the breaking with the moral tradition. This process was responsible for giving even more importance to legal texts, especially on the European conti-

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Brighton: Wheatsheaf Books, 1986.

[302] Albeit the nineteenth century has seen efforts in edifying a science of law in both sides of the Atlantic, the American experience was closer to emulate the natural sciences if compared to the projects developed in continental Europe. See SCHWEBER, H. The Science of Legal Science: the model of the natural sciences in nineteenth-century American legal education. **Law and History Review**, n. 3, pp. 421-466, 1999.

[303] This analogy became to be known as "The Langdell's metaphor" and has changed the way librarians see their function within the legal field. About the metaphor, its context, and its impact on librarians, see DANNER, R. A. Law Libraries and Laboratories: the legacies of Langdell and his metaphor. **Law Library Journal,** v. 107, n. 1, pp. 7-56, 2015.

[304] This approach led to the rise of sociological jurisprudence, which influenced the formation of legal and social studies in the twentieth century. See SCHIFF, D. N. Socio-Legal Theory: social structure and law. **The Modern Law Review,** v. 39, n. 3, pp. 287-310, 1976. This vision has influenced the research agenda within legal realism. However, this same empiricism has later assumed a critical agenda that did not consider the science devoid of values, which led to a real paradox. See TRUBEK, D. M. and ESSER, J. "Critical Empiricism" in American Legal Studies: paradox, program, or Pandora's box? **Law & Social Inquiry,** v. 14, n. 1, pp. 3-52, 1989.

[305] It was in this field that the main tensions between arguments of different orders occurred throughout the twentieth century, as will be seen in the following item.

[306] These traditional aspects took about a century to begin to occupy a place in the academic production of political scientists. See PAUL, D. E. Teaching Political Economy in Political Science: a review of international and

nent.[307]

Conclusions.

The economic innovations brought about by the Smithian discourse have left important hallmarks within the field of political economy. By crystallising the bourgeois moral project in his economic discourse, Smith has preserved a vision on the relationship between state and citizens, giving it a technical character. This supposed technicality remained present in his followers, making the separation between public and private spheres an essential category to defining the modern tax phenomenon. The assumption that the wealth generation process occurs exclusively in the private sphere has resulted in the absence of a political economy approach to a state's financial activity. This vacuum meant an opportunity for public finance, the political economy's offspring in the Anglo-Saxon tradition that, although causing an ideological tension, maintained a close connection with liberal assumptions. Baptised science of finance on the European continent, this public finance version gave rise to a much richer and multidisciplinary discourse on taxation.

Nonetheless, the multidisciplinary nature of the science of finance has not manifested itself in the same way everywhere, varying according to the impact left by cameralism. In Germany, the cradle of this movement, tolerance with the taxation's political dimension allowed elaborating a discourse more concerned with the essence of the state and its attributions. In France, whose "specific cameralism" developed sometime later, there was an initial reaction against the influence of these elements, later replaced by the idea that the budget is necessarily political. In addition to internal conflicts, the multidisciplinary nature of the science of finance was affected by scientific positivism, generating several attitudes that resulted in its fragmentation. In economics, the rejection of taxation's moral and political aspects gave rise to a mathematical analysis of marginal utility. This rejection, however, did not mean purging the moral foundations on which Smith based his arguments, but only the closing of the possibility of questioning them.

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comparative political economy syllabi. **Perspectives on Politics,** v. 4, n. 4, pp. 729-734, 2006.

[307] For an analysis of the impact of the process of codification in Europe and the United States, see WAGNER, W. J. Codification of Law in Europe and the Codification Movement in the Middle of the Nineteenth Century in the United States. **Saint Louis University Law Journal**, n. 4, pp. 335-359, 1952.

Nonetheless, in the legal field, the movement of defining the disciplinary boundaries provoked by the scientific positivism was not limited to the rejection of the moral or political considerations. The very new mathematical paradigm that became the dominant thinking in the field of economics also became the target of critiques from tax lawyers. This rejection promoted by lawyers within the field of science of finance against the new economic methods was undoubtedly due to questions of a theoretical nature, which does not exclude practical reasons related to the emerging complexity raised by the marginalism. It is not evident for lawyers to dialogue with these new economics based on instruments whose complexity prevents the approach of the untrained. The result was the search for an inherently legal perspective specifically conceived to deal with the phenomenon of taxation. This search has culminated in the independence of the legal field concerning the state financial activity, as the following item will show.

1.2.3. The legal discourse on taxation.

The previous item has shown the transformations on the discourse on taxation from Adam Smith's theory about wealth generation as a result of the free trade. This economic argument has turned into technical the bourgeois moral project of separating the public and private economic spheres. At the intellectual level, the consolidation of this project resulted in the rise of public finance as an outgrowth of the political economy focused on state tax activity. The importance of bureaucracy in continental Europe, reinforced by the intellectual production of the cameralistic tradition, has made the science of finance more open to contributions from other disciplines. The influence of scientific positivism, and the transformations in the economic field resulting from the marginalist revolution, have collided with this multidisciplinary character. The tensions in the tax field increased from the moment when the legal version of scientific positivism has attacked the moral, political, and economic aspects of the science of finance.

The result of this tension's aggravation was a long debate about autonomy from the nineteenth to the twentieth century that resulted in the independence of the legal discourse on taxation. This independence led to new debates related to the legal paradigms that should prevail in the analysis of the tax phenomenon, giving rise to the tax law as a field. The

rise of law and economics and the changes that this movement brought about in the legal field as a whole has deeply affected these debates. Such a rise, coupled with the ancient relationship between economics and tax law, resulted in a real crisis concerning the role of the tax lawyer. This crisis has become even more pronounced within the field of international tax law, given the particularities involving the phenomenon of international taxation. The result was the adoption of an attitude by international tax lawyers that paradoxically had the potential for nullifying the international character of the field of international tax law and its object.

This item aims at describing the process that resulted in the autonomy of the legal discourse on taxation and that generated its independent agenda. The premise is that the tax legal discourse was born and has developed in eternal tension with the economic discourse on the phenomenon of taxation. The hypothesis is that this tension, associated with the paradigmatic conflicts in the field of law during the twentieth century, was responsible for building an idea of international taxation from a domestic perspective. The item begins by presenting the conflicts that existed between lawyers and economists within the science of finance, and between tax lawyers and other lawyers. Afterwards, it portrays the impact of the rise of law and economics as a rival to legal formalism and the possible effects of this paradigmatic clash on legal tax field, mainly from a transnational perspective. Finally, it describes how the legal discourse on international taxation has opted for sacrificing its international character in order to preserve its legal quality.

Independence before economics.

Although the European continent has generated a tax field potentially multidisciplinary, the attitude promoted by the scientific positivism resulted in claims for autonomy. In the science of finance, these claims included the lawyer's rejection of the political character of taxation.[308] However, the legal version of scientific positivism faced a double problem since there were no tax codes to support a text-centred agenda while an empirical approach could lead the lawyers back to economics. Although inheritors of the economists' intellectual

[308] The French lawyers, influenced by the doctrine of German public law, promoted an epistemological revolution that resulted in a legal approach to taxation that privileged its technical-scientific character over its political dimension. See CROUY-CHANEL, E. d. La Définition Juridique de l'impôt. L'example de la doctrine française. In: Berns, T., Dupont Jean-Claude, K. and Xifaras, M. (Ed.). **Philosophie de l'impôt**. Bruxelles: Bruylant, 2006, pp.

constructs, the tax legal academy expressed resistance to the dominance of economic doctrines, a situation aggravated by the mathematical turn resulting from the marginalist revolution.[309] The alternative was the adoption of the German formalism as a methodological tool capable of reconstructing taxation as the object of an inherently legal tax field.[310] Thus, the conceptual formalism has become the dominant paradigm from which tax lawyers developed an independent agenda with scientific aspirations.

This scientific orientation embodied in the legal discourse on taxation, however, did not imply a reviewing of the metaphysical basis that underpinned the previous tax discourses. Just as neither the public finance movement nor the marginalist revolution has excluded the Smithian moral elements, the new legal discourse on taxation has inherited the liberal groundings of the political economy.[311] Thus, with its emancipation, the legal discourse on taxation carried within itself the genetics of the moral choices made previously. The result was that this process of emancipation attributed a technical-legal character to what was a specific moral project of social organisation.[312] Thereby, the separation between public and private economic spheres, as well as the premise that the process of wealth generation necessarily lies in the private sphere, became part of the tax legal field's ideology. This duality is crucial not only to grasp the outcomes of the autonomy of the legal discourse before the science of finance but of the tax law before other legal branches.

135-167.

[309] On how distinct scientific claims resulted in the divorce of economists and jurists in French tax thinking, see "Vie et Mort de la Science des Finances" in PELLET, R. L'Enseignement des Finances Publiques à l'Université. **Revue du droit public**, n. 4, pp. 957-995, 2013, pp. 958-976.

[310] Although this tax legal paradigm is German in origin, the construction of a formalist legal discourse on taxation soon spread to Italy, Austria, and France, and from there to South America. For a full description of this process, see "Une Histoire des Origines de la Science Juridique Financière et Fiscale" in BOURGET, R. **La Science Juridique et le Droit Financier et Fiscal: étude historique et comparative du développement de la science juridique fiscale (fin XIXe et XXe siècles)**. Paris: Dalloz, 2012, pp. 93-237.

[311] Waserman demonstrates how technical and scientific aspirations in constructing a tax discourse do not necessarily exclude engagement with certain political and ideological values. See "Les Doctrines Financières Publiques, Expression Scientifique d'Engagements Idéologiques" in WASERMAN, F. **Les Doctrines Financières Publiques en France au XIXe siècle : emprunts économiques, empreinte juridique**. Paris: LGDJ-Lextenso, 2012, pp. 35-66.

[312] This technical-legal character bases on a process of removing elements considered "non-legal" from the adaptation of the law of obligations, of Roman-civilist origin, to the field of tax law. Bourget explains that, among Germanic, Italian, Portuguese, and Hispanic lawyers, this kind of dogmatic analysis has been called the "general theory of ex lege tax obligation under public law." See BOURGET, R. **La Science Juridique et le Droit Financier et Fiscal: étude historique et comparative du développement de la science juridique fiscale (fin XIXe et XXe siècles)**. Paris: Dalloz, 2012, p. 20.

The debate involving the place of the tax law in the topography of the legal field was more important in the European continent than in the common law tradition. Where the science of finance has left a more significant legacy, the legal discourse on taxation was part of a broader discourse on the state financial activity.[313] It was from its independence before public finance law that tax law has consolidated itself as the main field in which the development of the legal discourse on taxation occurs. This consolidation results from the prolific legislative production at the beginning of the twentieth century that raised the importance of having a specific tax debate.[314] However, although this process of independence derived from practical reasons, it implied theoretical transformations concerning the phenomenon of taxation. Once disconnected from a discourse inherently tied to the state financial activity, tax law could rescue the liberal tradition of understanding taxation from its effects on the private sphere.

Independence before other legal branches.

Notwithstanding, where tax law emerged from the public finance law, the prevailing idea was that the legal tax field belonged to the public sphere. This idea, coupled with the dominance of the legal positivism in the first half of the twentieth century, resulted in the argument that the object of the tax law consisted of the legal obligations subjected to the public law.[315] On the other hand, the liberal thought held that the source of taxable wealth lay in the private economic sphere, subjected to private law. The question was whether or not the impact of taxation on the private sphere, mainly on property rights, would bring tax law to the scope of

[313] For the sake of having an English nomenclature, we call this broader field "public finance law", equivalent to the French expression "droit public financier". Arguing, however, that the droit public financier and the tax law (droit fiscal) have never been a "close-knit family", see LAMBERT, T. Droit Public Financier et Droit Fiscal: une famille à recomposer? **Revue française de finances publiques - RFFP**, n. 133, pp. 111-120, 2 Apr 2016.

[314] This process begins in Germany and is directly associated with the demand for resources arising from the First World War. The codification offered an object of study to the recent German tax law, resulting in a prodigious doctrinal production and the recognition of the discipline in German law schools. See "La Codification Organique du Droit fiscal Allemand : la « Reichsabgabenordnung » de 1919" and "Le Développement et le Renouvellement de la Science Allemande du Droit Fiscal" in BOURGET, R. **La Science Juridique et le Droit Financier et Fiscal: étude historique et comparative du développement de la science juridique fiscale (fin XIXe et XXe siècles)**. Paris: Dalloz, 2012, pp. 627-810.

[315] In the context of the French legal experience, Trotabas was who first elaborated a defence of this relationship of tax law within the public sphere from what was called a "constitutional conception", initiating a debate whose repercussions reached other countries. Although belonging to public law, tax law, for Trotabas, would be independent of administrative law since it has its own legal rules. See TROTABAS, L. Les Rapports du Droit Fiscal et du Droit Privé. **D. H. Chronique**, pp. 29-32, 1926, TROTABAS, L. Essai sur le Droit Fiscal. **Revue de science et de législation financières,** v. 26, pp. 201-236, 1928.

private law.[316] The debate on the autonomy of tax law before private law implied a clash between the liberal duality, represented by the division between public and private economic spheres, and the positivist project of the oneness of the legal system. The solution found was a break between a deemed formal dimension, subjected to the private law, and another considered real, on which taxation occurs.[317]

Such realist tax perspective equated the ancient economic dimension of the tax phenomenon, this time conceived as a substance in opposition to the formal aspects of the law. In this sense, the tax law would not overlap the formal categories elaborated by the discourse of the private law but reach the economic phenomenon underlying the legal form.[318] So, tax lawyers rescued the economic dimension of taxation that they have rejected in the process of fragmentation of the science of finance. This return to the economic origins of the tax phenomenon has coincided with the subsequent rise of law and economics (L&E) as a strong rival to the formalist paradigm in the legal field.[319] This broad approximation between economics and the legal field had a positive impact on defending the independence of tax law from private law. Situated within a broader framework of combating formalism and excessive abstractions in the field of law, L&E has harmonised with the efforts of identifying the substance behind the legal form.[320]

The genealogical relationship of the tax legal discourse with the economic

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[316] Based on this argument, Gény responded to the debate proposed by Trotabas by concluding that tax law would be closer to private than public law. See GÉNY, F. Le Particularisme du Droit Fiscal. **Revue Trimestrielle de Droit Civil**, pp. 797-833, 1931.

[317] For an explanation, and a critique, of how realism has become an entirely accepted feature of tax law in the French legal community, see SERLOOTEN, P. and DE BISSY, A. Le Néo-réalisme du Droit Fiscal. In: Hecquard-Théron, M. and Krynen, J. (Ed.). **Regards critiques sur quelques (r)évolutions récentes du droit**. Toulouse: Presses de l'Université Toulouse 1 Capitole, 2005, pp. 195-222.

[318] For the development of this idea, see TROTABAS, L. **Précis de Science et Législation Financières**. 9 ed. Paris: Dalloz, 1947, pp. 271-272, GIANNINI, A. D. **Il Rapporto Giuridico d'Imposta**. Milano: Giuffrè, 1937, pp. 157-158. This same debate was developed in the United States resulting in the doctrine of economic substance, relating to issues involving tax avoidance. For a narrative of this debate, see KOLARIK, W. J. and WLODYCHAK, S. N. J. The Economic Substance Doctrine in Federal and State Taxation. **The Tax Lawyer,** v. 67, n. 4, pp. 715-819, Summer 2014.

[319] Considering L&E as the most influential among the interdisciplinary approaches, see LANDES, W. M. and POSNER, R. A. The Influence of Economics on Law: a quantitative study. **The Journal of Law and Economics,** v. 36, n. 1, Part 2, pp. 385-424, 1993.

[320] Nonetheless, L&E was received differently in the United States and the United Kingdom in comparison to the European continent. Doctrinal research eventually became a haven for tax lawyers who did not identify themselves with this new process of rapprochement between economics and tax law. See GRECHENIG, K. and GELTER, M. The Transatlantic Divergence in Legal Thought: American law and economics vs. German doctrinalism. **Hastings**

categories leads to the idea that tax lawyers should naturally be receptive to the aforementioned rapprochement. The paradigmatic replacement of the German legal formalism for the realism of L&E should occur more effortlessly in comparison to other legal subfields.[321] Nonetheless, the new economics contrasted with the field that emerged at the turn of the eighteenth to the nineteenth century and that laid down the bases of the discourse on taxation whose categories have influenced the tax legal discourse. The economics assumed by L&E, after the mathematical turn derived from the marginalist revolution, was based on new tools and had an entirely different agenda.[322] The result of this rapprochement, therefore, was not a return to the origins of the tax discourse but a change in tax lawyers' attitudes.[323] The potential results of a potential rise of L&E as the dominant paradigm of the legal tax field seem to justify such behaviour.

The new L&E context.

The L&E movement is part of legal realism and results of the interdisciplinary efforts that began to take shape in the legal field in the late nineteenth century from the legal and social studies. These efforts contrast with other legal reaction to scientific positivism related to the centrality of law around legal texts, making L&E methodologically contrast with doctrinalism.[324] In this sense, L&E stands next to other interdisciplinary approaches to law, such as law and language and critical legal studies (CLS). However, L&E emerged in the American academic context as a rival response to the CLS, being an intellectual project that incorporated the liberal legal foundations, while CLS challenged them.[325] Although its methodology does not necessarily presuppose a liberal ideology, the political right and the capitalist or libertarian eco-

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International and Comparative Law Review, v. 31, pp. 295-360, 2008.

[321] Garoupa and Ulen argue that, in adopting Kaplow's idea, according to which, L&E characterises itself by the application of economic analysis to the fields of law where this application is not obvious, the conclusion is that L&E does not encompass tax law. See GAROUPA, N. and ULEN, T. S. The Market for Legal Innovation: Law and Economics in Europe and the United States. **Alabama Law Review**, n. 5, pp. 1555-1634, 2008, p. 1567.

[322] The preference of lawyers for theoretical approaches has led to relatively little empirical work in L&E in comparison to the other areas of economics. See LANDES, W. M. The Empirical Side of Law & (and) Economics. **University of Chicago Law Review,** v. 70, n. 1, pp. 167-180, Winter 2003.

[323] What therefore will modify the legal discourse on taxation, as will be seen later.

[324] On how this contrast arises from the divergences between German idealism and utilitarian-based American realism, see GRECHENIG, K. and GELTER, M. The Transatlantic Divergence in Legal Thought: American law and economics vs. German doctrinalism. **Hastings International and Comparative Law Review,** v. 31, pp. 295-360, 2008.

[325] Although the expressions "liberal" and "American" are associated here, we are referring to the economic thinking that follows the Smithian tradition. See SALZBERGER, E. M. The Economic Analysis of Law: the dominant methodology for legal research?! **Haifa Law Review,** v. 4, pp. 207-236, 2008, p. 211.

nomic thinking has initially captured the L&E. These groups traditionally favour free markets and combat central intervention, a situation that changed after the European contributions to this movement.[326]

The rise of L&E occurred not only through the legal approach of the economy but, mainly, by the economic analysis of the legal phenomenon. Therefore, not just tax law, but the whole legal field became the object of this economic approach, which again made the tax lawyers face the question of the economic interpretation of the tax phenomenon.[327] Such an approach is engaged in different projects, but positive economics is the dominant branch, employing empirical studies, econometrics, and other mathematical models. The objective is to offer predictions concerning the effect of changes in one variable on other as well as explanations about the causal connections between various variables.[328] Normative economic analysis is mainly dedicated to efficiency matters and aims at obtaining alternative solutions or at determining the best legal or institutional arrangements. Descriptive law and economics, by its turn, employs the language of economics to offer a description both of judicial decisions as legal rules or institutions.[329]

The three projects demonstrate that the field has maintained the tradition of scientific positivism of adopting a methodology that seeks to rule out issues considered subjective. The exception is the normative project, which nevertheless harmonises with the traditional economic approach for focusing on aspects concerning efficiency. Therefore, L&E maintains the aspirations of neutrality and technicality mainly through the employment of econometric tools and the centrality on efficiency. At the same time, the paradigm of neutrality prevents

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[326] See SALZBERGER, E. M. The Economic Analysis of Law: the dominant methodology for legal research?! **Haifa Law Review,** v. 4, pp. 207-236, 2008, p. 212.

[327] Two authors were essential in this process. The first was the economist Ronald Coase, whose theorem on the problem of social cost became a well-known work in the legal field, having won him the Nobel Prize in economics in 1991. The second is Richard Posner, a jurist who defined the foundations of the research program in Law & Economics. See COASE, R. H. The Problem of Social Cost. **Journal of Law & Economics,** v. 3, pp. 1-44, Oct 1960, POSNER, R. A. **Economic Analysis of Law**. 3rd ed. New York: Wolters Kluwer, 1986.

[328] See SALZBERGER, E. M. The Economic Analysis of Law: the dominant methodology for legal research?! **Haifa Law Review,** v. 4, pp. 207-236, 2008, p. 218.

[329] On normative economic analysis, see SALZBERGER, E. M. The Economic Analysis of Law: the dominant methodology for legal research?! **Haifa Law Review,** v. 4, pp. 207-236, 2008, p. 219. For an example about the descriptive law and economics in practice, see RUBIN, P. H. Why is The Common Law Efficient? **The Journal of Legal Studies,** v. 6, n. 1, pp. 51-63, 1977.

L&E from realising about its flaws, making the field lack self-criticism.[330] Notwithstanding, this combat to subjectivity has led L&E to abandon categories considered controversial, such as sovereignty, power, and justice.[331] Therefore, the predominance of this paradigm in the legal tax field has the potential for overriding categories that have been historically central within the legal tradition, and that help in recognising the lawyers as tax actors distinct from the economists.

The tax lawyer's crises.

The impact of legal realism and, consequently, of L&E on American legal thinking was recognisably more significant than on continental Europe. More than their European counterparts, the American tax lawyers faced a real existential crisis concerning their role in the tax field since the adoption of tools offered by L&E had the potential to turn the tax law scholar into a second-tier economist.[332] The preservation of the identity of the tax lawyer required the identification of a place where the skills of the lawyers made sense, preserving the legal dimension of being absorbed by the economic one.[333] The most evident alternative would be the search for refuge in doctrinalism, an alternative that, however, did not seem to be trivial at the international level. The absence of an international codification in tax matters did not allow the international tax lawyer to find shelter in the doctrinal research.[334] There was no central body whose decisions tax lawyers could criticise, and no legal obligation subjected to a hypothetical

[330] Leff criticises the premises of L&E (especially Posner's book), accusing this movement of aspiring to a realistic position while avoiding all the empirical complexities that the realistic attitude causes. For allegedly replacing definitions with normative and empirical propositions, Leff calls the economic analysis of law "American Legal Nominalism". See LEFF, A. A. Economic Analysis of Law: some realism about nominalism. **Virginia Law Review,** v. 60, n. 3, pp. 451-482, 1974 1974.

[331] Salzberger gives the justification: "Another advantage of economic thinking is that such a methodology provides us with a common language for discussion, and the debates on the subject matter of the analysis can focus on the model and its mathematical validity, on the policy conclusions from the model regarding the real world, and indeed on the simplifying assumptions. (…) Thus, wealth, or transitivity, or rent or monopolistic and competitive price have a broader common understanding, even among non-economists, than reasonableness, or good faith (vis-a-vis black letter or doctrinal analysis), or hegemony, or socialization (vis-a-vis sociological discourse)." See SALZBERGER, E. M. The Economic Analysis of Law: the dominant methodology for legal research?! **Haifa Law Review,** v. 4, pp. 207-236, 2008, p. 216.

[332] This issue is addressed in "The Problem: Lawyers in an Economist's World" in LIVINGSTON, M. A. Reinventing Tax Scholarship: lawyers, economists, and the role of the legal academy. **Cornell Law Review,** v. 83, pp. 365-436, 1998, pp. 370-375.

[333] Posner claims that the legal field has reduced to its economic dimension. See POSNER, R. A. The Decline of Law as an Autonomous Discipline: 1962-1987. **Harvard Law Review,** v. 100, p. 761, 1987.

[334] The absence of a central rule-emanating authority is what led Austin to call international law as a set of "positive moral rules" considered law only by "analogical extension". See AUSTIN, J. **The Province of Jurisprudence Determined and the Uses of the Study of Jurisprudence**. London: Weidenfeld and Nicolson, 1954, pp. 140-141.

international public law.

The first result of the above absence was the emergence of an agenda dedicated to international treaties on tax matters, which was situated within the framework of international law.[335] The second result was an effort to seek textual support in the domestic legislation of the countries. Such an attitude was responsible for building the image of international tax law from a perspective centred on the state and its internal norms.[336] This image, however, has imposed limitations on the field's potentialities, since its tools did not seem to be able to deal with the process of internationalisation of taxation. A paradigm that sees the state as the ultimate provider of norms to be analysed by the lawyer does not offer useful tools to deal with taxation as a global phenomenon. Amongst the elements constituting the global economy lies the phenomenon of taxation, in such a way that the recognition of an international economy presupposes the recognition of one genuinely international taxation, whatever this expression means.[337]

The economy, when seen as an international phenomenon implies the necessity to deal with an international variant of the phenomenon of taxation. As seen in the introduction, this "internationalisation of taxation" can be seen from two complementary angles.[338] From the object's perspective, this process would result in the internationalisation of the phenomenon of taxation, that is, the view of taxation as a global phenomenon. Thus, the idea of a global economy implies a sort of tax phenomenon not restricted to the borders of a given jurisdiction, but that characterises itself for manifesting among different jurisdictions.[339] From the

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[335] Even the nomenclature refers to international law. See QURESHI, A. H. **The Public International Law of Taxation**. London: Wolters Kluwer, 1994. Recognising tax treaties as a division of international tax law, see BERGLUND, M. and CEJIE, K. **Basics of International Taxation: from a methodological point of view**. Uppsala: IustusFörlag, 2014.

[336] This positivist view is known as the Westphalian paradigm. See "Pluralism and the Breakdown of 'the Westphalian Paradigm'" in BROWNSWORD, R. Field, Frame and Focus: methodological issues in the new legal world. In: Gestel, R. v., Micklitz, H.-W. and Rubin, E. L. (Ed.). **Rethinking Legal Scholarship: a transatlantic dialogue**. New York: Cambridge University Press, 2017, pp. 112-172, pp. 117-119.

[337] It is noteworthy that the European experience also recognises the existence of one European tax law, sometimes understood as part of international tax law. See "The three essential parts of international tax law" in BERGLUND, M. and CEJIE, K. **Basics of International Taxation: from a methodological point of view**. Uppsala: IustusFörlag, 2014. However, although it is a complex and highly influential field in the international tax debate, its limitation to a specific geographical area does not allow it to solve the tax problems caused by globalisation.

[338] See "International taxation".

[339] More specifically, this manifestation derives from the easiness in the international mobility of capital and its effects on all issues considered relevant for taxation: tax burden distribution, macroeconomic control, maintenance of the welfare state, etc. About the subject, see SWANK, D. The Effect of Globalization on Taxation, Institutions, and Control of the Macroeconomy. In: Held, D. and McGrew, A. G. (Ed.). **The Global Transformations Reader**.

subject's perspective, the internationalisation of the tax phenomenon, as an object of a specific field, resulted in the internationalisation of the tax field itself.[340] Hence, the emergence of an international economy implied not just an international phenomenon of taxation but an international community of tax specialists dedicated to elaborate the field's discourse on that phenomenon.

Reactions to the field's internationalisation.

The internationalisation of the economy brought up transnational situations not yet faced by the tax discourse of the nineteenth century. The internationalisation of the phenomenon contributed to the increased complexity of situations involving taxation, while the internationalisation of the field required an international joint activity able to cope with that phenomenon.[341] A more complex object and a new configuration of the actors demanded changes in the discourse of the tax field in order to adapt it to the new multicultural and intricate tax environment. A new configuration of the tax discourse, in turn, presupposed new attitudes of the tax specialists towards the phenomenon of taxation.[342] On the other hand, the plurality of actors that make up the field, as well as the different influences received from the various local tax traditions, had the potential to offer different outcomes.[343] The result was that economists and lawyers presented different reactions before the double internationalisation process experienced by the tax field.

As far as the economists were concerned, the pressure exercised by the in-

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Cambridge: Polity Press, 2003, pp. 403-420.

[340] Walker makes a similar claim related to the globalisation of the law. According to him, this process does not differ from the globalisation of other dimensions of social life. However, it implies the globalisation of what he calls the "internal world" of professional and academic practice. See "Taking Law to the World" in WALKER, N. **Intimations of Global Law**. Cambridge: Cambridge University Press, 2015, pp. 29-54. More specifically, subchapter 1.3. "Internationalising taxation and its discourses" will analyse the process of the internationalisation of the tax field.

[341] In 1915, Seligman emphasised the importance of this internationalisation to the development of the science of finance. According to him, the actors should face this international character from a wider field than that of his own country, reading different languages and noting movements in widely distant countries. See "Recent Literature in Taxation" in SELIGMAN, E. R. A. **Essays in Taxation**. 8th ed. London: Macmillan, 1915, p. 543.

[342] This presupposition is especially true concerning lawyers since changes in the social practice invariably consist of changes in the discourse. About this relationship, see "Discourse as social practice" in FAIRCLOUGH, N. **Language and Power**. London, New York: Longman, 1989, pp. 17-42.

[343] Haas analyses the difficulties related to the social construction of international reality in a given epistemic community. For him, the construction of an international policy depends on the prevailing ideas in a given community, and these ideas are the result of a tension between the actors' local experiences and the dominant knowledge of the community. See HAAS, P. M. Introduction: epistemic communities and international policy coordination.

ternationalisation of the economy has been relatively well-received. Although there was no consolidation of the economic discourse around the idea of an international economy, proposals and efforts came to systematise the new reality presented by international taxation.[344] One result of the attitudes assumed by the economists was their attempts to organise themselves internationally to carry forward the new academic agenda that arose. These attempts have produced institutional results embodied in the emergence of associations and the promotion of international congresses and seminars.[345] The initial and most essential economists' reaction to the internationalisation of taxation, however, was in the midst of the work developed by the League of Nations. It was one of the first efforts to build a truly international working group engaged in systematising the international tax discourse from a perspective not centred on the norms produced by a specific state.[346]

The lawyers, on the other hand, presented a greater difficulty in reacting to the internationalisation of the phenomenon of taxation. There were no immediate international coordination efforts to respond to the new reality that emerged, and there were some reasons for this.[347] As seen, the internationalisation of the economy in the nineteenth century had occurred when tax lawyers, at least in continental Europe, were still discussing their autonomous agenda. From the field's perspective, the turn from the nineteenth to the twentieth century witnessed the defence of the autonomy of public finance law vis-à-vis the science of finance.[348] International

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International Organization, v. 46, n. 1, pp. 1-35, 1992.

[344] The gold standard was the sole instrument of the international economy of the turning from the nineteenth to the twentieth century. See "Part One: The international system" in POLANYI, K. **The Great Transformation: the political and economic origins of our time**. Boston: Beacon Press, 2001, pp. 1-32.

[345] Ring chronicles Seligman's academic efforts in the early twentieth century to try to deal with the phenomenon of international double taxation. See "Early scholarship" in RING, D. M. The Promise of International Tax Scholarship and its Implications for Research Design, Theory, and Methodology. **St. Louis University Law Journal,** v. 55, n. 1, pp. 307-329, 2010a, pp. 314-318.

[346] In broader terms, Collins sees in the League of Nations, especially in its Secretariat, the origins of the formation of a genuine international institutional law. See COLLINS, R. The League of Nations and the Emergence of International Administration: finding the origins of international institutional law. **Revista Española de Derecho Internacional,** v. 71, n. 2, pp. 285-294, 2019. As item "1.3.1. First reactions to the internationalisation" will demonstrate, it was in this environment that the economists had offered a major intellectual contribution to the international tax field.

[347] Kennedy claims that the leading figure of what he calls the first globalization of law (between 1850-1914) was the teacher, inspired by the historical school of Savigny, by codification, by the individual private perspective and from the Westphalian paradigm. See "The First Globalization" in KENNEDY, D. Two Globalization of Law & (and) Legal Thought: 1850-1968. **Suffolk University Law Review,** v. 36, n. 3, pp. 631-680, 2003, pp. 637-648.

[348] Already in 1939, after the independence of tax law from public finance law, the International Congress on Taxation in The Hague discussed whether the autonomy of tax law under private law would be a means of favouring international treaties. At the time, five out of the six invited teachers concluded, from the positivist paradigm, that

law, which could offer support for this debate, underwent a remarkable transformation, in which it was abandoning its natural law tradition in favour of the positivist paradigm that gained importance. The cognitive crises and paradoxes surrounding law at the international level during this period have contributed to the dominance of the economic discourse in the international tax field.[349]

The international character.

The transformations experienced by international law were not an isolated factor but one out of many results of the rise of both scientific and legal positivism at the turn from the nineteenth to the twentieth century. Such a rise is associated with a paradigmatic shift that, at the international level, resulted in the abandonment of natural law's universal categories in favour of the centrality of legal texts as objects of analysis.[350] Nonetheless, given the incipient production of treaties and conventions, the international plane did not offer materials that could serve as objects of work for the tax lawyers. International tax treaties only proliferated from the discourse elaborated by the economists within the work of the League of Nations.[351] International law, therefore, did not offer the tools expected by tax lawyers, at least in light of the prevailing paradigm at the time. The only alternative was the aforementioned search for help in state law by constructing a discourse on international taxation from a domestic perspective.

International tax law, therefore, was conceived with a narrower scope than domestic tax law, a paradoxical situation that became the hegemonic vision of the field. Such a view is still currently replicated, in one way or another, within the manuals that reflect the con-

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such autonomy would have no importance, while the sixth admitted this possibility under certain circumstances. See CAHIERS DE DROIT FISCAL INTERNATIONAL. **L'Autonomie du Droit Fiscal Serait-Elle un Moyen de Favoriser les Accords Internationaux?** Volume II. L'Association Internationale de Droit Financier et Fiscal ed. Amsterdam: Swets & Zeitlinger, 1965.

[349] As Günther demonstrates, the positivist paradigm has enormous difficulty in dealing with the phenomenon of globalisation. See GÜNTHER, K. Legal Pluralism or Uniform Concept of Law? Globalisation as a problem of legal theory. **Journal of Extreme Legal Positivism,** v. 5, pp. 5-21, 2008.

[350] About how the human-made language system of international law has become the "celebrated focus of study" from the rise of the positivist paradigm, see "Positivism: representation and objectivity" in ALCANTARA, O. L. Ideology, Historiography and International Legal Theory. **Revue Internationale de Semiotique Juridique,** v. 9, n. 1, pp. 39-79, 1st Feb 1996, pp. 54-64.

[351] Before the League's work, the primary reference was the treaty celebrated between the Austro-Hungarian Empire and Prussia in 1899, as will be shown in subchapter "1.3. Internationalising taxation and its discourses".

solidated practice of the actors.[352] In this way, what came to characterise international tax law was not its international character itself, but the mere fact that a domestic tax rule applies to cross-border transactions.[353] Thus, international tax law kept its distance from the problems involving the legal quality of international law and preserved the Westphalian paradigm. Nonetheless, the connection between these two fields reveals itself by the way in which international tax law incorporates the language and the constructs elaborated by international law.[354] The current discourse of international tax law is not just the result of economic categories incorporated in the construction of domestic legal discourses on international taxation but also of a truly international legal experience.

Conclusions.

Forming an autonomous tax legal field took place in a context involving several variables, causing successive changes in this independence process's antagonists. Influenced by the scientific positivism of the nineteenth century, the legal discourse initially turned against taxation's moral, political, and economic elements. To this end, lawyers have adopted German formalism as a methodological tool capable of sustaining their specific agenda. Notwithstanding, this adoption has placed tax lawyers at the mercy of private law, especially in the face of a liberal paradigm that understands that wealth generation occurs in the private sphere. In reaction, tax lawyers built an argument consisting of separating a formal dimension submitted to private law from the idea that taxation seeks the "real" dimension of the operation, sending them back towards the economic discourse. The situation only stabilised with the emergence of tax codes, consolidating the idea of an autonomous tax legal field and its specific object.

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[352] The main Brazilian legal manual on international taxation, perhaps the only one that for decades could be called a manual in a strict sense, is entitled *Direito Tributário Internacional do Brazil* (International Tax Law of Brazil). Despite the apparent contradiction of the title, it expresses the outcomes of adopting the Westphalian paradigm accurately. See XAVIER, A. **Direito Tributário Internacional do Brasil**. 8th ed. Rio de Janeiro: Forense, 2015.

[353] "When I refer to international taxation or international tax law I am really speaking of this cross-border application of domestic law, and in my case that is almost invariably the domestic law of the United States." ROSENBLOOM, H. D. Teaching International Taxation. In: Bizioli, G. (Ed.). **Essays in International and European Tax Law**. Napoli: Jovene, 2010, pp. 1-9, p. 2.

[354] "Nexus principle", "fiscal jurisdiction", as well as "tax sovereignty" are a few examples of how the tax debate emulates the categories elaborated within the international law. On the application of concepts like soft and hard law to international tax law, see CHRISTIANS, A. Hard Law, Soft Law, and International Taxation Scholarly Essay. **Wisconsin International Law Journal,** v. 25, n. 2, pp. 325-334, 2007. However, the BEPS Project was responsible for highlighting this relationship even more, as will be seen in 1.3.3. The new great powers and the base erosion.

Nevertheless, the legal tax field's consolidation process has not taken place smoothly in every place and plane of the social practice. The American experience, greatly influenced by legal realism, observed an actual crisis in the role of the tax lawyer, especially in the face of the emergence of L&E as a dominant paradigm in the field. Similarly, the international plane did not have an international tax code nor specific texts capable of sustaining an agenda already dominated by positivism. Hence, tax lawyers turned to the domestic plane and built an international tax legal field whose borders were paradoxically narrower than those of their respective national tax laws. This fact explains why most international tax lawyers do not identify themselves as international lawyers but as tax lawyers specialised in a particular type of tax rule. The attachment to the Westphalian paradigm associated with the need to face the threat of economic discourse led tax lawyers to sacrifice the international character of their field to preserve its legal quality.

However, the Westphalian paradigm is just one possible approach to international law, and it fails to account for the complexity assumed by international taxation throughout the twentieth century. Thus, recognising the potential contribution of international law to the tax debate does not necessarily mean adopting that paradigm. Assuming that international law is also a field with a discourse historically elaborated from the power struggle, the mutual contributions of the two fields emerge. In this specific sense, one can say that international tax law is part of international law since the actors that form the international community of tax lawyers also compose that of international lawyers. This perspective can fill the cognitive vacuum that resulted in the absence of an agenda capable of understanding how the international legal discourse on taxation has developed. This development stemmed from the different contexts that marked the phases that form the history of the international tax field, as the following subchapter will demonstrate.

1.3. Internationalising taxation and its discourses.

The previous subchapter has shown that the narratives about the tax phenomenon historically converged to a debate about the legitimacy of taxation increasingly centred on the themes of property, state, and wealth generation. This debate resulted in both the rise of a

hitherto non-existent fiscal bureaucratic elite and the separation of public and private economic spheres. This separation, the division of labour, and the defence of free trade became the foundation of the theory of wealth generation within political economy. The influence of this theory along with the intellectual legacy of cameralism resulted in a multidisciplinary tax field that incorporated the liberal ideology. The impact of scientific positivism resulted in the independence of the legal tax field, which remained in constant tension with the economic discourse on taxation. Such tension resulted in crises that contributed to the construction of a legal discourse on international taxation that opted for sacrificing the international character of the field in order to preserve its legal quality.

The above-mentioned "domestication" of the international tax law, however, did not dispel the fact that there was a process of internationalisation of taxation underway. Not only the object but the field itself has undergone this process, resulting in an international context of social institutionalisation of the tax debate. However, transformations occurring at the institutional level resulting both from internal and external factors have impacted this debate over the past century. These transformations have triggered new power relations that were responsible for reformulations of the discourse on international taxation. Identifying the tax discourse, therefore, presupposes an understanding of the institutional context of power relations in which the discourse manifests itself. More specifically, the identification of the legal discourse on international taxation derives from the observation of these power relations from a genuinely international perspective of the legal phenomenon, close to the field of international law.

This subchapter aims at providing a description, from an international perspective, of the process that resulted in the current legal discourse on international taxation. The premise is that such a description implies identifying both the central actors as the institutional context responsible for changes in power relations that transformed the international tax discourse. The hypothesis is that these transformations resulted in three paradigmatically distinct moments in the field of international taxation. Item 1.3.1 describes the initial reactions to the internationalisation of taxation that culminated in the work of the League of Nations to avoid double taxation. Item 1.3.2 demonstrates the movement of OECD to become a chief player in tax matters by elaborating a discourse against harmful tax competition. Item 1.3.3 presents the rise of new central actors, the efforts of OECD to consolidate its position in the tax field, and the de-

velopment of a discourse defending the fight against base erosion and profit shifting.

1.3.1. First reactions to the internationalisation.

As seen, the process of internationalisation of the economy and, consequently, of taxation, in the nineteenth century, gave a new complexity to the object of the tax field. The tax debate has acquired a transnational character from the identification of common elements by the different local epistemic communities, resulting in the internationalisation of the field. Such processes caused changes in the tax discourse which led to transformations in the attitudes of the two main actors of the field. Economists have organised themselves in international academic efforts while lawyers were still discussing their ability in carrying out an autonomous agenda. As a result, a discourse that privileged the economic perspective has initially dominated the intellectual dimension of the international tax field. However, the social dimension of taxation still called for a genuinely international institutional project, and the pursuit of this objective was central to the development of the legal discourse on international taxation.

The tax debate's institutionalisation at the international level, however, was profoundly influenced by the context in which the process of internationalisation of the economy occurred. This process was closely associated with the geopolitical scenario that resulted in the First World War, and that constrained the way in which international relations took place in the following century. In parallel, the dominant ideology of the late nineteenth century was responsible for translating concepts and attitudes from international law to the tax field. This process required a forum, finding in the League of Nations the necessary institutional framework around which the tax actors began to gravitate. However, unlike the tradition of domestic tax discourse, the clash of interests at the international level could not be understood by simplistic dualities. The assumption of the existence of public and private spheres at the international level did not imply that these spheres were indivisible nor that their interests were necessarily in opposition.

This item demonstrates how the legal, political, and economic context of the early twentieth-century international plane conditioned the discourse on international taxation. The premise is that the defence of long-distance free trade has marked this first phase of the

international tax discourse's development. The hypothesis is that such defence rescued an old tradition, not necessarily involving taxation, based on the opposition between a universal right to free trade and the possible limitations arising from the exercise of local political interests. The item initiates demonstrating how the tax debate has emulated this tradition through a dichotomy between using residence or source as a criterion for justifying the imposition of taxation. It then describes how that dichotomy has resulted in a debate centred on combating international double taxation within the framework of the League of Nations. Finally, the item identifies the actors involved in this debate and how they have institutionalised the building of the international tax discourse.

Free trade context.

Before identifying the possible reactions of the field to the internationalisation process, it is important to highlight what this phenomenon consisted of during the nineteenth century. Despite few isolated episodes, a period of peace of almost a hundred years reigned between the most powerful economies, from the end of the Napoleonic wars in 1815 to the outbreak of First World War in 1914.[355] The evolution of the economic models of nations has generated new forms of economic interaction with effects in more than one jurisdiction. This event was, to a large extent, provided by technological advancement which allowed for a robust expansion of the business.[356] Supported by the international law tradition of protecting the international free-trade, the tax field has adopted an attitude of opposing international business to taxation.[357] However, unlike the bourgeois reactions to state interference in local commerce, the defence of long-distance free trade, as an ideology, predates the rise of liberalism, being found

[355] According to Polanyi, what made this peace effective was the *haute finance*, "an institution *sui generis*, peculiar to the last of the nineteenth and the first third of the twentieth century" functioning as "the main link between the political and the economic organization of the world." See POLANYI, K. **The Great Transformation: the political and economic origins of our time**. Boston: Beacon Press, 2001, p. 10.

[356] Although taxation and international trade are phenomena mutually related throughout history, it was from the debate on income taxation on the operations of transnational corporations (TNCs) that the agenda of the international tax field has emerged. On how this field arises as a reaction to the issues surrounding the impact of income tax on international investment flows, see PICCIOTTO, S. **Is the International Tax System Fit for Purpose, Especially for Developing Countries?** Brighton: Institute of Development Studies, 2013b.

[357] This view of taxation opposed to free trade has arisen from the prevalence of the liberal paradigm. According to Seligman, the free market debate in the context of mercantilism involved arguments related to the breaking of commercial monopolies but never exemption from taxation or duties, which today would be considered protectionist. See SELIGMAN, E. R. A. and FIORITO, L. Curiosities of Early Economic Literature: an address to his fellow members of the Hobby Club of New York. **History of Political Economy,** v. 32, n. 3, pp. 659-691, Fall 2000, p.

since the mercantilist period.

Therefore, the above-mentioned ideology did not necessarily represent a private versus public conflict, since the defence of long-distance free trade has been historically much more a matter of state than of personal liberty.[358] Besides, the historical non-dissociation between public and private interests in the protection of that value led to a superposition of commercial and state interests. This situation allowed the field of international law to develop a discourse that reflected a project of imperial expansion, be it commercial or in a strict sense.[359] Hence, state imperialism articulates with long-distance free trade so that the violation of this value authorises state measures against the violator. A practical outcome resulting from the emergence of this new language concerns the idea of civilisation and civilising mission. This idea implied the categorisations of nations according to their civilisational level, justifying interventions in local polities from the recognition or not of a given nation as an equal.[360]

This mindset became the foundation for the development of a doctrine concerning sovereignty that has characterised the first phase of international law. Such doctrine has developed a discourse opposing the exercise of local sovereignty and the protection of the long-distance free trade, revealing a tension between international commercial goals and local political interests.[361] Thus, for being considered as a principle in itself, long-distance free trade should not be hindered by the exercise of local sovereignty. Disobedience to this universal principle has historically justified disregarding the potential legitimacy of local constituted power, even employing violence, if necessary.[362] This ideology reached the tax field by incorporating

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669.

[358] A good explanation about how the concept of freedom to trade has changed from the influences of the Enlightenment is found in MAGNUSSON, L. Freedom and Trade: from corporate freedom and jealousy of trade to a natural liberty. **Keio economic studies,** v. 49, pp. 19-30, 2013.

[359] The explanation about the differences between formal and informal imperialism is found in GALLAGHER, J. A. and ROBINSON, R. E. The Imperialism of Free Trade. **The Economic History Review,** v. 6, n. 1, pp. 1-15, 1953.

[360] The dualism between civilisation and barbarity set the tone for international relations during the nineteenth and early twentieth centuries. See OBREGON, L. The Civilized and the Uncivilized. In: Fassbender, B. and Peters, A. (Ed.). **Oxford Handbook of the History of International Law**. Oxford: Oxford University Press, 2012, pp. 917-939, pp. 921-929.

[361] This tension has traditionally been in the midst of a colonial relationship between the expansionist European commercial interests and the local interests of non-European peoples. According to Anghie, it was from this relationship that the concept of sovereignty has developed within the field of international law. See ANGHIE, A. The Evolution of International Law: colonial and postcolonial realities. **Third World Quarterly,** v. 27, n. 5, pp. 739-753, 2006 The articulations between imperialism, civilising mission and the doctrine of sovereignty have already been presented in more detail in "1.1.3. From natural order to international law".

[362] See "War, sovereignty and the transformation of the Indian" in ANGHIE, A. Francisco de Vitoria and the

one rhetoric that emulates the different civilisational levels of nations, associated with the distinct level of complexities of tax systems. Such rhetoric has particularly impacted the field of comparative tax law since the choice for jurisdictions to be studied presupposed that they possessed the same level of development.[363]

The source versus residence debate.

Although the above-cited practice had reached the tax field when the international law was abandoning the use of universal categories, this has not weakened the universalist agenda of the tax debate. The liberal ideology has transformed the defence of expansionist trade interests before the local political interference into a principle of the tax field.[364] However, the dualistic paradigm involving the domestic relationship between the state and its citizens could not explain the idiosyncrasies of international taxation. The international tax phenomenon presumed a plurality of jurisdictions and ruled out a necessary antagonism between public and private interests.[365] This change brought complexity to the simplistic idea of wealth as deriving from the commercial interactions between private actors and subsequently transferred to the public sphere through taxation.[366] Such a complexity resulted in a need for new intellectual efforts to reconcile the discourses justifying the tax levy and the way this levy should take place.

Colonial Origins of International Law. **Social & Legal Studies,** v. 5, n. 3, pp. 321-336, 1996, pp. 327-331.

[363] Or by the fact that a legal category when recognised by civilised nations becomes source of international law. See SCHLESINGER, R. B. Research on the General Principles of Law Reorganized by Civilized Nations. **American Journal of International Law,** v. 51, n. 4, pp. 734-753, 1957. Leroy-Beaulieu contrasts the taxation of the civilised nations with the primitive financial economy, being the last one of some interest considering the administration of the colonies. LEROY-BEAULIEU, P. **Traité de la Science des Finances**. 7 ed. Paris: Guillaumin et Cie, 1906, p. 136.

[364] Eisenstein gives the reasons for this attitude: "(…) if an ideology is to be effective, it must convey a vital sense of some immutable principle that rises majestically above partisan preferences. Except in dire circumstances, civilized men are not easily convinced by mere appeals to self-interest. What they are asked to believe must be identified with imposing concepts that transcend their pecuniary prejudices." See EISENSTEIN, L. **The Ideologies of Taxation**. New York: The Ronald Press Company, 1961, p. 12.

[365] For an analysis on how the fiscal interest of capital-exporting countries can align with the private interest of local jurisdictions' elites, see MOORE, M. Globalisation and Power in Weak States. **Third World Quarterly,** v. 32, n. 10, pp. 1757-1776, 2011.

[366] Since the liberal project demanded the removal of state action from the private economic sphere, a state should make sure that the private sphere that concerns its citizens will not be reached by the "visible hand" of another jurisdiction. This was particularly true for the British case, which led to an internal lobbying process that culminated in an international movement against double taxation. See "Britain and Global Business" in PICCIOTTO, S. **International Business Taxation: a study in the internationalization of business regulation**. Cambridge: Cambridge University Press, 2013a, pp. 14-16.

The first intellectual effort consisted of the development of the idea of power to tax, inspired by the debates involving sovereignty arising from international law. This idea was grounded on the relationship between the state and its citizens and resulted in two theoretical proposals.[367] The first theory stems from the idea that the limits of sovereignty coincide with the boundaries of the general exercise of power, which includes the power to tax. Thus, the power to tax would be a logical consequence of the extension of the state sovereignty over everything subject to its authority or that derives from its authorisation, finding limits only in the sovereignty of another state.[368] The second, on the other hand, takes a more pragmatic stance and justifies the tax incidence by the simple ability of the sovereign state to do so. Based on the idea of control, taxation arises as a consequence of the exercise of sovereignty concerning economic events over which the state has the power to interfere.[369]

At the domestic level, the two theoretical proposals mentioned above would have the same result, since all the elements that led to the process of wealth generation subject themselves to the same authority. However, when such process results from the economic interaction of agents and factors of production submitted to different authorities, new choices must be made about how taxation should take place, which triggered the development of two narratives.[370] On the one hand, there was a vision that emphasised the agents keeping the wealth produced and their connection to a particular jurisdiction. This idea resulted in a discourse holding that the tax incidence should occur where the taxpayer has a formal connection.[371] On the

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[367] See "Power to tax" in JOGARAJAN, S. **Double Taxation and the League of Nations**. Cambridge: Cambridge University Press, 2018, p. 9.

[368] This position sees the sovereign's power to tax as a result of the control that a sovereign exercises over a given territory. For more details on the topic, see BEALE, J. H. Jurisdiction to Tax. **Harvard Law Review,** v. 32, n. 6, pp. 587-633, 1919.

[369] This view considers that more important than the physical presence of the property affected by taxation in the territory is the power of control over it, thus justifying the incidence on tangible or intangible goods, regardless of the jurisdiction of their owners. See CARPENTER, C. E. Jurisdiction over Debts for the Purpose of Administration, Garnishment, and Taxation. **Harvard Law Review,** v. 31, n. 7, pp. 905-931, 1918.

[370] This situation challenged the liberal tax project since it did not allow a taxation that was equally neutral concerning imported and exported wealth. From the 1960s, the field of international taxation recognised this trade-off through a dichotomy between what became known as capital import neutrality and capital export neutrality. See RING, D. M. The Promise of International Tax Scholarship and its Implications for Research Design, Theory, and Methodology. **St. Louis University Law Journal,** v. 55, n. 1, pp. 307-329, 2010a, p. 317, MIRRLEES, J. A., ADAM, S., BESLEY, T., BLUNDELL, R., BOND, S., CHOTE, R., GAMMIE, M., JOHNSON, P., MYLES, G. and M. POTERBA, J. **Dimensions of Tax Design: the Mirrlees review**. Oxford: Oxford University Press, 2010, pp. 925-926.

[371] As the only industrialised country that taxes on the bases of citizenship, the United States is the prime example of using political allegiance as a criterion for taxation. For an analysis of this way of justifying tax incidence, see

other, there was a view highlighting the elements responsible for the process of wealth generation and the possibility for the state to exercise authority over them.[372] It is from the confrontation of these two views that the field of international tax law developed the well-known residence versus source duality.

The double taxation phenomenon.

When the source versus residence duality emerged, a simplistic view separated jurisdictions in which production occurred from others where its consumption took place, emulating structural elements of the liberal paradigm. The idea of residence, geographically associated with the location of the factors of production, represented the supply side, while the source, as the destination or consumer market, symbolised the demand.[373] Since wealth generation stems from the encounter between supply and demand with no state intervention, that duality means the fragmentation of the private economic sphere. Given the absence of a liberal tax theory in a geographically and conceptually fragmented environment, the field has turned to this theme.[374] The existence of equally justifiable tax claims has resulted in the rise of double taxation at the international level. Albeit double taxation was not a new phenomenon at that time, its international version was associated with a new complexity deriving from economic development.[375]

"Resolution of conflict in Citizen and Residence Based Taxation" in GANN, P. B. The Concept of an Independent Treaty Foreign Tax Credit. **Tax Law Review,** v. 38, n. 1, pp. 1-78, 1982, pp. 44-69.

[372] This economic view that we could call realistic (since it opposes the formalism of the previous one) includes legal elements (enforcement of the rights to wealth) in determining the geographic location of the wealth to be taxed. See "The elements of economic allegiance" in BRUINS, G. W. J., EINAUDI, L., SELIGMAN, E. R. A. and STAMP, J. C. **Report on Double Taxation Submitted to the Financial Committee by Professors Bruins, Einaudi, Seligman and Sir Josiah Stamp**. League of Nations: Geneva: 5 Apr. 1923, pp. 22-27.

[373] Although these expressions have acquired new connotations, it is reasonable to assume that, at the time of the debate's institutionalisation at the international level, the idea of "residence" related itself to that of production or supply. This assumption is what justifies Coates's view, according to which, the industrialisation of semi-developed countries would make the taxation at the place of residence more widely appreciated, diminishing the disparity between it and the criteria of source taxation. See COATES, W. H. League of Nations Report on Double Taxation Submitted to the Financial Committee by Professors Bruins, Einaudi, Seligman, and Sir Josiah Stamp. **Journal of the Royal Statistical Society,** v. 87, n. 1, pp. 99-102, 1924.

[374] The problem has made the international tax debate resemble that of private international law, so the field began to focus on offering a discourse able to "resolve" the conflict of interest between source and residence jurisdiction. See "The Essential Dilemma of International Taxation" in GRAETZ, M. J. and O'HEAR, M. M. The Original Intent of U.S. International Taxation. **Duke Law Journal,** v. 46, n. 5, pp. 1021-1110, Mar 1997, pp. 1033-1041.

[375] At the turn from the nineteenth century, Seligman argued that double taxation was both an old phenomenon when based on the simple desire of the government to increase tax collection without considering the burden borne by the taxpayer, as a new phenomenon when it results from the economic growth and industrial increasing complex-

The European political context in the second half of the nineteenth century in favour of economic integration on the continent has generated an agenda of combating international double taxation. This agenda resulted in the conclusion of several international treaties, inaugurating the most traditional way of addressing the issue throughout the twentieth century.[376] The importance of these early international tax treaties is not limited to their political dimension or their immediate economic impact. Their language was employed by the treaties which came later, making the terms initially used be replicated and incorporated by the field. Repetition transformed the original forms, resulting from the choices of the actors involved in that first event, into perennial elements belonging to the field. Thus, the tension between international commercial goals and local fiscal interests was gradually replaced by a principle according to which international double taxation should be avoided, inaugurating a principled tradition that reached other categories.[377]

The principle of reciprocity, elaborated initially in the field of international law, has impacted the international double taxation debate. The exemption principle of the tax incidence, as well as their transformation into treaty rules, resulted in a textual mechanism that future situations could replicate.[378] The adoption of these rules in specific articles of the new international treaties to avoid international double taxation has inaugurated the habit of establishing specific methods of tax relief. Notwithstanding, the economic complexities involving the different behaviours of actors at the international level resulted in the perception that the construction of the discourse on international double taxation should derive from international collective efforts.[379] These efforts, in turn, were severely dominated by the context in which the

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ity. Seligman places international double taxation in this second category. See "Double Taxation" in SELIGMAN, E. R. A. **Essays in Taxation**. 8th ed. London: Macmillan, 1915, pp. 98-125.

[376] International tax treaties emerged in the context of international administrative cooperation since the mid-nineteenth century. The European political context, influenced mainly by the German efforts, led to the prevalence of the fight against international double taxation at the end of the century. The treaty celebrated between the Austro-Hungarian Empire and Prussia in 1899 was the first international treaty expressly concerned with double taxation. See JOGARAJAN, S. Prelude to the International Tax Treaty Network: 1815–1914 early tax treaties and the conditions for action. **Oxford Journal of Legal Studies,** v. 31, n. 4, pp. 679-707, Winter 2011.

[377] Picciotto claims that the business sector fostered this process. See "The Campaign against International Double Taxation" PICCIOTTO, S. **International Business Taxation: a study in the internationalization of business regulation**. Cambridge: Cambridge University Press, 2013a, pp. 14-37.

[378] Miller praised the celebration of the treaty between the Austro-Hungarian Empire and Prussia against double taxation and urged the other countries to follow the same path as the economic organisation of the modern world, at the time, demanded fiscal reciprocity as its correlate. See MILLER, A. C. Fiscal Reciprocity. **Journal of Political Economy,** v. 10, n. 2, pp. 255-258, 1902.

[379] On how the difficulties in adopting the principle of reciprocity and the credit system have led to the defence of

debates took place. The First World War not only pushed international taxation into the international agenda due to increased fiscal pressure, but it also determined the spirit that has driven the tax debate.[380]

The League of Nations.

In the five years following the war, the severe depression, the haunt of hyperinflation, and moments of significant development and euphoria were contrasting conditions the countries were facing. There was a growing sense of economic nationalism in which protectionist measures revived economic practices that resembled the mercantilist era.[381] From a political perspective, the world was experiencing a sense of frustration related to the conclusion of an unprecedented period of a century of peace representing not only the end of an era but the shutdown of an international political and economic endeavour. The liberal project of a free-market-based social organisation suffered a severe blow when the gold standard collapsed.[382] A new homogeneity among the great powers has characterised the European geopolitics once the Ottoman Empire ceased to exist. It was in this international economic and political environment that the League of Nations emerged as one of the results of the First World War.[383]

Its mission to promote and maintain peace demonstrates that there was a strong expectation that the League could represent a real institutional alternative to the failed international system that had been in place for most of the nineteenth century. In this sense, this

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international collaboration, see CROBAUGH, C. J. International Comity in Taxation. **Journal of Political Economy,** v. 31, n. 2, pp. 262-275, 1923.

[380] For an analysis of the behaviour of tax burdens in the United States, the United Kingdom, France, and Germany before, during, and shortly after the War, see SELIGMAN, E. R. A. Comparative Tax Burdens in the Twentieth Century. **Political Science Quarterly,** v. 39, n. 1, pp. 106-146, 1924.

[381] Argentina and Venezuela experienced an economic success that contrasted with the deficit and inflation witnessed by Germany and Italy. In this environment, the United States had already become Latin America's largest trading partner and was about to surpass the United Kingdom as the primary source of international capital. See "The economics and politics of the 1920s" in JOGARAJAN, S. **Double Taxation and the League of Nations**. Cambridge: Cambridge University Press, 2018, pp. 11-14.

[382] Polanyi argues that what led to the social collapse represented by the outbreak of the First World War was precisely the weakness of the gold standard as the only international instrument of the liberal project. See "Conservative Twenties, Revolutionary Thirties" in POLANYI, K. **The Great Transformation: the political and economic origins of our time**. Boston: Beacon Press, 2001, pp. 21-31.

[383] The First World War implied an essential symbolism since pacifism was one of the main features of post-industrial capitalism that contrasted with the mercantilism warmongering. About how mercantilism and liberalism can contrast in terms of appetite for war see SILBERNER, E. **La Guerre Dans la Pensée Économique du XVIe au XVIIIe Siècle**. Paris: Librairie du Recueil Sirey, 1939.

institutional alternative has meant the rescue of a universalist tradition of peaceful conflict resolution and the recognition of the need for a civilising project capable of counteracting violence.[384] Structurally, four bodies formed the League: the Assembly, the Council, the Secretariat-General, and the Permanent Court of Justice.[385] The Assembly was composed of all the member countries, while the Council had some permanent and non-permanent members. The striking feature of the Secretariat-General and the Permanent Court of Justice was the fact that they were not subordinate to the member countries that formed the League. This independent character possesses a very symbolic aspect since it represents the first genuinely supranational project of institutionalisation.[386]

Although peacekeeping was the central worry at the time of the establishment of the League of Nations, the founding document presented concerns with the world economy. These concerns prompted the Council to draft a resolution setting out a conference to study and propose solutions to the financial crisis.[387] The conference has divided the work into four commissions, and the one on international credits concluded for the need to combat international double taxation, accused of preventing foreign investment. Following the conference's suggestions, the Provisional Economic and Financial Committee was created, consisting of two sections (economic and financial) of 10 members that, although indicated by the countries, would act in a personal capacity.[388] The Financial Committee was responsible for the double taxation issue and referred the matter to four economists. The economists elaborated a report in 1923 that became the primary reference for the elaboration of the other reports produced by the League.[389]

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[384] See "The Nature and the Necessity of the League" in HOWARD-ELLIS, C. **The Origin Structure and Working of the League of Nations**. London: George Allen & Unwin, 1928, pp. 60-64.

[385] For more details on this organisational structure, see "The League's Machinery" in BUTLER, G. G. G. **A Handbook to the League of Nations**. 2nd ed. London: Longmans, Green and Co., 1925, pp. 36-48.

[386] Supranational differs from international for representing "an entity distinct from national governments that has a separate identity and loyalty and which exercises some measure of genuine autonomous power". See "Disaggregated International Organisations" in SLAUGHTER, A.-M. **A New World Order**. Princeton: Princeton University Press, 2009, pp. 22-23 .

[387] For the content and even a chronicle about the conference environment, see SIEPMANN, H. A. The International Financial Conference at Brussels. **The Economic Journal,** v. 30, n. 120, pp. 436-459, Dec 1920.

[388] See "The Economic and Financial Organisation" in CLAVIN, P. and WESSEL, J.-W. Transnationalism and the League of Nations: understanding the work of its economic and financial organisation. **Contemporary European History,** v. 14, n. 4, pp. 465-492, 2005, pp. 468-474.

[389] See BRUINS, G. W. J., EINAUDI, L., SELIGMAN, E. R. A. and STAMP, J. C. **Report on Double Taxation Submitted to the Financial Committee by Professors Bruins, Einaudi, Seligman and Sir Josiah Stamp**. League

The ICC.

What followed the economists' report was five years of work in which the experts belonging to the Financial Committee presented three other reports. The first, published in 1925, became the basis of the following reports elaborated in 1927 and 1928 and was marked by a tension between practical issues and the search for deemed technical solutions.[390] The 1925 discussions resulted in resolutions trying to conciliate a general income tax based on residence and the tax claim of the source countries. The result was that in 1927 a new report was presented in which there was the first draft of a model convention against double taxation.[391] This model convention has undergone some structural changes and has become one of the three model conventions presented in the 1928 report. Although the participation of new actors in the debates promoted at the 1928 meetings resulted in new proposals, there was a tendency not to discuss issues on which countries had already reached some consensus in the previous meetings.[392]

Amongst the participants was the International Chamber of Commerce (ICC), associated with the idea of promoting world peace through commerce and a pragmatic agenda aiming at removing barriers to international trade.[393] This agenda aimed at fighting double taxation by attributing foreign credits in response to tax impositions abroad, a measure unfeasible since it demanded an improbable homogenisation of the international behaviour. In 1921, ICC's Committee on Double Taxation had decided to abandon the search for objective answers, dedicating itself to the development of general principles. This logic was replicated in the ICC's congresses of 1923 and 1924 when several proposals emerged from the suggestions of

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of Nations: Geneva: 5 Apr. 1923.

[390] See "Personality, politics, and principles: the drafting of the 1925 resolutions on double taxation" in JOGARAJAN, S. **Double Taxation and the League of Nations**. Cambridge: Cambridge University Press, 2018, pp. 22-84.

[391] See "Turning resolutions into treaties: the drafting of the first model convention on double taxation" in JOGARAJAN, S. **Double Taxation and the League of Nations**. Cambridge: Cambridge University Press, 2018, pp. 98-166.

[392] See "One beget three: the drafting of the 1928 model tax treaties on double income taxation" in JOGARAJAN, S. **Double Taxation and the League of Nations**. Cambridge: Cambridge University Press, 2018, pp. 182-242.

[393] See "From 'Merchants of Peace' to the 'World Business Organisation'" in KELLY, D. The International Chamber of Commerce. **New Political Economy,** v. 10, n. 2, pp. 259-271, 2005, pp. 260-263.

the member countries.[394] Since these congresses occurred in parallel to the work developed by the League of Nations, ICC opted for referring its resolutions to the Financial Committee of the League. In response, the Committee has allowed ICC to send a delegation to attend the meetings.[395]

Notwithstanding, despite the rapprochement between the two organisations, the ICC and the League of Nations still had conflicting interests. While the ICC seemed only preoccupied with international double taxation, the Financial Committee also expressed concern in combating tax evasion.[396] Nonetheless, after considerable debate about how the ICC should participate in the work, the conclusion was that it could only provide some comments to the League's final resolutions. Therefore, the participation of the ICC did not have a foremost impact on the operational issues of the work carried out by the League of Nations.[397] The countries' representatives, as well as the countries themselves, were the actors that most influenced this first phase of the debates on the construction of the international discourse on international taxation. The ICC had limited to two the number of delegates it could send to the Financial Committee and these delegates were not on an equal footing with the countries' delegates.[398]

The countries.

The diversity of actors attending the meetings leads to the idea that the League of Nations has conducted the work based on broad participation and that the reports express the opinion of the international community at the time. Notwithstanding, and although the

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[394] For a detailed description of the dynamics of the debates, see "The Beginning of the Tax Treaty Process: The International Chamber of Commerce" in GRAETZ, M. J. and O'HEAR, M. M. The Original Intent of U.S. International Taxation. **Duke Law Journal,** v. 46, n. 5, pp. 1021-1110, Mar 1997, pp. 1066-1074.

[395] See "The ICC and Double Taxation" in JOGARAJAN, S. **Double Taxation and the League of Nations**. Cambridge: Cambridge University Press, 2018, pp. 87-90.

[396] The ICC opposed the international cooperation agreements on the grounds that, by eliminating double taxation, taxpayers would not be tempted to evade taxes. See CARROLL, M. B. Double taxation - a trade barrier. **Index, Svenska Handelsbanken,** v. VIII, n. 92, pp. 162-169, Aug 1933, p. 164.

[397] Graetz and O'Hear even claim that ICC's work was more important than the report made in 1923 by the economists within the League. Nonetheless, they acknowledge that, after 1925, the activity of ICC has limited itself to sending representatives to the Committee of Technical Experts and endorsing the League's work rather than proposing innovations and exerting influence. See "The Torch Passes to the League of Nations" in GRAETZ, M. J. and O'HEAR, M. M. The Original Intent of U.S. International Taxation. **Duke Law Journal,** v. 46, n. 5, pp. 1021-1110, Mar 1997, pp. 1074-1089.

[398] See "The ICC and the League of Nations" in JOGARAJAN, S. **Double Taxation and the League of Nations**. Cambridge: Cambridge University Press, 2018, pp. 90-97.

working language was French, the debate remained mostly restricted to the confrontation between the United States and the United Kingdom.[399] The participation of the United States, however, was more limited than imagined, given the internal situation of the country. The Americans were more concerned about their country's domestic affairs, neglecting part of the initial work and participating when the stage of the discussion no longer allowed the reopening of debates.[400] The United Kingdom, on the other hand, was the most central character, responsible for dictating the agenda of the tax debate. Although the Americans were experiencing strong growth, the British were the major actors who had to give their acquiescence to make the project have a global economic sense.

The Anglo-American debate was, therefore, the main contributor to the formulation of the proposals resulting from the 1928 meetings. The report produced by the 1928 Experts is considered the milestone of the evolution of the double tax treaties, which came to dominate the landscape of the international tax field.[401] Albeit there was some concern with the final report's bias in favour of capital-exporting countries, given the prevalence of residence taxation, the model was accepted even by the capital-importing countries. Perhaps because the United States, which just recently ceased to be a capital-importing country, did not participate in the negotiations from the outset.[402] The final result was that, despite some divergences, the experts of 1928 endorsed the model conventions. Thus, although the final report of 1928 has generated a big debate among the various participants in the last meeting, the proposals arising from the pragmatic positions of the participants of the 1925 and 1927 meetings ended up prevailing.

One of the outcomes of the meetings was the recommendation of the creation of a Fiscal Committee responsible for the continued development of principles to justify

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[399] For an analysis of this context pointing out its possible causes and implications, see JOGARAJAN, S. The 'Great Powers' and the Development of the 1928 Model Tax Treaties. In: Harris, P. and De Cogan, D. (Ed.). **Studies in the History of Tax Law**. Oxford and Portland: Hart, Volume 8, 2017, pp. 341-362.

[400] According to Jogarajan, differently from Britain, the United States was not as influential in the development of the 1928 Models as could be thought. See "Participation on double taxation" in JOGARAJAN, S. **Double Taxation and the League of Nations**. Cambridge: Cambridge University Press, 2018, pp. 170-177.

[401] The influence of the categories of income elaborated in the works of the League of Nations, mainly the 1928 report, on later treaties and models is found in JONES, J. F. A. Categorising Income for the OECD Model. In: Hinnekens, L. and Hinnekens, P. (Ed.). **A Vision of Taxes Within and Outside European Borders**. Alphen aan den Rijn: Kluwer Law International, 2009, pp. 93-109, pp. 97-100.

[402] Knapp claims that the situation of the United States as a capital importer was due to the underdevelopment of the American banking system in the nineteenth century. See KNAPP, J. Capital Exports and Growth. **The Economic Journal,** v. 67, n. 267, pp. 432-444, 1957.

taxation in a given jurisdiction. This committee represented the consolidation of the institutional dimension of the international community of tax specialists, consecrating the technical view on tax discourse.[403] Global efforts to construct a discourse on international taxation, however, have been interrupted by the melancholic end of the League of Nations. The inability to deal with the issues leading up to the Second World War was responsible for the widespread abandonment of that forum.[404] Notwithstanding, the legacy left by the work carried out within the framework of the League of Nations has remained in the tax field's culture. The work developed by the experts, especially the idea of international cooperation, has impacted the activities subsequently developed by other international organisations.

Conclusions.

This item has shown that traditional rhetoric defending long-distance free trade has influenced the beginning of the internationalisation process of the tax field. Hence, this process has initiated in a conflicting context, opposing expansionist interests to the exercise of local power. This opposition transformed the tax discourse constructed from the dichotomy between the state and its citizens, attributing a new complexity resulting from the plurality of actors at the international level. The conflict between a tax perspective oriented towards the formal connection of the actors and another emphasising the elements responsible for the wealth generation resulted in the source versus residence duality. Such duality shed light on the liberal paradigm's difficulty to explain the wealth generation in a geographically and conceptually fragmented economic environment. The result was the recognising of competing but equally justifiable tax claims, producing a new and more complex idea of double taxation.

Although the fight against international double taxation started at the end of the nineteenth century through uni and bilateral efforts, the League of Nations provided the

[403] According to Picciotto, the committee represented the continuity of the work of technical experts. This technical view, however, has failed to overcome the challenging political climate of the interwar period, resulting in a modest number of treaties concluded. See "The Fiscal Committee and Inter--War Treaties" in PICCIOTTO, S. **International Business Taxation: a study in the internationalization of business regulation**. Cambridge: Cambridge University Press, 2013a, pp. 24-27.

[404] However, although with a smaller number of participants, the work of the Fiscal Committee continued even during the war. See "The Mexico and London Drafts and the UN Fiscal Commission" in PICCIOTTO, S. **International Business Taxation: a study in the internationalization of business regulation**. Cambridge: Cambridge University Press, 2013a, pp. 49-52.

institutional environment necessary for structuring a multilateral debate. Thus, this debate occurred in the context after the first world war and resulted in an unprecedented supranational institutionalisation of the tax debate. In parallel to these events, the ICC was already sponsoring initiatives to offer solutions to the supposed problem of taxation as an international trade barrier. These efforts brought the ICC closer to the League of Nations' work, culminating in its participation at the meetings. Regardless of this movement of approximation, the countries and their representatives were the protagonists of the debate, establishing positions that gave rise to a discursive tradition. These actors were responsible for consolidating the initial intellectual categories that became part of the international tax vocabulary, influencing all the debates that followed.

The choices made by participants in the first debates drew an initial path followed by those who succeeded them, thus leaving their genetic record in the international tax field. When introjecting old mercantilist and liberal discourses in the new institutional context offered by the League of Nations, these actors fused them with the idea of technicality in the making. It was a harbinger of consolidating the fight against international double taxation based on the instruments generated by the reports produced. These reports provided intellectual categories that came to dominate the vocabulary of the nascent supranational tax bureaucracy, which incorporated them into their specific rites. However, the relative ease with which ideological elements took on a technical character correlates with the homogeneity of the actors who led the debate in this first moment. The new geopolitical context formed after the Second World War presented new power relations and evidenced a change in the field's discourse, as the following item will demonstrate.

1.3.2. New approaches to cooperation.

The previous item has shown that the initial reactions to the internationalisation of taxation took place in an environment marked by the end of a long period of peace and economic interaction. The influence of international law's discourse in defence of long-distance free trade has made the duality of source versus residence become the central theme of the international tax field. The inadequacy of the liberal theory on wealth generation to deal with the in-

ternationalisation of taxation has led to the rise of double taxation. The absence of a clear distinction between public and private interests at the international level has placed the issue of combating double taxation on the League of Nations' agenda. Although assisted by representatives from the International Chamber of Commerce, the main actors in this process were the leading economic powers. Such works have generated an attachment to the technical perspective on taxation, influencing the international fiscal bureaucratic culture that has consolidated since then.

Notwithstanding, the continued development of a transnational debate on taxation was violently interrupted by the Second World War and the League of Nations' end. Consequently, the tax debate's resumption took place in a new post-war environment that presented a context quite different from the previous one. The new context has provoked the withdrawing of the international tax debate from the forum that would be the presumed inheritor of the League, favouring an unlikely alternative. The Organisation for Economic Cooperation and Development (OECD) preference in detriment of the United Nations (UN), as the chief tax forum, was reinforced by the later rise of tax havens. These events resulted in a discursive transformation, from exclusively fighting international double taxation and tax evasion to combating harmful tax competition. However, this new discourse was responsible for making the OECD face the same problems that removed the mainstream debate on international taxation from the UN's scope.

This item aims at presenting the second phase in the development of the discourse on international taxation, characterised by the fight against harmful tax competition. The premise is that this discourse results from the OECD's consolidation as the technical forum for developing the international tax debate. The hypothesis is that this image grounds on a dichotomous view on taxation that attributes a technical aspect to the OECD's work in contrast to the UN's deemed political environment. Thus, the item starts by presenting the broad context in which the UN resumed the international tax debate after the Second World War. Afterwards, it explains how the rise of tax havens offered to the OECD the opportunity to demonstrate its ability to develop a deemed principled and technical discourse on international taxation. Finally, it shows that the attribution of a technical aspect to the discourse favouring international cooperation could not annul the international tax phenomenon's political dimension.

Post-Second World War context.

As at the time of the League of Nations, the international tax debate's resume occurred in a context characterised by the international relations' reconstruction after the frustration of a new failure in the social project to combat violence. Nonetheless, while there was also a central concern in preventing a third world war, the political and economic environment was quite different from the beginning of the century.[405] The decolonisation process and the fear of the new countries' alignment with the Soviet bloc resulted in the erosion of the international community's primarily European character. Such heterogeneity has undermined any efforts of universality and initially strengthened the international participation of the new actors.[406] However, this situation resulted in a movement against these actors' access to strategic institutional bodies or crucial debates.[407] On the other hand, the conflicts between the international community members went beyond ideological or cultural issues.

The international economic interaction reached unprecedented levels and demanded an agenda that could account for its outcomes. Technological advances in transportation and communication, as well as the breakdown of barriers to the flow of goods and services, increased the activities of multinational companies.[408] The states became interested in the economic benefits that these global activities allowed, which did not exist in the wealth generation model based on the local geographic and social circumstances. Hence, the conflicting interests in that global economic activity have generated enormous competition for the wealth produced.[409]

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[405] Unlike the timid process of institutionalising interests at the international level at the time of the League of Nations, the post-Second World War environment witnessed the spread of several international organisations with political and economic purposes. See "Pervasiveness of international organisations" in AMERASINGHE, C. F. **Principles of the Institutional Law of International Organizations**. 2nd ed. Cambridge: Cambridge University Press, 2005, pp. 6-9.

[406] See "Attitudes of Third World states towards international law" in MALANCZUK, P. **Akehurst's Modern Introduction to International Law**. New York: Routledge, 1997, pp. 28-30.

[407] See "The counter-attack of the industrialized States" in BEDJAOUI, M. **Towards a New International Economic Order**. New York: Holmes & Meier, 1979, pp. 144-167.

[408] For a detailed description of that scenario, see "The Promise of Global Institutions" in STIGLITZ, J. E. **Globalization and its Discontents**. New York: W.W. Norton & Co., 2002, pp. 3-22.

[409] In this sense, fiscal competition is just a specific type of competition for global economic activity. For a broader analysis involving the interests of power groups, inside and outside the states, in capturing part of this global economic activity, see "Jurisdictional competition as a framework for tax competition" in MORRISS, A. P. and MOBERG, L. Cartelizing Taxes: understanding the OECD's campaign against "harmful tax competition".

This competition demanded a forum capable of legitimising these interests at the international level while the discourse generated could legitimise the forum itself, resulting in international organisations' rise as the main international actors.[410] International organisations mirrored the national bureaucracies' ways, requiring more than international customs for functioning.

International law, dominated by the positivist paradigm, should emerge from sources considered valid, originated from the main international actors. This fact has made international law become international organisations' law, consolidating its view as a sort of international institutional law.[411] However, its close connection with international organisations does not restrict international law to international bureaucracy issues. An international organisation's main crucial element is its capacity to establish the global agenda by institutionalising specific interests within its bureaucratic social practice.[412] The result was that the competition for the wealth generated by the global economic activity has found in the international organisations the institutional instrument capable of formalising, at the transnational level, the various interests of the states.[413] In this politically heterogeneous and economically competitive environment, the UN had inherited the international tax debate.

The UN institutional context.

The League of Nations' Fiscal Committee's virtual successor was the Financial and Fiscal Commission of the Economic and Social Council (ECOSOC). Nevertheless, the UN's more heterogeneous environment resulted in excessive divergences that made the de-

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Columbia Journal of Tax Law, v. 4, n. 1, pp. 1-64, 2012, pp. 5-15.

[410] This double relationship between the interests of the states and the international organisations is one of the elements that form what International Relations' authors call "global governance". See BARNETT, M. N. and SIKKINK, K. From International Relations to Global Society. In: Reus-Smit, C. and Snidal, D. (Ed.). **The Oxford Handbook of International Relations**. Oxford: Oxford University Press, 2009, pp. 62-83.

[411] See ALVAREZ, J. E. **International Organizations as Law-Makers**. Oxford: Oxford University Press, 2005.

[412] According to Ring, the ability to establish and drive the agenda is a crucial element in the exercise of power within international organisations. See "Agenda Setting" in RING, D. M. Who is Making International Tax Policy: international organizations as power players in a high stakes world. **Fordham International Law Journal,** v. 33, pp. 649-722, 2010b, pp. 669-674.

[413] This scenario does not imply that, for a particular state, there would be necessary just one single interest. International organisations are complex beings in which a state sector may have a higher affinity with their counterpart in a foreign state than with a different national sector. On this issue, see "Government networks and traditional international organizations: interconnected worlds" in SLAUGHTER, A.-M. **A New World Order**. Princeton: Princeton University Press, 2009, pp. 152-162.

bate unfeasible, resulting in its discontinuity in 1954.[414] Thereby, the UN tax debate became restricted to the Ad Hoc Group of Experts on Tax Treaties between Developed and Developing Countries, created in 1968 to present an alternative to the OECD Model Convention. Since its early days, this group has emulated the inclusive perspective of the ECOSOC by considering the asymmetries in the relationship between industrialised and developing countries.[415] The tax debate at the UN expanded again from 1980 onwards, returning to encompass the theme of international cooperation. The group was assigned broader responsibility concerning tax issues, changing the name to Ad Hoc Group of Experts on International Cooperation in Tax Matters.[416]

The group was later renamed Committee of Experts on International Cooperation in Tax Matters (Committee) and comprised 25 members serving in a personal capacity.[417] The Committee provides a framework for a broad-based dialogue between experts from the fields of tax policy and tax administration. It also expresses an institutionalised concern that such cooperation reflects the members' geographical diversity and their tax systems' pluralities. Given the international scenario's configuration in the post-colonial context, this view on cooperation resulted in the prevalence of the developing countries' perspective.[418] Notwithstanding, this perspective was not influential in constructing the international tax discourse due to the tax debate's weakening at the UN level. The Committee was designated to be serviced by a "small technical staff" that, "within existing resources," develops activities related to collecting and

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[414] Picciotto argues that the divergences between developed and developing countries, between Anglo-Saxon and continental European countries, in addition to the cold war tensions, politicised the debate excessively. See "The Mexico and London Drafts and the UN Fiscal Commission" in PICCIOTTO, S. **International Business Taxation: a study in the internationalization of business regulation**. Cambridge: Cambridge University Press, 2013a, pp. 49-52.

[415] For an overview of the group's work and an analysis of the topics discussed, see SURREY, S. S. United Nations Group of Experts and the Guidelines for Tax Treaties between Developed and Developing Countries. **Harvard International Law Journal**, n. 1, pp. 1-66, 1978 1480. On how the inclusive perspective is reflected in the UN Model Convention, see KOSTERS, B. The United Nations Model Tax Convention and its Recent Developments. **Asia-Pacific Tax Bulletin,** v. 10, n. 1/2, pp. 4-12, 2004.

[416] Spencer says that, until 1980, the UN has limited itself to the model and treaty negotiations between developed and developing countries, becoming a global forum for tax issues from then on. See "The United Nations and international tax" in SPENCER, D. E. The United Nations: a forum for global tax issues? **New Zealand journal of taxation law and policy,** v. 12, n. 3, pp. 224-258, Sep 2006, pp. 232-234.

[417] The Resolution E/2004/L.60 has renamed the group and established its competence. Available in https://undocs.org/E/2004/L.60. Accessed in 22 Jan 2020.

[418] Bedjaoui points out that, for the first time, the international plan witnessed the formation of a majority that did not represent the material superiority of the great traditional powers. For a narrative about how this situation resulted in an unprecedented tension between the construction of legal discourse and the exercise of power within international organisations, see "Number versus force" in BEDJAOUI, M. **Towards a New International Economic Order**. New York: Holmes & Meier, 1979, pp. 140-144.

disseminating information on tax policies and practices.[419]

Thus, the prevalence of an idea of international cooperation based on developing countries' perspective did not allow a material institutionalisation of the tax debate within the UN. This situation was responsible for the emergence of a vision about the organisation as a locus unable to manage the debate's technical complexities.[420] Consequently, the UN became associated with discussions involving aspects traditionally considered political by the international tax field. The consolidation of this image resulted in the rise of an idea that linked the developing countries' interests to the tax debate's political use.[421] This view implied an institutional vacuum for developing an international tax phenomenon approach from a perspective considered technical. Such a situation allowed the OECD to occupy this space, building a tax discourse with technical and universal aspirations throughout a long process of recognising and consolidating its position of excellence in the tax field.

Forum change.

In 1948, The Organisation for European Economic Cooperation (OEEC) established itself to run the Marshall Plan for the reconstruction of Europe. The OEEC has inaugurated a new era of economic cooperation, playing an essential role in integrating western European economies.[422] Tensions between member countries and issues related to the geopolitical situation resulted both in the United States and Canada's adhesion as the expansion of the project of international economic cooperation.[423] As a result, on 14 December 1960, the final draft con-

[419] Zagaris emphasises how "tiny" was the group on international tax cooperation reorganised by the Resolution E/2004/L.60 in November 2004. See ZAGARIS, B. The United Nations' Role in International Tax Cooperation. **Tax Notes International,** v. 38, n. 4, pp. 337-340, 25 Apr 2005.

[420] Herzfeld said that the most critical international tax battle in 2015 was the issue involving a possible upgrade of the Committee, making it an intergovernmental commission. See HERZFELD, M. Who Will Control the Future of International Tax Policy? **Tax Notes International,** v. 78, n. 5, pp. 419-421, 4 May 2015.

[421] In this sense, the tax field began to emulate some industrialised countries' rhetoric against the new majority that formed at the international level, considered "irresponsible". Developing countries have come to be accused of over-politicising the problems put on the agenda of international organisations. See "Criticism of the 'automatic majority'" in BEDJAOUI, M. **Towards a New International Economic Order**. New York: Holmes & Meier, 1979, pp. 144-147.

[422] This role was played, above all, from an agenda of trade liberalisation associated with the development of a payment system capable of facilitating transactions between member countries. On how the Marshall Plan was only part of a broader recovery program promoted by the OEEC, see BARBEZAT, D. P. The Marshall Plan and the Origin of the OEEC. In: Griffiths, R. T. (Ed.). **Explorations in OEEC History**. Paris: OECD Publishing, Volume 33-44, 1997. Chapter II.

[423] Griffiths explains that albeit the exhaustion of OEEC's activities seems to derive from its success in implement-

vention was signed, creating the Organisation for Economic Co-operation and Development (OECD). The Centre for Tax Policy and Administration (CTPA) is the current OECD's directorate responsible for the international tax agenda. The CTPA corresponds to the supranational arm that supports the Committee on Fiscal Affairs (CFA), which is currently composed of representatives from member and non-member countries.[424]

The tax debate's weakening in the UN has found an alternative in the OECD and its economic cooperation agenda between industrialised countries. It is reasonable to intuit that the OECD would favour one discourse biased to capital-exporting countries' interests in the detriment of developing countries.[425] Nevertheless, such a bias alone does not explain how the OCDE has successfully appropriated the international tax debate.[426] It is unclear why an organisation created to promote economic development from the Marshall Plan could convert itself into a real international tax organisation. This transformation stems from an effort to expand OECD's activities by its bureaucracy, starting with the traditional concern with double taxation issues and reaching the promotion of international tax cooperation. This change of forum took place when the world witnessed several transformations that followed after the Second World War, from which three critical events are noteworthy.[427]

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ing its agenda, historical records reveal that the transformation process that resulted in the OECD involved internal crises and external pressures. Internally, Charles de Gaulle's rise to power removed France from the organisation's supranational agenda. In the international context, the cold war meant that the transformation of the OEEC combined with the United States and Canada's accession represented an alternative solution to creating an economic council within the North Atlantic Treaty Organisation. See GRIFFITHS, R. T. "An act of Creative Leadership": the end of the OEEC and the birth of the OECD. In: Griffiths, R. T. (Ed.). **Explorations in OEEC History**. Paris: OECD Publishing, 1997. Chapter XVIII, pp. 235-256.

[424] See "Centre for Tax Policy and Administration" in OECD. **Secretary-General's Report to Ministers**. Paris: OECD Publisher, 2019f, pp. 108-109. The Resolution of the Council C(2018)72, Annex IV, gives the current mandate and designates the functions of the CFA members. The Resolution is available in https://oecdgroups.oecd.org/Bodies/ShowBodyView.aspx?BodyID=963&Lang=en#. Accessed on 20 Feb 2020.

[425] Salzman associates the OECD with industrialised countries' interests and its ability to serve as an environment in which delegates from these countries can conduct closed-door meetings, constituting an institutional alternative to the United Nations system, considered highly politicised and dominated by developing countries. See "Rich Man's Club" in SALZMAN, J. Labor Rights, Globalization and Institutions: the role and influence of the Organization for Economic Cooperation and Development. **Michigan Journal of International Law,** v. 21, pp. 769-848, 2000, pp. 776-777.

[426] The assumption that this appropriation is limited to implementing the liberal ideology or defending industrialised countries' interests, both domestically as internationally, corresponds to what Morris and Moberg call the public interest and cartel explanations, respectively. See "The Public Interest Explanation" and "The Cartel Explanation" in MORRISS, A. P. and MOBERG, L. Cartelizing Taxes: understanding the OECD's campaign against "harmful tax competition". **Columbia Journal of Tax Law,** v. 4, n. 1, pp. 1-64, 2012, pp. 56-57.

[427] For a detailed explanation on these three events, see "The Growth of Tax Competition" in MORRISS, A. P. and MOBERG, L. Cartelizing Taxes: understanding the OECD's campaign against "harmful tax competition".

The first concerns the economic recovery of Europe after the great depression and the war, accompanied by the technological development that has reduced the costs of international operations. Trade barriers among developed economies fell due to the increasing European economic integration and the General Agreement on Tariffs and Trade (GATT). The second was the intense process of globalisation experienced by the banking industry from the 1970s onwards related to the bank managers' growing new behaviour. On the one hand, banks acquired an excessive appetite for risk while there was a progressive relaxation of controls on the international flow of capital through free exchange rates.[428] This relaxation of capital control is associated with the Marshall Plan's European economies' commitment to building a global financial system. The third is related to the bigger facility to obtain international financing vis-à-vis the same obtaining of capital in the domestic jurisdiction.[429]

OECD's technical consecration.

The above-mentioned events have created opportunities for evasion or avoidance of taxes on capital, and the increasing financial liberalisation has provoked the proliferation of tax havens. This scenario explains offshore finance growth, which takes advantage of legal fictions previously developed for an entirely distinct international trade environment.[430] In addition to the appearance of jurisdictions with low or no taxation, there was also a rise of the

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Columbia Journal of Tax Law, v. 4, n. 1, pp. 1-64, 2012, pp. 23-32.

[428] For a testimony on the impacts of a new generation of American bankers breaking with the conservatism that marked the first two decades after the Second World War, see "The Period 1942-1972" and "The Period 1973 - Present" in FEDERAL DEPOSIT INSURANCE CORPORATION. **The First Fifty Years: a history of the FDIC 1933-1983**. Washington: FDIC, 1984, pp. 6-10. About the impact of policy change concerning exchange rates in the configuration of the international monetary system in the 1970s, see "Floating Exchange Rates in the I970s" in EICHENGREEN, B. J. **Globalizing Capital: a history of the international monetary system**. 3rd ed. Princeton: Princeton University Press, 1996, pp. 139-145.

[429] During the late 1960s and early 1970s, for example, the cost of borrowing in the Eurodollar market, that it, borrowing in dollars but outside the United States, was significantly lower than the cost for borrowing in dollars within the United States. Continuing on the American example, since the interest rates in the United States rose during the 1960s and 1970s, the American companies made extensive use of Eurodollar financing through the Netherlands Antilles. So, it was possible to take advantage of a quirk in the US-Netherlands Antilles tax treaty that eliminated the US withholding tax on payments made to Antillean entities. See MORRISS, A. P. and MOBERG, L. Cartelizing Taxes: understanding the OECD's campaign against "harmful tax competition". **Columbia Journal of Tax Law,** v. 4, n. 1, pp. 1-64, 2012, pp. 124-126.

[430] Picciotto explains that the simplified model of a company residing in one country and operating a business in another does not correspond to transnational corporations' commercial reality. The author suggests that this mismatch has resulted in the weakening of the effectiveness of international income taxation. See PICCIOTTO, S. The End of Offshore? Regaining public control of finance and taxation in the era of globalization. **Conference: Governing the Public Domain Beyond the Era of the Washington Consensus? Redrawing the Line between**

so-called preferential tax regimes as a form of targeted tax competition. This mechanism allowed certain new jurisdictions, for which a general reduction in the tax rate would represent a loss of revenue, to participate in the dispute for the international flow of wealth.[431] Globalisation and capital mobility have caused investments to flow to wherever taxation was the lowest, inducing investment decisions. This fact has resulted in a drop in corporate income tax revenue as a percentage of GDP among OECD countries in the early 1990s.[432]

The rise of the tax havens and the preferential tax regimes have produced a very sophisticated way of obtaining tax advantages at the international level. Unlike how the Financial Committee of the League of Nations has addressed tax evasion, international operations' complexity required an international bureaucracy capable of understanding modern international tax planning's intricacies.[433] Although the debate on international tax planning has not started in the OECD,[434] this organisation has taken ownership of the constructions initially developed by the member-countries. Such appropriation derives from the fact that this topic is more present in developed countries' reality and because the OECD may offer an international approach. This movement consolidated the recognition of the OECD's technical competence to deal with international taxation. Such recognition has resulted in the tradition of requesting the OECD to develop studies and reports on specific international tax issues.[435]

The report entitled *Harmful Tax Competition: an emerging global issue* symbolises a new attitude towards international taxation. Its publication was a milestone in the

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the State and the Market. Toronto, Canada. 4th-5th November 1999.

[431] On the structural differences resulting from the two alternatives of tax competition, see "Two Forms of Tax Competition and the Role of the EU" in KEMMERLING, A. and SEILS, E. The Regulation of Redistribution: managing conflict in corporate tax competition. **West European Politics,** v. 32, n. 4, pp. 756-773, 1 July 2009, pp. 757-759.

[432] See MORRISS, A. P. and MOBERG, L. Cartelizing Taxes: understanding the OECD's campaign against "harmful tax competition". **Columbia Journal of Tax Law,** v. 4, n. 1, pp. 1-64, 2012, p. 37.

[433] The complexities concerning international relations in tax matters involving countries and international organisations are responsible for aggravating this scenario. This situation resulted in several intellectual proposals to understand this reality. See "Sophisticated Scrutiny" in RING, D. M. Who is Making International Tax Policy: international organizations as power players in a high stakes world. **Fordham International Law Journal,** v. 33, pp. 649-722, 2010b, pp. 679-682.

[434] Since the 1950s, the United States has been dealing with international tax planning concerning The Netherlands Antilles. See BOISE, C. M. and MORRISS, A. P. Change, Dependency, and Regime Plasticity in Offshore Financial Intermediation: the saga of the Netherlands Antilles. **Texas International Law Journal,** v. 45, n. 2, pp. 377-456, Winter 2009.

[435] See ZAGARIS, B. The OECD Report Identifying Harmful Tax Practices and Tax Havens Solidifies the Momentum of the Harmful Tax Competition Initiative. **Tax Management International Journal,** v. 29, n. 9, pp.

tax field's agenda and has contributed to the OECD's recognition as a kind of "world tax organisation", mainly for encouraging multilateral coordination efforts.[436] This recognition presents a double function since the OECD could legitimise the members' interests while the report could legitimise the OECD as a technical forum. The OECD could distance itself from its members' interests by adopting an allegedly technical discourse, taking a step towards its autonomy.[437] In this sense, the OECD transformed the way of constructing the international tax discourse, traditionally limited to the conflict between the source and the residence jurisdictions. The result was the untying of the tax discourse from its domestic origins and the rise of a genuinely international discourse of which the OECD would be the technical guardian.[438]

OECD's discourse on cooperation.

The OECD's efforts to build a genuinely international tax discourse resulted in a transformation that marked the second phase of the international tax field development. In this new phase, the construction of the discourse on international taxation took place from a universal idea about the phenomenon of taxation.[439] At this time, it was no longer a question of attributing taxing rights to the jurisdiction of source or of residence but of preventing behaviours with the potential to lead to no taxation at all. The idea of international cooperation in tax matters lost the broader meaning it used to have at the UN or the League of Nations, focusing

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521-530, 2000.

[436] See OECD. **Harmful Tax Competition: an emerging global issue**. OECD Publishing: Paris. 1998d. Cockfield understands that the way how OECD has conducted this project made the fight against harmful tax practices an essential step in this recognition. However, the author maintains that the OECD's successful work on e-commerce represents its first endeavour as a (lower case) world tax organisation. See "The OECD as informal 'world tax organisation'" in COCKFIELD, A. J. The Rise of the OECD as Informal World Tax Organization through National Responses to E-Commerce Tax Challenges. **Yale Journal of Law and Technology,** v. 8, pp. 136-187, Spring 2006, pp. 180-183.

[437] Morriss and Moberg not only maintain that the campaign against harmful tax competition corresponds to a shift in OECD's institutional action (traditionally guided by a liberal agenda to combat international double taxation), but that this change derives both from the political interests of member countries as from the institutional interests of the bureaucracy that forms the OECD. See "Cartelizing and competition" in MORRISS, A. P. and MOBERG, L. Cartelizing Taxes: understanding the OECD's campaign against "harmful tax competition". **Columbia Journal of Tax Law,** v. 4, n. 1, pp. 1-64, 2012, pp. 56-64.

[438] Ring explains that, although initially understood as a domestic issue, tax competition soon demonstrated the importance of an organisation of sufficient size, capable of impacting members and non-members. In this scenario, Ring concludes that the OECD was the logical choice. See "Analysis of the Tax Competition Story" in RING, D. M. Who is Making International Tax Policy: international organizations as power players in a high stakes world. **Fordham International Law Journal,** v. 33, pp. 649-722, 2010b, pp. 716-718.

[439] Christians associates this effort of elaborating general principles to the creation of a true theory of the social contract in terms of international relations in tax matters. See CHRISTIANS, A. Sovereignty, Taxation and Social

on combating harmful tax competition.[440] This strategy has avoided the necessity of using a particular country's political choices to develop the argument and has favoured the OECD's image as an independent technical organisation. OECD's attitude resulted in the emergence of a whole new vocabulary condemning conducts considered harmful according to a deemed technical and universal tax approach.[441]

The attitude expressed by the new discourse on international taxation resulted in an aesthetic that presupposed that there were competitive behaviours between countries that would be acceptable in opposition to others considered harmful. In this way, specific countries and jurisdictions contrasted to each other in lists and reports that assessed their tax policy choices.[442] At the same time, the international tax vocabulary has incorporated a system of colours in order to indicate conducts. Countries or jurisdictions that were not moving towards so-called "international standards" would be placed on a grey or blacklist, potentially involving specific reactions from other countries.[443] The idea of absolute standards that not necessarily derive from the actors' choices rescues the old tradition of a central and universal order. In this sense, the behaviours to be combated corresponded to actions in which the actors supposedly distort the naturally expected results according to the principles governing that order.[444]

Contract. **Minnesota Journal of International Law,** v. 18, n. 1, pp. 99-154, Winter 2009.

[440] On how the idea of international tax cooperation has become synonymous with combating harmful tax competition, see "The evolution of the international tax cooperation" and "The international fight against tax competition", both in MORRISS, A. P. and MOBERG, L. Cartelizing Taxes: understanding the OECD's campaign against "harmful tax competition". **Columbia Journal of Tax Law,** v. 4, n. 1, pp. 1-64, 2012, pp. 15-56.

[441] Brownsword gives a good explanation on the importance of this attitude: "(...) regulatory environments might become less concerned with subjecting human conduct to the governance rules and more reliant on designing in or designing out approved (or disapproved) patterns of behaviour." See BROWNSWORD, R. Field, Frame and Focus: methodological issues in the new legal world. In: Gestel, R. v., Micklitz, H.-W. and Rubin, E. L. (Ed.). **Rethinking Legal Scholarship: a transatlantic dialogue**. New York: Cambridge University Press, 2017, pp. 112-172, p. 121.

[442] This practice is well exposed in OECD. **Towards Global Tax Co-operation**. Paris: OECD Publishing, 2000c.

[443] Although countries do not necessarily use this nomenclature officially, their national blacklists imply a restriction or ban on operations with individuals or legal entities located in the listed jurisdictions. In turn, greylists imply the same restrictions for specific transactions or circumstances, while whitelists offer favourable national treatment. For a more in-depth analysis on this topic, see SHARMAN, J. C. and RAWLINGS, G. National tax Blacklists: a comparative analysis. **Journal of international taxation,** v. 17, n. 9, pp. 38-47, Sep 2006. On how France defined and instituted measures against jurisdictions considered non-cooperative, see GELIN, S. France's Revised 2009 Budget in Retaliation Against Non-Cooperative Jurisdictions. **Tax Planning International,** v. 11, n. 12, pp. 4-6, Dec 2009.

[444] De Kam argues that, while tax competition refers to efforts among countries to provide a tax environment that is attractive to individuals, globalisation induced several countries to use harmful tax practices addressed against the normative economic criteria of equity, efficiency, and simplicity, three out of the four cannons associated with Adam Smith. See DE KAM, C. A. Harmful Tax Practices. In: Albregtse, D. A., Bovenberg, A. L. and Stevens, L. G. M. (Ed.). **Er zal geheven worden!** Daventer: Kluwer BV, 2001, pp. 177-187.

Therefore, the new international tax discourse was not constructed from political positions adopted by member countries but from a deemed technical perspective on harmful tax practices' possible outcomes. The central concept was "harmfulness", understood from the premise that tax havens and preferential tax regimes could damage several values considered central to the field.[445] However, this attitude resulted in a strong reaction from the jurisdictions identified with the harmful tax practises. Such reaction has generated a debate on the limits of international tax cooperation, challenging not only the aesthetic of the rhetoric adopted but the very legitimacy of the forum that developed this discourse.[446] This debate resulted in a controversy involving a potential conflict between the fight against harmful tax practices and the exercise of fiscal sovereignty.[447] This controversy demonstrates that a technical character's attribution to the OECD's work does not nullify the international tax discourse's political dimension.

Political problems.

The same political idiosyncrasies that favoured the OECD's historical trajectory in the international tax field have posed some practical problems. The first consisted of establishing whether the work's scope should include only non-member countries or present a universal character. Thus, the OECD has faced the fact that, in devising a discourse allegedly unrelated to any particular tax system, there would be a risk that the results could go against the current behaviour of its members. Paradoxically, the institution recognised as capable of doing a technical reading of international taxation could end up condemning the attitudes of the actors responsible for that recognition. Conversely, limiting the work scope to the reality of

[445] The OECD has justified the new discourse claiming the importance of understanding how harmful tax practices affect the location of service activities, erode the tax bases, and cause several economic and social distortions. Based on this understanding, the OECD offered suggestions to combat such tax practices. See "Counteracting harmful tax competition" in OECD. **Harmful Tax Competition: an emerging global issue**. OECD Publishing: Paris. 1998d, pp. 37-62.

[446] For a chronicle of this debate, see "Hearts and Minds in the Global Arena" in SHARMAN, J. C. **Havens in a Storm: the struggle for global tax regulation**. Ithaca: Cornell University Press, 2006, pp. 70-100.

[447] The argument that the OECD is restricting the exercise of fiscal sovereignty is presented in JAMES, V. E. Twenty-First Century Pirates of the Caribbean: how the Organization for Economic Cooperation and Development robbed fourteen Caricom countries of their tax and economic policy sovereignty. **University of Miami Inter-American Law Review**, n. 1, pp. 1-50, 2002.

non-members would weaken the OECD's technical aspirations. Such limitation could undermine the organisation's technical image, transforming its report into a mere manifesto defending the member countries' international tax policies choices.[448]

The result was that the report concluded that some of the OECD members themselves were conducting practices considered objectionable. The report's conclusion resulted in Luxembourg and Switzerland abstaining in Council on the report's approval and recommendation adoption, with both countries stating their reasons.[449] Luxembourg disagreed about the belief that bank secrecy is necessarily a source of harmful tax competition. Luxembourg also expressed that the exchange of information circumscribed by international laws and respective national laws cannot be considered a criterion to identify a harmful preferential tax regime and a tax haven.[450] Switzerland has disagreed on the report's emphasis on geographically mobile activities and the differences between the state's tax rates as a criterion for identifying the harmful tax regimes. The country also condemned the disregard of existing tax regimes' diversity and the alleged report's selective and repressive approach.[451]

Although the OECD report has achieved recognition as a technical work, limiting the tax debate to member countries could diminish this character. The preservation of such recognition depends on the report's ability to treat international taxation as a global phenomenon and not a particular circumstance restricted to a group of countries. This issue has become even more critical due to the geopolitical changes since the League of Nations' work. The plurality of actors made it both challenging and essential to elaborate an international tax discourse sufficiently universal to deal with this new environment. On the other hand, the economic hegemony of OECD member countries facilitated, in principle, this attempt to universalise the discourse on international taxation. Notwithstanding, such hegemony relied on a contingent in-

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[448] According to Sharman, the image of the institution as apolitical, technocratic, and impartial is closely linked to OECD's ability to influence the transnational policy communities. See "The OECD rhetorically entrapped" in SHARMAN, J. C. **Havens in a Storm: the struggle for global tax regulation**. Ithaca: Cornell University Press, 2006, pp. 127-148.

[449] On the other hand, it is noteworthy that both countries could have prevented the report from being released since the publication decisions demand consensus. The mere abstention demonstrates the complexity of the dynamics involving the tax debates within international organisations.

[450] See "Statement by Luxembourg" in OECD. **Harmful Tax Competition: an emerging global issue**. OECD Publishing: Paris. 1998d, pp. 73-75.

[451] See "Statement by Switzerland" in OECD. **Harmful Tax Competition: an emerging global issue**. OECD Publishing: Paris. 1998d, pp. 76-78.

ternational economic scenario comprising a relatively homogeneous set of countries, allowing speculations about the possible consequences of the emergence of a new balance of forces.

Conclusions.

The previous sub-chapter has shown that the tax field's maturation over the nineteenth century resulted in denying taxation's political dimension. In its beginnings, the modern tax discourse represented an antinomy between a technicality resulting from the economy's consolidation as an autonomous discipline and a political dimension associated with moral and metaphysical origins. This duality affected the behaviour of the actors responsible for building the narrative on the role of the UN and OECD in the tax field. The OECD has only become an organisation associated with tax technicality because this view anchors itself in the UN's politicised image. The liberalisation process that culminated in the emergence of tax havens added a demand that allowed the OECD to consolidate such position. The fight against harmful tax practices has turned itself into the expression of a new type of international cooperation in tax matters that has enabled the OECD to operate as a *de facto* international tax organisation.

Notwithstanding, a more general view of these events shows that the OECD's technical character is not an inherent quality but a contingent factor. It is the context that informs the external demands, and these demands are responsible for establishing the elements employed in the construction of the tax discourse. The first phase of building the international discourse on taxation presented a homogeneity that did not permit antagonisms. Such antagonistic character arose only with the decolonisation process and the rise of the Soviet bloc, creating interests that supposedly departed from the tax foundations. Consequently, the elements allowing the construction of a dualist narrative between technique and politics within international organisations' scope appeared only from the post-Second World War international pluralism. In this sense, OECD's liberal origins have harmonised with this narrative associating the foundations of the liberal paradigm with a tax technicality.

The importance of the contextual analysis in understanding the OECD's supposedly technical character reveals the inevitability of taxation's political dimension. The construction of a tax discourse considered technical is only justified when it corresponds to an

answer to a social demand in this sense. At the international level, this demand arises from the arrangement of forces that constitute the main actors' power relations. From a legal perspective, by opting for a universalist discourse, the OECD created a potential tension between its position considered technical and the political power of the actors supporting such condition. This tension means that possible rearrangements in the balance of power can compel the OECD to alter its attitude towards international taxation. Hence, a new attitude emerged after the rise of new economic powers that did not actively participate in the initial phase of constructing the legal discourse on international taxation, as the following item will demonstrate.

1.3.3. The new great powers and the base erosion issue.

The last item has shown how the politically heterogeneous and economically competitive environment of the post-Second World War has changed the context of the tax debate. The United Nations (UN) promoted tax cooperation considering both geographical diversity and the plurality of tax systems. The industrialised countries reacted to this perspective, considered politicised, by abandoning the tax debate at the UN and funding it within the Organisation for Economic Co-operation and Development (OECD). The emergence of tax havens and preferential tax regimes, in turn, resulted in sophisticated tax strategies that demanded a denser tax discourse. Such density has allowed the OECD to consolidate its reputation as a technical tax organisation based on the construction of an international cooperation agenda focused on combating harmful tax practices. The reactions to this agenda have demonstrated the possible shortcomings of constructing a tax discourse deemed technical by its opposition to the political dimension of taxation.

The emergence of new great powers (NGPs) has further increased the fragility of the construction of a tax discourse based on a duality between technique and politics. Such fragility resulted in both a threat to the OECD's technical reputation and an opportunity to consolidate itself as a genuine world tax organisation. Thus, in a geopolitical scenario marked by new power relations, the OECD had the chance to build a universal discourse on international taxation. This endeavour characterises the third and current phase in the history of the international tax discourse, marked by the combat to the phenomenon of base erosion and profit shifting

(BEPS). Being materialised by the recent BEPS Project, this new international tax agenda is already producing theoretical and practical results responsible for changes in the discourse on international taxation. From a legal perspective, one of the results is the conclusion that the construction of an international tax discourse will only be universal if it considers the political dimension of taxation.

This item aims at presenting the current phase in the construction of the discourse on international taxation, characterised by the combat to the BEPS phenomenon. The premise is that this agenda is associated with the rise of the NGPs and consists of a departure from ideal categories, privileging the new actors' participation in the construction of the international tax discourse. The hypothesis is that this discursive change reflects the recognition of the role of politics in the construction of one tax discourse that aspires universality. Thus, the item begins by presenting the impact of the change in power relations caused by the rise of the NGPs on the OECD's institutional tax project. Then, it shows how this change resulted in a transformation of the discourse on international taxation, privileging the fight against the BEPS phenomenon. Finally, it presents the consequences of this shift to the international tax legal field, indicating the scenario that contextualises the debate on the digital revolution.

OGPs and NGPs.

The consolidation of the OECD's technical image built in opposition to the political character of the UN hid in itself the seeds of a problem. Although the OECD had a prolific publication of studies and reports, the mere existence of a high editorial capacity does not mean that the published content is necessarily technical.[452] Add to that the fact that member countries can sponsor specific research that interests them or forbid the publication of an internal document.[453] In general, such members corresponded to the same industrialised countries that

[452] Krause warns of the need to observe international organisations beyond their manifest role in providing technical information and services as well as in producing or applying legislation. For him, there are some latent roles of organisations, in which they act as arenas for debate, as an instrument of international pressure or as an actor that pursues an own bureaucratic agenda. See KRAUSE, L. B. and NYE, J. S. Reflections on the Economics and Politics of International Economic Organizations. **International Organization,** v. 29, n. 1, pp. 323-342, 1975. The question is whether the technical character of OECD's reports and studies is purely formal, or whether there is anything in them identified as materially technical. In this sense, the same questions raised in the introduction regarding academic production apply to OECD's publications. See "The context".

[453] Salzman explains that there is even an expression to designate the process by which all member countries au-

have abandoned the building of the international tax discourse within the UN institutional framework. Such a situation has led to accusations that the OECD acted more like an arena to defend their interests instead of a technical forum, bringing political rhetoric to the tax debate.[454] Thus, the change from fighting international double taxation to combating harmful tax practices resulted in the identification of the work of the OECD with the tax agenda of the old great powers (OGPs).

The reactions of tax havens, however, did not have the strength to modify the close relationship between the OECD agenda and the interests of the OGPs. The rise of NGPs, on the other hand, resulted in transformations not just concerning the redistribution of power among the main actors but also the very idea of a universal technical discourse on the phenomenon of international taxation.[455] On the social plane, NGPs mostly correspond to non-OECD countries, potentially weakening the institutional role of the organisation.[456] The increase of these new actors in the percentage of world wealth production, therefore, implies the decrease of the political and economic importance of the OECD's work. At the intellectual level, the differences between NGPs and OGPs have enormous potential to undermine the very ideological structures of the tax debate.[457] The rise of actors with very different historical experienc-

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thorise the publication of internal documents: "derestriction". On the relationship between OECD's production and interference by member countries, see "OECD Activities" in SALZMAN, J. Labor Rights, Globalization and Institutions: the role and influence of the Organization for Economic Cooperation and Development. **Michigan Journal of International Law,** v. 21, pp. 769-848, 2000, pp. 776-781.

[454] Townsend accuses the OECD of departing from the principles that govern international taxation towards the protection of the unilateral interests of member countries in order to create a genuine tax cartel. See TOWNSEND, A., Jr. The Global Schoolyard Bully: the Organisation for Economic Co-Operation and Development's coercive efforts to control tax competition. **Fordham International Law Journal**, n. 1, pp. 215-258, 2001.

[455] The idea of old or new powers is not absolute but contingent. Analysing a period of about five hundred years, Kennedy demonstrates how China, although initially a better candidate to consolidate itself as a major world power, was supplanted by its European competitors due to political, economic, and military circumstances, as well as the more efficient use of available resources. However, Kennedy has predicted, in 1989, a relative decline of the United States and a further rise of China. It is in this latter context that we oppose OGPs to NGPs. See KENNEDY, P. **The Rise and Fall of the Great Powers: economic change and military conflict from 1500 to 2000**. London: Unwin Hyman, 1989.

[456] For this work, a precise list of which countries make up each of the groups is less important than the idea that the groups imply. While the identification of OGPs with the Group of Seven (G7) is straightforward, we will use the expression NGPs sometimes referring to the BRICS countries, sometimes to the G20 countries that are not part of the OECD, and sometimes to refer to any emerging economies with the potential to impact the balance of power in the same terms as the BRICS countries. This new balance of power is already part of the academic tax debate, as one can see in BRAUNER, Y. and PISTONE, P. **BRICS and the Emergence of International Tax Coordination**. Amsterdam: IBFD, 2015.

[457] The vast majority of NGPs were not even recognised as a legal entity under international law during the first phase of the elaboration of the discourse on international taxation and, during the second phase, they were not economically relevant enough to be protagonists of the international tax debate. Cai offers a more detailed analysis of

es has challenged the liberal foundations that underpin the modern idea of taxation.

In this context, preserving the integrity of the discourse of international taxation would depend on the ability to reconcile the interests of these two groups of countries in a single language. In practical terms, this would mean adjusting a discourse conceived initially in the light of a Eurocentric paradigm in order to recognise the experiences of these new actors.[458] Thus, the discourse of international taxation could not rely on deemed universal tax principles identified from the tradition of the field, since this would mean subjecting NGPs to standards that they did not help to build historically.[459] Therefore, a new collective work, similar to that developed within the scope of the League of Nations, became necessary. This situation demanded a new forum that could legitimise the project of reconstruction of the discourse on international taxation. This forum, by its turn, must be responsible for developing a new tax universalism that does not impose itself on NGPs but that arises from the exercise of the sovereignty of OGPs and NGPs.[460]

Opportunity for the OECD.

By admitting that constructing universalism derives from international commitments, the most obvious alternative would be to bring the tax debate back to the UN. More specifically, the UN itself considered the possibility of creating an international organisa-

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the differences between OGPs and NGPs, emphasising that the formers have a high economic standard in addition to relatively common historical values and experiences. In contrast, NGPs have in common colonialism, democratic fragilities, and inequality. See "Differences between NGPs and OGPs" in CAI, C. New Great Powers and International Law in the 21st Century. **The European Journal of International Law,** v. 24, n. 3, pp. 755-795, 2013, pp. 759-760.

[458] In the case of NGPs, this is a particularly complex task. The interests of NGPs differ widely, just as there is no necessary correlation between their internal and international agendas. For a very critical analysis of the effect of these contradictions at the international level, see CASTAÑEDA, J. G. Not Ready for Prime Time: why including emerging powers at the helm would hurt global governance. **Foreign Affairs**, n. 5, pp. 109-123, 2010.

[459] Stephan argues that, as international relations become less asymmetric, there is a tendency to abandon the universalisms of international law, favouring more selective conduct in choosing what constitutes an international obligation. The heterogeneity of the actors makes this selectivity even more conflicting. See "Universality and selectivity in international law" in STEPHAN, P. B. Symmetry and Selectivity: what happens in international law when the world changes. **Chicago Journal of International Law**, n. 1, pp. 91-124, 2009, pp. 101-107.

[460] In this sense, the construction of the new universal tax discourse will depend on the forum's ability to capture this new heterogeneous political scenario. This ability implies recognising that international tax law is not limited to an objective description of principles or techniques, but that it corresponds to an activity of linguistic construction of the social meaning of its objects, which necessarily requires the participation of new international actors. On the tension between the political role and the objective view of international legal discourse, see WESSEL, J. International Law as Language: towards a "Neo" New Haven School. **International Journal for the Semiotics of**

tion entirely dedicated to tax matters.[461] However, while NGPs differ in many respects from OGPs, this does not mean that they necessarily align with the inclusive environment of the UN. From a geopolitical perspective, NGPs are as different from other developing countries as they are from OGPs.[462] From the NGPs' perspective, the best alternative would be an intermediate exit, and the Group of Twenty (G20) would be the ideal forum, given that its configuration symbolises the formation of the new economic elite that emerged at the end of the twentieth century. Notwithstanding, several political and institutional factors have prevented the G20 from acting as the central forum in the development of the new discourse on international taxation.[463]

NGPs' desire to take part in the elaboration of the discourse on international taxation occurred through the institutionalisation of this debate within the OECD. The strengthening of the idea that the OECD would be the best environment for this multicultural debate served a double interest.[464] For OGPs, maintaining the tax debate within the OECD would mean continuing to interfere in the content of the organisation's editorial production. Furthermore, the coming of NGPs to this forum would allow OGPs to explore the similarity between their institutionalised interests within the OECD with the interests of these new actors.[465] From the perspective of the supranational bureaucracy, the arrival of new actors, as well as the new

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Law - Revue Internationale de Sémiotique Juridique, v. 23, n. 2, pp. 123-144, June 2010.

[461] In 2001, the UN Secretary-General issued a report entitled "Recommendations of the High-level Panel on Financing for Development". See "The role of an international tax organization" pp. 27-28. Available in https://undocs.org/A/55/1000. Accessed on 4 Feb 2020.

[462] Cai points out that, although the attempt to maximise national interests is not a logic of action restricted to the great powers, the results of the actions of the smaller and geopolitically weaker states are of minor importance. Thus, even the interests of developing countries could only prevail at the international level through the action of OGPs and NGPs. See "Similarities between NGPs and OGPs" in CAI, C. New Great Powers and International Law in the 21st Century. **The European Journal of International Law,** v. 24, n. 3, pp. 755-795, 2013, pp. 760-763.

[463] Eccleston and Smith affirm that, despite the importance assumed by the G20 after the 2008 crisis and its constant support for the OECD's tax agenda since then, internal tensions related to divergent interests and the different profile of its actors have marked the debates of that organisation. See ECCLESTON, R. and SMITH, H. The G20, BEPS and the Future of International Tax Governance. In: Dietsch, P. and Rixen, T. (Ed.). **Global Tax Governance: what is wrong with it and how to fix it**. Colchester: ECPR Press, 2016, pp. 175-197. Therefore, the G20's internal environment is very similar to that of the UN, abandoned from the tax debate as it is considered excessively politicised.

[464] Christians explains that the importance acquired by the G20 was not enough to compensate for the lack of a formal institutional structure capable of making it the new forum for the international tax debate. The result was that the making of the discourse of international tax law remained within the framework of the OECD, dominated by the United States and Europe, but with more participation from developing countries. See CHRISTIANS, A. Taxation in a Time of Crisis: policy leadership from the OECD to the G20. **Northwestern Journal of Law and Social Policy,** v. 5, n. 1, pp. 19-40, Spring 2010.

[465] Baistrocchi notes a kind of convergence of NGPs towards what he calls "technology designed by the League of Nations", which was inherited by the OECD. See BAISTROCCHI, E. A. The International Tax Regime and the BRIC World: elements for a theory. **Oxford Journal of Legal Studies**, pp. 1-34, May 2013.

balance of power resulting from their emergence, suggest possible independence of the OECD's agenda.[466] These transformations made room for the development of a political role for the OECD that would not necessarily mean advocating the individual interests of its members.

This new role, however, should not neglect the reputation acquired by the OECD as an environment of technical production, under the penalty of losing the very justification for its choice. Thus, the development of the new discourse must maintain a connection with the phenomenological dimension of taxation.[467] On the other hand, this technical reputation should be preserved based on the new paradigm identified from the change in context resulting from the emergence of NGPs. In other words, the new universality of international taxation should not derive from syllogisms applied to abstract categories but from commitments assumed within the scope of international relations in tax matters.[468] Likewise, the perception that new power relations may trigger discursive changes imposes the need for a mechanism to preserve the new international tax discourse from future geopolitical arrangements.[469] The BEPS project has incorporated these three concerns symbolising the third and current phase in the development of the international tax discourse.

The BEPS Project.

The preservation of the BEPS Project's technical character was due to its centrality around the idea of BEPS as a phenomenon. In this way, the work starts from an international tax planning structure considered standard to identify each element that contributes to

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[466] Cockfield argues that by getting closer to non-member countries, and offering them a space to participate, the OECD can legitimise its claims as a world tax organisation. See "The road ahead: the need for more formal outreach" in COCKFIELD, A. J. The Rise of the OECD as Informal World Tax Organization through National Responses to E-Commerce Tax Challenges. **Yale Journal of Law and Technology,** v. 8, pp. 136-187, Spring 2006, pp. 183-186.

[467] The relationship between the phenomena and what we are calling technique will be explained in more detail in the item "2.1.1. Technological definition".

[468] In this sense, it would be necessary for the OECD to carry out the same process of institutionalisation of the new international economic order that Bedjaoui considered necessary at the UN level. See "The New Economic Order and new prospects for operational organisations" in BEDJAOUI, M. **Towards a New International Economic Order**. New York: Holmes & Meier, 1979, pp. 215-220.

[469] Mosquera Valderrama highlights the possible problems involving legitimacy arising from the extension of the results of the work of the OECD and the G20 to other countries and their citizens, especially developing countries. See MOSQUERA VALDERRAMA, I. J. Legitimacy and the Making of International Tax Law: the challenges of multilateralism. **World Tax Journal,** v. 7, n. 3, 6 Oct 2015.

the phenomenon of the base erosion.[470] These elements were not considered individually as harmful conduct, and each one of them became the object of analysis in a specific action of the project.[471] Nonetheless, the fact that several actions with different focuses form the BEPS Project does not imply the individualisation of the subjects under analysis. The OECD has stressed that the approach to the 15 proposed actions should be holistic, arguing that the division into themes had the purpose of facilitating the understanding of the characteristics and the implications of the phenomenon. The interconnection of the subjects, in turn, has led to the concern that the lack of carrying out a specific action could undermine the efforts in related actions.[472]

The BEPS Project has incorporated the new balance of power through an aesthetic that emphasised the same conditions of the participants. Thus, there was an effort to make clear that NGPs were not just following the OECD's work but assisting in the making of the international tax discourse.[473] This attitude has broken with a practice consolidated throughout the twentieth century in which the international tax discourse derived from the individual actions of the most dominant players. Although there were already multilateral instruments in the tax field, especially in the context of mutual assistance, this kind of multilateralism has tradition-

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[470] See "Annex C Examples of MNEs' tax planning structures" in OECD. **Addressing Base Erosion and Profit Shifting**. OECD Publishing: Paris. 2013b, pp. 73-81.

[471] It is worth mentioning that the digital economy was considered both a specific action and the context of combatting BEPS. See OECD. **Action Plan on Base Erosion and Profit Shifting**. OECD Publishing: Paris. 2013a, p. 14.

[472] "More fundamentally, a holistic approach is necessary to properly address the issue of BEPS. Government actions should be comprehensive and deal with all the different aspects of the issue. These include, for example, the balance between source and residence taxation, the tax treatment of intragroup financial transactions, the implementation of anti-abuse provisions, including CFC legislations, as well as transfer pricing rules. A comprehensive approach, globally supported, should draw on an in-depth analysis of the interaction of all these pressure points. It is clear that co-ordination will be key in the implementation of any solution, though countries may not all use the same instruments to address the issue of BEPS." OECD. **Addressing Base Erosion and Profit Shifting**. OECD Publishing: Paris. 2013b, p. 50. It is for this reason that Action 1, involving the digital economy, is considered impacted by all other actions, being Actions 3 (strengthen CFC rules), 7 (prevent the artificial avoidance of PE status), and 8-10 (assure that transfer pricing outcomes are in line with value creation), however, identified as particularly relevant. See OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2015 Final Report**. OECD Publishing: Paris. 2015a, pp. 86-87. The general idea is that the process of the digitalisation of the economy serves as a catalyst to base erosion and profit shifting. "BEPS risks are however exacerbated by the digital economy, and the measures developed in the course of the BEPS Project are expected to substantially address these risks. The key features of the digital economy have in fact been taken into account across the BEPS Project, in particular the changes to the permanent establishment definition, the update of the Transfer Pricing Guidelines and the guidance on CFC rules." See OECD. **Explanatory Statement**. OECD Publishing: Paris. 2015c, p. 8.

[473] Within the Task Force on the Digital Economy, the Brazilian and Indian delegates were elected bureau members, while the Chinese delegate has become a vice-chair. See On-Line Guide to OECD Intergovernmental Activity available in https://oecdgroups.oecd.org/Bodies/AdvancedSearch.aspx?Title=TFDE&Match=false. Accessed on 15 Aug 2019.

ally operated through small groups or even unilaterally.[474] Thus, multilateralism, which was already very present in the field of international law, also became part of the international tax field. It is noteworthy, however, that a multilateral instrument proposal was made during the works of the League of Nations, having been considered impossible given the particularities of the tax systems.[475]

However, although the participants represented most of the world economy at the time, a discourse aiming to be universal could not be limited to OECD and G20 members. The answer found was the adoption of an opening process similar to that used by the League of Nations, in which an increase in participants followed restricted initial meetings.[476] In the case of the BEPS Project, the opening to the other jurisdictions took place by instituting the Inclusive Framework (IF).[477] Given that new balances of power imply changes in the orders of discourse, the IF may not only legitimise the role of the OECD but also protect the tax discourse from the potential emergence of future NGPs. The organisation of public consultations allowing the participation of non-governmental stakeholders was responsible for including the society into the debate.[478] These concerns with the technical aspects, legitimation, and openness have contributed to a tax discourse that, while maintaining some traditional elements, presented a very original aesthetic.

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[474] For this reason, Pistone welcomed the BEPS Project as a significant step in the transition from bilateralism to a "true multilateralism" also in the decision-making phase. See PISTONE, P. Coordinating the Action of Regional and Global Players during the Shift from Bilateralism to Multilateralism in International Tax Law. **World Tax Journal,** v. 6, n. 1, pp. 3-9, 4 Feb 2014.

[475] Ironically, this shift has occurred when international law was facing a crisis of multilateralism. See SMITH, M. The EU, the US and the Crisis of Contemporary Multilateralism. **Journal of European Integration,** v. 40, n. 5, pp. 539-553, 8 Oct 2018. Besides the League of Nations, the European Economic Community and the European Free Trade Association also tried, unsuccessfully, to conclude a multilateral double taxation convention. Some successful multilateral tax treaties concerning double taxation or other tax issues involved limited regional areas. See "Successful work on MDTCs and other multilateral tax agreements" in LOUKOTA, H. Multilateral Tax Treaty Versus Bilateral Treaty Network. In: Lang, M., Loukota, H., Rädler, A. J., Schuch, J., Toifl, G., Urtz, C., Wassermeyer, F. and Züger, M. (Ed.). **Multilateral tax treaties**. London: Kluwer, 1997. 5, pp. 83-103, pp. 86-88.

[476] This process was introduced in "1.3.1. First reactions to the internationalisation."

[477] "Working together within OECD/G20 Inclusive Framework on BEPS, over 130 countries and jurisdictions are collaborating on the implementation of 15 measures to tackle tax avoidance, improve the coherence of international tax rules and ensure a more transparent tax environment." See http://www.oecd.org/tax/beps/about. Accessed on 16 Aug 2019. For an analysis of the issues involved and the possible implications of the Inclusive Framework, see also CHRISTIANS, A. and VAN APELDOORN, L. The OECD Inclusive Framework. **Bulletin for International Taxation,** v. 72, n. 4/5, pp. 226-233, 15 Mar 2018.

[478] However, the OECD recognises that the Business and Industry Advisory Committee (BIAC) and the Trade Union Advisory Committee (TUAC) represent its core relationship with civil society. See OECD. **Action Plan on Base Erosion and Profit Shifting**. OECD Publishing: Paris. 2013a, p. 26.

The new discourse.

The preservation of the technical aspects of the international tax discourse relied on the reinterpretation of the expression "base erosion". Although the expression was already part of the international tax vocabulary, the OECD has differentiated BEPS issues from those related to harmful tax practices or aggressive tax planning.[479] Thus, the project's discourse has incorporated this technical dimension through the idea that there were necessary measures to be adopted by countries. These measures were called "minimum standards", corresponding to the smaller required commitment that the jurisdictions should assume to prevent the effects of the BEPS phenomenon.[480] These minimum commitments represented the starting point for the construction of a new form of international cooperation in tax matters. Although not wholly abandoning the condemnation of practices considered harmful, the new attitude adopted became more focused on the recommendation of good practices.[481]

The concern about possible constraints to jurisdictions, especially those that are not members of the OECD, was also reflected in the aesthetics of the new tax discourse. Equality between the parties of the debate, OECD's members and non-members, was repeatedly invoked by the statement that the participants were on an equal footing.[482] There was an aban-

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[479] The connotation change evidences itself from the comparison of documents belonging to the second and third phases, respectively:
"The project is focused on the concerns of OECD and non-OECD countries, which are exposed to significant revenue losses as a result of harmful tax competition. Tax base erosion as a result of harmful tax practices can be a particularly serious threat to the economies of developing countries." In OECD. **Towards Global Tax Co-operation**. Paris: OECD Publishing, 2000c, p. 5.
"BEPS issues may arise directly from the existence of loopholes, as well as gaps, frictions or mismatches in the interaction of countries' domestic tax laws. These types of issues generally have not been dealt with by OECD standards or bilateral treaty provisions. (…) Moreover, governments must continue to work together to tackle harmful tax practices and aggressive tax planning." See OECD. **Action Plan on Base Erosion and Profit Shifting**. OECD Publishing: Paris. 2013a, p. 13.

[480] "The four minimum standards include: (1) a treaty anti-abuse rule; (2) transfer pricing documentation in the form of country-by-country reporting; (3) rules against harmful tax practices, including standards for preferential regimes (patent boxes) and a requirement for automatic exchange of tax rulings; and (4) minimum standards for improving dispute resolution." See HERZFELD, M. The Case against BEPS: lessons for tax coordination. **Florida Tax Review,** v. 21, n. 1, pp. 1-59, 2017, pp. 43-44. "The final package of BEPS measures was delivered in October 2015, providing a comprehensive toolkit for governments, consisting of four new minimum standards on: (i) country-by-country reporting; (ii) treaty shopping; (iii) harmful tax practices; and (iv) effective mutual agreement procedures". See OECD. **Tax and Digitalisation**. OECD Publishing: Paris. 2018a, p. 2.

[481] The BEPS Project's Action 4, before referring to the work of the Forum on Harmful Tax Practices (FHTP), mentions the development of "best practices in the design of rules to prevent base erosion through the use of interest expense". See OECD. **Action Plan on Base Erosion and Profit Shifting**. OECD Publishing: Paris. 2013a, p. 17.

[482] OECD recognises that, for the first time, its members have worked together and on an equal footing with G20 countries to design common responses to international tax challenges, representing unprecedented participation by

donment of the rhetoric that presupposed the construction of a tax universalism from a natural order identifiable through a technical view of taxation. Thereby, a contingent universalism stemming from the choices of actors involved in the construction of the discourse has replaced the former ideal universalism.[483] This new universalism has reiterated the idea that international taxation is naturally global, demanding that the OECD be more than just a counter for bilateral negotiations.[484] This situation resulted in a discourse that emphasised the growing number of adherents to the commitments generated by the project as a symbol of its success, revealing political concerns.

A change in the way of accompanying adherence to the new cooperation campaign is also a result of the impact of the political dimension of the tax debate promoted by the BEPS Project on the new discourse produced. This new discourse has abandoned the rhetoric of black or grey lists to identify the extent to which countries are closer or not to the new tax universalism.[485] In doing so, the OECD has avoided accusations of serving a specific group of more influential countries to limit the sovereignty of small nations. A horizontal idea that the peers themselves should carry out the analysis of the evolution of the project has replaced the verticality of the campaign against harmful tax practices.[486] For all these changes in the tax discourse, it is possible to conclude that the central actors in this process have abandoned an idealistic attitude towards international taxation, recognising its political dimension.[487] This recogni-

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developing countries in the elaboration of the international tax standards. See "Achievements of the BEPS Project" in OECD. **Explanatory Statement**. OECD Publishing: Paris. 2015c, pp. 5-9.

[483] Saint-Amans and Russo stress the importance of the consistent implementation and application of the BEPS Project at the countries' domestic level, not as a result, but as a condition for its effectiveness. The authors stress the need for a global dialogue that goes beyond G20's and OECD's members, mentioning the importance of local parliaments in this process. See SAINT-AMANS, P. and RUSSO, R. The BEPS Package: promise kept. **Bulletin for International Taxation,** v. 70, n. 4, pp. 236-241, 16 Mar 2016. The transition to the third phase represented the prevalence of the search for a contingently, instead of an ideally "good" tax discourse. This contrast emulates the two main philosophical lines of thought that have influenced Western culture. See item "1.1.1. Rationality, legal forms, and emerging interests."

[484] The OECD has already tried unsuccessfully to defend the need for a global approach to tackling harmful tax practices. See "Tax competition: a global phenomenon" in OECD. **Harmful Tax Competition: an emerging global issue**. OECD Publishing: Paris. 1998d, pp. 13-18.

[485] However, this aesthetic still resists, although in a very mitigated way, in the work of the Forum on Harmful Tax Practices (FHTP) related to the identification of preferential regimes. This is due to the direct relationship that this activity has in relation to the 1998 report on Harmful Tax Competition. See OECD. **Harmful Tax Practices - 2017 Progress Report on Preferential Regimes**. Paris: OECD Publishing, 2017a.

[486] For a critique of this peer review model, see DE GRAAF, A. C. G. A. C. and VISSER, K.-J. BEPS: will the current commitments and peer review model prove effective? **EC Tax Review,** v. 27, n. 1, pp. 36-47, 2018.

[487] Recognising the political dimension, however, is not the same as admitting its democratic character. The question of democracy at the level of international organisations invokes elements that go far beyond our conclusion. For

tion, however, does not mean abandoning the technical character of taxation nor neglecting its specific rationality.

The legacy.

Despite some initial incredulity, the BEPS Project represented a break with the old construction of the technical image of the OECD as opposed to the political character of the UN. Although the new paradigm arguably favours individual moves, several countries have committed internationally and have internally implemented some of the provisions.[488] The older model has only proved successful because of both the relative homogeneity of the central actors in the project to combat harmful tax practices as the lesser scope of the idea of international cooperation in tax matters.[489] Thus, the BEPS Project is not the cause but the consequence and the most significant symbol of the new power relations at the international tax level resulting from the rise of NGPs. In this sense, the new discourse has reiterated the close relationship between the field of international tax law and that of international law. Concerning the latter, the tensions between political and technical aspects are not new, forming part of the academic debate of this field.[490]

However, the theories involving the existence of a supposed international tax regime (ITR) already considered the close relationship between international law and international tax law. These theories consider repeated practices in the field of international taxation

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an analysis of the (im)possibility of having democratic organisations considered democratic, see DAHL, R. A. Can International Organizations be Democratic? A skeptic's view. In: Held, D. and McGrew, A. G. (Ed.). **The Global Transformations Reader: an introduction to the globalization debate**. 2nd ed. Cambridge: Polity Press, 2003, pp. 530-541.

[488] For a sceptical view on the project, see AVI-YONAH, R. S. and XU, H. Evaluating BEPS: a reconsideration of the benefits principle and proposal for UN oversight. **Harvard Business Law Review,** v. 6, n. 2, pp. 185-238, Summer 2016, KEMMEREN, E. C. C. M. Should the Taxation of the Digital Economy Really Be Different? **EC Tax Review,** v. 27, n. 2, pp. 72-73, 2018, SCHÖN, W. Ten Questions About Why and How to Tax the Digitalized Economy. **Bulletin for International Taxation,** v. 72, n. 4/5, pp. 278-292, 6 Mar 2018. Avi-Yonah argues that the United States should make unilateral moves, which would be followed by other countries. See AVI-YONAH, R. S. The Case for a Destination-Based Corporate Tax. **International Tax Journal,** v. 41, n. 5, pp. 11-47, 2015. According to the OECD, more than 130 countries and jurisdictions "collaborate on the implementation of the BEPS package". See https://www.oecd.org/tax/beps/about/#mission-impact. Accessed on 19 Aug 2019.

[489] See "1.3.2. A new approach to cooperation."

[490] This tension relates to the impact that technicality can have on the very function of international law, subjecting its discourse to the condition of a simple instrument of a state's will that is not self-evident. See KOSKENNIEMI, M. The Fate of Public International Law: between technique and politics. **Modern Law Review,** v. 70, n. 1, pp. 1-30, 2007. At the limit, this tension reveals another deeper one related to the dialectical relationship of law as an

as well as the celebration of bilateral tax treaties to support the existence of one customary international tax law.[491] Although the ITR proposal has the merit of connecting the tax debate to the realm of international law, it is limited to a debate on the sources of the international tax system. This approach presents an enormous theoretical difficulty to provide a systemic cohesion to ITR.[492] The focus on the international epistemic community, otherwise, leads to the analysis of the discursive dimension of the field, which allows observing international tax law as more than a system of international norms. This approach reveals both the power relations and the ideological basis underlying the discourses of the actors, filling a gap with which the ITR proposal is not able to deal.[493]

The application of the discursive approach in analysing the impact of the new BEPS discourse on the academic community reveals an initial rejection of the movement towards the political dimension of taxation. It is, however, a reaction that has historically repeated whenever reality shows itself incompatible with the paradigm of the field.[494] Such rejec-

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instrument of power and as a source of power in itself.

[491] The idea of an international tax regime is found in WEST, P. R. Foreign Law in U.S. International Taxation: the search for standards. **Florida Tax Review,** v. 3, n. 4, pp. 147-186, 1996, VANN, R. J. International Aspects of Income Tax. In: Thuronyi, V. (Ed.). **Tax law design and drafting**. The Hague: Kluwer Law International, 2000. 18, pp. 718-810, MCDANIEL, P. R. Trade and Taxation. **Brooklyn Journal of International Law,** v. 26, n. 4, pp. 1621-1640, 2000, AULT, H. J. The Importance of International Cooperation in Forging Tax Policy. **Brooklyn Journal of International Law,** v. 26, n. 4, pp. 1693-1698, 2001, RING, D. M. One Nation among Many: policy implications of cross-border tax arbitrage. **Boston College Law Review,** v. 44, n. 1, pp. 79-176, 2002. For a comprehensive work exposing this view see AVI-YONAH, R. S. **International Tax as International Law: an analysis of the international tax regime**. New York: Cambridge University Press, 2007, 213 pages. So, countries would not be completely free to exercise their fiscal sovereignty, being bound by the international commitments assumed as well as the customs of the international environment. See "Is there a customary international tax law?" in AVI-YONAH, R. S. International Tax as International Law Essay. **Tax Law Review,** v. 57, n. 4, pp. 483-502, Summer 2004, p. 496. Otherwise, several authors criticise this position, invoking the paradigm centred in the State to support the nonexistence of a truly international dimension. See ROSENBLOOM, H. D. The David R. Tillinghast Lecture International Tax Arbitrage and the International Tax System. **Tax Law Review,** v. 53, n. 2, pp. 137-166, 1999.

[492] Avi-Yonah recognises such difficulty and describes the coherence of the ITR as a "miracle" (albeit flawed). See AVI-YONAH, R. S. Structure of International Taxation: a proposal for simplification. **Texas Law Review,** v. 74, pp. 1301-1360, 1996, pp. 1303-1304. We prefer to attribute this miracle to the shared ideological basis that supports the existence of an international epistemic community of tax experts. Indeed, if it were not for a significant standardisation of the way the actors think, there would not be one ITR but several, each one deriving from the local epistemic communities' interpretation.

[493] In this sense, the discursive approach has the potential to offer more than the analysis of international power relations proposed by the International Relations approach. For an example of this later, see RING, D. M. International Tax Relations: theory and implications. **Tax Law Review,** v. 60, pp. 83-154, 2007.

[494] In the field of science, Kuhn calls anomaly this first identification that nature has violated the expectations induced by the paradigm. A scientist's first reaction to an anomaly is not to review the applicability of a paradigm but to consider the anomaly as unscientific. See "Anomaly and the Emergence of Scientific Discoveries" in KUHN, T. S. **The Structure of Scientific Revolutions**. 2 ed. Chicago: University of Chicago Press, 1970, 210 pages, pp.

tion has materialised itself through one rhetoric that aims at preserving the technical character of the academic discourse from the possible influence of the politicisation that took over the global tax debate. Thus, the BEPS Project also resulted in the development of an external dichotomy opposing the political discourse within the project to the technical character of the discourse produced by academics.[495] In principle, there is nothing that allows condemning this attitude so that it can represent an ideal of academic discourse. However, and according to the premises that base this work, this dichotomy is not only useless but dangerous.

The construction of a technical-rational discourse.

The opposition to the aforementioned dichotomy does not mean a lack of commitment to the technical dimension of international taxation. For being situated within the scope of the legal tradition, this work is part of a historical project for the construction of a rational discourse of social organisation. However, in understanding that this rationality is the result of an effort and not a natural event, the dichotomy must be seen with caution. Although humans have always dealt with some form of social organisation, the use of the academic rationality as an element of building the social order was never a *sine qua non*. Thus, an academic discourse that condemns the political dimension of taxation, claiming the monopoly of technical rationality, makes room for political attitudes towards taxation not committed to this project. The result would be a confrontation between the academic legal discourse on international taxation and the sources of external power that have legitimised such discourse in the first place, implying a crisis of academic legitimacy.

The legal tradition alone, however, does not offer tools capable of putting into practice the project of building a rational international tax discourse. As already demonstrated in this chapter, the legal tax discourse has a genealogical relationship with the categories and ideas formulated in the broader field of taxation. Thus, a tension between a project that privileged individual freedom and another that considered the role of the state have the most direct influence on the modern idea of taxation. Hence, the field of international tax law resulted from the process of internationalisation of the tax field, which was highly influenced by the liberal

52-65.

[495] This dichotomy will be resumed in item "3.3.3. Rethinking the role of the stakeholders".

ideology and the cameralistic movement. Liberal ideology prevailed in the international tax field, despite its shortcomings in dealing with the process of wealth generation at the international level. However, it is from a bureaucratic perspective, originated in cameralism, that this work can contribute in a more original and useful way to the debate on international tax law and the digital revolution.

Conclusions.

The present item demonstrated that the trigger for the third phase of the development of the international tax field occurred from the emergence of the NGPs. These governmental actors brought about transformations in power relations capable of modifying the discourse on international taxation. Such an event has both threatened the OECD's hegemonic position as presented it an opportunity to build an independent image. On the one hand, NGPs' emergence has shifted the centre of gravity of the world economy outside the axis of the countries constituting this organisation. On the other, the necessity to integrate new central actors in a project of field's construction in which they never participated allowed the OECD to develop an image different from that of a mere instrument of the OGPs' interests. The result was the launch of the BEPS Project and the consequent institutionalisation of a new attitude towards the international tax phenomenon, expressed from the aesthetic elements associated with the discourse produced.

The language used in the documents produced by the BEPS Project reveals an effort to highlight the level playing field between OGPs, NGPs, and the new participants resulting from the IF. This effort evidences a change in the discourse's assumptions, abandoning categories considered ideal in favour of the social construction of their meanings. Such change implied a difficulty in the articulation between elements considered technical and the political dimension of taxation. At the same time, the OECD should recognise the emergence of this dimension without abandoning the reputation of a technical body that allowed it to consolidate its central position. The result on the social plane was identifying minimum conduct to be assumed by countries and good practices they should pursue, revealing both contextual as subjective elements. In turn, at the intellectual level, there was an enormous approximation between interna-

tional tax law and international law, opening space for a new perspective about the field.

The fusion of contextual and subjective elements in the construction of the field's discourse gave a new reading to the expression "international". Besides what was intrinsically global, the BEPS Project involved elements of countries' local experiences, blurring the distinction between international law "of taxation", countries "domestic" international tax law, and comparative tax law. This unification imposes the need to build a new idea of technicality capable of coping with the search for tax universalism. The tension between an increasingly prominent political dimension of taxation and the technical perspective justifying an autonomous tax field became evident. This tension underlies the social context in which the digital economy international tax debate has developed itself. However, a realistic view of technique, politics, and digitalisation shows that the BEPS Project has comprised only the tip of the iceberg of the possible socio-economic implications of the digital revolution, as the next chapter will demonstrate.

Chapter's conclusions.

This chapter has demonstrated that the legal quality of international tax law goes back to an intellectual project for the rational organisation of social life that started with the philosophy's rise in Greece. This project intended to attach substance to a deemed rhetorical attitude to the discourse's emergence as an instrument of power to face political affairs. However, only in Rome the social practice currently identified as legal appeared from the emergence of specific conceptual forms associated with the notion of law. The counterpart of this intellectual activity corresponds to a social institutionalisation process that allowed the legal discourse to become a variable in the problem of power. This property of the legal discourse made it a disputed element by different power groups with universalist ambitions already in the middle ages. The leading group was the Catholic Church, which transformed canon law into the first successful proposal to build an intellectual systematisation of the Roman legal forms from the Greek rational project.

The systematisation of legal forms in an intellectual project with universalist ambitions gained more strength with the emergence of European universities as a locus of production, resulting in an intellectual dimension called here jurisprudence. This dimension ini-

tially involved a naturalistic approach, gradually replacing elements associated with a central order with a new type of rationalism that favoured the individual dimension. The emergence of scientific positivism meant a reaction to the metaphysical foundations of this rationality, producing new attitudes towards the legal phenomenon. The first one corresponds to legal positivism and its proposal to constitute an exclusively legal social practice. The second refers to the receptivity of the law to other areas of knowledge, bringing contextual elements to the understanding of the legal phenomenon. In both cases, the rupture with the legal field's metaphysical foundations posed a problem for the universal claims of law as an intellectual project.

The association of law with a universal structure, whether based on theological or humanistic groundings, allows the legal discourse's easy transition between the planes currently understood as domestic and international. In other words, the transnational legal phenomenon corresponded to a derivation of its universal characteristic associated with the existence of a central order. The questioning of this order produced a fissure between the local and the universal, resulting in renaming the *jus gentium* as "international law" from this new duality. Both the law's closing within its internal categories as its attachment to a specific context resulted in the prevalence of its contingent character over its universal aspirations. The outcome was a feeling of crisis that provoked a reaction against the very possibility of the law being considered international. This conflict between being "legal" and being "international" is fundamental in international tax law, although the notion of taxation helps in reconstructing this field's universalism.

The tax aspect of international tax law arises from its connection with a specific tradition whose social dimension manifests itself in different places and historical moments. As a social phenomenon, taxation has generated several types of discourse, both in terms of justifying it and fighting its incidence or the way it occurs. On the European continent, the Enlightenment was responsible for making these diverse discourses gravitate around arguments related to the origin of property and the legitimacy of the sovereign. Thus, taxation has entered the modern era within a discourse articulating the relationship between the state and its subjects. In parallel, the cameralism represented an intellectual project and a social practice that strengthened the construction of a bureaucratic discourse on taxation with technical ambitions. The physiocratic movement, in turn, was responsible for offering a new intellectual basis for understanding

the wealth generation process, giving a distinct perspective to the tax discourse.

Although the physiocrats were the first to conceive a wealth dynamically considered, Adam Smith was the one who managed to articulate this idea with the emerging interests of the industrial bourgeoisie. Situating the wealth generation process within the private sphere, Smith restricted the discourse on taxation to a series of postulates limiting state action, mainly towards market activities. The lack of a discourse that dealt with the financial activity of the state made public finance emerge as an offshoot of the political economy in the United Kingdom. The European continent, influenced by cameralism, produced a much richer and multidisciplinary science of finance, bringing together elements later described as political, economic, and legal. However, scientific positivism produced a movement rejecting the political aspects of taxation favouring a technical ideal. In particular, in the legal field, this movement was also responsible for the rejection of economic elements, fostering the desire to structure a strictly legal discourse on taxation.

The independence of the legal tax field vis-à-vis the economy and its mathematical instruments occurred from adopting a formalist perspective from German civil law. Notwithstanding, to also guarantee their autonomy from private law, the tax lawyers have emphasised the relationship between tax law and economic substance. This return to the economic discourse has become a constant tension in tax law, aggravated by the rise of law & economics, especially where legal realism was most widespread. The result was the emergence of a crisis perception concerning the lawyer's role in the tax field amid the prevalence of economic instruments. This situation has become even more accentuated at the international level since it does not offer a legislative framework or judicial decisions to serve as a refuge for the lawyers. The consequence was the denial of a genuinely international character to international tax law, making the construction of this field supported by domestic legislation.

The tax lawyers' cognitive difficulty in understanding a genuinely international perspective did not prevent the beginning of a taxation internationalisation process at the turn of the nineteenth to the twentieth century. This beginning occurred in a free trade protection context, emulating old discourses of freedom within a new narrative articulating the concepts of source and residence. In turn, the inability of the Smithian paradigm to deal with a fragmented

wealth generation process at the international level has placed the double taxation issue at the tax debate's centre. This issue has found its institutional reference in the League of Nations, inaugurating the first multilateral efforts to build an international tax discourse at the governmental level. In the private sphere, the International Chamber of Commerce (ICC) was already making several efforts in this direction. However, despite the ICC's attempts to participate in the League's work, the countries' agents were the protagonists in building the field's discourse.

After the Second World War and the end of the League of Nations, the construction of the international tax discourse took place within entirely different geopolitical circumstances. In this second moment, the context of decolonisation that characterised the environment of the United Nations (UN) resulted in accusations of this entity's excessive politicisation. As a reaction to this supposed politicisation, the more industrialised countries started to sponsor the international tax debate within the Organisation for Economic Cooperation and Development (OECD). This shifting was responsible for reinforcing the OECD's technical image in opposition to the supposedly political character of the UN. The emergence of tax havens and the increasing complexity of international tax planning represented an opportunity for the OECD to consolidate this image. From its prolific production of technical reports, the OECD has established itself as an international tax organisation *de facto*.

The status acquired by the OECD had to face the new international tax scenario resulting from the rise of the New Great Powers (NGPs). Since NGPs did not share the same cultural, economic, and social experiences as most OECD members, the organisation had to open up to the political dimension of taxation. In this third phase, the OECD avoided an overly technical discourse based on condemning the countries' conducts, favouring a collective construction based on the assumption of commitments. The idea of combating base erosion and profit shifting is the central concept in an institutional endeavour to reconcile technique and politics in the construction of the international tax discourse. On the one hand, the OECD could not afford to abandon its technical character under pain of attacking the same justifications that placed it as the main forum for this debate. On the other hand, the opening to the political dimension signals a realistic attitude towards a tax discourse that could be considered genuinely international.

CHAPTER 2 THE DIGITAL REVOLUTION AND ITS IMPLICATIONS.

The previous chapter has demonstrated the consequences of adopting a realistic attitude and a discursive approach to understanding international tax law. The articulation between categories representing the legal and tax fields' historical experiences associated with the internationalisation process to which these fields were submitted resulted in our framework for analysing the digital revolution. Such historical experiences carry the genes of the initial efforts in constructing a rational explanation for social life happenings. The gradual sophistication of the political discourse resulted in an intellectual separation between the physical and social orders, building a view of the human being in opposition to nature. Notwithstanding, this separation is exclusively cognitive, not representing an annulment of the social world's physical dimension. Understanding the relationship between the physical and social dimensions is critical in identifying the digital revolution's impacts on international taxation's legal discourse.

The digital revolution corresponds to a paradigmatic transformation in the technological field, and whose social and economic impacts have produced a broad literature. Economists, in particular, have constructed narratives involving the relationship between technological advances and economic development. However, such narratives frequently rely on an entirely economic perspective that describes the technology from its role in the production process. Although there is nothing wrong with this perspective in principle, it does not answer more fundamental questions like what technology is and how it develops. Answering these questions is a prerequisite for understanding the digitalisation process, under the penalty of not distinguishing between the digitalising agent and the object digitalised. This distinction is essential to understand what is unique about the digitalisation process and how it communicates with the categories that support the legal discourse on international taxation.

This chapter aims to demonstrate the impact of the digital revolution on the categories of the liberal paradigm on the wealth generation that constitute the international tax legal discourse. The premise is that the economy's digitalisation is just the visible dimension of a structural change in the liberal social order's groundings. The hypothesis is that the digital revolution has impacted the phenomenological dimension that underlies the social order centred on the liberal paradigm on wealth generation. Sub-chapter 2.1 offers a proposal to understand

what technology is, how it develops, and how the idea of technological revolution relates to the changes in the economic and social order. Sub-chapter 2.2 describes the information and communication technologies' transformations resulting in the digital language responsible for digitalising the economy. Sub-chapter 2.3 presents the effects of the digitalisation of the liberal social order's categories that structure the international tax legal discourse.

2.1. Technology, evolution, and revolution.

Chapter 1 has demonstrated that sophists and philosophers' rupture with the mythological explanations for social life events has inaugurated a new moment in Western thought. Before, the functional deities' religion provided a narrative about the social order as a natural world's outcome. Afterwards, the constant rationalisation of the social order associated with increasingly sophisticated discourses on political problems resulted in the world's humanisation. This humanisation has implied a transformation from explanations of social life grounded on the natural phenomena to distinct debates about nature as an object of the social world. Concerning the debate on the wealth generation within the political economy, nature became a necessary element of that process. As the economic discourse developed, the power over the natural world's phenomena helped to compose a narrative on the relationship between technological development and economic production.

Notwithstanding, the intellectual commitment to recognising nature as an object of the social world is not a peculiarity of the field of economics. When the first theories on wealth generation emerged, several debates on natural phenomena, considered in themselves or their social utility, already existed. These debates resulted in the rise of natural philosophy and were deeply affected by the positivist movement, generating the natural sciences as we know today. Furthermore, the physical world had already submitted itself to the social order, not only as an intellectual speculation object but for practical purposes. The whole trajectory of humanity, which includes the very project of humanising the world and rationalising the social order, stemmed from the power of capturing and using natural phenomena. Identifying the elements that constitute this power leads to understanding the impacts of the technological changes on the social order grounded on the liberal paradigm on wealth generation.

This subchapter analyses the relationship between technological changes and the rise of the social order structured from the liberal paradigm on wealth generation. The premise is that the discursive approach imposes a specific view on the technology that considers it within an intellectual project for constructing the human dimension. The hypothesis is that the rise and most significant changes of the liberal social order results from the industrial revolution and the emergence of the information technology. Item 2.1.1 presents a proposal for defining technology, relates it to the sciences, and discusses its relationship with the intellectual project for constructing the human dimension. Item 2.1.2 indicates the stimuli responsible for technological evolution, the mechanisms operating in this process, and the possible outcomes according to the evolution's type or intensity. Item 2.1.3 analyses the relationship between technological transformations and the social order grounded on the liberal paradigm on wealth generation.

2.1.1. Technological definition.

The previous chapter has demonstrated that the international tax legal field's construction reflects the dialectical relationship that the legal discourse maintains with power exercise. The legal discourse results from the institutionalisation of interests in power relations, while its proficiency represents a particular form of power. Consequently, recognising the existence of impacts caused by the digital revolution on international tax law implies admitting the relationship of that revolution with power exercise. Once the digital revolution is a particular sort of technological transformation, the conclusion is that technology also correlates to the exercise of power. Seen from a social perspective, the relationship between technology and power becomes evident, since the problem of power is typical of life in society. The question is whether, from an internal technological perspective, one can still elaborate a connection between technology and the exercise of power in social life.

The technological perspective also allows the understanding of a central category in analysing the history of the legal discourse on international taxation. This discourse bases itself on a dichotomy that opposes a political view of taxation to its technical aspects without revealing what such aspects represent. The adoption of the technological perspective, in turn, demonstrates that the technological elements are closer to the international tax legal catego-

ries than the social perspective allows us to realise. Notwithstanding, the fundamental question is to know what it means to be technical and how this quality relates to the idea of technology. Likewise, although science and technology usually go together, these terms are not confused, being necessary to understand their similitudes and distinctions. The difficulty in perceiving all these nuances occurs because, unlike technology's undeniable material dimension, the recognition of its ideational dimension is not an obvious task.

This item proposes a definition of technology from its diverse historical debates, correlating its intellectual dimension with its material results. The premise is that, as an idea, technology has teleological characteristics that differentiate it from the sciences, while its material dimension interacts both with the physical and social worlds. The hypothesis is that, from a technological perspective, the material dimension of technology reveals the existence of a physical basis on which the social order establishes itself. The item starts by presenting a point of departure to build a concept of technology from its traditional views. The item then identifies the similarities and differences between science and technology and emphasises the relationship between technology and the different existing phenomenologies. Finally, the item presents a proposal for differentiating technology from technique and explains how the passage from the ideational to the material dimension of technology influences its production.

Separating technology from its social environment.

A more sceptical look at the discourses produced by different fields about the idea of technology reveals an undeclared consensus. These narratives usually consider technology as given, an indisputable fact of life whose fundamental structures are self-evident and do not deserve any further explanation.[496] One reason for this may be that the most influential technology theorists were not physicists or engineers, but economists, philosophers, and historians, thinkers who traditionally tend to see technology as a finished object. The pervasive character of technology and the consequent lack of estrangement this situation entails led to utilising its

[496] Van Wyk highlights the lack of consistency in using technology-related vocabulary, asserting that, since the nineteenth century, few authors have made efforts to analyse the intrinsic characteristics of the technology. For the author, the difficulty in finding a definition for technology lies in the relatively primitive state in which the theories about technology find themselves. See VAN WYK, R. J. Technology: a fundamental structure? **Knowledge, Technology & Policy,** v. 15, n. 3, pp. 14-35, 1 Sept 2002.

advancements as a parameter to measure the different moments in humanity's history.[497] This association stems from a primarily instrumental view of technology, understood as a tool employed to solve social life problems. Such a vision reveals a popular way of defining technology, that is, as a mean to achieve a specific end.[498]

Nonetheless, the transition from one historical era to the next does not cancel the technological achievements already obtained but incorporates them into the new technologies. This situation reveals an essential characteristic of the different technologies: they interact with each other in creating new technologies.[499] This interaction means that, in moving in the opposite direction in the timeline, one would discover that technologies always form themselves from other technologies.[500] However, this statement comes up against the fact that there must be one first technology not based on a previous one at some point in time. This intellectual exercise reveals the most straightforward way of generating technology, from the appropriation and use of a given natural phenomenon with a specific objective.[501] Therefore, if there is a difference between phenomenon and technology, this difference is not physical but cognitive, relating to the physical world's appropriation within a teleological attitude.

Therefore, the expression technology refers to both the objects produced and the mental process that allows the capture and use of a given phenomenon with a specific purpose. This intellectual dimension is etymologically present in the expression; it is the *logos*

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[497] For an example of how it is possible to build a "big history" of humanity characterising historical periods from their technological production, see HEADRICK, D. R. **Technology: a world history**. Oxford: Oxford University Press, 2009. Headrick shows how the idea of big history emulates the use of advances in the field of science and philosophy as a measure of the complexity of thought. In this sense, technology contributes in a central way to the creation of the world in which we live.

[498] Arthur claims that being "a means to fulfill a human purpose" is the first and most basic definition he gives to technology. In this sense, an apparatus, a method, or a process always "does something", that is, it develops to perform some predetermined purpose. See "Combination and structure" in ARTHUR, W. B. **The Nature of Technology: what it is and how it evolves**. New York: Free Press, 2009, pp. 27-44.

[499] Usher says that, although the ends that justify it may vary, what he calls "mechanical invention" stems from the emergence of new syntheses from pre-existing elements, through a process he calls "constructive assimilation". See "Discovery and Invention Distinguished" in USHER, A. P. **A History of Mechanical Inventions**. New York: McGraw-Hill, 1929, pp. 10-14.

[500] Technology, as a multiplicity of objects without essence, is similar to the perspective employed by Deleuze and Guattari to problematise the question of machines. For these authors, machines are functionally related to each other, forming (and being formed by) other machines, based on a non-hierarchical relationship that the authors call rhizomatic. See DELEUZE, G. and GUATTARI, F. **Mille Plateaux: capitalisme et schizophrénie**. Paris: Les Éditions de Minuit, 1980.

[501] Arthur asserts that phenomena are the source of all technologies. Thus, the essence of technology is to employ such phenomena in order to achieve a particular end. See "Phenomena" in ARTHUR, W. B. **The Nature of**

that serve as a cognitive complement to the *tekhne*, meaning the skill or art.[502] Thus, on the one hand, technology refers to the entire complex of instruments available in a given culture at a given time, elaborated to capture and use natural phenomena.[503] Such instruments can correspond to tangible objects, such as ships or cell phones, or intangible, such as the written language or an algorithm. On the other hand, technology can also refer to a specific way of thinking about these phenomena, oriented towards solving specific issues. Therefore, the technology exists both in the material world and in mind, being the latter the most critical dimension for constructing a narrative capable of identifying its essential elements.[504]

Principle and recursiveness.

The intellectual dimension of technology implies that, before existing physically, technology structures itself around a specific way of thinking about resolving problems. This structuring frequently takes place from a previously recognised conceptual manner of dealing with a particular natural phenomenon.[505] Such a situation indicates that a whole group of technological solutions can emerge from a single specific means of capturing and using that phenomenon. Thereby, it is possible to say that an identical phenomenological principle may apply even for a given set of technological objects constructed for different purposes.[506] Conse-

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Technology: what it is and how it evolves. New York: Free Press, 2009, pp. 45-57.

[502] Analysing the transformations experienced by the academical use of the expression "technology", Schatzberg concludes that, among Anglo-American authors, it had a more specific meaning compared to the French and German literature. From the German discourse's influence related to the expression "Technik", the idea of technology ceased to mean only the field of the study of "mechanical arts" to signify this very art. For a narrative on this process, see SCHATZBERG, E. "Technik" Comes to America: changing meanings of "technology" before 1930. **Technology and Culture,** v. 47, n. 3, pp. 486-512, 2006.

[503] Kelly uses the term "technium" to mean the entire system to which this complex of instruments gives rise. See KELLY, K. **What Technology Wants**. New York: Penguin Books, 2010.

[504] Leo Marx proposes a similar division in his conceptual approach to technology. In this sense, the concept would result in two categories. The first is ideological and consists of the dominant conception of the mechanical arts. The second is substantive and refers to technological objects' development and the institutional setting that allows this development. See MARX, L. Technology: the emergence of a hazardous concept. **Technology and Culture,** v. 51, n. 3, pp. 561-577, 2010.

[505] Referring to modern technology, Heidegger sees in this intellectual activity an authentic process of revelation. Thus, the instrumental or merely anthropological definitions would not be sufficient to express technology's power to reveal the truth concealed in nature. See "The Question Concerning Technology" in HEIDEGGER, M. **The Question Concerning Technology**. New York & London: Garland Publishing, 1977, pp. 3-35.

[506] Arthur explains that technology always organises itself around a principle or a central concept that he calls "the method of the thing". The author understands the passage from technology's intellectual dimension to the physical plane as the expression of these principles or concepts in the form of physical components. See "How technologies are structured" in ARTHUR, W. B. **The Nature of Technology: what it is and how it evolves**. New York: Free Press, 2009, pp. 31-36.

quently, new technological solutions will always correlate to a central principle or concept from which new instruments emerge to satisfy particular demands. In this sense, the amount of potential technological solutions draws a parallel to the volume of the different captured phenomena as the number of distinct captures and uses of the same phenomenon.

Nevertheless, the construction of a group of new technological solutions around a specific concept is not only due to the direct relationship of the technological objects with a given phenomenon. As already said, after the initial phase of capture and direct use of the phenomenon, new technological solutions are more likely to emerge from the incorporation of previous technologies in new objects.[507] As a result, the old concepts present in the previous technologies may combine and give way to new ones. On the other hand, even when technological devices result from others, it does not imply that the principled concepts initially present will necessarily remain within the resulting objects. As their subparts standardise, it becomes more likely to maintain the general principle in these new technological objects' architecture. However, it is necessary to distinguish the leading architecture from the secondary ones, a dependence relationship between high and low technologies called recursiveness.[508]

Recursiveness is responsible for attributing a sophisticated character to technology, frequently disassociated from the rudimentary use of natural phenomenology. Although the frontier is not so clear, a high recursiveness separates low from high technology, implying a complexity that does not correspond to the almost primitive intuitions of harnessing phenomena for specific purposes. Such complexity presupposes the obliteration of the phenomenology explored and an excessive self-referencing. When technology is seen only in terms of its relationship with other technologies, this modularity character privileges the architecture that governs the parties' connection. This prevalence produces an abstractionism that favours the intellectual dimension of technology, making its materiality a mere logical consequence of the former. This highly rational view characterises the contemporary moment, removing the notion of technology from the scope of social practice and making it a synonym for science.

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[507] Complex technologies always emerge from simpler building blocks. For an analysis of how the complicated elements that make up the computer derive from simpler ones such as the logic circuit, see ARTHUR, W. B. and POLAK, W. The Evolution of Technology within a Simple Computer Model. **Complexity,** v. 11, n. 5, May 2006.

[508] For details on the relationship between the technological principle governing the whole and the parts, see "Recursiveness and its consequences" in ARTHUR, W. B. **The Nature of Technology: what it is and how it evolves**. New York: Free Press, 2009, pp. 37-44.

Technology and science.

The abstractionism that characterises high technology does not diminish from the importance of the phenomenon explored but inserts it in the context of the new technological rationalism. This idealised perspective translates the intellectual dimension of technology into an effort to understand the phenomenon with a specific purpose. In this sense, a hypothetical suppression of this purpose would make that dimension a mere intellectual commitment to understanding the phenomenon's characteristics. This commitment to understanding natural phenomenology, regardless of its role in solving a practical problem, characterises the natural sciences' intellectual dimension.[509] Such a theoretical exercise allows identifying the main conceptual difference between science and technology from comparing their intellectual dimensions. Except for technology's teleological character, the intellectual dimension of both corresponds to a human effort to understand the natural phenomenology.[510]

However, a realistic attitude towards the relationship between science and technology demonstrates the existence of profound differences. Albeit their intellectual distinctions limit themselves to the different ends they pursue, the historical analysis of their social practices demonstrates that technology does not correspond to applied science.[511] Although modern high technology has a close relationship with scientific knowledge, its diffusion typically implies obliterating the scientific concepts that support it. Besides, modern science, or even natural philosophy, are much more recent events than the development of objects capable of cap-

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[509] Barnes contrasts the relationship between science and technology in the "bad old days" and "his" present (1982). When comparing the forms of cognition of both, the author states that, in the past, science was creative and constructive, while technology corresponded to deductive routine. The reason for not considering that deductive activity as scientific stems from his assumption that technology was a physical representation of science: deducing its implications but incapable of offering any cognitive feedback. For the present, the author understands that both science and technology correspond to creative and constructive forms of cognition and that there is an interactive relationship between them. See BARNES, B. The Science-Technology Relationship: a model and a query. **Social Studies of Science,** v. 12, n. 1, pp. 166-172, 1982.

[510] Because of this identity, according to Bunge, the philosophy of technology had not been well developed until 1966. The idea that technology would correspond to an applied science has allocated its intellectual dimension into the scientific field and relegated it to the condition of a theory-free craft. See BUNGE, M. A. Technology as Applied Science. **Technology and Culture,** v. 7, n. 3, pp. 329-347, 1966.

[511] Although the intellectual dimensions of both do not present any structural difference, the fact that technology orients to specific results implied an attempt to subordinate technological to scientific knowledge through the idea that technology would be nothing more than applied science. However, Alexander maintains that the history of technology does not subordinate to that of science; otherwise, it would not be possible to understand what consists of the engineering activity. See ALEXANDER, J. K. Thinking Again about Science in Technology. **Isis,** v. 103, n. 3, pp. 518-526, 2012.

turing a part of natural phenomenology.[512] In a broader historical perspective, scientific accomplishments were always more dependent on technology than the contrary. For searching for solutions to practical problems, technology, and not science, was responsible for exploring the material applicability of captured new phenomena, which has benefited, among others, the scientific field itself.[513]

Technology's image as something independent of previous scientific knowledge calls for distinguishing the principle applied from the phenomenon explored. The phenomenon is natural and encompasses the properties of the elements of nature, while the principle applied concerns the appropriation of that phenomenon by an idea that employs such properties in specific objectives. Such a power to harness one or more phenomena to achieve a given objective characterises the very essence of technology. As articulating phenomena is not straightforward, adapting different phenomenological properties to human needs has become the technological capacity expression.[514] More than merely appropriating a given phenomenon, the development of a technological principle depends on the ability to extract specific properties from natural phenomena. Therefore, although the essence of technology resides in its relationship with the phenomenological plane, its teleological dimension points to its distance from natural phenomena in their original state.[515]

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[512] Although there are authors who defend a long historical relationship between technology and science, and even a relationship of dependence on the first concerning the second, the question is how accurate this definition of science is. Science as a systematised knowledge and based on a consistent paradigm is a much more recent phenomenon than the exploitation of natural phenomenology for specific purposes. Mathias analyses this issue and concludes that the scientific attitude that communicates with such exploitation distinguishes itself from the scientific knowledge built in the last 250 years. In this sense, the author maintains that there has been a continuous approach between science and technology insofar as scientific knowledge was able to explain the cause-and-effect relationships identified in technological experimentalism. See MATHIAS, P. Who Unbound Prometheus? science and technical change, 1600-1800. **Yorkshire Bulletin of Economic & Social Research,** v. 21, n. 1, pp. 3-16, 1969.

[513] Since science is also human-made, and not a natural phenomenon, technology has played an enormous role in its construction. For an analysis of the autonomous view of technology before science and how historians understand this relationship, see WISE, G. Science and Technology. **Osiris,** v. 1, pp. 229-246, 1985.

[514] That is why, for Heidegger, what defines technology is not the possibility of revelation, nor its instrumental character, but the fact that its essence represents a specific form of revelation that relates the human being to the natural phenomenology. See HEIDEGGER, M. **The Question Concerning Technology**. New York & London: Garland Publishing, 1977, pp. 12-14.

[515] This teleological distance between technology and nature has affected the way of describing the human experience historically. Technology has become the protagonist representing human accomplishments, while nature has always played an antagonistic position in this narrative. For a critique of this historical description and a proposal for conceptualising human history considering the role of nature and technology, see SCHATZKI, T. R. Nature and Technology in History. **History and Theory,** v. 42, n. 4, pp. 82-93, 2003.

Natural and social phenomena.

So far, the conclusion is that developing a technological principle or concept requires understanding how to harness different phenomena and explore their specific properties. However, such conclusion refers to natural phenomena, associated with the characteristics of nature's elements. The question that arises concerns the existence of social phenomena and their implications for the field of technology. A realistic approach, not based on metaphysical foundations, imposes the conclusion that, if there is a phenomenology considered social, it should nonetheless be based materially on the natural world.[516] Therefore, the distinction between the social and the natural worlds is purely cognitive, corresponding to an unfolding of the intellectual project of construction of the human dimension insofar as individuals are considered part of a social whole.[517] From a technological perspective, however, this distinction does not affect the process of capturing and using phenomena, whether social or natural.

The cognitive dissociation between the natural and the artificial worlds derives from the intellectual project for constructing the human dimension. Therefore, it is an endeavour that depends on elaborating an idea of the human being in opposition to other categories that form the universe.[518] Notwithstanding, the inseparability between the human being and its surrounding phenomenology implies the artificialisation of part of the natural world. Such artificialisation corresponds to humanising certain natural phenomena since they are closer to the circumstances that historically have been constituting the world's social dimension.[519] The clash

[516] The recognition of this material continuity between the natural and the social world is the theoretical assumption of the intellectual project known as "big history", which contextualises the entire history of humanity in a great history of the universe that begins with the big bang. For a presentation of this assumption and a critique of the project's literary form and philosophical ambition, see HESKETH, I. The Story of Big History. **History of the Present,** v. 4, n. 2, pp. 171-202, 2014.

[517] The notion that individuals and social entities maintain a relationship of part to whole is preponderant in the branches of philosophy dedicated to society and social sciences. For an examination and criticism of this thought, see RUBEN, D.-H. Social Wholes and Parts. **Mind,** v. 92, n. 366, pp. 219-238, 1983.

[518] Foucault affirms that the idea that the human being, as a cognisable category, has always existed is an illusion of European thought. According to Foucault, humanism, attributed to the Renaissance's rise, has only emerged as a concept in the late nineteenth century from the rise of different social fields. See FOUCAULT, M. **Les Mots et les Choses: une archéologie des sciences humaines**. Paris: Gallimar, 1966. Although not advocating the existence of a specific time for its emergence, we agree that the Western project for constructing the human dimension is a long process inaugurated with the rise of philosophy in ancient Greece, obtaining its most elaborate expression from the nineteenth-century humanism.

[519] After recognising the absence of a clear separation throughout history between disciplines dedicated to nature and others dedicated to the study of the human being (in itself or its social context), Bod proposes an empirical ap-

of this process with the intellectual project to rationalise social life initiated in ancient Greece resulted in a more sophisticated understanding of the human phenomenology. The result is the consciousness of a social phenomenology, located halfway between the natural and the human dimensions of the universe's phenomenology.[520]

The belief in the existence of a social phenomenology was one of the conclusions of the intellectual project of Auguste Comte and his construction of a "social physics". The thought that social phenomena are subject to specific laws, as natural phenomena are subject to the physics' laws, found support in the mathematical forms developed in social sciences.[521] This simplified and objective way of understanding social phenomenology has developed into a conception of inter-subjective reality in which both natural phenomenology and social action constrain the events in the social world.[522] This conception has consolidated a view on social phenomenology distinct both from the exclusively human and natural dimensions. The question is whether such phenomena could be captured and employed for specific purposes, and the implications of this occurrence. The result could be the generation of a social technology whose intellectual dimension is evident, but whose materiality still generates debates.

Technology and technique.

The previous chapter grounded on the assumption that the law, in its institutional dimension, historically consisted of a social practice oriented towards the rational organ-

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proach to the history of the humanities basing on the externalisation of the human mind's expressions. Despite the apparent anachronism, the author argues that it would only be possible to build this narrative if adopting the modern idea of humanities to search, in the past, for methods and standards that corresponded to what we now attribute to this field. The difficulty experienced by the author and the type of solution he offers reinforce our argument that the project for the construction of the human dimension has only recently been consolidated, depending on a process of artificialisation of natural phenomenology in order to meet the project's needs. See "Introduction" in BOD, R. **A New History of the Humanities: the search for principles and patterns from antiquity to the present**. 2015, pp. 1-12.

[520] On how Durkheim links society's notion to the mental process of representing social life to construct the object of sociology, see "Society as Representation" in FALASCA-ZAMPONI, S. Society as Representation: Durkheim, psychology and the 'dualism of human nature'. **Durkheimian Studies / Études Durkheimiennes,** v. 20, pp. 43-63, 2014, pp. 45-48.

[521] This mathematisation was particularly significant since the emergence of statistical methodology influenced by the Saint-Simonians at the École Polytechnique and its proposal that social studies should be as scientific as the physical sciences. About this, see "Statistics and statistical methodology" in GORDON, S. **The History and Philosophy of Social Science**. London: Routledge, 1991, 690 pages, pp. 529-532.

[522] The primary representation of this way of understanding the social world is Alfred Schutz and his social phenomenology. See SCHUTZ, A. **The Phenomenology of the Social World**. Evanston: Northwestern University

isation of society. This statement leads to the unavoidable conclusion that the law consists of a type of social technology.[523] In addition to the law, every human action emerges from appropriating the surrounding phenomenology to satisfy a specific necessity.[524] However, this fact leads to the little useful notion that any form of interaction between the individual and the universe would be technological. Such a conclusion implies a paradox since technology is considered human-made for being formulated in opposition to nature's phenomena, while its deemed omnipresence could turn artificial all the natural objects exposed to the human being. If the idea of technology stems from a cognitive separation of the universe, the type of phenomenon to be captured, whether human, social, or natural, must cognitively condition that idea.

The intellectual project for constructing the human dimension imposes the conceptual separation between a phenomenology more intimately linked to this dimension and another considered natural. This separation results in a distinction between technological aspects related to the appropriation and use of natural instead of human phenomena. On the one hand, the human dimension generates a type of technology considered human or social according to its subjective or inter-subjective character. This vision is the oldest way of understanding both the material and the intellectual dimension of technology, and, for semantic reasons, will be referred here as "technique".[525] In contrast, the current dominant idea of "technology", associated with the machinery and artefacts resulting from the industrialisation process, is a relatively recent event. This newer manner of conceiving technology's intellectual dimension and its material results will be treated here as "technology in the strict sense".[526]

Press, 1967.

[523] This technological view of law supports the claim that legal activity is similar to engineering. Thus, the law would also constitute an instrument that explores a social phenomenology to achieve certain ends. In this sense, see HOWARTH, D. **Law as Engineering: thinking about what lawyers do**. Cheltenham Northampton, MA: Edward Elgar, 2013.

[524] For this reason, Arthur says that the creativity used in standard engineering, although not holding the same esteem, does not differ from other creative fields such as music or architecture. See "Combination and Solution" in ARTHUR, W. B. **The Nature of Technology: what it is and how it evolves**. New York: Free Press, 2009, pp. 96-101.

[525] Schatzberg explains that the cognate expressions equivalent to "technique" and "technology" traditionally meant, respectively, the methods (and processes) of material culture and the study of these activities. See "The Meaning of Technology in Nineteenth-Century Europe and America" in SCHATZBERG, E. "Technik" Comes to America: changing meanings of "technology" before 1930. **Technology and Culture,** v. 47, n. 3, pp. 486-512, 2006, pp. 488-496. Therefore, at a time when the idea of automatism had not yet developed, the expression "technique" corresponded to what we here claim to be the appropriation and use of human and social phenomenology.

[526] Oldenziel maintains that only from the twentieth century, and as a result of the influence of Thorstein Veblen's thought in the English-speaking world, the expression "technology" gained the meaning of object or machine, be-

The technique pre-exists technology both logically as chronologically since the existence of an artefact presupposes some more or less accurate process or method of conceiving its existence and usefulness. Going further, and considering the material constraints imposed by its environment, the technique corresponds to the most basic form through which human beings consciously interact with the material universe.[527] In its most profound sense, the technique becomes not only an instrument, par excellence, for constructing the social world but its central object. This conception of technique relates to everything that is historically human, and its totality corresponds to something similar to the entire culture of a given civilisation.[528] Such a characteristic situates the technique in a unique position within the intellectual project for constructing the human dimension. This position explains the tensions between techniques traditionally recognised as central to that project and potentially transformative new social architectures.[529]

Devices and design.

Although the notion of technology presupposes that of technique, its material dimension can result in a separation that produces unique characteristics. One of the

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coming independent from human agency. See "Veblen amalgamating, engineers, machines, and technology" in OLDENZIEL, R. **Making Technology Masculine: men, women and modern machines in America, 1870-1945**. Amsterdam: Amsterdam University Press, 1999, pp. 42-46. This work will employ the term "technology" both in broad (including the technique) as in the strict sense. If the context does not evidence the meaning, the expression "technology in the strict sense" will emphasise its contrast with the notion of technique.

[527] Tenner highlights how technologies shape the human body's use in daily activities, opposing, however, to the idea that this influence would imply a submission to technology. For the author, neither the technologies nor their use is an autonomous event, but a product of human choices. Going further, Tenner mentions that the technique is present even though there is no technology. In this sense, the mere act of walking or swimming would represent an interaction technique between the human body and its material circumstances. See "Technology, Technique, and the Body" in TENNER, E. **Our Own Devices: how technology remakes humanity**. New York: Vintage Books, 2004, pp. 3-29.

[528] Making a distinction between traditional and modern technique (equivalent, respectively, to what we are calling technique and technology), Ellul emphasises that traditional technique was restricted to production, war, hunting, consumption (like clothing or houses), and magic, admitting that a modern look could see in this set the totality of life. Ellul excludes the metaphysical dimension of the human being's relationship with the universe (which does not matter for the present work) and the logical and discursive rationality oriented to efficiency. However, we consider that this rationality is not an internal characteristic of the technology in a broad sense but a demand that arises from a specific and recent technical project. The apparent contradiction between our statement and Ellul's stems from the contrast between his transcendental and dichotomic view of man and technology in a broad sense and our notion of technology as an unfolding of the intellectual project for constructing the human dimension. See "Technique in civilization" in ELLUL, J. **The Technological Society**. New York: Vintage Books, 1964, pp. 64-79.

[529] For a narrative about the social upheavals resulting from the confrontation between the new configurations of the social organisation and the already consolidated labour traditions, see "Market and Man" in POLANYI, K. **The Great Transformation: the political and economic origins of our time**. Boston: Beacon Press, 2001, pp. 171-186.

by-products of the construction of the human dimension is the recognition that there is an objective dimension that, in theory, may not depend on the technique. In other words, the physical process concerning the capture and use of natural phenomena may not depend on direct human agency. This possibility reveals that automatism is a feature that technological devices have when considered in opposition to the technique.[530] This purely hypothetical distinction between the material dimensions of technique and technology became possible from the spread of machines progressively less dependent on human interference. Such spreading resulted in a new vision on the relationship between human beings and technology in which technique means not only the handling of machines but the proficiency in their intellectual dimension.[531]

The rise of automation has resulted in the release of technology from its dependence on the human ability to handle the new devices produced. Consequently, the development of new objects from pre-existing technologies may presuppose an autonomous relationship between devices. Since they share principles allowing them to communicate with each other, devices can associate themselves in forming new devices, either generating other principles or maintaining those already existent. The more widespread the devices' language is, the higher is the possibility of forming combinations and creating new technological solutions. This fact turns into secondary the search for new phenomenologies or new ways of thinking about known phenomena in generating new technological solutions. Except in extraordinary situations that justify the effort to develop new interactions with the phenomenology, new technological solutions ordinarily result from previous technologies' assembling.[532]

Creativity may manifest itself in the technological field from the assembling of pre-existing technologies to satisfy a specific need. This procedure corresponds to the activity known as design, consisting of a vision of the technological field oriented to resolving

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[530] Of the six characteristics that Ellul attributes to modern technique (equivalent to what we call technology) three are related to its ubiquity, and three, to its independence from the human being. See "Characteristics of modern technique" in ELLUL, J. **The Technological Society**. New York: Vintage Books, 1964, pp. 79-148.

[531] This new technique differs from the traditional one in that it is not oriented towards a final result, but towards knowledge about the technology itself. Veblen highlighted the importance of this technical knowledge at the same time that he recognised the importance of engineers for their production, placing them on an equal footing with other sources of production that support society. The result was a movement to value technocracy in solving social issues. See VEBLEN, T. **The Engineers and the Price System**. New York: B. W. Huebsch, 1921.

[532] According to Heidegger, given the proximity between modern science and high technology, these extraordinary situations correspond, as a rule, to advances in the field of modern physics. See HEIDEGGER, M. **The Question Concerning Technology**. New York & London: Garland Publishing, 1977, pp. 21-23.

new projects' problems.[533] It is not necessarily a matter of inventing new technologies but employing accepted principles or concepts to solve issues that introduce particularities, such as a new bridge on a river, or a new building. In this sense, the design activity must employ previous principles and concepts to identify how to resolve that specific situation, since a new project will frequently bring about a new problem. Notwithstanding, this practice of making new technological solutions from a previous technological menu can also lead to technological innovations. Such assembling of previous technologies for generating different technological devices may also result in a distinct technological principle.

Conclusions.

The complexity in elaborating an accurate conception of technology stems from the different meanings that the various approaches have traditionally emphasised. Philosophers, historians, and economists have faced the most conceptual issues related to technology and their context, always considering their respective fields' specificities, but ignoring the other fields' contributions. This item's title carries an intentional ambiguity that discloses our attitude towards this problem, revealing both a purpose and a method. The intention is to provide a definition of technology that is also technological, resulting in a self-reference that, far from implying a methodological flaw, reinforces the adopted paradigm. Technology is not internal to philosophy, history, or economics, but something much closer to actors who traditionally are not interested in conceptualising it. Consequently, the best way to comprehend technology internally is not from how engineers define it, but from how they perform their activity.

Engineering activity presupposes a way of thinking about how to harness different phenomena to resolve particular social life problems. This cognitive activity's outcomes reflect on the material plane, and such cognitive-material duality resulted in a vision of technology linked to science. Excluding the material results, technology and science have similar intellectual dimensions, and both are concerned with understanding the phenomenology. However, technology's teleological character is mainly responsible for these fields' separate historicities

[533] In this work, "design" has a broad meaning and is practically confused with the engineering activity. Bonsiepe brings a more specific idea of the activity, distinguishing it from science and technology due to its concern with the articulation between the device and the user. See BONSIEPE, G. H. M. The Chain of Innovation Science · Technology · Design. **Design Issues,** v. 11, n. 3, pp. 33-36, 1995.

and the distinct attitudes between engineers and scientists. Likewise, the phenomenon's quality allows speculation on this engineering activity's different manifestations, depending on whether it harnesses natural, social, or individual phenomena. Given the importance of this distinction to lawyers, we chose to reserve the term technology, in its strict sense, for the autonomous exploration of natural phenomena, while social and human "engineering" will be called technique.

In terms of the type of solution offered, standard engineering, consisting of solving specific problems based on the existing technology, contrasts with extraordinary engineering responsible for generating new technologies. Nevertheless, there is no need for advanced scientific knowledge about the phenomenon underlying the technological solution provided in both cases. As technology develops, the articulation between existing devices gains more autonomy before the intellectual dimension concerned with understanding the natural phenomenology. Therefore, high technology's main feature consists of its intense recursiveness, which presupposes a language allowing different devices' assembling. The question is to identify the difference between providing solutions based on existing technologies and the production of new technologies. Understanding when an engineering activity is standard or extraordinary depends on the technological evolution process's characteristics, as will be seen in the next item.

2.1.2. Technological evolution.

The previous item has presented a view of technology as a necessary outcome of the intellectual project for constructing the human dimension. According to this view, technology means the thinking about solutions and its tangible or intangible results, implying the harnessing of particular phenomena and the recurring to previous technologies. Although having identical intellectual dimensions, the technology differs from science due to its necessary teleological character and its particular historicity. However, the proximity to the sciences allows speculation about possible technologies based on natural, social, and individual phenomena. This speculation, associated with the necessary separation between the human and natural dimensions, resulted in the distinction between technology in the strict sense and technique. Technology's material dimension, associated with a shared language allowing the assemblage of different devices, opened new possibilities for understanding the process of technological evolution.

Although the language standardisation may be a catalyst for technological evolution process, it does not explain why or how it occurs. Such process derives from both extrinsic and intrinsic factors in the technological field, encouraging or hindering the march of technological development. These elements are necessarily related to the technology's central qualities, acting directly on the technological evolution process's mechanisms. Under a dynamic perspective, these mechanisms must emulate the same elements that characterise technology, namely, its direct relationship with the capture and use of natural phenomena and its recursiveness to pre-existing technologies. The question is whether, at some point, it is possible to say that the process of technological evolution has given rise to a real technological revolution. As a corollary, it is necessary to understand the importance of this identification and the implications of a hypothetical technological revolution.

This item describes the most critical elements affecting technological development and analyses how this evolution may result in new domains and provoke technological revolutions. The premise is that the socio-economic context and the technological evolution's core mechanisms establish the development conditions. The hypothesis is that the potential paradigmatic transformations on technology's intellectual dimension result in the emergence of new domains, constituting a new technological language and provoking technological revolutions. The item begins by showing the relationship between socio-economic factors and the technological evolution process. Afterwards, it identifies the central mechanisms in this evolution process and the impacts caused by the change of principles and technological domains. The item concludes by presenting elements that allow us to identify when the evolution gives rise to a real technological revolution and its possible implications beyond the technological field.

Economic supplies and demands.

Except for science's connection with modern technology's intellectual dimension, the external factor mostly associated with technological evolution is the economic context. The intimate relationship between technological progress and economic growth transformed the economic discourse, bringing the technological changes to the economic narratives

about production process's features.[534] However, although technological evolution generally conducts to economic growth, the opposite is not necessarily valid. Even in an economic expansion scenario, some form of technological stagnation may occur due to a strong economic dependence on a specific sector.[535] Therefore, albeit technological evolution is necessarily related to qualitative economic transformations, it is only contingently associated with a quantitative increase.[536] Consequently, the economic context's impact on technological evolution depends on how the relationship between economy and technology is intellectually perceived and materially structured.

The economic debate concerning the relationship between production factors and products has a high similarity with technology's intellectual dimension. It is not by chance that the economists have developed a discourse on innovation that emulates, in their epistemic universe, the same categories observed around the idea of technological evolution.[537] This perspective, inserted in the scope of the so-called evolutionary economics, understands innovation as an outcome of the several factors related to the economic environment in which technological changes occur.[538] Hence, economic demands for technological solutions are not

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[534] Rosenberg adopts a view equivalent to what we call "technology in a broad sense" to inform that the difficulty in elaborating these narratives is associated with the different possibilities of defining technological progress, suggesting the existence of two common denominators: the interest in expanding the volume production, and the concern with increasing product quality for a given amount of resources. In this sense, the author informs that most economists are concerned with the quantitative impacts of technological progress, focusing only on cost reduction. However, Rosenberg highlights the importance of considering product innovation and qualitative improvements, presenting extensive historiography about the debate on the relationship between technological progress and economic growth. See "The historiography of technical Progress" in ROSENBERG, N. **Inside the Black Box: technology and economics**. Cambridge: Cambridge University Press, 1982, pp. 3-33.

[535] On the subject, Felbermayr demonstrates that even technologically stagnant sectors can lead to endogenous economic growth. See FELBERMAYR, G. J. Specialization on a Technologically Stagnant Sector Need Not Be Bad for Growth. **Oxford Economic Papers,** v. 59, n. 4, pp. 682-701, 2007.

[536] For a detailed analysis of the distinction between development and economic growth, see "The Fundamental Phenomenon of Economic Development" in SCHUMPETER, J. A. **The Theory of Economic Development: an inquiry into profits, capital, credit, interest, and the business cycle**. Cambridge, Mass.: Harvard University Press, 1949, pp. 57-94.

[537] According to Yagi, the distinction between invention and innovation is difficult to conceive, but one can infer it from Schumpeter's economic sociology theory. Thus, although innovations ground on inventions, the categories would belong to different universes. While inventions result in technological knowledge development, innovations correspond to that development's transfer to the economic world dominated by entrepreneurs, not by engineers. See YAGI, K. Schumpeter in the Harvard Yard: inventions, innovations and growth. In: Shionoya, Y. and Nishizawa, T. (Ed.). **Marshall and Schumpeter on Evolution: economic sociology of capitalist development**, 2008, pp. 204-224.

[538] Although several streams are under the umbrella of evolutionary economics, they all agree that the economic actors' attitudes are closer to the cultural context than a deemed universal rationality. In this sense, see WUNDER, T. A. Toward an Evolutionary Economics: the 'theory of the individual' in Thorstein Veblen and Joseph Schumpeter. **Journal of Economic Issues,** v. 41, n. 3, pp. 827-839, 2007.

limited to efficiency matters, reaching any production issues understood as problems by the economic paradigm. Conversely, anomalies not perceived as problems by the economic paradigm will not demand any solution. Therefore, innovation will only occur when a given invention corresponds to a problem's solution, thus recognised by the economic paradigm.[539]

Under a material perspective, the relationship between technological evolution and the economic context becomes more straightforward. The economy encompasses all the techniques and technologies that constitute it so that the process of producing wealth in a given society presupposes a great economic language that unifies the technological whole.[540] In adopting this vision, the economy must recognise the emergence of new engineering activities and the material result of their intellectual production as economic events. From this recognition, the promotion of innovation can occur both by the specific economic incentives and actions to protect an entire sector understood as technological.[541] Likewise, economic freedom and the facility to obtain inputs, including technology itself, allow for a more significant supply of elements from which engineers can make combinations. In turn, such economic freedom usually presupposes broader social aspects that transcend the borders of the economy.

Social supplies and demands.

The social factors that encourage greater economic freedom also influence the way the process of technological evolution occurs. Thus, the same double relationship between the economy and the technology limited to production scope applies to a broader perspective of human needs. In this sense, even the most basic forms capable of constituting the social

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[539] Ruttan goes further, situating technological transformation after innovation. For the author, the invention is a prerequisite for innovation, and this latter is a condition for technological change. He starts from the Schumpeterian distinction between the social process that produces innovations and the processes resulting in inventions, admitting that neither Schumpeter nor the growth economists have explained what happens in these processes. With this, Ruttan rescues the idea of innovation developed by Usher framing it in a functional context, related to the practical application of technological innovations and the economic organisation. See RUTTAN, V. W. Usher and Schumpeter on Invention, Innovation, and Technological Change. **Quarterly Journal of Economics,** v. 73, n. 4, pp. 596-606, 1959.

[540] Arthur says that, since the economy depends on the technologies (and techniques) that compose it, she decides which new technologies will be part of the system. See "The economy evolving as its technologies evolve" in ARTHUR, W. B. **The Nature of Technology: what it is and how it evolves**. New York: Free Press, 2009, pp. 191-202.

[541] For this reason, the idea of information and communication technology has both an instrumental (meaning technology in a strict sense) and an economic perspective (as an economic sector). This theme will return in subchapter "2.2. The digitalisation of the economy".

dimension can be seen from a technological perspective, while technology can be limited to its aforementioned instrumental character.[542] In this way, aesthetic, cultural, political, or religious factors have the power also to generate demands, offer incentives, or simply prevent any form of technological change. Therefore, the propensity for associating a given moment in the history of civilisation with a specific type of capturing and using natural phenomena is not just a chronological issue. Such correlation reveals the attitude of the respective civilisation towards the technology available in a specific period.[543]

Notwithstanding, some social factors have historically been more critical than others in generating demands for technological advances. War has traditionally been the main factor in offering urgent demands for technological solutions, forming the engineer's image as an actor distinct from the architect or the master builder.[544] The close relationship between science and technology has generated technological solutions to scientific problems, while scientific production fosters technological evolution. In the same sense, a culture that values the development of scientific rationality has the potential to offer minds capable of decoding the possibilities of capturing and using natural phenomena. These cultural factors lie in a broader normative framework that affects how the engineers realise their very process of solving problems.[545] Hence, the social circumstances in which engineers find themselves establish the material basis and ideological paradigms for technological evolution.

The axiological factors related to the choices made by different societies over time have played an enormous role in constraining technological evolution. A society that

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[542] From a technological perspective, the emergence and supremacy of the written over the oral language meant a turning point in the human self-conscience, which led Plato to consider writing as "inhuman" because it intended to establish outside what can only exist inside the human being. See "Writing restructures consciousness" in ONG, W. J. **Orality and Literacy: the technologizing of the word**. New York: Routledge, 2002, pp. 77-113.

[543] Specifically, concerning energy use, Ayres states that the difference between technology expertise by a small elite and its dissemination among the average citizen is the difference between adopting or not a given type of energy. For a historical analysis of the relationship between the rise and fall of cultures and the inventor's respectability in a given society, see AYRES, E. Social Attitude Toward Invention. **American Scientist,** v. 43, n. 4, pp. 521-540, 1955.

[544] Although the engineering activity is as old as civilisation itself, the engineer's recognition is relatively recent and restricted to the scope of war. In eighteenth-century France, the notion of a civil affairs engineer emerged in the first schools dedicated to these professionals' training. On how the École des Ponts et Chaussées was responsible for "civilising" military engineers, see GILLISPIE, C. C. Engineering, Civil and Military. In: (Ed.). **Science and Polity in France: the end of the old regime**. Princeton: Princeton University Press, 1980. Chapter VII, pp. 479-548.

[545] Brown, Lee Downey and Diogo present a sample of how the normative framework can affect engineering knowledge transmission. BROWN, J. K., LEE DOWNEY, G. and DIOGO, M. P. The Normativities of Engineers: engineering education and history of technology. **Technology and Culture,** v. 50, n. 4, pp. 737-752, 2009.

opted to prevent all or specific individuals from dedicating to understanding science and technology's intellectual dimension reduces technological change possibilities. Even in overcoming this intellectual barrier, social circumstances can impact technological evolution as it affects the new technology's diffusion mechanisms. Thus, technological evolution is not exclusively explained by individual inventiveness, depending on collective social decisions constrained by the authorities with sufficient power, status, or technical knowledge to allow innovation diffusion.[546] Hence, it is necessary to conclude that it is not possible to state, beforehand, that technological advances are desirable or not. The social factors that foster or inhibit technological evolution stem from the same project for constructing the human dimension that sustains the idea of technology in the first place.[547]

Evolution's core mechanisms.

The importance of economic and social factors for the technological evolution process is quite intuitive when adopting an instrumental view of technology based on an external perspective. What deserves more attention is how the relationship between these external factors and the internal mechanisms responsible for technology evolution occurs.[548] A theoretical exercise of isolating the technology from its political, economic, and social environment is necessary to answer this question. This isolation confronts the new technology with the technological universe to which it belongs, resulting in a vision of technological evolution from the idea of self-reproduction.[549] Such reproduction occurs from new processes of capturing or using a given phenomenon and new forms of recombining previous technologies. Thus, albeit the external factors are responsible for offering the technological demands, the technology's material

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[546] On the importance of leaders and change agents' opinion in adopting a given invention by a specific social system, see "Four main elements in the diffusion of innovations" in ROGERS, E. M. **Diffusion of Innovations**. 3rd ed. New York: Free Press, 1983, pp. 10-34.

[547] In this sense, technological evolution itself corresponds to a social activity like any others, not a factor determining the social and economic order. For a critique of technological determinism of Marxist origin, see HEILBRONER, R. L. Do Machines Make History? **Technology and Culture,** v. 8, n. 3, pp. 335-345, 1967. For an updated view of the same debate, see HEILBRONER, R. L. Technological Determinism Revisited. In: Smith, M. R. and Marx, L. (Ed.). **Does Technology Drives History?** Cambridge, Mass.: The MIT Press, 1994, pp. 67-78.

[548] For an exception, see "The mechanisms of evolution" in ARTHUR, W. B. **The Nature of Technology: what it is and how it evolves**. New York: Free Press, 2009, pp. 167-190.

[549] Although it is a purely intellectual construction, the notion of technology as exclusively self-referenced results, in the end, in a technological system that opposes both the individual and society. On the possible sociological developments of adopting a systemic view of society, see REICHEL, A. Technology as System: towards an autopoietic theory of technology. **International Journal of Innovation and Sustainable Development,** v. 5, n. 2/3,

dimension establishes the rules for the evolutionary mechanisms' functioning.[550]

As seen, the ordinary production of technology consists of standard engineering, through which solutions are proposed based on shared principles. Although this process means a quantitative increase of technological devices, it does not necessarily correspond to a change in existing technologies.[551] Such a change depends on more profound transformations in technology's material basis to reduce the restrictions imposed by the physical properties that establish the limiting conditions.[552] In this case, it is not just a matter of producing a solution to a problem but of overcoming the very limitations inflicted by the material constraints. The difference between a change in a given technology and a technological evolution lies in how other technologies will benefit from that initial transformation.[553] Recursiveness represents the measure of technological evolution so that high technology means depending more on pre-existing technologies then on the direct capture and use of natural phenomena.

The notion that technology evolves from combining previous technologies does not imply that technological advancement necessarily consists of a process of accumulation. Technological evolution is subject to the same paradigmatic discontinuities identified in the domain of natural sciences, given their identical intellectual dimensions.[554] When such discontinui-

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pp. 105-118, 2011.

[550] In an analysis dedicated to the advances in the material dimension of technology, Van Wyk highlights the relationship between the disciplines he believes are responsible for shaping technological trends and the physical limits of the pace of progress. Thus, economics, energetics, entropic, and ecology are responsible for creating technological demands whose response depends on articulating the three aspects of the material dimension of technology: matter, energy, and information. In turn, such dimensions are measured, respectively, in grams, joules and bits. In this sense, technological advancement corresponds to an increase in complexity, efficiency, and the characteristics of size and time related to artefacts and processes. See VAN WYK, R. J. Technological Change: a macro perspective. **Technological Forecasting & Social Change,** v. 15, pp. 281-296, 1979.

[551] The design activity is responsible for the standard march of technology, presenting the daily engineer's problems and legitimate solutions. However, such solutions are limited to the engineer's choices, which is why Arthur says that design "is a matter of choosing solutions". See ARTHUR, W. B. **The Nature of Technology: what it is and how it evolves**. New York: Free Press, 2009, p. 101.

[552] Even from an economic perspective, Magee recognises that material innovation represents a significant part of the technological development process. The estimated impact of these innovations in the computer sector is about 2/3 of all technological progress from 1969-2009. See MAGEE, C. L. Towards Quantification of the Role of Materials Innovation in Overall Technological Development. **Complexity,** v. 18, n. 1, pp. 10-25, 2009.

[553] Coccia and Watts maintain that the speed of the advance of a given technology is associated with its ability to offer benefits to a more significant number of related technologies. See COCCIA, M. and WATTS, J. A Theory of the Evolution of Technology: technological parasitism and the implications for innovation management. **Journal of Engineering and Technology Management,** v. 55, pp. 1-18, 2020.

[554] This comparison applies even more concerning modern high technology for its close connection with the field of physics. On the occurrence of discontinuities in the discourse of natural sciences, see KUHN, T. S. **The Structure of Scientific Revolutions**. 2 ed. Chicago: University of Chicago Press, 1970, 210 pages.

ties occur in an environment of significant interdependence, the evolution of a given technology will not only affect the previous technologies it replaced but all other technologies based on it. In this case, it is not about incorporating the previous technologies in the new one but discontinuing the very recursiveness chain.[555] Such a rupture transforms standard engineering's procedure because it institutes a new method of articulating the pre-existing technologies. It represents a change in the principle applied and, consequently, in the mechanisms governing the relationship between the type of phenomenon captured and the solving problem.

Domains.

The previous item has demonstrated that the recursiveness that characterises this combination process can result in general architectures that do not correspond to local architectures' principles. In these cases, the occurrence of a technological discontinuity may not affect the local principles but the general architecture itself.[556] Structurally, what can occur is an abandonment of the game of combinations based on an earlier principle and the implementation of a new principle from which the process of evolution will continue. This abandonment can disrupt a specific technology's evolutionary chain, instituting a new relationship pattern between the other technologies that compose it.[557] More than just establishing a new principle to be employed, these disruptions may result in the emergence of a brand-new technological domain. With the rise of a new domain, not only a new constellation of components appears, but new practices, knowledge, rules of combination and, above all, a new way of thinking.[558]

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[555] This rupture is equivalent to what, in the field of economics, Schumpeter called creative destruction. See "The Process of Creative Destruction" in SCHUMPETER, J. A. **Capitalism, Socialism and Democracy**. London and New York: Routledge, 2003, pp. 81-86.

[556] For a theoretical discussion and practical demonstration of the effects of an architecture's discontinuity without changing the parts that compose it, see HENDERSON, R. M. and CLARK, K. B. Architectural Innovation: the reconfiguration of existing product technologies and the failure of established firms. **Administrative Science Quarterly,** v. 35, n. 1, Special Issue: Technology, Organizations, and Innovation, pp. 9-30, Mar 1990.

[557] The idea of following the evolution of a complex structure instead of its parts gave rise to the structural model for determining technological transformation. Knight offers a proposal to apply this model to analyse the evolution of the digital computer. See KNIGHT, K. E. A Functional and Structural Measurement of Technology. **Technological Forecasting and Social Change,** v. 27, n. 2, pp. 107-127, 1st Apr 1985.

[558] Gorokhov gives us an example of this emergency by analysing the material and intellectual dimension of the technological changes that gave rise to radar. In this sense, radar's invention resulted in the breakdown of radar theory concerning radio engineering, radically transforming communication systems and the thought on communication processes. See GOROKHOV, V. The Historical Development of Radar Science and Technology as the Prelude to the Modern Information Revolution. **Icon,** v. 12, pp. 168-189, 2006.

Therefore, when there is a change in the principle responsible for technological solutions, one can speak of technological change. Nonetheless, when a new pattern of possible combinations accompanies the change of principle, this new domain generated corresponds to the emergence of a new technological language.[559] Hence, this domain forms a new linguistic pattern from which new elements combine, obeying a logic that will characterise such new activity. Although its emergence is an extraordinary event, a new domain will imply a new form of standard engineering, which means a new type of design activity.[560] This new design corresponds to a new form of expression of the domain's language, corresponding, ironically, to manipulating new technological clichés. Such a new domain's emergence does not necessarily transform the fundamental structure relative to the new technology's local architectures but may incorporate them into the new linguistic context.[561]

Technological development encompasses new versions of past technologies, brand new technologies, and the emergence of new domains. This rise corresponds to the most significant technological evolution expression, substantiated by the emergence of a new technological language.[562] Technology, in its entirety, corresponds to a collection of different languages developed to enable the combination of specific technological elements. Such languages are both an expression of technology in the strict sense, since they manifest in the material dimension, as of technique, given that they form the interface connecting the engineer to that dimension.[563] These languages may be interconnected more directly or indirectly, but, in the end,

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[559] Arthur explains that the new language generated by the emerging domain establishes the new articulation rules between devices within this new domain. See "Design as expression within a language" in ARTHUR, W. B. **The Nature of Technology: what it is and how it evolves**. New York: Free Press, 2009, pp. 75-79.

[560] In reality, the empirical analysis shows that, even without the emergence of a new domain, the mere technological discontinuity generated by a selection process between competing technologies can culminate in a single dominant design. See ANDERSON, P. and TUSHMAN, M. L. Technological Discontinuities and Dominant Designs: a cyclical model of technological change. **Administrative Science Quarterly,** v. 35, n. 4, pp. 604-633, 1990. However, when arising from the emergence of a new domain and a new language, this dominance's effects are even more impactful for the technological field, as will be shown below.

[561] The famous computer's description as a hierarchical structure proposed by Burks, Goldstine and von Neumann demonstrates how a new domain's emergence may absorb previous technologies in a new functional structure. See BURKS, A. W., GOLDSTINE, H. H. and VON NEUMANN, J. **Preliminary Discussion of the Logical Design of an Electronic Computing Instrument**. Princeton: Institute for Advanced Study, 1946.

[562] Arthur points out that, unlike the creation of new technologies, the emergence of a new domain is not just a matter of more efficiency, but new design possibilities. For this reason, for the author, the emergence of a new domain is the main form of technological progress, defining a given era's style. See "Domaining" in ARTHUR, W. B. **The Nature of Technology: what it is and how it evolves**. New York: Free Press, 2009, pp. 71-75.

[563] As an interface, the language resulting from the emergence of a domain has discursive effects that are not limited to the design practice, influencing how the engineers' cognitive activity operates. Nersessian informs that this influ-

they will always have the potential to be completely integrated. This possibility stems from the fact that the idea of recursiveness provides for a potential new general architecture that can be developed from the set of existing technologies, inserting such technologies in a new linguistic context.

Redomainings.

The different domains represent specific technological groups that correspond to more than the simple sum of the devices constituting them. Such domains do not arise from an invention attributed to an individual, emerging from the diffusion of their language and their social practices' consolidation.[564] As they refer to various technologies, domains may include devices supposedly not related to each other, such as electromagnets and toasters. These devices belong to the same domain for sharing a central principle consisting of electricity harnessing, although exploring its different effects, such as producing a magnetic field and heat generation. The emergence of the technological domain of electrodynamics is associated with the knowledge necessary to harness these and other particular effects stemming from the electrical phenomenon. Although its devices represent its material dimension, it is the type of technological knowledge shared by its actors that characterises the domain.[565]

Domains' collective characteristics, associated with the idea of social practice, result in a distinct process of evolution when compared to devices. Thus, although the idea of recursiveness is also applicable to domains, a new domain arises not only from

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ence is recognised by the field of cognitive studies related to science and technology, although there is a tendency to separate the personal cognitive process from the socio-cultural environment in which this process occurs. For the author, the production of scientific knowledge (we add "technological innovation") is directly related to the environment's social, cultural, and material wealth. Thus, Nersessian proposes that this environmental perspective goes beyond the individual's boundaries, recognising engineering thinking as a complex system that comprehends cognition and context. See NERSESSIAN, N. J. Interpreting Scientific and Engineering Practices: integrating the cognitive, social, and cultural dimensions. In: Gorman, M. E., Tweney, R. D., Gooding, D. C. and Kincannon, A. E. (Ed.). **Scientific and Technological Thinking**. Mahwah, New Jersey: Lawrence Erlbaum, 2005. Chapter 2, pp. 17-56.

564 For a more detailed presentation of the domains' characteristics and their relationship with the technologies that form them, see "Domains, or Worlds Entered for What can be Accomplished There" in ARTHUR, W. B. **The Nature of Technology: what it is and how it evolves**. New York: Free Press, 2009, pp. 69-86.

565 Laudan highlights the academics' difficulty in identifying this intellectual dimension, since, except for high technology, technological knowledge is rarely articulated and mostly visual, which contrasts with the verbal and mathematical forms familiar to academics. Such difficulty explains, in part, the lack of interest in the cognitive content of technology. See "Introduction" in LAUDAN, R. **The Nature of Technological Knowledge: are models of scientific change relevant?** Dordrecht: Reidel, 1984, pp. 1-26.

pre-existing technologies, or a new phenomenon uncovered by the scientific advancement, but from social practices already widespread. A new domain creates a new epistemological field since a whole new language emerges to account for this new technology body.[566] Concerning the emergence of new domains directly associated with the capture and use of natural phenomena, this language will reflect the characteristics of the phenomenon harnessed. This whole movement is mainly motivated by the perception of the epistemological paradigm's inability to deal with some particularity of the field.[567] A domain emerges from new linguistic functionalism that influences how engineers provide solutions according to a new technological paradigm.

The most apparent possible result of the emergence of a new domain is replacing a previous one since it is not a matter of substituting a single technology but a whole way of thinking. On the other hand, this suppression does not presuppose a discontinuity in the evolutionary process of the technologies that establish the suppressed domain's material basis.[568] If there is a technological discontinuity resulting from the emergence of a brand-new domain, such discontinuity operates in the technology's intellectual dimension. Nevertheless, this discontinuity does not necessarily mean the previous domain's disappearance, but a possible new contextualisation within the nascent epistemological framework.[569] Even when a new domain causes profound transformations in previous domains, the affected domain's fundamental principles may remain preserved. Such a situation corresponds to the conversion of past domains into sub-domains within a new technological hierarchy relationship.

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[566] According to Constant, the very idea of a collaborative practice implies transforming the traditional inventing model associated with the idea of an individual genius. Technological production would assume a collaborative feature in the same terms in which Thomas Kuhn described his model of normal science. For a historical analysis and proposition of an "ideal-typical" model of collective technological practice, see CONSTANT, E. W. Communities and Hierarchies: structure in the practice of science and technology. In: Laudan, R. (Ed.). **The Nature of Technological Knowledge. Are Models of Scientific Change Relevant?** New York: Reidel, 1984, pp. 27-46.

[567] The perception that a technological domain could not develop due to the insufficiency of one or more of its components resulted in the expression "reverse salients". The idea is that radical innovations are necessary to modify the subsystems that prevent the expansion of the hierarchically superior architecture. See "Reverse salients and critical problems" in HUGHES, T. P. **Networks of Power: electrification in western society, 1880-1930**. Baltimore: The Johns Hopkins University Press, 1983, pp. 79-105.

[568] Understanding that only the material, and not the intellectual dimension, characterises the evolution of technology, Basalla condemns the idea of technological discontinuity. As a corollary, Basalla maintains that the idea of technological revolution stems, among other things, from confusion between technological changes and socioeconomic changes. See "Continuity and discontinuity" in BASALLA, G. **The Evolution of Technology**. Cambridge: Cambridge University Press, 1988, pp. 26-63.

[569] Arthur explains that, while some domains present a "cycle of life", others reinvent themselves. In this sense, when their key technologies undergo radical changes, domains may morph and throw off new subdomains. See "How domains evolve" in ARTHUR, W. B. **The Nature of Technology: what it is and how it evolves**. New York:

Revolutions.

Given the identity of their intellectual dimensions, the way revolutions take place in the scientific field helps to understand technological revolutions. The idea of scientific revolution involves replacing a paradigm given its inability to deal with anomalies that emerge in the field and result in crises that affect the normal science course.[570] In technological terms, such a paradigm shift corresponds to the emergence of a new language capable of modifying how standard engineering proposes technological solutions for everyday problems.[571] Nonetheless, technology possesses a teleological orientation that diverges from the sciences' purely cognitive objectives, bringing it closer to interests identified with other social life perspectives. As a result, technological revolutions can transform structural aspects of production and social organisation processes. Therefore, the emergence of a new domain may not merely impact the technological field itself but also the economy or even the entire social order.

Notwithstanding, the emergence of a brand-new domain does not necessarily involve a paradigmatic revolution in a socio-economic sense. Identifying such occurrence demands understanding how the new technological paradigm has changed the production process or the social organisation hitherto established.[572] As, in these cases, technology is seen from its capture by an epistemological paradigm belonging to a different field, technological revolutions often take on a different guise. The prevalence of the socio-economic perspective in studying technological paradigm changes was responsible for associating the technological revolutions with industrial revolutions.[573] This vision became even more consolidated with the rise of a sub-

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Free Press, 2009, pp. 146-151.

[570] Kuhn makes it clear that the impact of scientific revolutions is more significant on the intellectual plane. See "Revolutions as Changes of World View" and "The Invisibility of Revolutions" in KUHN, T. S. **The Structure of Scientific Revolutions**. 2 ed. Chicago: University of Chicago Press, 1970, 210 pages, pp. 111-143.

[571] Constant emulates the Kuhnian categories to argue that revolutions occur in the field of technology when a new technological paradigm emerges and dominate a community of practitioners as a result of an accumulation of "presumptive" anomalies. See CONSTANT, E. W. **The Origins of the Turbojet Revolution**. Baltimore: Johns Hopkins University Press, 1980.

[572] Specifically, concerning the social organisation at the international level, Kello points out that the technological revolution in which political thinkers are interested is the one that impacts ideals, beliefs and habits of a given political system. Thus, the author proposes a division of technological revolutions within the scope of international relations as they result in a disruption, a revision, or a change in the international system. See "Technological Revolution and International Order" in KELLO, L. **The Virtual Weapon and International Order**. New Haven: Yale University Press, 2017, pp. 80-115.

[573] Because of this prevalence, it has become commonplace to claim that, after the first industrial revolution started in the eighteenth century, other "industrial revolutions" followed. For example, for Schwab, we would be experiencing the fourth industrial revolution, characterised by breakthroughs in areas like gene sequencing, nanotechnol-

field in economics concerned with the impacts of innovation on economic activity. The result was the submission of technological advancements to an industrial perspective, summarising technology to a mere element that composes the production process.

Adopting an industrial perspective implies submitting the technology to a limited paradigm within the intellectual project of building the social world. While there is nothing inherently wrong with this approach, such a procedure will inevitably result in a reductionist view of technology. Furthermore, it is even possible to identify a double reductionism in this approach, which limits the technology to an economic view that, in turn, is limited to a productive perspective. Technology would not only be restricted to an economic view, but to a business view, in which a technological revolution would be nothing more than a revolution in the way of doing business. A realistic approach to technology must go as far as the paradigm allows to advance, which implies an inversion of the approach. Thus, the analysis of the technological revolution's impacts on the economy and social order calls for a technological perspective, which implies privileging the intellectual dimension instead of technology's material instrumentality.

Conclusions.

Technological evolution results from a dialectical relationship between the internal mechanisms that make up technology and the offers and demands that its context determines. This finding is very similar to the description of the evolution of legal discourse presented in the previous chapter. Such similarity is not a mere coincidence but the realisation that law is a type of technology in a broad sense. Thus, the tense relationship between the preservation of internal mechanisms and the external attempt to submit them to a merely instrumental condition is not a particular legal feature but of the technology in its broad sense. However, and unlike the legal narratives, external actors provided the main narratives about technology, privileging its instrumental character over its internal mechanisms. On the other hand, such narratives do not reduce the importance of understanding how these mechanisms interact with the socio-economic context and contribute to the technological evolution process.

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ogy, renewables, and quantum computing. The second and third revolutions would be characterised, respectively, by the advent of electricity and the assembly line in the late nineteenth century, and the emergence of computer and digital technology between the 1960s and 1990s. See "Historical context" in SCHWAB, K. M. **The Fourth Industrial Revolution**. Geneva: World Economic Forum, 2016, pp. 11-13.

From an internal perspective, technological evolution results from the changes that have taken place in the elements that constitute the essence of technology. In this way, discovering new phenomena to be explored and inventing new methods of exploring a given phenomenon result in new technologies' emergence. Nonetheless, a rupture in the recursive chain represents the most significant form of technological transformation. These ruptures are associated with the rise of a brand-new domain, implying the emergence of a new technological language which results in a new sort of engineering activity. This event's greatest manifestation occurs when the new domain's language proliferates over other technological domains, affecting not just their material dimension but also their actors' very way of thinking. This process characterises the technological revolution in its strict sense, meaning the consecration of a new technological paradigm whose effects may exceed the limits of the field of technology.

Although technological revolutions occur in the intellectual dimension, they produce effects on technology's material plane. Consequently, this revolution will necessarily result in visible transformations of the social and economic order to a greater or lesser extent. Nevertheless, identifying technology-related changes in the economy and society is not enough to claim that there has been a technological revolution. Technology characterises itself for modifying the human being's material reality, which does not mean that every change corresponds to a revolution. Furthermore, given the dialectical relationship between the technology and its context, it is necessary to identify whether a given technological revolution is a cause or a consequence of a socio-economic revolution. Although it is common to refer to several technological revolutions as industrial revolutions, a more detailed analysis demonstrates the existence of only one technological revolution altering the economy and society, as the next item will show.

2.1.3. Technological revolution.

The previous item has approached the idea of technology from a dynamic perspective, analysing the transformation process responsible for its evolution. Such analysis permitted identifying several internal mechanisms and favourable or contrary socio-economic external contexts to technological transformations. These contexts act on the central mechanisms

that characterise technology, and such interaction represents the essence of technological evolution. The apex of such evolution corresponds to the rise of a technological domain, its specific language, and the emergence of a new way of thinking about standard engineering activity. The results of the emergence of a new domain over pre-existing domains can range from their replacement to their absorption in the light of a new technological paradigm. The emergence of new paradigms provokes revolutions in the technological field, an episode that has become part of the economic discourse concerning industrial revolutions.

The association between technological and industrial revolutions has become a conceptual tool to explain the liberal social order's successive changes. It is now commonplace to refer to one, three, four, six or even more industrial revolutions, each of them associated with a specific technology. Nonetheless, given the mutual influence between the technologies and their environment, it is not always clear if a social revolution is a cause or a consequence of a technological revolution. It is crucial to identify whether the dominance of an emerging domain's language has impacted the social sphere or if the social order changes have created revolutionary technological demands. Since the social order implies an organisation technique, the above identification only makes sense if one considers the technology in its strict sense. Hence, a socially relevant technological revolution will only occur if a new technological domain defies the paradigm that governs social organisation technique.

This item aims at analysing the relationship between technological changes traditionally associated with industrial revolutions and transformations in the social order grounded on the liberal paradigm. The premise is that this analysis depends on the separation between the adopted technique of social organisation and the technologies associated with the revolutionary period. The hypothesis is that the technological revolution that affected the social order occurred only after the emergence of the digital domain. The item begins by analysing the relationship between technological and social changes that resulted in the so-called first and second industrial revolutions. Afterwards, the item shows how the new industrial society generated demands for control resulting in the rise of information processing technologies. Finally, the item demonstrates how the emergence of the digital domain was responsible for creating a language related to information processing that transformed industrial society.

Industrial revolution.

As demonstrated, the external context and the socio-economic supplies and demands it imposes are decisive factors constraining the technological evolution. Hence, eighteenth-century Britain's natural, social, and intellectual environment correlates with the fact that the industrial revolution emerged there before spreading across the world.[574] The English subsoil was rich in mineral coal and iron ore in a moment of the history characterised by intense international commercial rivalry. Besides, there were no longer any commercial monopolies in the country, the government accepted the idea of wealth generated through commerce, while the British fleet protected its merchants abroad[575]. In the intellectual plane, the freedom of thought allowed industrial development and the consequent expansion of trade and manufacturing activities. Likewise, the eighteenth century, differently from the nineteenth-century academicism, had not yet developed a spirit of depreciation of practical solutions to production problems.[576]

Notwithstanding, the British industrial revolution had less to do with technological knowledge than with the period's political and economic conditions. The knowledge needed to produce the manufactures that characterised industrialisation was elementary, and the British were far behind some of its European rivals in terms of education.[577]

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[574] Hobsbawm clarifies that, although this is not an event with a definite beginning and end, it is possible to identify when the economic transformations brought about by the Industrial Revolution went far enough to produce a substantially industrialised economy. These changes occurred between 1780 and 1800, resulting from the configuration of factors that formed the British context. This context is deeply analysed in "The Industrial Revolution" in HOBSBAWM, E. **The Age of Revolution**. New York: Vintage Books, 1996, pp. 27-52.

[575] Associating technological changes both to the replacement of consolidated methods as severe human dislocations, Landes states that this new context meant the most drastic break with the past since the invention of the wheel, highlighting its particular impacts on investment and labour. In the first case, a new conception of risk has made entrepreneurs prisoners of their investments. In the second, an even more fundamental transformation has separated workers (though not all) from the means of production. For an analysis of the various factors related to forming a British context favourable to these transformations before its continental neighbours, see "The Industrial Revolution in Britain" in LANDES, D. S. **The Unbound Prometheus: technological change and industrial development in Western Europe from 1750 to the present**. Cambridge: Cambridge University Press, 1969, pp. 41-123.

[576] Although there was still some social distinction between the scientist's image as a poet or theologian and that of the inventor as someone without any education, the seventeenth and eighteenth centuries experienced a process of approximation between these two characters given the experimental mechanics' influence on invention's mental process. This approximation was decisive for recognising the importance of what we are calling here the intellectual dimension of technology. On the relationship between scientists and inventors, see AYRES, E. Social Attitude Toward Invention. **American Scientist,** v. 43, n. 4, pp. 521-540, 1955, pp. 523-527. On the influence of scientific experimentalism on the inventors' creative process, see "The rise of modern experimental science" in USHER, A. P. **A History of Mechanical Inventions**. New York: McGraw-Hill, 1929, pp. 58-65.

[577] Petroski reports that French engineering's highly structured theoretical foundations in the eighteenth century contrasted with the English apprentice system based on skilled craftsmanship. See PETROSKI, H. The Civil Engineer: on the occasion of a sesquicentennial. **American Scientist,** v. 90, n. 2, pp. 118-122, 2002.

Therefore, the expertise necessary for processing the matter was not sophisticated enough to produce a language that exceeded the technological field's limits. The model of a social organisation centred on the market corresponded to the main technical innovation responsible for the subsequent technological revolutions.[578] Consequently, the industrialisation process that deserves to be analysed is not that of matter but of society itself. The emergence of industrial society, based on an asymmetric relationship characterised by the political construction of a world market monopolised by a single producing nation, is responsible for industrialisation's revolutionary character.[579]

An industrial society based on the liberal paradigm required intense state action to create the necessary conditions for implementing such a social engineering project. This collaboration between state and market interests was even closer when it came to the project to create a global market for British production.[580] Nonetheless, the move from the agricultural to the industrial production model at the internal level demanded a new way of capturing and using human force. Such capture was not limited to technical design but involved an entire effort of social restructuring based on removing the rural population to the urban area.[581] The submission of the social order to a technical and technological development project has meant an unprecedented way of seeing the relationship between human beings and technology. However, this rationalisation process clashed with traditional social organisation forms and required other new techniques and technologies to alleviate this tension.

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[578] Ellul explains that it was the technological development that resulted from social restructuring, and not the contrary. For him, eighteenth-century England, before France and the United States, already gathered the five elements that he considers central in this process, namely: a long process of technological maturation in a broad sense, population growth, favourable economic environment, ease for social adaptation, in addition to an evident intention (sponsored by the bourgeoisie) to articulate all these factors around social transformation. See "The Industrial Revolution" in ELLUL, J. **The Technological Society**. New York: Vintage Books, 1964, pp. 42-60.

[579] Although creating a world market for English manufacturing was not a necessary condition for its growth, such growth would have been much slower, and not "revolutionary" if based on the expectation of an increase in the British population's purchasing power. Therefore, the English technological explosion profited from other local markets' purchasing power, located outside its territory. On the central role of market expansion for the first industrial revolution, see BERRILL, K. International Trade and the Rate of Economic Growth. **The Economic History Review,** v. 12, n. 3, pp. 351-359, 1960.

[580] The state's importance in constructing national and international markets will be seen, respectively, in the items "The construction and independence of the national market" and "The protection of the free international market".

[581] Polanyi explains that this process took place from the repeal of laws that guaranteed the poor of England a minimum income based on the cost of bread. The author argues that the existence of these laws prevented, until 1834, the establishment of a competitive labour market. The peasant population's gradual impoverishment, associated with a gigantic wave of enclosures, produced a rural proletariat that supplied labour's industrial demand. See "Speenhamland, 1795" in POLANYI, K. **The Great Transformation: the political and economic origins of our time**.

Demands for control.

The rise of the industrial society meant replacing traditional relationships developed spontaneously by new social bonds deliberately designed to achieve specific production goals. This substitution transferred the individual from the context of local community relations to a broad social environment guided by one new rationality.[582] This new rationality was based on the liberal paradigm and had the market as the central and structuring element of the new pluralist social order that was emerging. From an economic perspective, the migration from commercial to industrial capitalism implied a change in the very discourse that justified social relations.[583] These new relationships no longer based themselves on honour, love, or family ties between the commercial actors responsible for creating the global market. As a result, the emergence of industrial capitalism was accompanied by new techniques and technologies that supplied the lack of social control mechanisms typical of traditional communities.[584]

However, the importance of developing new techniques and technologies associated with industrial production control is not limited to aspects related to the social plane. The division of labour, associated with mechanisation development, implied an unprecedented quantitative increase in production.[585] This increase represented a new energy and matter processing pattern, resulting in a production speed that exceeded the human capacity to exercise

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Boston: Beacon Press, 2001, pp. 81-89.

[582] Tönnies identified the transition from life in the community (Gemeinschaft) to life in society (Gesellschaft) as a crucial precondition for the emergence of capitalism. See TÖNNIES, F. **Community and Civil Society**. Cambridge: Cambridge University Press, 2005.

[583] Weber argues that this new capitalist economy's emergence depended on nullifying traditional attitudes towards the economy. See "Modes of the Economic Orientation of Action" in WEBER, M. **Economy and Society: an outline of interpretive sociology**. Berkeley: University of California Press, 1978, pp. 69-71. Weber's statement reinforces our notion that changes in discourse correspond to changes in the actors' attitude towards a given object.

[584] In addition to the change related to social ties, Beniger explains that the diversified production model has mitigated the demand for control mechanisms in commercial capitalism. According to the author, the producers shared the risk with commercial representatives, and the volume of production and turnover did not justify a big concern. However, based on the social division of labour and specialisation, industrial capitalism involved constancy and volume, which imposed the need to develop new control mechanisms. For this reason, Beniger goes far as to say, contrary to what Weber claims, that it was not religious or ideological changes that resulted in industrial capitalism, but the technical and technological development related to production control. See "From Tradition to Rationality: distributing control" in BENIGER, J. R. **The Control Revolution: technological and economic origins of the information society**. Cambridge and London: Harvard University Press, 1986, pp. 121-168.

[585] However, it is noteworthy that the division of labour was initially much more relevant than mechanisation. While Smith's work emphasised the division of labour since the end of the eighteenth century, mechanisation only became part of the discourses that described the industrialisation process in the early nineteenth century and usually associated with human intervention. See BEZANSON, A. The Early Use of the Term Industrial Revolution. **Quarterly Journal of Economics,** v. 36, n. 2, pp. 343-356, 1922.

control. This situation has generated new technical and technological demands related not to the production process itself, but to the processing of information necessary to control it.[586] The fractionation of the productive activity resulting from the division of labour implied the emergence of a productive system with a particular phenomenology. The inability of traditional methods to deal with this new phenomenology has led to a real crisis of control that has brought about changes in the emerging industrial society.

Since the industrial revolution took place through a project to restructure the social order, the economic production process's increase in speed meant a broader acceleration of the society as an all-encompassing production system. Thus, the same demands for techniques and technologies that helped manage industrial production existed to control the industrial society.[587] The result was a specific technological development concerned with the problems arising from the increasing complexity of the industrial society. Although this technological advancement resulted from improvements in production technology, it developed based on a phenomenology related to the capture and use of information.[588] Notwithstanding, the first technological response to these social demands for control has not emerged as a technology in the strict sense. As an information control technique, the modern bureaucracy was the primary material result of a nascent technological tradition related to information processing.

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[586] Beniger argues that it was only from the increase in the speed of production and distribution provided by the steam power that uncertainties related to price variations and other risks in distribution reduced, allowing the market mechanisms foreseen by the liberal paradigm to act in the economy. See "Toward Industrialization: controlling energy and speed" in BENIGER, J. R. **The Control Revolution: technological and economic origins of the information society**. Cambridge and London: Harvard University Press, 1986, pp. 169-218.

[587] Beniger explains that, in addition to an information control crisis in the production process, the acceleration caused by industrialisation impacted the entire material dimension of the economy, affecting consumption and distribution. Analysing the American reality, the author states that the social perception of a crisis of control started from the new railroads' safety problems, which demanded maximum efficiency. See "Industrial Revolution and the Crisis of Control" in BENIGER, J. R. **The Control Revolution: technological and economic origins of the information society**. Cambridge and London: Harvard University Press, 1986, pp. 219-287.

[588] The increase in complexity due to technological advances associated with the mechanisation of production was responsible for the cybernetic field's emergence. According to Mitcham, cybernetics has as its primary object the understanding of the relationship between animal and machine, and the theoretical concept that lies at the centre of this relationship is information. Although the field only emerged from the 1940s, Mitcham points out that some authors trace its origins from the first debates on mechanisation in the late eighteenth century. See "Cybernetics" in MITCHAM, C. **Thinking Through Technology: the path between engineering and philosophy**. Chicago: The University of Chicago Press, 1994, pp. 204-207.

Technical responses.

Although similar social phenomena have appeared in different places and times, the rise of modern bureaucracy was one of the core outcomes of the industrial revolution. Its importance derives from its role as a technical mechanism for controlling information in light of the tension between the economic and social orders.[589] This control was exercised through a vision of the wealth generation as a process guided by impersonality and identified with the business rationality that liberal ideology preached. This process presupposed the definition of responsibilities, hierarchical authority, specialised decisions, and specific communication functions.[590] The issue was not to generate information from the bureaucratic technique but to process it at a speed equivalent to that of the new wealth generation process. This increase in speed demanded a decrease in the amount of information to be processed, which happened from the adoption of forms responsible for capturing only specific social reality aspects.

The procedure of rationalising the information processed resulted in the power to deal with large-scale processes and complex social systems. The first application of this new possibility was on the productive process itself, which became more intricate after the social division of labour's institutionalisation. The second application concerns the control of the global market for the results of the production process. The existence of a market encompassing very different local conditions became possible only from the simplifications allowed by bureaucratic processes, making bureaucracy a necessary tool for globalisation.[591] Bureaucracy and rationalisation led to the emergence of a technical domain related to information, which produced a specific technical language that, later on, allowed the emergence of the correspondent technological

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[589] The bureaucratic organisation has traditionally been used as a control mechanism for large social systems, emerging whenever an organisational effort directed towards a particular objective becomes necessary. For a historical analysis of bureaucracy as a mechanism for social control, see "Evolution of Control: culture and society" in BENIGER, J. R. **The Control Revolution: technological and economic origins of the information society**. Cambridge and London: Harvard University Press, 1986, pp. 61-118.

[590] Weber was the first and leading theorist to describe the characteristics of the bureaucracy generated by the industrial revolution. For his description of modern bureaucracy's characteristics, see "Bureaucracy" in WEBER, M. **Economy and Society: an outline of interpretive sociology**. Berkeley: University of California Press, 1978, pp. 956-1005.

[591] Beniger explains that the "forms' system" represents how the bureaucratic technique faced the information processing issue. When summarising the reality to some standardised information, the form allowed handling a large amount of information. See "Revolution in Generalized Control: data processing and bureaucracy" in BENIGER, J. R. **The Control Revolution: technological and economic origins of the information society**. Cambridge and London: Harvard University Press, 1986, pp. 390-425.

domain.[592] The language shared by these domains concerned an information-related phenomenology, afterwards reaching other economic and social sectors.

At its most basic phenomenological level, the information consists of the fundamental instrument by which nature establishes an order despite a physical tendency to chaos. The ability to appropriate certain information permits opposing the universe's entropic properties and establishing a particular structure.[593] Because of this material requirement, what happens is that the amount of information depends on a physical storage limit so that additional information inevitably demands extra space. Therefore, any information processing continuity imposes obtaining more space to accumulate information, which demands additional energy. Such a dependency relationship demonstrates that its connexion to energy is an information's physical property, making the study of energy a synonym for studying information. The result is that information is not an abstract concept, obeying the same physical laws that govern the universe, and, therefore, must be codified in a material base.[594]

Technological responses.

Bringing this issue to the human dimension, the emergence of written language transformed ideas into graphic symbols, implying a separation between the idea itself and the human brain. More specifically, the sound-based language, unlike just representing

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[592] Although it is possible to trace the computer's ancestry to technologies much older than the industrial revolution, this ancestry concerns merely mathematical calculation or some automatic repetition. It was only after 1945 that information processing, in a broader sense, started to have a technological dimension in the strict sense. See ASPRAY, W. **Computing Before Computers**. Ames, Iowa: Iowa State University Press, 1990.

[593] In this sense, life's very existence, mainly intelligent life, becomes a scientific puzzle given the natural tendency to chaos. The existence of complex beings occurs through a natural process of handling information that obeys the same limitations imposed by the second law of thermodynamics: the trend is always increasing entropy, disorganising the system. See BIRD, R. J. Entropy, Information and Randomness. In: (Ed.). **Chaos and Life**: Columbia University Press, 2003. Chapter 9, pp. 172-201.

[594] The so-called "Maxwell's Demon" was probably the intellectual experiment that most provoked reactions that contributed to the development of the study of the material dimension of information. James Clerk Maxwell suggested the hypothetical existence of a being that, only from its knowledge about particles' speed, could circumvent the second law of thermodynamics. In the experiment, Maxwell assumes a closed, thermally balanced system in which hot and cold particles move randomly. Thus, he suggests that if there was a demon capable of anticipating each particle's movement, this could separate the system to leave all the hot particles on one side and cold on the other, decreasing entropy without the use of extra energy. The answer to the riddle would be that there is a limit to the amount of information that the demon could retain, so that, when reaching such limit, new information would require the erasure of the old. This process consumes energy and, therefore, demonstrates the relationship between information and its material dimension. See DAUB, E. E. Maxwell's Demon. In: Leff, H. S. and Rex, A. F. (Ed.). **Maxwell's Demon: entropy, information, computing**. Princeton: Princeton University Press, 1990, pp. 37-51.

scenes from nature, allowed the recording of even more abstract ideas.[595] This form of language, limited to the human sphere, found a technological equivalent from the industrial revolution and the punched card system's emergence. This system has allowed the human being to control the machine's operation, not by interfering through physical force but by developing a logical sequence of command.[596] The migration from a human language to a language disconnected from a specific cultural tradition has made it possible for human ideas to take on a material dimension that machines could understand.[597] This technological development has met with the technical tradition related to information processing, giving rise to the computing field.

The modern computer did not arise as a more advanced model of previous machines but as a logical result of a specific way of thinking about exploring information as a phenomenon.[598] Thus, the harnessing of the information is the essence of the intellectual dimension of information technology. Although the expression etymologically alludes to the act of calculating, the modern concept of computation goes beyond the idea of an advanced device capable of complex mathematical operations. Thus, as a technology, the modern computer has an intellectual dimension related to information processing, while its material dimension expresses itself by the physical structure that stores the encoding of information.[599] The computer repre-

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[595] In this case, the written language meant the emergence of an autonomous view of abstract ideas, allowing adopting these abstractions in a different context and developing a way of thinking understood as "literate" in a modern sense. On how one can see writing as a technology capable of separating the human being from its ideas, see "Writing restructures consciousness" in ONG, W. J. **Orality and Literacy: the technologizing of the word**. New York: Routledge, 2002, pp. 77-113.

[596] Although the punched card system had emerged to control weavers' machines since the eighteenth century, it was its application in the field of computing that revealed its ability to serve as a material basis for registering ideas. Angluin states that Ada Lovelace was the first to use punched cards to "reprogram" machines initially developed to perform simple arithmetic operations, allowing them to perform different functions. See ANGLUIN, D. Ada Byron Lovelace. In: Case, B. A. and Leggett, A. M. (Ed.). **Complexities: women in mathematics**. Princeton: Princeton University Press, 2005, pp. 60-67.

[597] This material encoding of human language into machine-understandable language is the first step in a broader "language understanding" process that has recently resulted in the field of artificial intelligence. Debates in the field of cognition usually differentiate between simple language recognition, which allows the machine to perceive a given communication and react to it, from a linguistic understanding in its broadest sense, that is, encompassing the agent's intention. In 1969, MacKay already highlighted the possibility of computer programs being able to perceive the intentional aspects of human language if they have what he calls the "skeleton representation" of the linguistic context employed. See "Linguistic and Non-Linguistic 'Understanding' of Linguistic Tokens" in MACKAY, D. M. **Information, Mechanism and Meaning**. Cambridge, Mass.: MIT Press, 1969, pp. 120-127.

[598] This conclusion explains why, in addition to his importance for developing a universal machine capable of doing different tasks, Alan Turing has contributed to the field of cognition. See OATLEY, K. The Digital World. In: (Ed.). **Our Minds, Our Selves: a brief history of psychology**: Princeton University Press, 2018, pp. 103-120.

[599] Alan Turing and Charles Babbage's contributions represent this duality between the computer's intellectual and material dimensions, respectively. It is from the union of these contributions that the concept of "digital" emerges. See BYNUM, W. Science in Our Digital Age. In: (Ed.). **A Little History of Science**: Yale University Press, 2012,

sents the technological version of the bureaucratic tradition as a technique for controlling information. The need for this control is not limited to the production process and the making up of a global market, involving the state bureaucracy due to the complexity acquired by the industrial society.[600]

The state is central to the development of information technologies since it is the primary gatekeeper and user of information processing. The computer emerged as the technological complement to the state bureaucracy from the need for tools and methods to cope with industrial society's volume of information.[601] Besides, given its dependency on a material basis, information processing implied specific means of communication. Therefore, information and communication are interconnected phenomenological realities and the technical or technological transformations involved in one inevitably affected the other.[602] This relationship explains why it was within the public sphere that the computer emerged in its most significant expression, associated with transformations in communication technology. Nonetheless, although appearing as responses to the need for social control, information and communication technologies presented the potential to transform the industrial social order's foundations.[603]

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pp. 251-256.

[600] Recognising, in 1934, the dominance of the liberal paradigm from which the industrial society becomes a big productive system, Mumford emphasised the need that the control of this process does not remain exclusively in the hands of the industrialists. Advocating the need for planning and ordering techniques to be transferred from industry to the social order as a whole, the author defended the need for more significant rationalisation of political organisation, under pain of allowing the emergence of irrational, instinctive and traditional elements in society. The author referred to the rise of fascism, understanding that the power resulting from industrial society's control techniques should move away from the use of physical force. See "Political Control" in MUMFORD, L. **Technics and Civilization**. London: Routledge & Kegan Paul, 1934, pp. 417-423.

[601] Agar traces this trajectory in the case of the English experience. He tells how the computer emerged in the context of the Second World War in the face of the need to increase the information processing capacity to decode Nazi messages, and how this emergence means continuity of the information processing carried out by the English bureaucracy. See AGAR, J. **The Government Machine: a revolutionary history of the computer**. Cambridge, Massachusetts: The MIT Press, 2003.

[602] For this reason, the development of bureaucratic control techniques in the nineteenth century has accompanied an effort to develop communication technologies. See STANDAGE, T. **The Victorian Internet: the remarkable story of the telegraph and the nineteenth century's on-line pioneer**. Markham, Ontario: Thomas Allen & Son, 1998. The idea of communication used in this work is not broad but restricted to processed information communication.

[603] Although making no distinction between science and technology, Dewey highlights the impacts of the emergence of what he calls the "mechanical devices due to science". For Dewey, science's instrumentalization produces social consequences related to human ideas and ideals that form the biggest problem that civilisation has never faced. At the centre of this problem is science's potential to consolidate itself as the most potent social control instrument that has ever existed. Thus, in 1931, Dewey predicted that the great scientific revolution was yet to come, resulting in controlling human relations and directing the social effects of technological machinery. See "Science and Society" in DEWEY, J. **Philosophy and Civilization**. New York: G. P. Putnam's Sons, 1931, pp. 318-330.

Information society.

The transition of information processing from a technical to a technological environment have initiated structural changes in the social order. The new technological framework has reduced the need for simplifying information, allowing the information technology to expand to other domains of social life.[604] Therefore, the computer was responsible for the beginning of a type of information processing capable of capturing the reality in a magnitude increasingly closer to its actual complexity. The result was the possibility of the digital language to emulate several social processes traditionally conducted in different environments, a phenomenon that became known as virtualisation.[605] Virtualisation was responsible for exporting the digital language outside the limits of the technology field, resulting in its influence over industrial society's different aspects. Such influence has caused profound transformations in the industrial social order, giving rise to the idea that a post-industrial society has emerged.

Although post-industrial society's idea has become widespread, different theoretical proposals have emphasised distinct aspects of this concept. On the one side, post-industrial society assumed an image associated with a growing environment of uncertainties in which several conflicts emerged.[606] This perspective characterises the new society by emphasising the accumulation of knowledge, and no longer the organisation of work or the accumulation of matter as in the industrial society. On the other, post-industrial society presupposes stability developed around the rising technical rationality as a reference for social organisation.[607]

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[604] Information technology has become more pervasive since it gradually made it no longer necessary to "mutilate" the real world for making it fit into the bureaucratic processing of information. Castells says that this pervasiveness is one of the characteristics of what he calls the "information technology paradigm". For Castells, this paradigm interacts with the economy and society through a flexible and convergent network logic in which information is its raw material. So, unlike how we have been using the expression so far, Castells is not referring to a new paradigm on how to think about solving technological problems, but to a new social paradigm based on information technology. See "The Information Technology Paradigm" in CASTELLS, M. **The Rise of the Network Society**. Volume I. Chichester: Blackwell Publishers, 2010, pp. 69-76.

[605] In this sense, virtualisation implies the transition from processes traditionally conducted through physical interaction to processes in which this interaction is absent. Therefore, the analysis of the virtualisation process reveals a progression towards the total absence of this interaction. Fiol and O'Connor analyse such progression, considering the implications of frequency, occasionality, or total absence of face-to-face contact in organisational systems. See FIOL, C. M. and O'CONNOR, E. J. Identification in Face-to-Face, Hybrid, and Pure Virtual Teams: untangling the contradictions. **Organization Science,** v. 16, n. 1, pp. 19-32, 2005. However, as the following subchapter will show, digitalisation and virtualisation refer to distinct processes despite being usually associated.

[606] Touraine presents an analysis of the nature of social conflicts and power disputes responsible for shaping this new society's cultural and social orientations. See TOURAINE, A. **La Société Post-Industrielle**. Paris: Editions Denoël, 1969.

[607] Bell maintains that the centrality around the codification of theoretical knowledge is the axial principle of this

This idea stresses the shift from the production of goods to services, a process of codifying theoretical knowledge, and the view that there would be an "intellectual technology". In both theoretical proposals, information plays a central role as a catalyst for social transformations, which is why this new social order is also called the information society[608].

The idea of the information society has several meanings and is defended based on the emphasis on characteristics that can even be mutually exclusive. Nevertheless, all of them share the assumption that quantitative changes in information brought about by new technologies imply qualitative transformations in the social system.[609] On the other hand, different theories express distinct concerns about the role of information within this process of social structuring. Theories considered mainstream usually understand information as a neutral element, while critical theories consider it as a product of the social environment[610]. In one way or another, these theories gravitate around the importance of communication and information technology as a central element in the new informational social order. Specifically, the Internet's emergence as a social and economic environment and the types of relationships resulting from this new paradigm's dominance were the most fundamental elements of this process.[611]

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new emerging society, responsible for directing the social change. See BELL, D. **The Coming of Post-Industrial Society: a venture in social forecasting**. Heinemann: London, 1974.

[608] Bell emphasises the information processing and the codification of knowledge as the most critical elements of post-industrial society. These elements, combined with the development of telecommunication technologies, resulted in the emergence of an information society. According to Bell, the information society has two fundamental characteristics: the dominance of a generalised scientific thought (the formation of a "Big Science") and the instrumentalization of technology with the potential to determine social organisation. See BELL, D. The Social Framework of the Information Society. In: Forester, T. (Ed.). **The Microelectronics Revolution: the complete guide to the new technology and its impact on society**. Cambridge, Mass: The MIT Press, 1981, pp. 500-549.

[609] Webster justifies the different explanations on the information society from the different criteria used to analyse the information increase's impact on the social system. He cites the prevalence of theoretical knowledge as a sixth criterion in addition to the economic, technological, occupational, spatial, and cultural criteria. Unlike the others, theoretical knowledge does not emphasise the quantitative increase in information but its consideration as the central object in the social arrangements. See "What is an Information Society?" in WEBSTER, F. **Theories of the Information Society**. 3rd ed. New York: Routledge, 2006, pp. 8-31.

[610] Based on legal knowledge, Trosow presents an overview of the various existing perspectives on the information society and concludes that there are two competing paradigms. Bell's work is central to the information society model, which presupposes an inevitable trajectory determined by advances in information technology. In turn, Touraine's work is foundational for the information-for-society model, which sees information technology as an instrument for the exercise of power by different social actors. See TROSOW, S. E. The Ownership and Commodification of Legal Knowledge: using social theory of the information age as a tool for policy analysis. **Manitoba Law Journal,** v. 30, n. 3, pp. 417-462, 2003.

[611] This topic will be resumed in the item "2.2.1. Realising the digitalisation".

The digital revolution.

Therefore, while the industrial society was the cause of the mechanisation that characterised the industrial revolution, the information society is a consequence of the digital revolution. The social scientists who offer explanations for this new society do so based on theoretical constructions that admit a technological domain that pre-exists such society.[612] It could not be the other way around since the excessive amount of information that explains social change was due to the increased processing capacity resulting from technological developments. Likewise, the sociological narratives that base the new society on the qualitative aspects of information only do so given the contributions of the digital field's intellectual dimension to cognition theories. Unlike the industrial revolution, the digital revolution characterises itself by the emergence of a specific domain and its language dominance. The paradigmatic changes brought about by this new language are the most evident expression of the occurrence of a revolution in the strict sense.

Although lawyers and economists commonly depict the digital revolution as just another industrial revolution, it is the only one essentially technological revolution that has taken place. It is not just a category of economic or legal discourse identified as a catalyst for the production process, but a phenomenon with the potential to modify these very discourses. This fact does not contradict the idea presented here that the emergence of the digital domain corresponded to a technological response to information control's social demand. What happened was that this response went far beyond the needs that justified it, opening up new possibilities with the potential to transform the very social order that contains it. Thus, although its most visible effects are related to production efficiency, the digital revolution has an evident discursive dimension. From the analysis of the effects of digital language expansion, it becomes possible to understand the economy's and the entire social order's digitalisation process.

[612] For example, Castells starts from the Internet and network technologies creation, alongside the micro-engineering development, to explain the technological revolution that has culminated with the emergence of the information technology paradigm in the social and economic field. See "The Historical Sequence of the Information Technology Revolution" in CASTELLS, M. **The Rise of the Network Society**. Volume I. Chichester: Blackwell Publishers, 2010, pp. 38-61.

Conclusions.

This item has demonstrated that mechanisation related to the industrial revolution was not the cause, but the consequence of more important contextual changes. Such changes stemmed from technical evolutions in production mode associated with a whole restructuring of the social order from the liberal paradigm on wealth generation. The new social context triggered demands for control responded with technical and technological advances concerning information processing. The digital revolution resulted from the technological reaction to that problem, provoking visible transformations on the social plane. The ubiquity of the computer and the Internet's popularisation are two noticeable results of the digital revolution's social and economic transformation. This revolution's intellectual dimension corresponds to the dominance of digital language within the technological field, a paradigmatic change that marked the transition from industrial to the information society.

At first, digital technology diffusion, economically understood as an innovation in production processes, reached traditional business and social practices. The natural reaction to this event is an effort to describe this diffusion process from the economic discourse, emulating categories already consolidated by the field. The perception that this phenomenon had developments beyond traditional intellectual categories' boundaries occurred in parallel with identifying new wealth generation forms. The immediate response to this perception was adjusting economic language to describe traditional businesses and the entire economy in light of the new context. Nonetheless, the digital paradigm has proved to be more effective in articulating the phenomenon of wealth generation than categories traditionally linked to the liberal paradigm. To understand this situation, one must identify how the digitalisation process affects the economy and the liberal social order, as the next subchapters will show.

2.2. The digitalisation of the economy.

The previous sub-chapter has presented the idea of technology employed to build our narrative about the rise of the social order structured from the liberal paradigm. Unlike technique, technology in the strict sense characterises itself for capturing and using natural phenomena without human intervention. Capturing new phenomena and discovering new ways

to harness the same phenomenon correspond to technological evolution's most basic expressions. This evolution can also base on new architectures designed from previous technologies, potentially giving rise to new domains that may result in technological revolutions according to their languages' dominance. Although the industrial revolution is traditionally associated with the spread of machines, it was not a technological revolution in the strict sense. Such technological revolution occurred with the emergence of the digital domain and the information and communication technologies (ICTs), affecting the economy and society.

The economic vocabulary has captured the impacts of the digital revolution on production, distribution, and consumption through the idea that a digitalisation process was underway. This process is associated with ICT's emergence as an economic sector but goes beyond information and communication technologies. The aesthetics of the ICT domain's language has become a symbol of the qualifier "digital", reaching even traditional economic sectors that predate the ICT. The omnipresence of this language in all business models is responsible for spreading the idea that the digitalisation encompasses the entire economy. Notwithstanding, the idea of economy is much broader than that of commercial activity so that its digitalisation does not limit itself to the dominance of the ICT's language over other business sectors. If there is an overall digitalisation process affecting the economy, such a process must also influence wealth production as conceived by the liberal paradigm.

This subchapter demonstrates how the technological revolution stemming from the ICT domain's emergence has generated the economy's digitalisation process. The premise is that ICT's domain has transformed the economy both from the emergence of activities hitherto non-existent and by adapting traditional business models to the new digital language. The hypothesis is that the digitalisation of the economy has an institutional and a discursive dimension represented, respectively, by the emergence of the ICT as an economic sector and the pervasiveness of the digital language on the other economic sectors. Item 2.2.1 presents the emergence of the ICT sector and examines the influence of digital language on the economic discourse. Item 2.2.2 analyses how digital language has impacted traditional business models while permitting new economic activities. Item 2.2.3 demonstrates how the idea of production based on informational phenomenology offers a new perspective to understand value creation and wealth generation.

2.2.1. Realising the digitalisation.

The last sub-chapter has shown that the computer's invention was not a fortuitous event but a technological offspring of the intellectual tradition concerning information control. This tradition started with the rise of modern bureaucracy as a specific technique for controlling the volume of information produced by the industrial society. Unlike the industrial revolution, the emergence of the technological domain associated with information and communication technologies (ICTs) has meant a technological revolution in the strict sense. This revolution expresses itself from the digital language's dominance, invading other domains of the technological field. Social scientists recognised the importance of these events by considering them as central elements in shifting from the industrial to the information society. Although the broad economic impact resulting from the emergence of ICTs is evident, the paradigmatic influence of digital technology on the economy requires a more detailed analysis.

In addition to their intellectual importance for the technological field, computers' rise was responsible for creating a new economic environment. The innovations triggered by the invention of the personal computer, associated with expanding the Internet to the private sphere, resulted in the emergence of economic activities with singular characteristics. In the economic field, these activities emulate the sophisticated technological structure that governs the Internet's functioning. The result was the perception that economic interactions between companies within the Internet sector reflected the technological dependence among the layers that form the Internet. The impact of digital technologies on other sectors of the economy resulted in the technological language's influence on the economic discourse. The rise of a digital economic language demonstrates a change of attitude resulting from the digital revolution's impact on the economic liberal paradigm.

This item aims at demonstrating how the digital revolution, occurred in the field of technology, resulted in the emergence of a digital economic language. The premise is that the economy, as a production, distribution, and consumption technique, shares a similar intellectual dimension with digital technology. The hypothesis is that the digital language is increasingly invading other economic sectors, given the continuous virtualisation of traditional business activities and the rise of new digital processes. The item begins by describing how the

invention of the personal computer, and the Internet's privatisation process, have generated a digital economic environment. Afterwards, the item demonstrates that the Internet sector's business relations corresponded to applying the digital paradigm to the economic plane by emulating the Internet's layered system. Finally, the item demonstrates how virtualisation and digitalisation are associated with the emergence of a digital economic language.

Computers and the network culture.

Although the Internet's history is mostly confused with computers', the episodes that form each trajectory occurred in different contexts. The revolution provided by the computer's invention has initially restricted itself to the technological field, and its expansion depended on meeting specific foreign demands.[613] For being economically relevant, technological inventions must become economic innovations, a process that depends on their diffusion. Thus, it is necessary to distinguish the emergence of computers and the resulting digital technological language from the invention of personal computers, which were responsible for the diffusion of digital innovation. From the seventies to the eighties, personal computer's rise was responsible for the beginning of material and epistemological popularisation. This process has shaped the contemporary manner the computer is seen in society, albeit the personal computer's diffusion did not initially mean easy switching between devices.

Contrary to the search for the integration of devices, personal computers' emergence occurred in a context of disputes for the exclusive use of architectural standards. Conflicts involving intellectual property and the efforts to establish monopolies gave the tone of the genre of competition that marked the beginning of computers' popularisation.[614] After being initially restricted to specialists, the computer's real explosion was only possible when a whole process of standardisation of hardware and software occurred in the nineties. This standardisation process allowed computers to dialogue with other computers, even if they were produced by

[613] Akera associates the emergence of the computer with the context of the Second World War, attributing its intense development in the United States during the Cold War to the demands coming from military, academic and commercial institutions. See AKERA, A. **Calculating a Natural World: scientists, engineers, and computers during the rise of US Cold War research**. Cambridge, Mass.: The MIT Press, 2007.

[614] Castells explains that the popularisation of the IBM standard was not due to a desire for openness but to its vulnerability to cloning, which occurred on a massive scale, especially in Asia. See "Micro-Engineering Macro-Changes: electronics and information" in CASTELLS, M. **The Rise of the Network Society**. Volume I. Chichester: Blackwell Publishers, 2010, pp. 39-45.

different companies, making it easier for ordinary people to enjoy their benefits. Such fact resulted in a race to develop mechanisms for standardising information packages, allowing large amounts of information to circulate. The new scenario no longer corresponded to a communication system between computers, but between computer networks.

More than just a technological development on data trafficking, the rise of communication networks soon took on a political character, resulting in the emergence of one genuine network culture. What once were interconnected relations between individuals or between groups of individuals began to transform into an actual social order that demanded new efforts of control.[615] From the liberal paradigm perspective, the dispute for control in this cyber social order is a new version of the intellectual separation between the public and private economic spheres. In other words, this dispute is not an isolated event, but another episode in a long history of constructing an independent social sphere, immune from intervention by the constituted power.[616] The values of individual autonomy and freedom espoused by this cultural change shaped the open network structure for communication.[617] This new culture of freedom has marked the Internet's transformation from a technology developed for governmental purposes into a private economic space.

The Internet as a private economic space.

The origins of the Internet lie at the state level, in the context of transforming the use of computers for communicational purposes based on two critical events. The

[615] Goldsmith and Wu claim that this social order represented a new challenge to the nation-state paradigm, demanding national governments' control efforts. The result was the emergence of an Internet that, to a certain extent, reflects the borders of countries, contrasting with its initial anarchic spirit. See GOLDSMITH, J. L. and WU, T. **Who Control the Internet? Illusions of a borderless world**. Oxford: Oxford University Press, 2006.

[616] Wu demonstrates that the struggle for control of the Internet corresponds to a pattern that has repeatedly occurred as soon as a new promising communication technology appears. Thus, the telephone, radio and satellite television also experienced an initial moment of euphoria and optimism associated with the individual's freedom, followed by a solid industrial dominance resulting in the formation of cartels. See WU, T. **Master Switch: the rise and fall of information empires**. Reprint edition ed. New York: Alfred A. Knopf, 2010.

[617] Castells argues that alongside the restructuring of industrial economies to accommodate an open market approach and the revolution in information and communication technologies, the freedom-oriented cultural movements of the late 1960s and early 1970s (including civil rights, feminist, and environmental movements) resulted in what the author calls "the network society". According to Castells, the culture of freedom was fundamental to induce the network technologies that formed the essential infrastructure for the globalisation of companies. See CASTELLS, M. Informationalism, Networks, and the Network Society: a theoretical blueprint. In: Castells, M. (Ed.). **The Network Society: a cross-cultural perspective**. Cheltenham, UK: Edward Elgar, 2004, pp. 3-45.

first corresponded to standardising all the elements necessary for processing and transmission, resulting in general protocols and languages enabling widespread use.[618] A second critical factor was users' participation in the internal networks, leading these networks to something that would start to look like the current Internet. In the initial phase of ARPANET, there was no clear distinction between producers and users. Although currently viewed from a commercial perspective, the Internet environment results from a long and intricate process, encompassing technical, technological, organisational, and political structuring. However, the turn from the eighties to nineties witnessed a reinterpretation of this process resulting from the libertarian discourses' resurgence.

The libertarian mentality brought an ideological component to the emerging Internet community, contrasting to more pragmatic demands. The Internet needed standardisation so that network communicability could take place, while the excessive pluralism menaced fragmenting the web.[619] The result was a constant transformation that pushed technological advances towards the standardisation of devices produced by the ICT sector. The economic face of such standardisation was the commoditisation of the products associated with a continuous fall in the prices of ICT devices. This event's double result was that technological standardisation implied more possible combinations to form new technologies while commoditisation gradually reduced transaction costs related to information and communication. Products increasingly cheaper and capable of adapting to a broad range of other devices allowed the ICT sector's technology to become the material basis of the emerging digital economy.

The first texts defending the existence of a digital economy emerged while the tensions concerning the cold war were beginning to dissipate. The technological advances as the renewed libertarian mentality appeared when the world experienced a new wave of enthusi-

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[618] Roberts explains that this standardisation occurred through a revolution in communication technologies called "packet switching" that originated as part of a network computing experiment that became known as ARPANET. See ROBERTS, L. The Arpanet and Computer Networks. In: Goldberg, A. (Ed.). **A History of Personal Workstations**: Association for Computing Machinery, 1988, pp. 141–172.

[619] According to Abbate, this apparent contradiction has become one of the Internet's main characteristics and explains its enormous development. The centralising role of ARPA in technology convergence, especially the spread of the use of the TCI/IP protocols and the system of gateways, associated with the activism of groups with different views and interests, allowed the Internet's privatisation process. This process corresponds to the transfer of Internet control from the Department of Defense of the United States to the National Science Foundation, and the following decentralisation process. See "Popularizing the Internet" in ABBATE, J. **Inventing the Internet**. Cambridge, Massachusetts: The MIT Press, 1999, pp. 181-220.

asm for liberal economic thinking.[620] So, if the industrial economy started in England in the late eighteenth century, the digital economy has its origins in the United States in the 1990s. Nonetheless, this new economy provided by the Internet was already born global, characterised by the almost instantaneous exchange of information, capital, and cultural communication. The new economy is also usually described as opposed to the industrial economy in terms of the type of production involved since it bases on processing information instead of matter. However, to understand the digital economy as an outcome of the digitalisation process, it is necessary to identify the factors associated with the digital paradigm's dominance within the economy.

Digital economic activities.

Identifying how the digital paradigm's dominance took place requires understanding the relationships between the technologies that make up the Internet architecture. This architecture is grounded in a layered structure whose individual contributions to the connectivity process that characterises the Internet are intellectually and materially identifiable.[621] Such structure expresses a hierarchical logic, in which higher technologies overlap previous technologies situated closer to the basic phenomenon harnessed. It is from the physical base of cables and electrical circuits that new technologies develop, gradually moving away from the Internet's material dimension. Therefore, its hierarchical logic explains the relationship of the Internet's architecture with the digital language's dominance. Technologies are more advanced as they operate farther from the Internet's material base, while this excessive recursiveness separates the digital language governing the architecture as a whole from potential local languages guiding its parts.

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[620] Tapscott describes this scenario in one of the books responsible for popularising the expression "digital economy". See "The New Economy" in TAPSCOTT, D. **The Digital Economy: rethinking promise and peril in the age of networked intelligence**. New York: McGraw-Hill, 2015, pp. 15-18.

[621] The way manuals explain this layered system reflects this distinction between its intellectual and material importance. The Open Systems Interconnection (OSI) model is the best to understand the functions of the layers, while the TCP/IP Reference Model, used in ARPANET, has become, in practice, the most widespread. Tanenbaum and Wetherall explain the need to reconcile the intellectual merits of the first with the dominance of the second's protocols, proposing a division in five layers as follows: physical layer - the electrical, timing and other interfaces by which bits are sent as signals over channels; data link layer - algorithms for achieving reliable, efficient communication of whole units of information called frames between two adjacent machines; network layer - concerned with getting packets from the source to the destination; transport layer - data transport from a process on a source machine to a process on a destination machine, regardless of the physical networks currently in use; application layer - where all the applications lie. However, this didactic and simplified model preserves the idea that the higher the Internet layers are, the more they move away from their physical structure. See TANENBAUM, A. S. and

Notwithstanding, the emergence of the Internet's layered system has provoked transformations that exceeded the technological field's limits. The companies whose activities corresponded to each layer's technological functions soon began to emulate, on the economic sphere, the same relations of technological character.[622] In this sense, the intellectual dimension of the economy, as a production technique, became influenced by the Internet's hierarchical logic. This change in attitude has implied that Internet companies started to adopt their respective technologies' descriptive characteristics as metaphors to identify their economic practices. The result was that, as the economic functions emulated technologies more or less distant from the material basis of the Internet, the companies' activities also came to be considered more or less material. Such a perception is at the root of the widespread notion of virtualisation, allowing economic activities to be classified based on their digitalisation degree.[623]

The different degrees of digitalisation of the economic activities soon resulted in the idea that there would be an ecosystem of companies located at different distances from the Internet's physical layer. This ecosystem results from an agglutination process associated with the dependency relationship that these companies have among themselves.[624] Such a dependency is a logical consequence, since these companies' goods and services correspond, in

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WETHERALL, D. J. **Computer Networks**. 5th ed. Harlow: Pearson Education, 2014.

[622] This process was evident in the 1990s, given the emergence of a new economy resulting from the Internet's privatisation process. Castells claims that Internet-related companies were at the heart of the new information technology industry, employing a layered system to classifying them. The first layer comprises companies which provide the Internet infrastructure. The second layer encompasses firms developing the Internet's infrastructure applications: software products and services for web transactions. The third layer includes companies which do not generate revenue from direct business transactions, but from advertising, membership fees, and commissions, in exchange for which they provide free services over the web. Finally, the fourth layer included companies conducting web-based economic transactions. Although the last two layers have equivalents in the traditional economy, the first two allude to the Internet's layers. See "The New Economy" in CASTELLS, M. **The Rise of the Network Society**. Volume I. Chichester: Blackwell Publishers, 2010, pp. 147-162.

[623] Nonetheless, it is essential to note that there is widespread confusion between virtualisation and digitisation. Traditional activities may be the object of virtualisation, and digital technology is one (perhaps the most effective) means of doing so. However, digitisation is not just about virtualising the traditional but also enabling new economic interactions unparalleled in the economic tradition. The following sub-item, "Digital economic language", will take up this topic.

[624] Ticoll and Lowy were some of the first to intuit an Internet-related business community emerging in the 1990s. According to the authors, this community would have different characteristics from traditional businesses, especially concerning competition, economies of scale and scope, and the relationship between service provision and value creation. The impact of these characteristics on the way companies in this sector relate to each other suggested that a new industrial environment was raising from the proliferation of multiple e-business communities formed by actors with shared interests and seeking market dominance. The basic unit of this new environment is the "internetworked enterprise", a fundamental element of the new digital economy. See TICOLL, D. and LOWY, A. Joined At The Bit The Emergence Of The E-Business Community. In: Tapscott, D., Ticoll, D. and Lowy, A. (Ed.). **Blueprint to the Digital Economy**. New York: McGraw-Hill, 1998, pp. 19-33.

economic terms, to the same technological functions of the Internet's layers. In addition to being lumped together in an easily identifiable ecosystem, these companies maintain economic ties guided by a digital architecture responsible for shaping it. Thereby, from the Internet, as a technological complex, an economic complex emerged in which the actors constructed their bonds from an increasingly more evident digital paradigm. All of these factors contributed to the construction of a narrative about the Internet as an economic sector.

Characteristics of the Internet sector.

The new economic sector provided by the Internet encouraged investments in ICT in the United States, which initially increased the American economy's productivity. Notwithstanding, such productivity has not accompanied an increase in the workforce of the companies.[625] This mismatch derives from the digital character of the production factors and their intense interconnectivity, attributes associated with the new activities' virtual character. Such a character is not present within the employees so that the digital ecosystem increasingly identifies itself with an environment of direct interaction between technologies. The growth in companies' productivity without the corresponding expansion of jobs implied an increase in labour productivity. Besides, the jobs within companies belonging to the Internet sector characterise themselves for their high qualification and orientation towards maintaining automated production processes.

The effects of the virtualisation process on labour have become one of the primary debates related to the new economy's emergence. Although the tension between technological transformations and the workforce is not new, there is no record of a technological advancement process based on the digital production of goods and direct interconnectivity between devices.[626] Likewise, although the first advances in data processing had already impacted eco-

[625] Lenard and Britton explain that investment in information technology was responsible for the significant increase in labour productivity. In sectors such as the computer manufacturing or software publishing industry, the respective growth from 1997 to 2004 was 143% and 62%. In the same period, labour force participation in the technology sector increased only from 3.5% to 3.7% due, among other factors, to the flight of jobs out of the country. See "Productivity" in LENARD, T. M. and BRITTON, D. B. **The Digital Economy Fact Book**. 8th ed. Washington, D.C.: Progress & Freedom Foundation, 2006, p. 90.

[626] The narrative of Neufeind, O'Reilly, and Ranft demonstrates that there is no dominant opinion on the potential impacts of the process of digitalisation on the workforce. Authors reach opposite conclusions concerning the risks involved and the degree of novelty resulting from the digital economy. However, these analyses often base them-

nomic production, ICT developments have allowed the virtualisation of products' and services' distribution. This phenomenon was responsible for transferring the weight of the business activity, previously located predominantly within the production side, to the sphere of reputation and brand. The importance acquired by the demand implied more investments in the control of the information located in this sphere. Such a situation has created imbalances in commercial relations that demanded governmental efforts to protect consumers.

Notwithstanding, the increasing virtualisation of commercial activities has both reached the workforce as impacted the capital employed. As the Internet consists of a basic physical structure from which several other layers develop, it is possible to think of a whole production structure that also tends to virtualisation.[627] These transformations are not limited to the Internet sector in a strict sense but are part of a much larger transformation in the production process. In this way, besides a technological characteristic of the Internet sector, virtualisation is also a transforming phenomenon affecting how different economic arrangements interact. Consequently, the rise of the Internet sector has represented the emergence of essentially digital economic activities and resulted in the virtualisation of traditional commercial activities. Both processes correlate to the change in economic actors' attitude towards the production process, evidenced by adopting a digital language.

Digital economic language.

The perception that the Internet environment permitted intense virtualisation of traditional business activities impacted the economic discourse. The rhetoric associated with the emergence of electronic commerce is the most representative indication of a dualistic

selves on the liberal paradigm and consider the effects of digitalisation in terms of how this paradigm describes the process of generating wealth. In this sense, see "Identifying the challenges for work in the digital age" in NEUFEIND, M., O'REILLY, J. and RANFT, F. **Work in the Digital Age: challenges of the fourth industrial revolution**. London: Rowman & Littlefield International, 2019, pp. 1-23 1463.

[627] The virtualisation of the production structure in the highly digitalised businesses harmonises with the changing nature of investment in assets in the digital economy, as sustained by Haskel and Westlake. The authors state that, although there was a constant increase in the importance of intangibles in the industrial society, the information society has dramatically accelerated this process. According to the authors, intangibles have the following economic attributes: reuse without reinvestment, sunk costs concerning investments, low barriers to free riders on initial investments, and synergies with other assets. See HASKEL, J. and WESTLAKE, S. **Capitalism without Capital: the rise of the intangible economy**. Princeton: Princeton University Press, 2017.

vision predominant within the economic field.[628] Such a vision admitted a conceptual border between a physical environment of traditional economic activities and a virtual space that emulates such activities. This frontier would be given by the Internet, meaning that the virtual economic activities would take place within the social order resulting from transforming the Internet into a private economic space. Although this dualism acknowledges the existence of a digital economic environment, its adoption reinforces the foundations of the liberal paradigm. A digitally virtualised economy would be nothing more than the emulation of a real economy, the latter being the ultimate origin of wealth generation.

However, although they are traditionally associated, digitalisation and virtualisation correspond to distinct processes whose results can be even conflicting. Although digital technology has proven to be the leading mechanism for the virtualisation of traditional activities, it is not the only one.[629] In the same sense, the impacts of digitalisation on the economy are not limited to the process of translating a deemed real production into the virtual economic space. The influence of digital technology on traditional sectors of the economy both produced a virtual version of conventional commerce as reached sectors considered virtual by definition.[630] If the digitalisation process were limited to the virtualisation of traditional activities, there would be no sense in identifying the emergence of an information society from the effects of digital technology on the financial sector, for example. The question is to understand the nuances of the digitalisation process and contextualise it in a broader framework beyond the real and virtual economy dichotomy.

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[628] In 1997, the Commission of the European Communities issued a communication to encourage the growth of e-commerce in Europe. The document refers to the existence of one traditional e-commerce, for which the network is only a means of data transmission, drawing a parallel with one Internet e-commerce, in which the network is the market itself. Despite these conceptual differences, the Commission concludes that e-commerce is about conducting business electronically. See "The Electronic Commerce Revolution" in COMMISSION OF THE EUROPEAN COMMUNITIES. **A European Initiative in Electronic Commerce**. Brussels: 16 Apr. 1997, pp. 2-8.

[629] Overby clarifies that the virtualisation of processes is not exclusive to information technology, nor does it apply equally to all processes. However, based on his "process virtualization theory" proposal, the author emphasises that information technology has allowed an increasing range of processes to virtualise, and this high "virtualisability" is associated with sensory, relationship, synchronism, identification, and control requirements. See OVERBY, E. Process Virtualization Theory and the Impact of Information Technology. **Organization Science,** v. 19, n. 2, pp. 277-291, 2008.

[630] The first traditional sectors of the economy impacted by the process of digitalisation were the commerce of products and the financial sector. See "The multiscale geographies of electronic commerce and electronic finance" in MALECKI, E. J. and MORISET, B. **The Digital Economy: business organization, production processes and regional developments**. New York: Routledge, 2008, pp. 93-118.

The virtualisation of activities does not necessarily transform the information processing, which may still rely on traditional methods. On the other hand, digitalisation submits this processing to a specific technological context, imposing the harnessing of information while a phenomenon. This feature places communication and information technologies (ICTs) in a central position since the lack of a specific purpose allows their articulation with any production processes.[631] Hence, digitalisation submits a given phenomenological reality to the specific type of processing of ICTs, which implies its reduction to an exclusively informational condition. This unprecedented capacity for articulation has caused ICTs to spread to other domains, making it difficult to maintain the conceptual divide between their specific economic sector and the others.[632] However, along with the advancement of technologies is the prevalence of its specific language, so that the ICTs diffusion implies the digital language prevalence in other sectors of the economy.

Economic language transformation.

The idea of an all-encompassing digitalisation of the economy has implied the digital language's expansion beyond the Internet economic sector's borders. It was not just about the emulation of the Internet's layered system within the digital companies' economic interactions, nor about employing electronic metaphors to describe traditional business activities' virtualisation.[633] The dissemination of the digital language through the economy reached quite unlikely sectors, offering a new comprehension to the notion of a digital economy. Digital

[631] The European Commission recognised the uniqueness of this characteristic, using it as the very definition of the digitalisation process: "The economy is becoming digital. Digitalisation is the process of spreading of a general purpose technology." See the Report of 28 May 2014 of the Commission Expert Group on Taxation of the Digital Economy, p. 5. Available in https://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/taxation/gen_info/good_governance_matters/digital/report_digital_economy.pdf. Accessed on 30 Mar 2019.

[632] Zuppo complains about this difficulty when trying to establish criteria to define and standardise the employ of the acronyms "ICT" and "ICTs". See ZUPPO, C. M. Defining ICT in a Boundaryless World : the development of a working hierarchy. **International Journal of Managing Information Technology,** v. 4, n. 3, pp. 13-22, Aug 2012.

[633] The new economic reality has characteristics that cannot be apprehended by merely adapting the traditional vocabulary. The Internet sector's particularities reflect in this domain's language, and such particularities resulted in a digital economic language. Malecki and Moriset point out that, although the digital economy is part of a broader "digital paradigm", the metaphors used to describe the new type of economy result in ambiguities and technological determinism. In this sense, the authors focus on the emergence of digital technologies to explain the aspects that make the digital economy a distinct phenomenon. See "Information Technologies and the 'New Economy' Debate" in MALECKI, E. J. and MORISET, B. **The Digital Economy: business organization, production processes and regional developments**. New York: Routledge, 2008, pp. 13-35.

economy was not a different economy anymore, nor a virtual incarnation of the real economy, but the consequence of a process influencing the entire economy. By ceasing to represent a conceptual dichotomy, "digital", as a quality, has come to characterise a potential aspect of the economy itself. The question is to understand what factors are associated with the emergence of a digital economic language and its impact on the production process.

Occasional transformations in the language shared by the actors of a specific field correlate to a change in their attitude towards a given object. In this case, there is a continuous spreading of the digital language in the economic field, potentially modifying the entire economic discourse about production, distribution, and consumption.[634] One cannot overlook the fact that the construction of a digital economic environment was characterised by ideological conflicts that influenced the development of the Internet as a sector of the economy. Notwithstanding, this ideological origin alone does not justify the digital language's dominance over pre-existing economic sectors. Such domination correlates to how the digital revolution has impacted the interactions between economic actors. In this sense, the emergence and dominance of a digital economic language result from a transformation in these actors' attitude, evidenced by how economic relations began to take place within the digital economy.

Conclusions.

Before understanding the economy's digitalisation, it was necessary to identify how the relationship between computers and the Internet took place. The computer represented the emergence of a technological way of thinking about information processing that reached a new level based on the Internet's storage and communication tools. Specifically, the personal computer's emergence resulted in identifying an economic sector whose importance went beyond production issues. Although the computer is the core element of this sector, the Internet was responsible for producing an economic ecosystem driven by digital technology. In

[634] According to Ustyuzhanina, Sigarev, Komarova, and Novikova, the growing use of the term "digital economy" among the scientific community, referring to both traditional sectors and the emergence of new areas, is not just a change of technological arrangement or another industrial revolution. Digital economy refers to a significant structural transformation within the economy, affecting price proportions and generating new markets. It implies a paradigmatic shift in economic development, entailing changes on the nature of the divisions of labour, the form of business interaction, and on the groundings of economic power. See USTYUZHANINA, E. V., SIGAREV, A. V., KOMAROVA, I. P. and NOVIKOVA, E. S. The Impact of the Digital Revolution on the Paradigm Shift in the Economic Development. **Revista Espacios,** v. 38, n. 62, pp. 12-24, 2017.

turn, this production experienced a preliminary process of obliterating the Internet's state origins and the indistinct role between its users and producers. In this context, the Internet emerged in the nineties as a private economic space whose structure would influence the business activities developed in this environment.

The Internet presents itself as a complex system in which several layers superimpose over a physical structure of cables and other devices. The farther from the physical layer, the more developed the technology employed, given its high recursiveness and, consequently, its greater distance from the basic phenomenon initially harnessed. This quality is confused with the very notion of digitalisation since it is the digital architecture that starts to govern the relationship between the parts of this system. What happened was that, when it became a private economic space, the Internet transferred the digital paradigm of its technological architecture to the language of the economy. With this, economic production based on digital technology started to emulate the Internet's architecture, so that each layer represents a service or product in the sector. As a result, the technological layers system came to affect the economic field from the perception that specific businesses would be more digitalised than others.

Although not all productive activities correspond to some technology represented in the layered system, the digital paradigm did not restrict itself to the Internet sector. This paradigm has reached different economic sectors, resulting in digital categories influencing the economic language. Given that economic production, as a technique, is apprehensible from a technological perspective, a digital economic language's emergence demonstrates a technological paradigm's prevalence. This prevalence corresponds to the most fundamental element of the digitalisation of the economy, in which virtualisation is just an outcome of a more profound structural change. The incapacity to recognise such a structural transformation explains the conceptual confusion in confronting digital and traditional economies. The difficulty in understanding these two categories as steps in the same process resulted in a primarily business perspective on the economy's digitalisation, as the next item will show.

2.2.2. Digitalised, digital, and digitalising businesses.

The previous item has shown how the invention and later diffusion of

computers allowed creating a network culture that has transformed the industrial society. The most significant symbol of this transformation is the emergence of the Internet and its conversion into a private economic space, resulting in the digital economy. The economic activities carried out in this environment reflected the Internet's architecture, so that companies in this sector began to emulate the digital language. The peculiar characteristics of the ecosystem formed by these companies resulted in the dichotomy between virtual and traditional economic activities. However, although associated, virtualisation and digitalisation refer to distinct phenomena, making it impossible to describe the whole digital economy from such simplistic dichotomy. Thus, the economy's digitalisation, embodied in the digital paradigm's dominance at the economic level, resulted in the emergence of a digital economic language.

The most visible dimension of the digital language dominance at the economic plane concerns the narrative about the business models commonly associated with the digital economy. The idea of electronic commerce (e-commerce) was only the beginning of an attempt to describe traditional businesses based on neologisms that reflect the elements of digital technology. Such a description has qualified businesses based on technologies located in the upper layers of the Internet structure as highly digitalised. In this sense, digitalisation does not merely imply the transformation of traditional activities but also the creation of new production forms. However, this economic innovation was not limited to business activities in a strict sense, allowing individuals to create value from other types of transactions. This generation of value, in turn, became the central object of business models developed to explore the informational phenomenon resulting from those transactions.

This item aims to identify the digital economy from the leading business models' characteristics associated with the digitalisation process. The premise is that the idea of digitalised traditional businesses and new digital businesses are the most visible face of the dominance of the digital economic language. Nonetheless, the hypothesis is that excessive attention attributed to virtualisation has prevented identifying the information's central role in the digitalisation process. The item begins by presenting the impacts of virtualisation and digitalisation on traditional business models, expressed by the digital language's initial dominance over other economic sectors. Afterwards, the item presents business models that emerged from the digital language, implying the perception that there was an ongoing digitalisation process. Finally, the

item examines non-mercantile forms of economic interaction that demonstrate a new kind of wealth generation through information processing.

Digitalisation and traditional business activities.

The rise of the e-commerce debate was the first sign of a general perception about the impact over the traditional economic sectors caused by the information and communication technologies (ICTs) revolution. Such perception is particularly critical in the international tax field since the digital economy debate is the legatee of the first discussions on e-commerce that began in the nineties.[635] In broad terms, e-commerce means selling goods or services in which the purchase, payment, or delivery occurs through computer networks. Although involving a digital component, e-commerce is not confused with highly digitalised businesses, since this digitalisation can refer to specific stages of the commercial activity. However, the continued digitisation of texts, images, sound, among other things, has led e-commerce to move towards the digital economy in the strict sense. An essential step in this transition, resulting from electronic commerce's very success, was the rise of digital payment services.

The digitalisation of the payment services was indispensable in shifting from e-commerce to a real digital economy since they offer trust in performing business transactions. As intermediaries responsible for handling sensitive financial information, these companies reduce transaction costs on the Internet.[636] The online payment service providers usually process payment information through a particular software that prevents the parties from accessing each other's bank or credit card information. In practice, this means that the company that owns the software lies in a privileged position vis-à-vis the parties as far as the payment information is concerned. Such payment may involve, in addition to credit cards or banking transactions, solutions in cash, electronic wallets, and mobile solutions. Likewise, in addition to their

[635] More specifically, within the OECD, the debate on international taxation and the digital economy promoted by the Task Force on the Digital Economy corresponds to a merger of the debates on taxation and electronic commerce and the construction of a global internet economy. For an analysis of these two debates, see items "3.1.1. Taxation and e-commerce" and "3.1.2. Information and the internet economy".

[636] According to the OECD, online payment services correspond to different activities, including credit card services, debit cards, mediation services, payments by phone or mobile bank payment, online banking, or even electronic currency systems. For reducing transaction costs, these services must be easily applicable, simple, low cost, secure, complying with the legislation, and respecting information privacy. See "Online Payment Systems" in OECD. **Online Payment Systems for E-commerce**. OECD: Paris: 18 Apr. 2006b, pp. 12-31.

primary function as money in the strict sense, the technology that underlies digital currencies allows them to operate as a means of payment.

In parallel to digital payments developments, automatic commercial transactions associated with a superior velocity in the communication process resulted in the high-frequency trading. These operations use complex algorithms to identify small price variations and make high-speed buy and sell orders to exploit such fluctuations.[637] This business model's emergence corresponds to implementing the idea of making profit through a wholly digital environment and without a necessary human agency. Its success is associated with a more significant technological capacity to identify market opportunities before the competitors.[638] Except for the technological design of the algorithm that controls the logic of operations, this business model is based exclusively on the use of faster process and communication technologies. This model meant the beginning of an increasingly automated digital business tradition, which has not restricted itself to the exclusively immaterial sphere.

Robotic-AI, 3D and IoT.

The debates related to the effects of decreasing human dependence for the production process did not start with digital technology, having gained prominence with the first industrial revolution. The novelty lies in the speed and intensity of this decreasing, as well as the potential invasion of machines in spheres previously identified as human beings' monopolies.[639]

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[637] O'Hara argues, however, that the impact of high-frequency trading is not limited to issues involving speed. The enormous asymmetry between agents with a high and low frequency of trading generates a predatory relationship, in which the extensive use of data results in a change in the market structure itself. See O'HARA, M. High-Frequency Trading and Its Impact on Markets. **Financial Analysts Journal,** v. 70, n. 3, pp. 18-27, 2014.

[638] However, this is not just a matter of speed and information processing capacity. The effects of high-frequency trading on competition have implications for fairness. In this sense, Angel and McCabe list different views on fairness to conclude that the use of this technology is not inherently unfair. Assuming that (theoretically) anyone can use these technologies, the privileged position of their owner would not cause harm to another competitor, which would only occur if these technologies distorted the buying and selling decisions of the latter. See ANGEL, J. J. and MCCABE, D. Fairness in Financial Markets: the case of high frequency trading. **Journal of Business Ethics,** v. 112, n. 4, pp. 585-595, 2013.

[639] Soete says that the discussion about the possible dangers of automation on the existence of jobs is quite old, although the feeling of fear was more widespread in Europe than in the United States. According to Soete, Americans traditionally see technological advances as inducing new skilled activities, so that more education and training could solve the loss of routine jobs. However, the speed and particularities of the process of digitalisation of the economy led the author to maintain that, although there is still no problem of mass unemployment due to automation, it is necessary to recontextualise the above discussion from an alternative income system independent from the idea of employment, such as, for example, a basic income. See SOETE, L. Destructive Creation: explaining the productivity

The advances generated by robotics have changed production's speed and efficiency, making the process mobile and adaptable to different sectors. The dissociation between material and logical dimensions, represented by the hardware versus software duality, allows the development of generic mechanisms that depend only on the elaboration of appropriate commands. This situation differs from the debates that preceded it from the emergence of artificial intelligence (AI) technologies. AI represents unprecedented mechanisation of the cognitive activity itself, which raises questions about human beings' relevance in the production process.

Besides advances at the logical plane, digital technology has significant potential for transforming the material dimension of production. The three-dimensional (3D) printing technology makes less clear the economic liberal paradigm's cognitive boundaries separating the different production process stages.[640] Although the material effects on the consumer experience may be the same, the possibility of printing a product that exists only digitally modifies the idea of a production process in its strict sense. This modification becomes more profound when considering that printing may not be in charge of those who developed the layout but of a third party or even the customers. This situation impacts the formation of prices in this sector, given the commoditisation trend that can operate on two levels. The dissemination of 3D printers may turn the idea of production-driven value obsolete, while the popularisation of the layouts may turn the value of products depend exclusively on the cost of the material employed.

The emergence of a communication network between devices known as the Internet of Things (IoT) complements the advances in the logical and physical planes represented, respectively, by advanced AI-based robotics and 3D printers. The IoT corresponds to the most profound expression of the mechanisation process within the network society. Although

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paradox in the digital age. In: Neufeind, M., O'Reilly, J. and Ranft, F. (Ed.). **Work in the Digital Age: Challenges of the Fourth Industrial Revolution**. London: Rowman & Littlefield, 2019, pp. 29-46.

[640] 3D printing is the technological basis of a production process known as "additive manufacturing", which differs from the traditional process of transformation of matter by starting from fundamental elements in the production of more complex objects through the addition of layers. Unruh says that 3D printing may revolutionise the production process, allowing the emergence of a circular economy capable of emulating nature's sustainable production system. Unruh explains that, although still incipient, 3D printing can achieve this goal because it harmonises with what he calls the five principles that constitute the "Biosphere Rules": minimisation the types of materials used, recover and reincarnate materials, maximisation of the power autonomy, sustainable product platforms, and the prevalence of the product's function over its form. See UNRUH, G. Circular Economy, 3D Printing, and the Biosphere Rules. **California Management Review,** v. 60, n. 3, pp. 95-111, 2018. The relationship between additive manufacturing, both with the digital production process and the digitalisation of the natural universe, will be taken up in the next item and sub-chapter, respectively.

based on digital technology, the network society is a concept that refers to a communication network of human beings, not machines. Notwithstanding, with the continuous pervasiveness of IoT, the different stages of the production process become potentially mechanised. From a futuristic perspective, the frontiers of building a general automation process depend on the mechanical capacity of autonomously obtaining energy and raw materials. However, besides this potential transformation on the scope of material production, the digital economy is already responsible for new business structures that blur the difference between goods and services.

New digital businesses.

The most representative symbol of the digital economy's virtual character is the emergence of the business model known as cloud computing. In general terms, such service consists of employing the Internet's standardisation to provide processing or simple online data storage. Processing may involve offering some software or even handling data, allowing customers to avoid the burden of maintaining a physical structure. However, unlike a mere remote server, the cloud computing service does not assume that all resources available stay on a particular computer. Given the advances in communication speed, redundancy strategies become applicable, allowing data storage on different computers, and ensuring greater security for the service's continuity. Repeating, at the individual level, the same strategy that gave rise to the Internet, the data security offered by cloud computing assumes a conceptual disconnection of information from its local physical structure.[641]

Regardless of the type of service involved, cloud computing is associated with the idea of X-as-a-Service (XaaS), implying that any aspect of information processing can operate remotely. XaaS has implied that the application service providers have come to offer the possibility of hosting and managing vital applications for several users.[642] This definition reach-

[641] Yoo explains that cloud computing's virtualisation, unlike previous technologies, is based on an automatic process of redistributing the computational process on different servers. Thus, the same server can be shared by several users, each acting as if it had an exclusive server, while the same user can utilise an application that is running on several different servers. It is a real separation between the logical and the physical dimension of the computational process. See YOO, C. S. Cloud Computing: architectural and policy implications. **Review of Industrial Organization,** v. 38, n. 4, pp. 405-421, 2011.

[642] Although there are different definitions in the literature, the idea of XaaS is associated with a paradigmatic transition process from the concept of using a device to use services available in the cloud. In other words, the idea of "aaS" means that not a device, but a particular feature will be available or may be made available in the cloud. See

es a wide range of applications made available to the general public, such as search engines, social networks or other applications supported by a standard browser. More specifically, this business model frequently includes infrastructure, platform, software, content, or data. Although the XaaS business model has had a significant impact on other sectors of the economy, it is not limited to inter-company operations, also applying to end consumers. These services to end consumers, including emails, social networks, or the storage of photos or videos, have increased from mobile access expansion.

More recently, when the Internet's growth also reached the universe of mobile gadgets, the software distribution for these devices also presented a significant development. As a consequence, there was the emergence of applications that became known as app stores. Although app stores do not necessarily have restrictions on the users' access, in practice, only the owners of specific operating systems can likely purchase the applications offered. This tendency turns the control of app stores into a fundamental element on how the app market will develop, raising debates about companies' criteria to favour one or another application. It turns out that the app store sells both products developed by the company that has control over the store and other companies. Applications' acquisition takes place for a fixed price, for free, or through a "freemium" model, in which free and limited access allows the purchasing of additional functionalities.[643]

Participative, advertising, and multi-market platforms.

Similarly, but not restricted to the mobile devices, the participative networked platforms consist of intermediaries that provide a virtual space for users to create content and make it available. The content created can correspond to different media forms, including

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DUAN, Y., FU, G., ZHOU, N., SUN, X., NARENDRA, N. C. and HU, B. Everything as a Service (XaaS) on the Cloud: origins, current and future trends. **Conference: IEEE 8th International Conference on Cloud Computing**. New York, NY, USA. 27 June to 2 July 2015. Therefore, the philosophy behind XaaS reflects the broad idea of technology and its relationship to natural phenomena, in the sense that even devices are relevant only as a repository of specific effects to be captured.

[643] For a more detailed analysis of these models, see "The Relationships Between Revenue Models and Revenue Performance: free vs. paid vs. Freemium" in ROMA, P. and RAGAGLIA, D. Revenue Models, In-App Purchase, and the App Performance: evidence from Apple's App Store and Google Play. **Electronic Commerce Research and Applications,** v. 17, pp. 173-190, 2016, pp. 174-177.

audio, video, written media, or a combination of forms.[644] These platforms are located between at least two groups of users, exploring the network effects that this position offers them. Such structure frequently corresponds to a community model to ensure that users remain as long as possible and offer as much data as the system can capture. The business model consists of the commercialisation of information produced by the user or captured from its use, about which the platform can charge other users or third parties who do not take part in the community. The platform can also offer targeted ads to its users, using the information available to make the marketing action more precise, acting as an online advertising agency.

Notwithstanding, online advertising services are not limited to networked platforms, comprehending different business models. What is common to all is the capacity to identify the information necessary to segmenting consumers, substantially reducing the costs of targeting.[645] In this way, online advertising companies correspond to intermediaries who insert advertisements when users access some information, or even offer paid alternatives whenever they perform a particular search. The operation's essence is capturing and processing a massive amount of data to profile users who can match their preferences as consumers. The difficulty in understanding this business model lies in the fact that the company often offers service without consideration to the user in exchange for the possibility to capture and process their information. The commercial relationship occurs with third parties who remunerate the company for a fixed number of ads, clicks, or specific actions.

In addition to the platforms based on user-generated content, some platforms, known as multisided platforms, operate in multisided markets. In this business model, the intermediary stands between two or more clusters of users interacting through the multisided platform.[646] Such a model characterises itself by the occurrence of indirect externalities between user groups and the possibility of establishing price strategies that are not neutral. The indirect

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[644] According to the OECD, participative networked platforms usually encompass social networking, online games, participative community platforms, and Internet publishing and broadcasting platforms. See OECD. **Participative Web and User-Created Content: web 2.0, wikis and social networking**. Paris: OECD Publishing, 2007b.

[645] Goldfarb goes far as to claim that this reduction is the fundamental economic difference between online and offline advertising. See GOLDFARB, A. What is Different About Online Advertising? **Review of Industrial Organization,** v. 44, n. 2, pp. 115-129, 2014.

[646] Since its main feature is the ability to connect two or more groups of stakeholders with different qualities but mutual interests, Evans and Schmalensee have dubbed this business model as "Matchmakers". See EVANS, D. S. and SCHMALENSEE, R. **Matchmakers: the new economics of multisided platforms**. Boston: Harvard Business

network effects occur whenever an increase in the number of users on one side of the platform implies an increase in users' utility on the other side. This relationship allows the platform to extract a more substantial benefit through price strategies that explore these variations in utility between groups. Besides issues involving elasticity, the platform's concentration of information allows it to absorb surpluses from suppliers and consumers, mainly when these groups comprise individuals unaware of such possibilities.

Digitalising non-business economic interactions.

The exploitation of users' surpluses stems from an information asymmetry that favours platforms, and such asymmetry lies at the heart of the so-called gig economy. The gig economy is a sub-dimension of the digital economy relating to individuals who develop economic activities that do not correspond to the traditional employment model.[647] Although this movement has roots that are not limited to the economic sphere, it brings a new way of approaching wealth generation. The ability to perform various tasks generates an unexploited production potential, in which latent skills correspond to an inactive capacity to make a profit. So, associated with other factors, digital technology makes it possible to organise these potentials in economic arrangements that do not necessarily have a commercial character. Such potential has also been identified by platforms with commercial purposes, permitting a new type of digital business that, taken as a whole, resulted in the sharing economy.

Several business models have emerged in recent years intending to capture surpluses related to underused or unused goods, potential services, and the respective demand for both. Such capture often occurs through applications that reduce transaction costs and the need for a traditional productive organisation.[648] In financial terms, the applications emulate the costs

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Review Press, 2016.

[647] According to Prassl, although the gig economy has offered flexibility and relative independence to the worker, and convenience and affordability for the consumer, the sophisticated technology behind its structure presents risks for these two groups. The asymmetry of information between the platform and its users has the potential to make working conditions precarious, in addition to eroding consumer rights. See PRASSL, J. **Humans as a Service: the promise and perils of work in the gig economy**. Oxford University Press, 2018.

[648] This reduction occurs because this business model allows people to enjoy a specific quality or effect of a particular good or service without the inconveniences of maintaining the property. Munger understands that this distinction is central to how businesses will take place in the future, predicting that entrepreneurs will have to consider this type of transaction cost reduction in their activities. The question is basically to replace the average cost of a thing for its marginal cost. This substitution consists of a double change: from owning to renting, and transacting peer to

related to the intermediate activities of conventional production, while a group of provider users offers end activities or the final products for consumer users. This facilitation allows amateurs to offer the same services as professionals without employing entrepreneurship, administration, and marketing efforts.[649] Despite the economic benefits, the general decrease in the prices of the goods and services raises questions concerning which business models are socially preferable. This debate also comprehends these platforms' impacts on professional businesses since the platforms' pervasive character transforms the entire traditional economy.

The platforms' intermediation between users puts in question the foundations that justify companies' existence and their paradoxical nature in the market society. This paradox is associated with the fact that even the most ardent defenders of the freedom to trade understand that, in their internal relations, companies need to adopt a bureaucratic organisation model.[650] Notwithstanding, the digitalisation of the organisational relationships is challenging such corporate bureaucracy, subjecting the firm to an informational condition. It turns that the platforms allow new competitive relationships to emerge where previously there was only a technical-bureaucratic organisation. This situation reveals a transformation in the business activity's nature, implying a change from its technical to a technological character in the strict sense. The emphasis would no longer be on the economic agents themselves but on the technological capacity to process their information.

The perception of an economic activity exclusively related to information processing is implicit in the metaphorical expression "data mining". One of the results of the emergence of information processing was the idea that one could mine data in a debugging pro-

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peer instead of business to consumer. The apps allow this change by facilitating the exchange of secure information between the parties, offering a reliable means of payment, and giving trust to the terms of the contract. See MUNGER, M. C. Tomorrow 3.0: the sharing economy. **The Independent Review,** v. 20, n. 3, pp. 391-395, 2016.

[649] Langlois calls "dynamic governance costs" the cost of not having these capabilities when needed, and their importance explains the vertical integration processes to achieve an adequate institutional arrangement. The author argues that tacit knowledge, routines, and the skills applicable to specific business activities, in addition to these costs, determine the frontier between the firm and the market. See LANGLOIS, R. N. Transaction-cost Economics in Real Time. **Industrial and Corporate Change,** v. 1, n. 1, pp. 99-127, 1992. The sharing economy consists of the blurring of this frontier since its underlying technology reduces dramatically the transaction costs associated with these organisational factors.

[650] Coase justifies the preservation of business bureaucracy instead of applying market laws in the firm's daily relations due to the transaction costs involved. See COASE, R. H. The Nature of the Firm. **Economica,** v. 4, n. 16, pp. 386-405, 1937.

cess capable of identifying only the valuable information.[651] The importance of data in economic production has generated the perception that additional data would be equivalent to an increase in profit possibilities. Consequently, digital companies also turned to data capture, resulting in an enormous amount of information collected and processed and leading to the rise of big data. The shift of economic vocabulary towards the idea of data, associated with the expressions already crystallised in the business environment, resulted in neologisms such as "information goods". More than that, this change also represents the prevalence of an informational dimension in the process of economic production.

Conclusions.

The present item has demonstrated that the economy's digitalisation comprises several dimensions associated with different perceptions. The first one corresponds to the impact of digital technologies on traditional business models, gradually affecting the purchase process, the payment, or even the delivery of products or services. This dimension is quite identified with the idea of virtualisation, automatism, and immateriality, symbolising the reproduction of traditional activities on the virtual plane. In this case, the emphasis rests on the unnecessary physical presence or human intervention to carry out traditionally brick and mortar production activities. Notwithstanding, the virtualisation's centrality obliterates the perception of the effects that are typical of digitalisation. The result is the prevalence of the idea that the digital economy is nothing more than a virtual version of the real economy, meaning only the emulation of traditional processes in the cyberspace.

The second dimension of the digitalisation process corresponds to the emergence of activities only made possible by digital technology. Since their origin, these are highly digitalised business models as they are located entirely in the highest layers of the Internet hierarchy. Cloud computing consists of information processing services that symbolise a rupture

[651] The entire data mining process ground on the premise that there is a conceptual separation between the data, which would not have a value in itself, and the knowledge extracted from it, considered a result of applying a specific analysis method. This same method is what would allow us to identify patterns of behaviour hidden in the data set. Based on this identification, the data mining process would allow predicting possible variations resulting from the correlation between different data fields. See BARITCHI, A. Data Mining and Knowledge Discovery. In: Raisinghani, M. S. (Ed.). **Business Intelligence in the Digital Economy: opportunities, limitations, and risks**. Hershey PA: Idea Group Publishing, 2004, pp. 35-47.

between the physical and informational dimensions. Likewise, all the other business models based on this separation reinforce such a rupture, presuming the management of the relationship between their consumers and some specific effects of the informational phenomenon. Although information processing has a technical tradition that pre-exists the digital technologies, its vision as an autonomous business model is a recent event. Companies' bureaucracy has always been seen as the essence of business activity and not a distinct and exogenous element.

The perception that the information corresponds to a potentially exploitable phenomenon allowed the emergence of business models that characterise the third dimension. In this case, the digitalisation of the economy is altering the very structure that grounds economic activities. Business models based on offering online advertising represent the most orthodox version of a break between consumers and users. Given the vast information asymmetry favouring big data companies, the boundary that separates the user as a consumer of a product or as part of a larger product is not so clear. This blurring is due to the users' reduction to an informational condition, turning them indistinguishable from the other information processed by the digital company. This situation allows speculations on the existence of an exclusively informational dimension within the wealth generation process and the possibility of its direct exploitation, as the following item will demonstrate.

2.2.3. Digitalisation and wealth generation.

The last two items have shown two conspicuous dimensions of the economy's digitalisation, both related to the business activity. The first corresponded to the emergence of information and communication technologies (ICT) as an economic sector and the digital language's dominance over the economic field. Such dominance has resulted from a technological revolution that has produced non-homogeneous effects in the other sectors of the economy. The second was the transformation in traditional processes of acquiring goods and services, whose digitalisation gave rise to what became known as electronic commerce. Moreover, new business possibilities within the upper layers of the Internet, related to information processing and the commercial use of asymmetries that it provides, enabled highly digitalised business models to appear. Such asymmetries are central in submitting users to a purely informational

condition, which characterises big data companies' economic activity.

However, the impacts of the aforementioned technological advances over the liberal paradigm on wealth generation go beyond issues exclusively related to business models. Such a paradigm was responsible for the emergence of a dynamic wealth concept supported by the division between public and private economic spheres. Competing theories about value creation have influenced the debate on the origin of the wealth, shedding light on different phenomena with the potential to affect its process of generation. The idea of wealth generated from different phenomena raises questions about their characterisation within the project to build the human dimension. In this way, there should be different types of wealth depending on whether it stems from natural, social, or individual phenomena. Consequently, the impact of the digitalisation of the economy on wealth generation includes considerations involving the distinct ways of capturing and using these phenomena.

This item aims to analyse the impacts of the economy's digitalisation on the fundamentals of the liberal paradigm related to wealth generation. The premise is that the wealth generation process has a phenomenological basis subjected to the intellectual project for constructing the human dimension, resulting in wealth arising from nature and the labour. The hypothesis is that the digital language's dominance summarises all the different phenomena responsible for generating wealth to the informational phenomenology. The item starts by contextualising the dynamic wealth concept as initially promoted by the liberal discourse and later influenced by the debate about value. Afterwards, the item identifies the phenomena capable of generating wealth according to a division imposed by the intellectual project for constructing the human dimension. Finally, the item examines how digitalisation highlights the technological dimension of wealth in which value is a function of information processing.

Wealth in the liberal paradigm.

The last chapter has revealed that modern taxation arose in opposition to what was understood, at that time, as the mercantilist view of wealth, represented by the possession of precious metals, and whose quantity would necessarily be constant. In this sense, a new liberal theory presupposed a dynamic wealth resulting from market activities performed freely

without state intervention.[652] Therefore, such a theory symbolised the antagonism to a model whose political substratum presupposed an enormous power concentration in the sovereign's hands. The new vision privileged an alleged natural freedom system to release the potential creator of wealth from private economic actors' market transactions.[653] By merely pursuing their self-interests, these private agents would help maximise the wealth of the entire society. Such a maximisation is associated with a type of social organisation considered the spontaneous arrangement stemming from human beings' natural propensity to bargain.

Notwithstanding, the roots of the idea of a wealth dynamically considered were already present in the physiocrats' thinking through the concept of net income. This income would only be possible from the exploitation of nature since, according to the physiocratic doctrine, the land would be the sole source of all wealth.[654] Although mentioning and offering mild criticism on the physiocratic thinking, the liberal view on wealth generation focused on combating mercantilism by mixing arguments today considered political and economic. In addition to not opposing the idea that nature could be a source of wealth, the liberal discourse has incorporated it, emphasising the importance of the land. However, such incorporation of the physiocratic argument has modified the point of view about processing nature's material elements, observing it from the applied human efforts. The income provided by the land has become a function of the variables involving trade and, more significantly, labour.

The liberal paradigm has changed the understanding of wealth's origin and

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[652] We have already dealt with the emergence of modern taxation in item "1.2.2. The tax field". It is important to note that, although this theory has its origins in Smith's writings, the expression "liberal" used here has a much more political than economic sense. According to Winch, the exclusively economistic sense emerged in the nineteenth century from liberals' and Marxists' reinterpretation on Smith's work. See WINCH, D. N. Adam Smith's Politics Revisited. **Quaderni di storia dell'economia politica,** v. 9, n. 1, pp. 3-27, 1991.

[653] De Mattos states that this system of natural freedom appears in Smith's economic discourse as a set of institutions that would match human beings' natural inclinations with socially beneficial results, measured in terms of the maximum increase of wealth. According to the author, Smith claims that the institutions of the mercantile system would not be able to bring about such an achievement, so that prosperity would require letting men be spontaneously guided by their nature, making their decisions based on these natural inclinations. See DE MATTOS, L. V. As Razões do Laissez-Faire: uma análise do ataque ao mercantilismo e da defesa da liberdade econômica na Riqueza das Nações. **Revista de Economia Política,** v. 27, n. 1, pp. 108-129, 2007.

[654] Rubin explains that physiocrats did not make a clear distinction between the idea of a net profit, a net income, and a net product. Thus, the author concludes that the physiocrats correctly intuited by associating the idea of wealth with the physical productivity provided by agriculture. However, physiocrats would have been wrong to deny this quality to industry, considering it only capable of transforming matter but not of producing a new material substance. See "The Net Product" in RUBIN, I. I. **History of Economic Thought**. London: Pluto Press, 1989, pp. 124-132.

its form of expenditure, reversing the mercantilist argument. Previously considered obtained from state acquisition of precious metals and spent with citizens' labour, the wealth became an individual labour's creation consumed by the state activity.[655] The freedom to choose how to employ this labour, in this view, would naturally lead to the allocation of productive efforts in activities that would be the best economically for the whole of society. Such deemed natural distribution of efforts in their best positions justifies the idea that the pursuit of individual interests implies the general good. By considering that the agricultural labour is more productive than foreign trade, the conclusion was that mercantilism was artificially promoting a worse social arrangement. This same distinction between different labour qualities triggered a whole theory of value associated with this new wealth source.

The value debate.

The idea that certain productive activities may have a higher value than others resulted in the intellectual separation between prices considered intrinsically natural and their numerical representation resulting from market variations. In the first case, the price would correspond to a function of the labour employed in production, whereas the market price relates to factors involving supply and demand of the product.[656] Such distinction would lead to a dissociation between the actual use of a given good or service and the price that merely represented a particular transaction. This dissociation means that the perception of value at the time of exchange may not reflect that asset's value in use. Since the value in use expresses intrinsic qualities of the product, the dissociation implies a duality between such objective nature of the value and a subjective perspective. This duality demonstrates that such theory presumes a quality belonging to the object that does not concern its perception from the recipient.

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[655] In this sense, McNulty says that, although Smith has given rise to several different economic debates, no field owes as much to the Wealth of Nations as labour economics. According to the author, Smith transformed most mercantilists' harsh attitudes towards workers into an intellectual defence of labour as the ultimate source of wealth. As the main factor of production, the idea of work in Smith was not limited to human action but reached all elements of nature. See MCNULTY, P. J. Adam Smith's Concept of Labor. **Journal of the History of Ideas,** v. 34, n. 3, pp. 345-366, 1973.

[656] Smith develops this separation in Chapter VII of Book I of Wealth of Nations. See "Of the natural and market Price of Commodities" in SMITH, A. **An Inquiry into the Nature and Causes of the Wealth of Nations. Books I-III**. London: Penguin Books, 1999a, pp. 38-48. Because it is associated with manufacturing, the natural is the minimum price at which a commodity could enter the market in a given period. However, although it gravitates around the natural price, the market price may deviate from it given supply and demand factors.

The distinction between value in use and value in exchange, associated with the premise that there would be productive and unproductive labours, has created two other important distinctions. The first was the realisation that it was possible to apply the above distinction to human labour.[657] Such analysis implies that the central element in creating the value of a good was not the price paid for the worker's effort, that is, wages, but the labour employed. The second was that the actual value of one good did not correspond to the labour effectively employed but to the labour necessary for its fabrication. With this, the manufacturing of a good would incorporate not merely the labour currently employed in its production but all the previously applied labours that made the current manufacturing context possible. The relationship between the transformation of raw material into goods and the value of these goods became the basis for subsequent debates involving the industrial capitalist mode of production.

As the last chapter has demonstrated, this labour-centred approach was deeply affected by the marginalist revolution and the emergence of a notion of subjective value. However, the acceptance of decreasing marginal value did not erase the debates on production and innovation, which continued, in one way or another, to emulate the initial intuitions related to the process of transformation of matter.[658] In general, the tax debate followed the marginalist tradition, more in line with the theories related to income taxation. Such theories were increasingly moving away from their origins related to wealth, albeit maintaining in their discourse some elements related to the idea of intrinsic value. The marginalist proposal offered pragmatic results that strengthened the new emerging tax field, causing the tax practitioners to focus on the transactions' numerical result. Nevertheless, this subjectivation of value raises essential questions related to the existence, or not, of its substantive dimension.

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[657] According to Hollander, David Ricardo was responsible for dissociating the cost of labour (wages) and its use in determining a product's value. Based on Ricardo's exchange of letters with Malthus, McCulloch, and Trower, Hollander identifies three phases in Ricardian thinking about value. The first corresponds to the Smithian theory itself. The second, expressed in the chapter on the value of Ricardo's Principles of Political Economy and Taxation, corresponds to the defence of independence between the cost of wages and the value of goods. The third, an object of controversy about Ricardo's theories, corresponds to the beginning of criticism on labour's adequacy to measure value, interrupted by Ricardo's death. See HOLLANDER, J. H. The Development of Ricardo's Theory of Value. **The Quarterly Journal of Economics,** v. 18, n. 4, pp. 455-491, 1904.

[658] It is possible to notice a historical dissociation in the debate related to the idea of value. On the one hand, a broader view of value continued to permeate economic debate. On the other hand, a perspective restricted to the scope of business activities has developed a parallel debate on the ability to predict the realisation of income for a given company in a given time interval. This forecast is expressed in exclusively monetary terms and corresponds to a radically reduced value economic theory application. On how business value developed as a particular type of economic value, see ROREM, C. R. Business Value. **The Journal of Business of the University of Chicago,** v. 2,

Wealth generation and price.

The dominance of the subjective theory of value has cooled the economic debate about the possible existence of a substantive dimension of wealth. As the most crucial beacon to guide commercial relations, the price has assumed a central position in an increasingly pragmatic debate.[659] Nonetheless, the legal tax field's independence before the other branches of the law has encouraged the construction of a substantive language on wealth generation. The decisive factor for the consolidation of a substantive agenda in the tax field occurred at the international level, from the emergence of interests related to the possibility of price manipulation and its tax consequences. However, the tax field did not return to the value debate's tradition, maintaining the centrality of the idea of price. The result was the emergence of a paradoxical attitude that considered price not as the cause but the consequence of certain types of market transactions, depending on the qualities of the transacting actors.

The international tax discourse has emulated the ancient value debate by distinguishing artificially constructed prices from natural prices resulting from ideational operations. These operations would be those between independent parties in a free market, which would preserve the foundations of the liberal paradigm.[660] Therefore, this attitude intended to harmonise with the marginalists' subjective value since it does not turn to the merchandises' phenomenological dimension. Notwithstanding, the application of the arm's length principle implies that any individual in identical circumstances would adopt the same conduct. In one way or another, there must be a substantive dimension of value, or else the problems related to the generation of wealth would be merely cognitive, and not economic. In other words, the wealth of a nation would correspond to a function of possible mental arrangements, regardless of any con-

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n. 3, pp. 312-325, 1929.

[659] Heilbroner explains that, after the nineteenth century's passionate debate, the problem of value has lost economists' attention, who have devoted themselves to theories of price. However, the author maintains the need to analyse what he calls the "deep structure" of economic life, which connects itself to the economic phenomena occurring on the surface, including the determination of prices. See HEILBRONER, R. L. The Problem of Value in the Constitution of Economic Thought. **Social Research,** v. 50, n. 2, pp. 253-277, 1983.

[660] The need to preserve these foundations has transformed the natural price's determination into a tax field's principle. Developing a historical analysis of the arm's length principle (ALP), Collier and Andrus explain that its origins go back to the first debates involving branch allocations in the 1920s. Nevertheless, ALP's primacy emerged in the 1960s, when determination methods started to incorporate elements of the operating context. See "Establishing the Primacy of the ALP" in COLLIER, R. S. and ANDRUS, J. L. **Transfer pricing and the arm's length principle after BEPS**. Oxford: Oxford University Press, 2017, pp. 52-60. Therefore, it is undoubted that the ALP establishes a much closer correlation of the price with its objective environment than with subjective aspects related to actors' self-interest's maximisation.

sideration involving the material plane.

On the other hand, even admitting that value is a category that corresponds to an individual and subjective aspect, this assumption would also result in the need to recognise a substantive dimension. It turns out that, for being subjective, the variation in the value of a good would correspond to a variation in the individual's way of thinking, which represents a specific form of information processing.[661] Thus, the relativistic attitude towards the idea of value would not solve the initial question. Considering value creation as a subjective issue would only condition its determination to the power to exercise control over this subjectiveness. In all cases, the idea of value calls for a phenomenological dimension, whether concerning possible objective elements related to the generation of value, or the phenomenology behind the subjective choices defended by the marginalists. The result is that regardless of the adoption of an objective or subjective perspective, the wealth generation stems from the value's phenomenological dimension.

Wealth generation phenomena.

As previously stated, this work's realistic perspective requires recognising that all forms of phenomenological manifestation have the same material basis. Therefore, besides consisting of the substratum that supports the universe's natural dimension, this basis also supports its social and individual dimensions.[662] This statement indicates that adopting a subjective perspective does not mean recognising value creation as arbitrary since the human phenomena belong to that same material basis. Notwithstanding, the existence of a shared material basis does not imply that all processes of wealth generation result from the same kind of phenomenon. An intellectual project to construct the human dimension, which justifies the very idea of social phenomenology, imposes the distinction between natural, social, and individual phenomena. In this sense, the creation of value and, consequently, the generation of wealth, will be materially

[661] This objectification of the subjective theory of value is one of the distinguishing features of the modern Austrian school before the nineteenth century's Vienna school. After the First World War, subjective theories of value acquired an interpretative character and a realistic attitude. In this sense, explanations for subjective values could not ground on self-evident assumptions of human nature but on the psychological determinants that constrain utility perception. See SWEEZY, A. R. The Interpretation of Subjective Value Theory in the Writings of the Austrian Economists. **The Review of Economic Studies,** v. 1, n. 3, pp. 176-185, 1934.

[662] See "2.1.1. Technological definition".

based on processes that explore these three phenomenological bases.

The phenomenological base that has long been recognised by the discourse on wealth generation corresponds to wealth arising from nature's events. This dimension supported an idea of static wealth, in which human efforts were limited to acquiring a wealth generated from natural phenomena.[663] This naturalistic perspective reached a physiocratic thinking limited to land cultivation issues but capable to elaborate a dynamic approach to wealth. The direct relationship with aspects concerning the basic needs of the human being, as opposed to bullionism's arbitrariness, demonstrates the importance of direct control of natural phenomenology. However, wealth generation's natural dimension does not end in the physiocratic thinking, being a premise for Smith and his followers. Although Smith's main category is labour, he sensed the existence of more or less productive labour as it was more or less associated with cultivating the land.

A new way of understanding the transition from the physiocrats' wealth theory to Smith's is by reversing the natural and human dimensions' centrality. Whereas the physiocrats stated that wealth came from the land, which depended on cultivation, Smith argued that the focus should be on the labour employed.[664] This specific divergence does not arise from Smith's ontological differentiation but from a change in the starting point for determining wealth generation's material basis. The contrast between the natural and individual dimensions of wealth generation results from the intellectual process for constructing the human dimension. The originality in Smith's thinking stems from his perception of the economic outcomes of this

[663] Although criticising the excessive reductionism about the mercantilist thinking, allegedly the result of a rationalist (and not historical) analysis of a few British authors, Blanc and Desmedt recognise that the mercantilist economic discourse revolved around the question of state action and aspects involving money. Thus, after deconstructing the traditional discourse on mercantilist authors, Blanc and Desmedt suggest distinct groups of mercantilist thinkers according to their greater or lesser proximity to the established power. Even though they emphasise the differences between these groups, Blanc and Desmedt admit the centrality of the phenomenology involving gold and silver in developing their debates. See BLANC, J. and DESMEDT, L. In Search of a 'Crude Fancy of Childhood': deconstructing mercantilism. **Cambridge Journal of Economics,** v. 38, n. 3, pp. 585-604, 2014.

[664] This small shift explains why Smith was more sympathetic to physiocratic thinking vis-à-vis his strong digested criticism targeted to what he called the "mercantile system". Smith did not deny the importance of agriculture in generating wealth, devoting Chapter IX of Book 4 of the Wealth of Nations to attack the physiocratic argument, according to which, the industry of merchants, artificers, and manufacturers would be unproductive. Smith argued that, at the worse, the industry's production could help to increase the "productive power of productive labour" related to the cultivation of the land. See "Chapter IX Of the Agricultural Systems, or of those Systems of Political Economy, which represent the Produce of Land, as either the sole or the principal Source of the Revenue and Wealth of every Country" in SMITH, A. **An Inquiry into the Nature and Causes of the Wealth of Nations. Books IV-V**. London: Penguin Books, 1999b, pp. 365-379.

human phenomenology when seen beyond the individual action embodied in labour effort. The social division of labour demonstrates that Smith has perceived a new phenomenon concerning wealth generation, distinct from the natural and the individual dimensions.

Digitalisation and the technological dimension of the wealth.

In a technological perspective in the broad sense, what Smith has realised were the economic effects on the wealth generation process deriving from the technique's development. These effects relate to the individual's technique associated with the worker's specialisation and the social technique expressed by the production organisation's efficiency gains.[665] Smith has identified a phenomenon that, although related to labour, is not confused with the physical effort undertaken to transform the matter. In parallel with this transformation process itself, the idea of an organisational production technique opened space for new discourses on the generation of wealth. As the technology in the strict sense acquired economic importance, new discourses related to mechanisation emerged. Although Smith has already intuited this idea since the eighteenth century, the digital revolution has evidenced its most profound connection with the wealth phenomenology.[666]

The intimate relationship of technology in the strict sense with wealth generation was initially unclear, presuming that machines are merely extensions of an activity inherently human. In other words, the logic of wealth generation remained the same: a consequence of the transformation of the matter whose origin is nature and concerning which the ma-

[665] According to Rosenberg, this duality resulted in a criticism supporting a contradiction in Smith's thinking exposed in Wealth of Nations. Such a contradiction would consist of the conflict between his exaltation of the division of labour as a catalyst for the worker's creativity, as exposed in Book 1, and his claim that this same division would make the worker "stupid and ignorant", as expressed in Book 5. However, Rosenberg argues that there is no significant contradiction but the finding that Smith knew how to identify the human, social, and economic reflexes of the division of labour. In this sense, the inventive capacity would not be an absolute value, meaning both the ability to engender philosophical speculations and offer technological answers to specific problems. See ROSENBERG, N. Adam Smith on the Division of Labour: two views or one? **Economica,** v. 32, n. 126, pp. 127-139, 1965.

[666] We argue that this idea was present, to some extent, in Smith's thinking. When explaining how the division of labour impacted productivity, Smith has offered three "articles": the dexterity that results from specialisation, the time saved by not shifting from one activity to another, and the invention of machines. In the latter case, although Smith did not refer to human or natural phenomena, he explained the emergence of machines not only as a result of the broad knowledge that philosophers possess but as an outcome of the specific, although limited, knowledge developed by the skilled worker. See "How the Division of Labour multiplies the Product" in SMITH, A. **Lectures on Justice, Police, Revenue and Arms: delivered in the University of Glasgow by Adam Smith (reported by a student in 1763)**. Oxford: Clarendon Press, 1896, pp. 163-168.

chine only contributed through efficiency gains. Notwithstanding, with the emergence of digital technology, in addition to merely increasing analogic processes' efficiency, a new digital paradigm has emerged. This paradigm brought a new concern with the understanding of what is central and what is peripheral in the process of generating wealth. In this sense, in removing what is merely adventitious, what remains is a method of thinking about wealth generation that represents the essence of this process. Thus, the digitalisation allows exploring the wealth in its most elementary informational mode since information is the ultimate phenomenon that unifies the others.

If wealth generation implies the use of matter to satisfy human needs, the processing of informational wealth will correspond to the ability to act directly on the matter's informational dimension. Although representing a revolution in manufacturing, 3D printers perform an analogical form of material intervention that does not reach the object's internal structures. The digitalisation must reach the materials themselves to achieve such structures, making the materials also digital. For operating at the molecular level in the production process, 3D assemblers allow the switch between data and matter in its most profound sense, giving a new perspective to digital production. Although its importance for manufacturing processes is evident, information has acquired a dual role given the digital paradigm's emergence. Information about products concerns the ability to digitally apprehend their phenomenological characteristics, while information about the processes reveals their material existence's decoding.

Information, energy, and value.

Although it is a necessary condition for the digital production process, information about the product does not exist only in technological terms. What is ground-breaking is the possibility of processing a massive amount of manufacturing information that reveals the phenomenology behind the material existence of an object. In this sense, the greater the available information on the process, the lesser the wastage with redundant procedures to transform the matter and give rise to a specific product. If the production process encompasses all the steps that lead to the final product's material existence, a more significant amount of information will imply a smaller number of steps. Ultimately, if the amount of information about the process tended to infinity, the result would be a theoretical disappearance of the process itself. If this process

corresponds to technological intervention which is artificial by definition, the result of a continuous increase in information would be the naturalisation of the production process.

The intellectual exercise proposed above does not intend to circumvent the elementary aspects of information theory or the thermodynamics' laws. The counterpart to an increase in the amount of information in a process is the need for more energy to store and handle it. On the other hand, the identity between the information processed and the energy employed results in another relevant phenomenological peculiarity. If the digital fabrication, given a vast amount of information, implies a paradoxical disappearance of the technological process, its cost tends to be equal to that of the energy used in handling that information. It is important not to confuse the energy used in the product's materialisation process with the energy employed in handling the information concerning that process. In terms of value theory, what is innovative is that the value-added to a digitally produced material product equals the energy used in processing the fabrication's information, not the energy spent on the fabrication itself.

In more pragmatic terms, what is being observed is the development of digital technologies that, although not allowing to overlook manufacturing products' costs, are gradually reducing them. In this case, the digitalisation of products and processes has been sufficient to decrease the costs concerning creation, replication, and distribution of the production result. Thus, the cost of producing an additional unit of one product equals the cost of the material and energy employed. In economic terms, the result is a tendency for the marginal cost of production to reach as close to zero, mainly due to the development of technologies for reusing materials and obtaining cheaper energy sources.[667] This process's most critical social result would be the end of the scarcity, as this idea expresses itself within the liberal paradigm. If scarcity is considered the primary phenomenon that influences price formation, its extinction will imply the lack of financial return on investment in information production.

Conclusions.

The emergence of a dynamic view of the wealth generation process

[667] Rifkin says that the transition from an economy that processes matter to one that processes information implies reducing the cost of this second processing close to zero. In this way, 3D printing would make the process of manufacturing goods equivalent to the digital service. See RIFKIN, J. **The Zero Marginal Cost Society: the Internet of**

brought out essential aspects of the value's phenomenological dimension. The first concerns the distinction between natural and human phenomena in the wealth production process, while the second differentiates the wealth arising from technique and technology in the strict sense. This debate lost its prominence in the economic field, given the emergence of the theory of subjective value resulting from the marginalist revolution. As a central element in the debate about wealth generation, value lost its importance, being replaced by the idea of price as the primary category around which the economic discourse started to revolve. Although disguised as a debate about price, the tax discourse recovered substantive aspects traditionally associated with the idea of value. Against what the liberal paradigm establishes, the price has become a potential object of manipulation, permitting situations contrasting with the tax field's expectations.

The tax discourse was concerned with distinguishing a merely nominal price, albeit resulting from an economic operation that took place, from an imaginary substantive price attributed to deemed archetypical behaviours. This debate was more significant at the international plane, reaching traditionally accepted criteria related to the way countries exert their power to tax. The search for substantive aspects involving the idea of price demonstrates the current importance of understanding the phenomenology behind the wealth generation process. However, the digital paradigm's emergence evidenced the prevalence of informational phenomenology over the phenomena traditionally associated with wealth generation. This prevalence took information from an accessory position concerning economic production and placed it at the centre of this process. The main result of this change was identifying the energy needed for information processing as the true phenomenological expression of the idea of value.

Nevertheless, the above-mentioned theoretical situation is not consistent with the digitalisation of the economy that is still in progress. The current international economy is neither entirely industrial nor fully digital, being formed by a myriad of wealth production processes exploiting different phenomenologies. This mixed character is responsible for asymmetries between the economic actors that continue to be affected by the digitalisation process. One of the most visible aspects of these asymmetries is the difficulty of reconciling an international tax legal discourse produced from the liberal paradigm with a digitalising economic reality. Nonetheless, the simultaneous existence of wealth generation processes associated with dif-

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Things, the collaborative commons, and the eclipse of capitalism. New York: Palgrave Macmillan Trade, 2014.

ferent paradigms does not affect only the international taxation's material dimension. The intellectual categories that constitute the international tax discourse have been impacted by the digital revolution's social outcomes, as the next sub-chapter will demonstrate.

2.3. Digital revolution and the liberal social order.

The previous two sub-chapters have demonstrated how advances in information and communication technologies (ICTs) resulted in a technological revolution that transformed the economy. The digital language emerged and became dominant on the other technological domains, a situation that found an economic equivalent in the ICT sector's influence over the other sectors of the economy. Nevertheless, digitalisation has transformed traditional commerce, allowed new business models, and has challenged the very way of generating wealth as determined by the liberal paradigm. This challenge stems from the impact that digitalisation has on the phenomenology associated with the generation of wealth. By themselves, these events do not imply that the process of digitalisation necessarily corresponds to a social revolution in the strict sense. Such a revolution cannot be merely technological but must reach the social order for which the legal discourse is an organisation instrument.

The mere existence of possible social outcomes resulting from a technological revolution is not enough to sustain a transformation along the same lines as the industrial revolution. Likewise, identifying new business models or even new wealth generation processes is insufficient to affirm that the economy's digitalisation corresponds to a real revolution. A legal relevant social revolution implies a paradigmatic change on the discourse justifying the established social order, impacting its internal categories. Specifically, the legal discourse on international taxation has historically developed from articulating two main categories of the liberal paradigm. The private sphere, represented by the market, is responsible for the generation of wealth, while the public sphere, symbolised by social and political interests, stands as a non-mercantile space. Nevertheless, the material environment in which these categories interact is determined by the different phenomena that constitute the project for constructing the human dimension.

This subchapter demonstrates the digital revolution's impacts on the liber-

al dichotomy between the market and the socio-political interests. The premise is that this dichotomy depends on a cognitive separation between the human being and nature, resulting in the opposition between the artificial and natural worlds. The hypothesis is that the digital revolution is destroying the liberal dichotomy as it reduces all its categories to their informational dimension, impacting the foundations of the international tax legal discourse. Item 2.3.1 presents a realistic view of the market as a product of the state action, and for which the digitisation process offered a real opportunity of independence. Item 2.3.2 describes the process of fictitious commodification of money and explains the social impacts of digital currencies' emergence. Item 2.3.3 analyses the tensions resulting from the submission of nature and human beings to a mercantile condition and the impacts of digitalisation on the intellectual project for constructing the human dimension.

2.3.1. Markets and the digital revolution.

The present work has so far referred to the idea of a social order resulting from a paradigm on wealth generation that presupposes a separation between public and private spheres. As the primary manifestation of this private sphere, the market represents a space for wealth production contrasting with the state's inherently political nature. Nevertheless, this dichotomy is not sufficient to explain the market or identify the processes responsible for its emergence and leading role in social life. Likewise, it is not evident how to recognise the elements that constitute the private economic sphere and the characteristics that differentiate them from politics. If the social order intends to maximise wealth generation from a market immune from state intervention, the market and state's frontiers should be clearly defined. Therefore, such cleavage must correspond to a kind of social arrangement that expresses itself materially at the phenomenological plane, making those frontiers historically identifiable.

Notwithstanding, the market's image as a category necessarily opposed to state's political nature does not harmonise with what a historical analysis reveals. Before becoming a major category within the liberal paradigm, the market assumed a national character as a step in the political project to build a national state. The political action to build an international market has historically been even more significant, resisting to the paradigmatic revolution

resulting from the rise of liberal thought. Therefore, the state action in protecting the international free market has been a political practice equally advocated by the mercantilist thinking and by the liberal discourse. Nevertheless, the remarkable transformation that has recently emerged consists of the rise of the digital market, which has the potential to inaugurate a first market genuinely free from state intervention. The irony lies in the fact that this stateless digital market is artificial by definition, and far from the natural character defended by the liberal discourse.

This item aims at presenting the process that culminated in the central role of the market in the liberal social order and the following transformations brought about by the digital revolution. The premise is that the national and global free markets result from institutional political efforts, not corresponding to natural phenomena. The hypothesis is that state action allowed the rise of a stateless international market discourse that only became materially feasible after the digital revolution. The item begins by demonstrating that, although the liberal discourse refers to the market as the antithesis of politics, this division was only made possible by the political action of building a national market. The item then shows that, although the dichotomy between public and private spheres remains at the international level, the liberal discourse admits the need for state efforts to preserve the international free market. Finally, the item explains how the digital revolution allows a real schism between the market and the state, analysing its impacts on the liberal social order.

National market construction.

Exchanges in the social sphere are a constant practice in human history, a characteristic that is confused with the very idea of living in society. It is a phenomenon that emerges from the interaction between the individual and the external dimension, that is, between personal interests and the material possibilities of their satisfaction.[668] What is not trivial is the

[668] Swedberg clarifies that these interests are of different natures, not just economic. In this sense, the author offers an alternative to mainstream economic thinking that understands the market as a system more or less contained in itself. Thus, Swedberg intends to broaden the view he considers narrow of economic market theory, basically synonymous with abstract price theory. Defending a realistic attitude, the author suggests that the historical analysis of the markets consider the following elements: the voluntary character of the actors in satisfying their interests; the degree of interest according to the dependence on the market; the type of interest at stake (economic, political, among other things); the economic power of the actors, in contrast to other forms of power, such as authority; and the interest of political actors related to the dependence of society as a whole on the market. See "Markets in History" in SWEDBERG, R. **Principles of Economic Sociology**. Princeton: Princeton University Press, 2003, pp.

idea supported by the liberal paradigm according to which the evolution of exchange practices necessarily leads to the rise of the market as a central element for social organisation. This statement raises questions of a normative nature, but, above all, it demands an empirical analysis on the history of the role of the market in social life.[669] The question is to know what succession of events would have led to the dominant idea that the market society is a natural result of a deemed innate propensity to exchange. Likewise, it is necessary to verify whether such a position finds support in the historical evidence, which, in turn, demands a previous definition of a market.

The idea of an innately human propensity to exchange generates an image of the market as a uniform phenomenon whose transnational character is a function of its development stage. Nevertheless, the vision of a spontaneous local trade that develops from the complexity acquired by social relations contrasts with the historical facts.[670] Besides, more than just trade, market, in its modern sense, is a meeting of exchanges that exceeds the mere commercialisation of goods, reaching a normative dimension of the commercial relationship. Thus, the modern market is not a mere physical or symbolical *locus* for exchanges but a behaviour pattern that uses prices as a guiding element. Although the statement seems trivial, such obviousness stems from the national market's centrality in modern social life, which has not always happened.[671] Neither this centrality nor the very existence of a national market occurred automatically or spontaneously but resulted from political projects.

The centralisation of power in the European monarchies' hands has dismantled the fractional system resulting from the feudal production model. The mercantilist state authority was the agent responsible for the end of this fragmentation, which resulted in the

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131-157.

669 Hicks assist in analysing this role by suggesting specialisation as a factor in understanding the emergence of the market. See "The Rise of the Market" in HICKS, J. R. **A Theory of Economic History**. London: Oxford University Press, 1969, pp. 25-41.

670 According to Swedberg, creating national markets was "anything but automatic", only happening with the help of political actors, especially the state. See "national market" in SWEDBERG, R. **Principles of Economic Sociology**. Princeton: Princeton University Press, 2003, pp. 140-143.

671 In this sense, Polanyi opposes Hawtrey's liberal argument, according to which, the market followed the practice of exchange as one of the results of the natural human propensity to exchange. Polanyi understands that the expression has several meanings and that the emergence and centralisation of what came to be known as the national market resulted from a long historical process in which the performance of a central authority had a fundamental role. See "Evolution of the Market Pattern" in POLANYI, K. **The Great Transformation: the political and economic origins of our time**. Boston: Beacon Press, 2001, pp. 59-70.

emergence of national markets in Europe.[672] This process was intimately linked, among other factors, to the commercial revolution caused by the discovery of the new world and the consequent migration of the commercial axis from the Mediterranean to the Atlantic. Internal trade unification corresponded to a necessary step in strengthening nations to adapt to the new commercial rivalry reality that emerged alongside the mercantilist model. Such unification was made possible from a monetary standardisation sponsored by the monarchy that reduced the transaction costs involving the country's different regions.[673] A decisive state action prevented private monopolies, competition, and attack from adventurers, allowing the stability of production and distribution processes.

National market independence.

The transition from the feudal production model to mercantilism meant the emergence of a national market as a by-product of the political project of centralising the absolute national state. Therefore, the national market does not correspond to a sphere that opposes politics, belonging to the mercantilist political project that allowed the liberal moral project's implementation.[674] Such a moral project was not limited to submitting the production process to the market's logic, reaching the entire social organisation. The liberal discourse preached a distancing between the public sphere and the national market without recognising the central authority's role in designing and producing such a market. Besides, the liberal moral project implied the liberalisation of existing products and the commodification of elements that were not merchandise in a traditional sense. Consequently, the national market's independence from the state demanded the transformation of money, land, and labour into fictitious commodities.

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[672] Based chiefly on the Prussian history, Schmoller informs how mercantilism played a politically and economically unifying role so that the process that resulted in the modern European states could not be apart from that which produced a real national economy. Therefore, Schmoller opposes the liberal view according to which the mercantilist statesman is an obstacle to economic development, demonstrating that such development could not occur in Prussia without a decisive intervention by that central authority. See SCHMOLLER, G. **The Mercantile System and Its Historical Significance**. New York: Macmillan, 1884.

[673] The next item will again address the role of forming a currency market in the consolidation of the national market. See "2.3.2. Natural, social, and digital money."

[674] In this sense, Gerschenkron's reaction to Hicks's description of markets' emergence is quite illustrative. In his critique of Hicks' "Theory of Economic History", Gerschenkron highlights that the author only considered merchants' role and disregarded the great unifications provided by mercantilist statesmen. According to Gerschenkron, these actors were responsible for the foundations of industrial development that later became the object of the liberal project. See GERSCHENKRON, A. Mercator Gloriosus. **Economic History Review,** v. 24, n. 4, pp. 653-666, 1971.

The liberal moral project of building a private economic sphere immune from state political agency was not limited to domestic affairs. The arguments invoking the economic effects of absolute and relative advantages resulting from specialisation have traditionally mixed national and international events.[675] Notwithstanding, the international market comprises historical moments and contexts that do not relate to national markets' formation. Unlike the substitution of the feudal production mode by the mercantilist mode, there was never a process of centralisation of power capable of cancelling the intervention of local powers at the international level. Hence, instead of preaching a complete departure from state action, the liberal discourse calls for states' and international organisations' intervention to remove threats to the liberal project. Therefore, the liberal international market does not result from the separation between economic and political interests but from a political project committed to creating a global economic sphere.

The protection of the free international market.

The liberal political project to expand the market system internationally began to take shape in the first half of the nineteenth century. During this period, the international free trade project emerged from the association between developing a competitive labour market and implementing the gold standard.[676] While skilled labour was an internal attribute to countries, the gold standard was the central element in building the free international market. More than a simple instrument, the gold standard symbolised the very internationalisation of the

[675] However, Gordon warns that Smith's and Ricardo's internationalist projects differed in their premises and justifications. Smith saw the free trade market as a mere continuity of the national market, which is why his description of the wealth generation process in this plane corresponds to the same productivity arguments related to the division of labour at the domestic level. On the other hand, Ricardo understood that the freedom of capital and labour, foreseen at the domestic level, would not apply at the international plane, justifying his arguments based on the specialisation between countries according to their relative advantage. See "International Trade" in GORDON, S. **The History and Philosophy of Social Science**. London: Routledge, 1991, 690 pages, pp. 194-201.

[676] Polanyi asserts that the liberal policy did not appear in the eighteenth century when the physiocrats began to use the expression laissez-faire but from the 1820s onwards. In the nineteenth century, the construction of free international trade (together with the subjection of labour to market prices and the automatic gold standard) became the militant creed's objective. According to Polanyi, however, the formation of a free international market required the state as the great promoting agent, implying a paradoxical intervention to make Smith's naturalism compatible with society's needs. For the author, this paradox implied another, the truly spontaneous social uprising against the artificial project of market centrality, embodied in the rise of socialism and fascism, described by liberals as protectionism resulting from human impatience, ambition and narrowness. See "Birth of the Liberal Creed" in POLANYI, K. **The Great Transformation: the political and economic origins of our time**. Boston: Beacon Press, 2001, pp. 141-157.

liberal project of building a world society organised by the free market. This configuration was responsible for the international free-market model's success while the political balance between the world great powers remained. Notwithstanding, the collapse of the gold standard, associated with the geopolitical upheavals resulting from the fall of the Ottoman Empire, was responsible for this project's end, resulting in the rise of violence between nations.

The inability to prevent the explosion of violence resulted in a new attitude towards the liberal project to build the international free market in the twentieth century. The project's initial failure has demonstrated the necessity for direct intervention on the economic context to safeguard the international market.[677] This protection demanded institutional efforts by establishing international organisations whose objectives would not necessarily represent those of the states as national entities. The preoccupation with the possible outcomes from national democratic institutions was associated with the emergence of various forms of totalitarianism. The result was that, far from advocating a separation between the economic and political spheres, the new liberal discourse emphasised the need for state action to promote the international free market. In this context, the private economic sphere was not a separate reality, but a space designed from the tools provided by international law and politics.[678]

The nineteenth-century liberal paradigm, which described the international market as an extension of the national and placed it in contrast to the political sphere, could not explain the new moment. The articulation responsible for building an international economic space did not place the market in a different dimension from politics but in the middle of a confrontation between globalist and nationalist projects.[679] Consequently, the new liberal project

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[677] Slobodian points out that this recognition that the market is not the result of natural development, but the product of politically constructed extra-economic conditions, distinguishes neoliberal discourse from typical nineteenth-century market fundamentalism. In this sense, the real focus of neoliberals would not be on the market itself, but on the redesign of the state, laws, and other institutions capable of protecting the market from the reactions witnessed at the beginning of the twentieth century. See "Encasement, not liberation" in SLOBODIAN, Q. **Globalists: the end of empire and the birth of neoliberalism**. Cambridge, Mass.: Harvard University Press, 2018, pp. 5-7.

[678] The absence of doubts about the state's role allowed the consolidation of a specific legal discourse at the international level, contradicting the incredulity of those who argued that there could be no more than essentially diplomatic arrangements in the conduct of international trade agreements. Reich presents the process that led to this consolidation, concluding that the liberal perception about the need for legal stability at the international level was no different from the primitive villagers of ancient times. See REICH, A. From Diplomacy to Law: the juridicization of international trade relations. **Northwestern Journal of International Law & Business,** v. 17, pp. 775-849, 1996.

[679] According to Slobodian, the School of Geneva was who best incorporated this new ethos. For the author, unlike the Chicago or Virginia school that ignored the rest of the world, European neoliberals could not afford to focus only on their local reality, which made them theorists of the global order. This globalist intellectual project was op-

does not aim to leave the market free of state intervention but protect it, through state action, from threats to its values. These threats are related to institutions' democratic control and state actions considered irrational for not harmonising with the liberal ideology. Therefore, the free international market evidenced an effort to subsume democratic decisions to a technical project of organisation of the international order. Such a project aims at making a specific political view prevail over others, on the grounds of its deemed technical and rational superiority.

International market's impossible independence.

The cry for a political project of international institutionalisation for the free market's defence represents a shift in the liberal discourse. It is the recognition that, differently from what occurs at the domestic level, it was impossible to implement a process of independence of the international market vis-à-vis the political sphere.[680] In the mercantilist period, based on an interventionist paradigm contextualised by the environment of absolutism, this separation made no sense. Thus, the idea of a free international market was something that, far from opposing to it, included the state in protecting a universal right to free trade. Although the liberal discourse on wealth generation consists of rejecting the mercantilist premises, it could not offer an adequate alternative. Given the existence of a plurality of countries with divergent interests, the idea that the private economic sphere would necessarily be in opposition to the public political sphere did not correspond to the international reality.

The international plane does not have a central world authority or an absolute government against which liberal discourse could oppose. Besides, given that the expansion of markets was beneficial to industrialised nations, the convergence of public and private interests prevailed over the moral perspective on the need for non-intervention. The making of an

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posed to nationalist impulses and was responsible for tension between global economic rationality and the political exercise of sovereignty. See "Geneva school, not Chicago school" in SLOBODIAN, Q. **Globalists: the end of empire and the birth of neoliberalism**. Cambridge, Mass.: Harvard University Press, 2018, pp. 7-13.

[680] The realisation of this impossibility is associated with the awareness of liberal thought in the twentieth century, as identified by Slobodian, that democracy could lead to its self-destruction, while nationalism may sabotage the globalist project. The author states that, in the liberal view, the rise of different types of fascism demanded limitations to democracy itself, which would only be possible to be implemented by a global constitutionalist project, a need arising from the post-imperial period. Thus, Slobodian concludes that twentieth-century liberals were not critical of the state itself, but of the nation-state. See "Militant globalism, not market fundamentalism" in SLOBODIAN, Q. **Globalists: the end of empire and the birth of neoliberalism**. Cambridge, Mass.: Harvard University Press, 2018, pp. 13-16.

international market has distinct impacts on wealth generation, favouring processes that explore the wealth's technological dimension. From the countries' perspective, the free world market also meant industrialised nations' prevalence over those dependent on wealth arising from nature or physical human labour.[681] Before the lack of intellectual or material reasons for adopting a different attitude, the liberal discourse maintained the same mercantilist free trade logic. The state that should move away from the private sphere was not the sponsor of the free international trade but the local governments that adopted protectionist measures.

The result of all these factors was that the new international liberal discourse could not emulate its traditional domestic dichotomy between a spontaneously developed market and an intervening state agent. The free international market has acquired a specific connotation, becoming a synonym for globalism in opposition to nationalism, but not to the political agency itself.[682] This pragmatic stance adopted by the liberal discourse, however, goes against its most basic premises. The liberal paradigm presupposes a social order representing the protection of the market's natural evolution, which contrasts with a politically constructed international project. Notwithstanding, with the emergence of digital technology, it also emerged a digital economic environment in which the state action may no longer be necessary. The rise of the international digital market symbolises the real possibility of separation between the states and the international market, although this event also collides with the liberal groundings.

The digital market.

The most critical factor in the production process's organisation in a market economy is the price system, as it decides what to produce, when, and in what quantity. In addition to the wealth distribution's previous configuration, the price will also inform the recipi-

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[681] Stigler says that the limitation imposed by the market's size on the effects of the division of labour is so relevant that it lies at the heart of the theory of the functions of firm and industry. Although it is not impossible to apply the effects of the division of labour to agriculture, its returns are lower than those of industry and decrease with the intensity of land cultivation, whose supply is relatively fixed. See STIGLER, G. J. The Division of Labor is Limited by the Extent of the Market. **Journal of Political Economy,** v. 59, n. 3, pp. 185-193, 1951.

[682] Slobodian claims that liberals of the twentieth century (neoliberals, in his language) saw the world capitalist economy as threatened by the precarious arrangements that corresponded to the global political conditions. In this context, international organisations became instruments for introducing international governance and institutionalising the global market's protection against national governments' interference. See "Vertical fixes for a disintegrating world" in SLOBODIAN, Q. **Globalists: the end of empire and the birth of neoliberalism**. Cambridge, Mass.: Harvard University Press, 2018, pp. 19-26.

ents of the goods produced.[683] Digitalisation brought to the new market an essential feature potentially affecting the plausibility of using such a system. An economy in which the production process has a marginal cost tending to zero will, in the long run, make the prices of digital goods and services also disappear. As a result, the profit generation would depend exclusively on information asymmetry, so that digital companies could expropriate consumer surplus by pricing above marginal cost. Given that their wealth generation process bases on information processing, such companies are in a very favourable situation vis-à-vis their consumers and regulatory bodies, which is aggravated by their immaterial character.

Immateriality is responsible for the ubiquity of the digital market, which results in a fusion of the historical types of market, encompassing international, national, interregional, and local markets. This ubiquity leads to a situation where, even if formally tied to a given jurisdiction, these companies do not identify themselves specifically with a particular economy.[684] Such a characteristic can put social interests at risk since it allows digital companies to escape from regulation and generates unwanted distinctions between them and individuals (and non-digital companies). When these characteristics are associated with the high capacity to process information, the result is the risk of technological interference in politics. This interference would correspond to the extension of technological design over the social organisation centred on the market. Such a situation places technology on the same level as the law as an instrument of rational organisation of the social order and threatens the intellectual project of constructing

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[683] Although the price traditionally evokes a theoretical encounter between the supply and demand curves, it has a phenomenological dimension that depends on social arrangements that precede society organised by the market's logic. Veblen explains that the formation of prices in the market society is directly related to the distribution of wealth in a period before the industrial revolution. This distribution is responsible for structuring classes and establishing habits that have significantly affected consumption patterns. Thus, the formation of prices is not a mere abstraction but the material result of historical events that are not necessarily present in the assumptions of the liberal paradigm. See VEBLEN, T. **The Theory of the Leisure Class: an economic study of institutions**. New York: B. W. Huebsch, 1918.

[684] This lack of identification results from the unnecessary market access, in the traditional sense, since the network structures that underlie the digital market now emulates the former economic relations. Our idea is in line with Ustyuzhanina and Komarova's argument that information and communication technologies allowed the migration from the market, as the central space in which economic interactions occur, to network structures. The authors claim a change in both the type of economy and the dominant coordination mechanisms. Thus, the market economy based on trade and coordinated by the price system and legal regulation is gradually giving way to a network economy based on redistributive transactions and coordinated by mutual agreement and conventional norms. See USTYUZHANINA, Y. V. and KOMAROVA, I. P. The Digital Revolution Influence on Development of the Network Economy. **Journal of New Economy,** v. 19, n. 6, pp. 5-15, Dec. 2018. However, we understand that the network economy's coordination mechanisms are the result of the choices made when designing the technologies that structure the digital market.

the human dimension.[685]

As the most crucial ingredient of the modern bureaucracy, the legal discourse stood out to ease tensions between economic rationality and social passions. Nonetheless, such quality was not sufficient to avoid the rise of different forms of authoritarianism as harsh reactions against economic hegemony in the conduct of political affairs.[686] The threat to the law's social role is even higher when a technological discourse begins to flourish and recreate the field of social reality from an imperceptible language. While the law is explicit in changing social reality, technological transformations usually imply hidden mechanisms of social organisation.[687] The danger of these mechanisms lies in the fact that they remain outside the human dimension, not being perceived as a political project but as the very frontier of material possibilities. When the digital environment is considered a given reality, insubordination is not an option since it is impossible to disobey the digital design without abandoning the technology as a whole.

Effects and challenges.

On the economic level, the digital market's rise also challenges the liberal paradigm since this depends on a fundamentally moral argument that assumes the existence of a natural propensity to bargain which was responsible for creating the market. The digital market operates at a logical level superimposed on the telecommunications structure, being inherently artificial as it stems from the design activity.[688] This characteristic implies a migration, causing

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[685] The item "2.3.3. The digitalisation of the natural, social, and individual" will return to this topic.

[686] This paradox becomes even more evident when one contrasts English common law's reality to the German legal experience. Writing before the rise of Nazism, Weber has characterised Germany as having a more rational and bureaucratic judicature than England. Interestingly, Weber associates capitalism's success in England, despite being more prone to medieval practices than to the Roman law's institutes' rationality, with the denial of justice to the economically weaker groups. See "The Technical Superiority of Bureaucratic Organization Over Administration by Notables" in WEBER, M. **Economy and Society: an outline of interpretive sociology**. Berkeley: University of California Press, 1978, pp. 973-980.

[687] Dealing specifically with digital technology, Lessig states that while one easily recognises how the law regulates real space (through constitutions, statutes, and other legal codes), it is necessary to understand how another type of code acts as an obscure regulator of cyberspace. According to the author, code determines access to digital objects and regulates human interactions, preserving or eroding specific values. See "Code is law" in LESSIG, L. **Code: and other laws of cyberspace, version 2.0**. New York: Basic Books, 2006, pp. 1-8.

[688] As Perez explains, all the so-called "technological revolutions", occurred since the end of the eighteenth century, based on some infrastructure responsible for economic transformations that resulted in changes in the principles that govern production. Such infrastructures usually operated on transportation and communications, establishing their frontier in speed and reliability. See "Technological Revolutions and Techno-Economic Paradigms" in PEREZ, C. **Technological Revolutions and Financial Capital: the dynamics of bubbles and golden ages**. Northampton,

the market to abandon its technical character to assume a technological aspect. Such a migration implies its transformation from an object historically considered a social practice into a strict sense technological element. This transformation attributes an objectified character to the market and distances it from the rational project of building the human dimension. Such a situation implies replacing the economic rationality associated with the industrial revolution by the digital design's dominance as a social organisation mechanism.

The digital market affects the fundamentals of the liberal paradigm and the categories that make up the technical discourse resulting from it. Thus, the efficiency stemming from the social division of labour loses meaning in a technological environment capable of extracting special effects from different phenomena.[689] Likewise, the digital market weakens the idea that private interests would almost always lead to public benefits. It turns out that competition in the digital market is not horizontal, but vertical, in which firms do not compete for efficiency in the domain of a given phenomenology, but in the ability to explore new dominant phenomenologies. Such factors result in a loss of meaning in the debate about the value creation's origin, whether resulting from production efforts or due to subjective preferences. Considered an informational phenomenon, the value not only becomes subject to technological exploration in the strict sense but, for the same reasons, it moves away from the human dimension.

The submission of value to the condition of informational phenomenon directly impacts the process of generating wealth in the light of the liberal paradigm. The process of digitalisation has made the social relations of production, formerly converted into economic relations from the industrial revolution, encapsulated in the digital logic associated with the plat-

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Mass.: Edward Elgar, 2002, pp. 8-21. However, we argue that the digital market does not emerge directly from the physical communication infrastructure, locating itself at the top of a logical overlap of layers, all of them essentially technological in the strict sense. Thus, unlike previous episodes, the digital market does not depend on the human factor's superposition on a technological structure, but on the interplay of strictly technological layers.

[689] Kenney and Zysman point out that, although platforms present themselves as mere intermediaries, they have unprecedented control over work organisation and remuneration. The authors state that the question is whether design choices will benefit general economic growth or just an algorithmically oriented reorganisation favouring the platform's builders' enrichment. However, it is noteworthy that the authors do not limit the idea of a platform to work intermediation sites, so that it is possible to think of platforms oriented to other platforms, being the Internet itself the foundational platform of all. See KENNEY, M. F. and ZYSMAN, J. The Rise of the Platform Economy. **Issues in Science and Technology,** v. 32, n. 3, pp. 61-69, 2016. From what the authors claim, there is no reason to believe that platforms could not have the power to intervene in the intermediation between platforms. This fact means that the phenomenology related to the social division of labour, in its broadest sense, may become an object of technological harnessing.

forms and their technological environment.[690] This encapsulation is responsible for submitting to the digital language all categories that make up the wealth generation process. With this, elements such as supply and demand cease to behave like independent variables, becoming a function of the information processing. As a result, the price system responsible for structuring the entire market economy loses its supposedly natural character. In the digital market, the price ceases to be an independent phenomenon responsible for conditioning the economic actors' attitudes, turning itself into a consequence of processing the informational phenomenon that constitutes it.

Conclusions.

Although the liberal discourse refers to it as the spontaneous result of a human being's natural propensity to bargain, the market's centrality in the modern social order occurred at enormous social engineering costs. The emergence of the national market results from the political efforts that culminated in constructing absolutist states in the European continent. The liberal discourse could articulate its moral argument of separation between the public and private economic spheres only from this event. At the international level, especially after the First World War, this discourse no longer hid the need for state action to build an international free market. Since then, the dichotomy advocated became the one between the state's actions to promote free trade in contrast to protectionist measures adopted by local governments. Notwithstanding, the digital revolution has provided an unprecedented opportunity to put the moral project of building a stateless international market into practice.

On the other hand, the emergence of an international digital market contrasts with different elements that make up the liberal paradigm on wealth generation. The characteristics of digital products and services challenge the price system as a reference for economic actors' performance. Furthermore, due to its inherently artificial quality, the international digital market does not harmonise with the normative assumptions of the liberal paradigm. In this sense,

[690] In its 2019 report, the OECD has emphasised the central economic role of online platforms in the intermediation between different markets but stressed that these platforms were not confused with the digital ecosystem in which they operate. However, in explaining what this ecosystem would be, the OECD has made no effort to differentiate the economic nature of ancillary services provided to platforms from the technological structure that enables such services, referring to all of them as "digital". See "What is an "online platform"?" in OECD. **An Introduction to Online Platforms and Their Role in the Digital Transformation**. Paris: OECD Publishing, 2019c, pp. 19-26.

the appeal to preserve human nature's spontaneous results loses strength in the face of an economic order structured from a deliberately technological design. Finally, the impacts of the digital revolution on the fictitious merchandises responsible for the emergence of the market society produce effects beyond the economy's borders. The new contextualisation of money, land, and labour within the digital environment directly impacts the very phenomenology that underlies the liberal social order.

In sum, the market's role in society has changed according to the transformations in the dominant paradigm concerning both the wealth generation process and its moral justifications. The shift from feudalism to mercantilism, and from this later to the industrial society, implied a political agenda of social reorganisation that confronted ancient traditions. Given this historicity, the digital revolution can change the balance between commercial and social interests through the rise of digital technology as another technocratic discourse. The digital discourse has the potential to place the international market in an unprecedented position of independence from the state. Even among the greatest defenders of market independence, the predominant idea was that some merchandises, such as money, should remain a state monopoly. Nevertheless, digital technology advances are beginning to point to alternative ways of modifying this state exclusivity, as the next item will demonstrate.

2.3.2. Natural, social, and digital money.

The previous item has demonstrated how national markets in Europe resulted from political projects responsible for constructing the national states and dismantling the feudal production system. Subsequently, the idea of a national market gained a central status in industrial society, being the object of the liberal intellectual project of separation from public and private spheres. The industrial revolution presupposed the expansion of this market, resulting in political efforts to build an international market. These efforts resulted from the recognition that it was impossible to separate public and private spheres at the international level and, consequently, to build a stateless international market. Such a possibility occurred only after the emergence of an international digital market, resulting from the development of information and communication technologies. However, this international digital market conflicted with the mor-

al assumptions of the liberal paradigm in the face of its necessary artificiality.

This succession of events depended on a process of fictitious transformation of several elements that did not correspond to the idea of merchandise in the traditional sense. The fictitious commodification of money at the national level took place by emulating gold's natural characteristics, establishing a monetary standard in force for more than a century. Several insurgencies against the deleterious social effects of subordinating money to the natural phenomenology have provoked control efforts, which was catalysed by the internationalisation of the gold standard. These efforts' main symbols were the growing importance of central banks and the increased financial sovereignty feeling. Notwithstanding, given the digitalisation process, libertarian projects began to emerge, aiming to insulate the currency market before the state sphere. In turn, such intellectual projects present some internal inconsistencies, both contradicting their premises as having harmful effects on the social fabric.

This item aims at demonstrating how the process of digitalisation of the economy is enabling, for the first time, the emergence of a global currency market outside the scope of state interference. The premise is that this emergency is associated with a libertarian naturalistic argument that contrasts with the artificial character of the digital money. The hypothesis is that the emergence of digital money presents the potential to result in state money parasitism regardless of the social actors' political choices. In this sense, the item begins by analysing how money's commodification has emerged grounded on the gold's natural phenomenology emulation. The item then describes how the internationalisation of the gold standard, coupled with the general problems of adopting its natural phenomenology, has augmented the importance of social instruments of currency control. Finally, the item analyses the emergence of digital currencies and the problems resulting from the money's independence before the state.

Money as fictitious merchandise.

The previous item stated that the national market's emergence resulted from a political project of economic unification that suppressed the feudal production model. Currency unions' establishment was one of the elements associated with this unification, allowing the standardisation of payment forms within the future national states' borders, resulting in

economic growth.[691] In addition to the effects on economic operations, a single currency has facilitated capital accumulation, and this accumulation process became a hallmark of the mercantilist model. This accumulation process was responsible for offering a robust monetary base that enabled the future transition from commercial to industrial capitalism. Although associated with a political agenda, these events allowed money to be reinterpreted by the liberal discourse as a natural phenomenon emerging from human nature. Such a reinterpretation has turned the currency into an input within the classical theory of money.

The idea of money as a medium of exchange presupposes its usage to determine the value relations between all merchandises available in the market. In this sense, the money's value would be nothing more than an arithmetical function of the merchandises' values potentially expressed in monetary terms.[692] Notwithstanding, while creating a national market and establishing currency unions were events historically associated, the notion of a currency market has its specific implications. As an independent event, establishing a currency market opens space to promote a notion of the price of money as the outcome of internal money market forces. This idea is in harmony with the traditional thinking according to which money, as a concept, implies using a specific commodity as a currency, given its natural characteristics. Since considered just another commodity, the arising question is how much intrinsic value money possesses as a product.

Money's commodification represents a double submission of its value to

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[691] Although it is a commonplace to claim that money diversity impeded trade and that its consequent reduction, through currency unions, favoured market integration, Boerner and Volckart argue that historical analysis reveals an inverse relationship. The authors argue that overcoming a diversity of currencies requires a minimum of pre-existing market integration responsible for establishing the price relationships for gold, silver, and the commodities that will guide the unification process. Thus, based on these relationships, and considering the central roles of silver and gold, respectively, in local and long-distance trades, the authors demonstrate a correlation, in Late Medieval Central Europe, between the belonging to a currency union and the existence of well-integrated money markets. Therefore, the authors conclude that, although the currency union has positive effects on market integration, these effects are perceived only when this integration is sufficiently advanced in proportion to the currency fragmentation. See BOERNER, L. and VOLCKART, O. The Utility of a Common Coinage: currency unions and the integration of money markets in late Medieval Central Europe. **Explorations in Economic History,** v. 48, n. 1, pp. 53-65, 2011.

[692] This view considers money as an ideal category to which different properties can be attributed and was adopted by Jevons in his definitions of the four functions of money. After presenting the drawbacks of a pure barter system, Jevons affirms that money consists not only of a medium of exchange, but of a measure, a standard, and a mechanism for storing value. Based on these ideal qualities, the author follows his analysis to identify, among the existing commodities, which, according to their properties, would best perform those functions. See "Barter", "Exchange" and "The Functions of Money" in JEVONS, W. S. **Money and the Mechanism of Exchange**. New York: Appleton, 1898, pp. 1-18.

the market's action, since, as other merchandises, it submits itself to the law of supply and demand. Thus, on the one hand, money would represent the value of other commodities while, on the other, money would have a value in itself as a fictitious product.[693] Because it is a product, money should behave like the other outcomes of production processes, which would influence its relationship with the idea of wealth. In the light of the liberal paradigm, therefore, money would not only be the numerical representation of an exogenous wealth but the actual incorporation of the labour value from which it derives. Although applicable to money already in circulation, this statement is not consistent with the absence of correlation between money's value and the effort for its issuing. In this sense, the effortlessness in fabricating this product resulted in linking money issuing to the material phenomenology related to the scarcity of gold.

Emulation of nature.

The issuance of money backed by the physical existence of a certain amount of gold was the artifice used to attribute aspects of naturalness to the currency's essentially social character. This mix between natural and social phenomena marked the relationship between the gold standard and the quantitative theories of money.[694] Thus, if money behaves as the numerical expression of wealth itself, this wealth will be subordinated to the amount of gold that exists and the speed of currency circulation. Once, under the liberal paradigm, this speed is a constant, the general level of prices will act as a function of the quantity of currency in circulation. This function is the premise from which emerges the idea that the currency would be neutral and exogenous since it would not affect the economy's production and given that the monetary authority could modify its quantity. Nonetheless, the union of natural and social phenome-

[693] Although the expression "money" is being used here as an ideal category, this idealism does not undermine its importance or diminish its impact on the material elements of the commodities associated with it. Graham asserts that whilst, on the one hand, money has historically derived its value from its physical or legal relationship with monetary commodities, on the other, the value of these commodities, especially gold and silver, has more recently been influenced by its status as monetary metals. Thus, the author concludes that it is possible to extract a mutual benefit from this relationship. In 1947, he suggested that although the money of the future should not be fully identified with a commodity's value, it should be related to this value to contribute with one psychology of confidence in the currency. See GRAHAM, B. Money as Pure Commodity. **The American Economic Review,** v. 37, n. 2, pp. 304-307, 1947.

[694] Schoenberger explains that, despite its evident natural characteristics, like beauty, brightness, and scarcity, the social perception of gold's value at a given moment depends hugely on its historicity. In this sense, an artificial scarcity caused by gold's social use at a given historical moment reinforces the natural scarcity of gold. Hence, gold has gradually become the material substance of social power, which affects its value and peculiar use. See SCHOENBERGER, E. Why is Gold Valuable? Nature, social power and the value of things. **Cultural**

nologies from adopting the gold standard presents paradoxes with harmful social results.

Due to the gold standard, the monetary authority's ability to supply money depends on the existing gold stock in a given national market. In this way, to avoid considerable variation in prices, changes on the demand side should only be compensated with the supply from a pre-existing gold stock.[695] However, the construction of an international market due to the industrial revolution created an extra demand for currency that put the national monetary authorities' issuing capacity in check. Although it is possible to obtain more gold and integrate it into the economy in the long run, a rapid expansion in production and trade can cause deflation, undermining the building of a global consumer market. International expansion, however, could not imply abandoning the natural phenomenology, under the penalty of fulminating one of the foundations of the liberal paradigm. It was necessary a "social turn" at the international level, maintaining the commodification of money, although to a lesser extent than at the domestic level.

The process of expanding the consumer market, necessary for the Industrial Revolution's success, took the question of the commodification of money to another level. The problem was now related to the necessity of stabilising exchange rates in order to generate commercial predictability.[696] In addition to this, forced travel money, or even banking money, would be limited to a specific jurisdiction, not having the ability to circulate internationally. In response to these problems, the gold standard emerged as the real materialisation of the mercantile character assumed by the currency at the international level. Although an international market instrument, the gold standard remained linked to its domestic origins, which required global organisational efforts. As a result, the project for money commodification at the international

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Geographies, v. 18, n. 1, pp. 3-24, 2011.

[695] For this reason, mining has become a crucial subject in the literature related to the gold standard. According to Eichengreen and McLean, the central question concerns identifying how responsive the gold supply could be in the face of a variation in demand. Although the mining analysis in the nineteenth century reveals some stability in prices, it is not sure whether this fact derived from some regularity in the mining activity or resulted from a succession of discoveries by chance. See EICHENGREEN, B. J. and MCLEAN, I. W. The Supply of Gold under the Pre-1914 Gold Standard. **The Economic History Review,** v. 47, n. 2, pp. 288-309, 1994.

[696] Guha explains that the way a country stabilised the exchange rate differed according to its currency's use as international money. Underdeveloped countries and colonies depended on their foreign trade and their gold monetary reserves to adjust any mismatches in their balance of payments. On the other hand, Western developed countries could change their interest rate, adjusting their balance of payments and, consequently, the exchange rate. See GUHA, A. Exchange Rate Management in Gold Standard Era: a historical overview. **Economic and Political Weekly,** v. 42, n. 45/46, pp. 67-72, 2007.

level, although having the financial sovereignty as its principle, had the gold standard as its instrument and the *haute finance* as the representation of its institutional dimension.

Money market's internationalisation.

More than a mere instrument, the gold standard meant the materialisation of the liberal project in its effort to build an international market. However, the internationalisation of the gold standard was not limited to accepting the liberal paradigm but recognising the value embodied in gold in the money issued by other countries.[697] On the one hand, labour-value theorists understood that gold's value represented the incorporation of labour spent on production. On the other hand, the heterodox doctrine that emerged after the marginalist revolution emphasised the scarcity of gold as an element capable of explaining its subjective value. Nevertheless, this intellectual convergence around the gold standard does not explain the institutional effects resulting from its adoption. The internationalisation of the liberal project of the nineteenth century needed an institutionalising element capable of ordering the new international currency that emerged, and this element was the *haute finance*.

If the gold standard was the instrument to contain the tension between financial sovereignty and international relations, the institution responsible for linking economic and political organisation in the world was the *haute finance*. This institution was responsible for organising international finance techniques in order to establish a world peace system.[698] Its role as an intermediary between political and economic interests arose from the need to establish an

[697] According to Cecco, although its intellectual origins lie in Smith's and Ricardo's writings, the belief in gold's ability to act as an equilibrium mechanism based on absolute and relative price movements became central in economic thinking just before the First World War. From this perspective, unlike the merely relative scarcity of inconvertible money, gold, as a commodity, has a production cost and, consequently, labour embedded into it. De Cecco states that, except for a few exceptions, this perspective became dominant in the economic literature on the gold standard and formed the basis of the discourse intended to re-establish it after its collapse in 1914. See "The International Gold Standard in Economic Literature" in DE CECCO, M. **The International Gold Standard: money and empire**. London: Frances Pinter, 1984, pp. 1-21.

[698] *Haute finance* is an expression coined by Polanyi to refer to a sui generis institution that, according to the author, assumed a role equivalent to that of ancient dynasties and episcopacies as a decisive factor of social instrumentality. Considered by the author as the nucleus of the most complex institution in history, *haute finance* operated at the international level through its various independent national organisations. Thus, although structured based on cooperation between national banks, national capitals, and national finance, *haute finance* emerged as an international network that accidentally served as an instrument of peace. This situation harmonised with its more immediate purpose: making a profit. See "The Hundred Years' Peace" in POLANYI, K. **The Great Transformation: the political and economic origins of our time**. Boston: Beacon Press, 2001, pp. 3-20.

autonomous agent capable of gaining both national statesman's and national investors' trust. This necessity has united national banking systems with the international banker as a character capable of financing states and industries. Notwithstanding, world peace was not a final objective in itself but a condition for guaranteeing profits through a good relationship with governments. This situation has generated conflicts between political and economic interests that resulted in several reactions to the market's international institutionalisation.

The First World War has characterised the collapse of the gold standard, ushering in a new era in constructing the international monetary system. After the period of significant financial liberty that distinguished the traditional international gold standard age, what followed was an increase in currency control associated with new emerging demands.[699] The social perception that monetary regulation and price instability may impact people's lives resulted in new stakeholders' emergence. In this time, the concerns about exchange rate control involved the project to build a free international market in parallel with non-mercantile political and social interests. For confronting the emerging democratic scenario of the leading economic powers in the first half of the twentieth century, these interests began to acquire monetary policy significance. These circumstances have undermined the naturalist monetary discourse project, resulting in a deliberate social attitude towards money.

Back to the social phenomenology.

The various unsuccessful attempts to re-establish the international gold standard occurred in an environment where political and economic objectives competed. Countries faced difficult choices involving rising unemployment due to the 1929 crisis and the need to articulate external policies to preserve a weakened international order.[700] In this time, the ex-

[699] Although the First World War association with the end of the international gold standard is evident, there are disagreements about how this relationship took place. Unlike mainstream thinking, de Cecco claims that it was not the war itself that ended the international gold standard, but the latter's inability to remain in equilibrium. The author argues that the simple possibility of war was enough to initiate the system's collapse, presenting a succession of events that culminated in removing London as the world's financial centre. The most important part of the author's narrative is his premise that the international gold standard would be a British Empire product, which would explain the coincidence in both events' chronology. See "The Crisis of 1914 and the breakdown of the International Gold Standard" in DE CECCO, M. **The International Gold Standard: money and empire**. London: Frances Pinter, 1984, pp. 127-170.

[700] Eichengreen explains that, in addition to this fact, the development of the international monetary system in the interwar period has experienced two other changes: the migration of the world financial centre from the United

change rate could not be just a cold result of the natural phenomenology attributed to money by establishing the gold standard. As a result, international relations witnessed a race to submit the natural aspects of the gold standard to a project for the prevalence of social interests. Such a submission was necessary to strengthen the monetary policy mechanisms to make them capable of dealing with the problems resulting from the emulation of the natural phenomenology at the international level. This need resulted in reconstructing central banks as instruments responsible for the transition from a naturalist perspective to a social approach to money.

The traditional thinking about central banking presents a naturalistic perspective in which central banks control the money supply by adjusting the amount of gold in circulation. However, the gold standard's collapse has opened space for new supply control mechanisms, not necessarily associated with the quantity, but with social and behavioural factors.[701] The new central banks' role consisted of centralising the supply of credit in a given country, mitigating the deflationary effect that money's functioning as a commodity could cause. This model did not aim at interfering in the law of supply and demand, but at reducing the impacts of short-term volatilities. Nevertheless, by functioning as a buffer for the impacts between the domestic and the international economy, central banks have meant a new mechanism capable of exercising monetary nationalism. Such a nationalist attitude has created a new tension between this decisional sphere and specific social values, generating different outcomes.

In a period of international market expansion, converging economic and political interests harmonise with the effects of a monetary policy that includes money as a commodity. Nonetheless, in an economic recession scenario, the companies' need for credit contrasts with currency protection, creating tension between business and monetary policy.[702]

Kingdom to the United States; and a change on the nature of the capital flow, this time more suspicious of the monetary policies and potentially aggravating the pressure on central banks. See "Interwar Instability" in EICHENGREEN, B. J. **Globalizing Capital: a history of the international monetary system**. 3rd ed. Princeton: Princeton University Press, 1996, pp. 45-92.

[701] Hawtrey informs that central banks' image before 1914 shares the same assumptions underlying the Ricardian theory on foreign trade. Thus, any differences in the price level in a free market would be justified only by geographic factors, while the international flow of gold-backed currency would automatically correct any other distortions. However, Hawtrey suggests that, besides quantity, income and consumer spending also impacts the price level. In this way, central banks could control the money supply by changing its quantity or expanding credit. See "The Cunliffe Committee", "The Need for a Revised Theory of Bank Rate", "Release and Absorption of Cash", "An International System", and "The Central Bank's Power Over Credit" in HAWTREY, R. G. **The Art of Central Banking**. London: Longmans, Green and Co., 1932, pp. 143-155.

[702] According to Polanyi, this tension was responsible for the emergence of protectionist measures that undermined

However, the conflict between the private economic sphere and monetary policy never occurred at the institutional level, consisting of a theoretical unfolding of spheres division promoted by the liberal thought. The state continued to guarantee trade operations at the international plane, expressing the value of money by purchasing power instead of any deemed incorporated value. This event made the function of money increasingly evident as a mechanism for the stability of operations, allowing it to be understood independently of the state. This movement led to a new stage of liberal thinking about money at the international level, resulting in efforts to separate money from the state.

Digitalisation and stateless money.

The divergence of interests between monetary and business policy has created a feeling that money in private individuals' hands would have a type of value whose nature would not be confused with that of the state that issued it. This sentiment gave rise to a new attitude defending the private wealth expressed in the currency used to represent economic power.[703] The idea of an inherently private wealth implied the possibility of developing decentralised currencies, breaking with the central authority, and rescuing a tradition that predates the absolutist period. Inserted within the scope of the market-oriented social order, the existence of private currencies inevitably led to the moral defence of competition between currencies. Notwithstanding, this project depended on reversing the state monopoly on the currency erected during the national market construction. This effort, supported by the supposed ontological conflict between individual wealth and state interference, resulted in a discourse protecting the currency against state action.

The intellectual project of separation between money and the state found in the economy's digitalisation a technological possibility of accomplishment. Electronic payments' emergence has generated the first debates about the possible creation of a type of money

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the liberal ambitions of building a fully self-regulating market. Such protectionism derived from the perception of the social importance of currency control. Polanyi affirms that, unlike land and labour, which traditionally relate to well-defined social strata (the peasantry and the workers, respectively), monetary protectionism has become a national factor, bringing together diverse collective interests. See "Self-Regulation Impaired" in POLANYI, K. **The Great Transformation: the political and economic origins of our time**. Boston: Beacon Press, 2001, pp. 210-217.

[703] Hayek's thinking best embodies this rhetoric. His argument about the necessary separation between public and private spheres, allocating the value expressed in the currency within the scope of the latter, can be found in HAYEK, F. A. v. **Denationalisation of Money: the argument refined**. 3rd ed. London: IEA, 1990.

whose mercantile character did not depend on a departure from state interference but on the state's inability to interfere.[704] These methods, however, have not solved the problem of trust that is at the heart of the transaction costs of international operations. In this new electronic scenario, private individuals became the personal guarantor of economic transactions, occupying a place usually filled by the state. However, from the emergence of the digital currencies, a new decentralised way of guaranteeing the value symbolised by the operation's numerical representation gained space. More important than the currency itself, the decentralised transaction registration mechanism was the real disruptive element contributing to the separation between money and the state.

The desire to develop a decentralised information mechanism is directly associated with an ideology of rejection of state authority. As the most recognised digital currency's technological base, Blockchain results from a political effort identified with the libertarian mentality that dominated the Internet privatisation process.[705] Nevertheless, despite their anarchic origins, digital currencies have usually explored the traditional economy's monetary base to preserve their value. Therefore, instead of offering an alternative to the state monopoly, digital currencies have traditionally acted as parasites of the states' currencies while allowing the anonymity of the transacting parties. Such parasitism also solves the liquidity problem in the black economy in this initial moment when it seeks stability mechanisms. On the other hand, given the lack of a foreign exchange technology, digital currencies suffer from the same problems of scarcity and volatility that resulted in central banks' creation, which compromises their image as autonomous currencies.

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[704] For Froomkin, the determinant factor, in this case, was anonymity. The issue arising from the emergence of digital cash revolved around this technology's ability to facilitate illicit transactions and make money laundering easier. In the face of a scenario of payments made mainly by intermediaries and the consumers' aversion to operating with foreign banks, there was no great concern with regulating lawful transactions or an international cooperation effort in this regard. The concern was, above all, at the criminal level. See "New Channels of Commerce" in FROOMKIN, A. M. Flood Control on the Information Ocean: living with anonymity, digital cash, and distributed databases. **Journal of Law and Commerce,** v. 15, n. 2, pp. 395-508, 1995, pp. 449-479.

[705] Golumbia analyses Bitcoin-related activism's discourse and demonstrates that its economic and political background emerges from the libertarian ideology. This ideological origin explains the obsession for protecting the currency's natural features from state intervention. The author also hallmarks that this independence is reinforced by conspiracy theories that see central banks as mere instruments of specific power groups to steal value from the people. See GOLUMBIA, D. **The Politics of Bitcoin: software as right-wing extremism**. Minneapolis: University of Minnesota Press, 2016.

The failure to separate money and state.

Digital currencies, especially Bitcoin, raises doubts about their capacity in maintaining an alternative economy independently from states' currencies. The most crucial one is whether digital currencies offer a monetary alternative for society, or necessarily will behave like states' currencies' parasites.[706] The idea that Bitcoin would need a state currency to be exchanged conflicts with the anarchic reasons that lie at its historical roots. In this case, Bitcoin would allow hitchhiking the financial system, sometimes converting into state currency to benefit from liquidity, and occasionally returning to its digital form to enjoy immunity from social accountability. If so, digital currencies would not genuinely be private money, as preached by the libertarian discourse, but a mechanism capable of generating asymmetries between individuals. Far from an instrument of liberation, this characteristic of the digital currencies would only make them tools for the redistribution of power, not from society vis-à-vis the state, but among the members of society themselves.

Albeit not capable of developing independently from the state monetary system, Bitcoin remains the subject of a discourse of rejection of the very social institutions on which it bases itself. Without performing the traditional functions of money, its utility depends on its convertibility into other currencies.[707] In addition to the problem related to parasitism, the typical anonymity of digital currency turns them into potential mechanisms for committing crimes in general. Although the possibility of using a particular tool to commit illegal acts is not, in itself, an argument against its permissibility, admitting technological determinism would take

[706] Iwamura, Kitamura, Matsumoto e Saito understand that excessive price changes do not allow Bitcoin to become a threat to the currencies issued by central banks. The authors maintain that such instability is due to two factors. The first is the lack of flexibility on the supply side of the digital currency, which stems from the libertarian ideology and its search for preserving the natural characteristics of the currency. The second is the risk of interruption of mining activity due to a fall in the digital currency price before the costs of confirming and validating transactions. Interestingly, the authors offer solutions that emulate, at the technological level, the same instruments for controlling currency fluctuations used by central banks. See IWAMURA, M., KITAMURA, Y., MATSUMOTO, T. and SAITO, K. Can We Stabilize The Price of a Cryptocurrency?: understanding the design of Bitcoin and its potential to compete with central bank money. **Hitotsubashi Journal of Economics,** v. 60, n. 1, pp. 41-60, 2019.

[707] Golumbia claims that the language used to defend Bitcoin belief is largely self-justified, metaphorical, and lacking in facts, resembling a religious cult. In this speech, Bitcoin becomes at the same time the instrument of an attack on the supposed ills of traditional institutions, and the decentralised alternative associated with the idea of democracy and freedom. The author highlights the religious aesthetics associated with the history of Bitcoin: a leader who emerges mysteriously, starts the Blockchain chain from the first block of transactions called "genesis block", and disappears without spending his Bitcoin wallet valued at more than ten billions of dollars (according to the price in 2018). The conjectures about the true identity of Satoshi Nakamoto, according to the author, was one of the consolidating factors of the Bitcoin community. See GOLUMBIA, D. Zealots of the Blockchain: the true believers of the

this issue out of the political sphere. These potential asymmetries may deteriorate social relations, generating feelings of dissatisfaction before the established social order. Unmet political urges have the potential to be channelled into confrontational movements by individuals, seeking to preserve their traditional structures through attitudes that can lead to violent reactions.

What is paradigmatically new about digital currencies is not their virtual character, since, as an idea, money always was an abstract category. Digitalisation has highlighted the separation between money, as such abstraction, from the material dimension resulting from the commodities historically used to represent it.[708] Nevertheless, this process is noteworthy because it attempts to separate money from its social phenomenology, submitting it to a strictly digital condition. Such a submission occurs when a mathematical rule is established based on the material capacity to process a given amount of information. However, this design is at risk of failing both because of the verification system's possible material bankruptcy and Bitcoins' inability to function as a currency. Once faced with this essentially human lack of confidence, the state would not be capable of acting as a mechanism to alleviate the tensions arising from monetary pressure, this being the main legacy of the libertarian attempt to separate the state and the money.

Conclusions.

From a technological perspective in a broad sense, the digital currencies' emergence has resulted in a design conflict between a technology and a technique. Digital currencies are not the outcome of natural evolution, but logical choices based on a society built from the liberal paradigm. In this sense, the idea that this technology would preserve an intrinsically

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Bitcoin cult. **The Baffler**, n. 38, pp. 102-111, 2018.

[708] In this sense, it is essential to differentiate the purely virtual character of the digital currency, associated with the idea of digital existence as opposed to the natural or social (that is, a digitised currency), from a currency that intends to fulfil its functions as money from the digital phenomenology. Although the literature does not justify its choices in the above terms, it is possible to identify a clear division between a debate about currencies belonging to a decentralised system and operated by an open-source cryptographic protocol, and another debate about virtual currencies issued and regulated by a central server. The authors usually refer to the first case as cryptocurrencies, and the debate involves the same themes we are raising concerning Bitcoin. As for the other non-decentralised virtual currencies, the main issue is the competition between currencies issued by central banks and private currencies sponsored by actors with great economic power. Bilotta and Botti realised these subtleties in their analysis of virtual currencies sponsored by large companies such as Walmart, Facebook, and Telegram. The authors identified different objectives, economic rationales and even ideologies according to the technology employed and the type of control exercised over each of the currencies. See BILOTTA, N. and BOTTI, F. **Libra and the Others: the future of**

private value from the possibility of state interference is fallacious. Since the intellectual process of unification of the political sphere, at least in the places where this process has resulted in a real social transformation, this interference means bringing to the political field what was under individual control. Thus, by ceasing to be a technique to become a technology, money would no longer be subjected to political projects to construct its social meaning but to a specific engineering design. The question that arises concerns what kind of external elements offered demands or incentives for a specific design type to have been privileged over others.

The libertarian discourse's naturalist rhetoric, despite its conflict with the inherent artificiality of technology, aims to rescue a liberal tradition concerned in preserving the essence of things. However, by assuming a technological determinism of return to individuality, it tries to preserve both worlds' best. On the one hand, the technology associated with the enormous information asymmetry allows the currency's decentralisation along the same lines as the feudal period. On the other hand, this decentralisation is not accompanied by responsibility for constructing a new social order, so that this neo-feudalism only finds meaning if supported by the liberal project. In technological terms, digital currencies' intellectual dimension corresponds to a derivation of the same dimension of social technique regarding money commodification. Consequently, this libertarian attitude only has an economic sense in a context of currency parasitism before the social order built from the liberal paradigm.

Therefore, digital currencies' technological design is a necessarily political theme, occupying a place similar to law as a tool for controlling the social order. Although, as a technology, it depends on the material constraints inherent to engineering activity, this characteristic does not prevent its submission to the political sphere. Likewise, the law has a traditional technical dimension that refers to its scholastic academic origins, which does not diminish its role in constructing the social order. Hence, the regulatory debate related to the technologies that support digital currencies is at the same level as any other debate related to a given invention's social diffusion. This diffusion is the premise of the difference between invention and innovation, presupposing a concern with the implication of inventions in the social order. For relating to values able to arouse the most diverse passions, these implications relate to the problem of power and the project of construction of the human dimension, as the next item will show.

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digital money. Istituto Affari Internazionali (IAI): 22 Nov. 2018.

2.3.3. Digitalisation of the natural, social, and individual.

The two previous items have shown that the project of a market society, in which market prices drive both the productive and the social order, has expanded the idea of commodities. Such expansion implied the commodification of what did not fit the traditional idea of a product, that is, the outcomes of production processes. Money transformation into merchandise, therefore, corresponded to a fictitious commodification process that, at the international level, depended on the state intervention to occur. Nevertheless, money as a commodity suffered from the oscillations resulting from external impacts and demanded central banks' reinvention as protection mechanisms, resulting in monetary nationalism. This nationalism soon developed an individualistic narrative sustaining the need for currencies independent of state intervention. Digital currencies' development has satisfied such claim, allowing an unprecedented possibility of genuine stateless money with potential impacts on the liberal social order.

Besides money, a market society must render all elements necessary for the production process and wealth generation available, submitting them to the price system. When the idea of a market society took shape, debates on the wealth generation involved arguments maintaining that the land was the ultimate wealth source. However, since it has traditionally needed human labour to generate wealth, it was not the mere possession of the land but the worked land that was the source of wealth. Consequently, the money, the land, and the labour should be commodified and made available in the market society's productive process. Nonetheless, labour is no more than the expression of the human dimension, while the land is the environment in which the human being carries out its existence. In this way, the structural transformations brought about by the digital revolution on the elements of the productive process are not limited to economic aspects but are necessarily related to the intellectual project for constructing the human dimension.

This item analyses the digitalisation process's impacts on the natural environment and the human dimension as categories belonging to the liberal paradigm on wealth generation. The premise is that the liberal paradigm's emergence and dominance depended on a social organisation technique consisting of transforming the land and the labour into commodities, submitting nature and the human being to the price system. The hypothesis is that the emer-

gence of digital technology may capture the natural, the social, and the individual phenomenology at a level that threatens the liberal project itself. The item starts by describing the impacts of land and labour commodification from the potential conflicts between the economic and social order. Afterwards, it demonstrates how digitalisation is affecting the cognitive distinction between natural and artificial environments. Finally, the item presents the digital revolution's impacts on the intellectual project for constructing the human dimension.

Nature and humans as fictitious merchandises.

As mentioned elsewhere, the commodification of the labour and the land corresponded to human beings themselves and their natural environment. In this sense, their inclusion in the market mechanism meant the subordination of society's substance to the market's logic, mainly the price system.[709] In turn, this subordination reveals the primacy of a specific type of technical design over ancient social arrangements built from tradition. Therefore, this commodification of labour and land corresponded to isolation and capture of specific social and natural phenomenology aspects. On the other hand, the historical experience shows that a forced submission of the values resulting from tradition to social architectures structured from disruptive designs has frequently generated insurgencies. Such insurgencies are not necessarily associated with an agenda to prevent social changes but may be committed to reducing the deleterious effects of their implementation or even the social rearrangements' pace.

Although there is a tendency to concentrate on the substantive aspects of social changes, the speed of transformations in the human condition is also relevant for analysing economic progress's social impact. Since this progress usually implicates profound social dislocation, the community may succumb to the process in the face of this disorder's exaggerated pace.[710] Abrupt social dislocations, or indifference for the people's velocity in adapting to new

[709] Polanyi states that production corresponds to the very interaction between human beings and nature, which explains the need to submit labour and land to the price system, allowing their commercialisation through wages and rents, respectively. However, the author points out that this submission has compromised all the other elements that make up the human dimension and its natural environment, generating a social reaction to preserve the values traditionally associated with them. According to the author, this reaction ultimately led to the rise of fascism in Europe. See "Man, Nature, and Productive Organization" in POLANYI, K. **The Great Transformation: the political and economic origins of our time**. Boston: Beacon Press, 2001, pp. 136-140.

[710] Polanyi points out that as important as the direction of change is its pace, which can determine whether or not to preserve a given community's well-being. The author argues that the understanding of problems related to change is

conditions, can trigger revolts that result in social violence. Moreover, concerning the new industrial society, the speed of changes occurs in conditions equivalent to that of the production process, which visibly contrasts with the usual slowness of customary social arrangements. Likewise, the awareness that an ongoing transformation process exists can be a value to be preserved by the social actors. The undermining of this collective conscience consists of an attack on the very premises of rationality that structures the liberal paradigm.

However, the attempt to isolate certain human phenomena through the social division of labour did not completely erase the attachment to traditional social values. Such values resulted from a lengthy and customary social institutionalisation process, offering a sense of community absent within the liberal rationality.[711] The result was a tension between efforts to preserve traditional aspects of the social order and the expanding new industrial discourse. Given this discourse's direct relationship with the liberal paradigm on wealth generation, this tension can express itself as a conflict between the economic and the social order. Understanding the economic order as technology in the broad sense implies a departure from the moral presumptions and alleged human nature descriptions incorporated in the economic field. This departure makes the relationship between economy and society instrumental and circumstantial, and the primacy of one or another depends on the context and intended purposes.

Tensions and revolutions.

From a technological perspective, the economic discourse is not an alleged rational derivation of natural phenomena but a technique comparable with other social institutions. Its object, the economy, is a mixture of technique and technology and has the same importance as other social life institutions, conditioning and being conditioned by the social con-

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where liberal philosophy is most flawed, and its belief in the spontaneity of progress does not allow it to see the role of the State as a regulator of the speed of social change. To prove his point, he draws a parallel between the social transformations resulting from the Industrial Revolution in English society in the nineteenth century with the enclosure process at the beginning of the Tudors period. Polanyi highlights the vital role of the King and his Council of Chancellors in preserving society's welfare by slowing down this process. See "Habitation versus Improvement" in POLANYI, K. **The Great Transformation: the political and economic origins of our time**. Boston: Beacon Press, 2001, pp. 35-44.

[711] Durkheim recalls that the chock between traditional values and the liberal social order is not just a matter of pace. In his functional analysis of the division of labour, Durkheim informs that this function is to create some bonds of solidarity that he calls mechanical and organic, but not to produce a civilisation. See "The method for determining this function" in DURKHEIM, É. **Division of Labor in Society**. Illinois: The Free Press of Glencoe, 1933, pp.

text.[712] Although the economy may encompass phenomena that differ from the traditional notion of production, a technological view imposes a more restricted scope.[713] This narrow scope turns the relationship between the economy and society into a specific tension between the productive and social order. The first result of this tension was the changing role of the market in society since the Smithian paradigm's rise in explaining the wealth generation process. Although the market has historically played an essential role in social life, the prevalence of the liberal paradigm and the price system has become the central elements in the organisation of production factors.[714]

The centrality of the market within the industrial social life has impacted the interpretation of human beings' physical interaction with the universe's phenomenology. Labour, an essential category in the narratives aiming to describe the human essence itself, has become an element subordinated to the industrial production process.[715] The commodification of nature, in turn, converted it into an input for production, summarising it to the primary raw material to be transformed into industrial products. It turns out that nature is just another name for the environment in which human beings live, so that their own space of existence has come to submit to the organisation model centred on the market. Society reacted to this submission through institutions whose ancestry is independent of the economic foundations of the liberal paradigm about wealth generation. The most critical non-economic technique used to respond to the rise of the market economy was the law, resulting in legal fields dedicated to the public sphere.

49-69.

[712] This view of the economy as part of a comprehensive technology in the broad sense characterises the institutionalist approach. In this sense, it moves away from the metaphysical speculations about the nature of human being, which are typical of the orthodox approach. For an analysis of the concept of "institute" and its relationship with traditional debates about technology, see WALLER, W. T. The Evolution of the Veblenian Dichotomy: Veblen, Hamilton, Ayres, and Foster. **Journal of Economic Issues,** v. 16, n. 3, pp. 757-771, 1982.

[713] Economic tools' application to questionable aspects of social life became a form of entertainment known as Freakonomics. Instead of demonstrating the ubiquity of economic discourse, Freakonomics has not been taken seriously by academics, sparking debates about the need for economics to turn to the field's traditional objects. DiNardo highlights economic theory's role in producing questions considered relevant according to economic tools' feasibility in offering an answer in the terms proposed. See DINARDO, J. Interesting Questions in "Freakonomics". **Journal of Economic Literature,** v. 45, n. 4, pp. 973-1000, 2007.

[714] The process that led to this centrality was explained in "2.3.1. Markets and the digital revolution".

[715] The most noteworthy narrative is that of Marx when theorising about the effects of the alienation of labour on human beings. In his Economic and Philosophical Manuscripts of 1844, Marx affirms that, besides being alienated from the act of producing and the product they produce, the process of labour commodification resulted in the workers' alienation concerning their condition as "species-beings". As a result, alienated labour would alienate the workers both from other human beings as from the very human essence. See "Alienated Labour" in MARX, K. **Karl Marx: selected writings**. 2nd ed. Oxford: Oxford University Press, 2000, pp. 85-95.

The law played a central role in minimising tensions between the liberal organisation of the industrial production process and the collective efforts to preserve society's traditional values. Given its two-dimensional character, the law functioned as an element to legitimise the market society both for offering a justification considered rational and institutionalising the liberal values in the state bureaucracy.[716] This legitimating role would only make sense if the rationality proposed by the law were considered something distinct from the economic rationality. Consequently, the instrumental role of law did not imply its subordination to the economy, resulting in the consolidation of a non-mercantile space. This space allowed the integration of social values that did not necessarily correspond to the economic discourse elements, attributing a mixed character to the bureaucracy. The result was the consecration of the law as the state's official rationality discourse and the responsible for industrial society's organisation.

The material dimension of the digitalisation.

The transition from the industrial to the information society presupposes the complete digitalisation of the elements that make up the market, including labour and land. Hence, these fictitious merchandises must be both contextualised from digital logic and translated to the digital language.[717] The idea of the division of labour carries the cognitive effort to isolate particular human phenomenology characteristics. In the digital context, the ability to restrict human phenomenology's capture to specific aspects is continually pushing the boundaries of

[716] After presenting a historical and conceptual overview of the law in different regions, Weber explains its role as an instrument of domination in European industrial society. Restricting his idea of domination to that of authoritarian power of command, Weber presents different ways in which the ruled obey specific commands, highlighting the rationality implicit in administrative bureaucracy as a factor of legitimation. Given the complexity of administrative tasks and the emergence of the idea of direct democracy, Weber informs that personal prestige, as well as technical superiority, have become factors of legitimation both for the (notable) agents and the bureaucratic structures to which they belong. The result was the association of legal rationality with bureaucracy, as opposed to the tradition of patriarchalism and the charismatic structures of domination that refer to individual authority. See "Domination and Legitimacy" in WEBER, M. **Economy and Society: an outline of interpretive sociology**. Berkeley: University of California Press, 1978, pp. 941-955.

[717] The digitalisation of human beings and their material environment was the product of changes initially occurred in American society and later exported to the rest of the world. Analysing the reality of the United States in the late 1960s, Brzezinski explains that the growing possibility of manipulation provided by the advances in science and technology has led to the fear of the submission of individual conduct to deliberate external control. This fear extended to the human being's relationship with an increasingly artificial environment resulting from rational planning, in contrast to traditionally spontaneous urban development. The author concludes that these factors have generated a paradoxical situation, in which technology enables the creation of a global network while fragments humanity, causing frustrations that result in violence and resentment. See "The Global Impact of the Technetronic Revolution" in BRZEZINSKI, Z. K. **Between Two Ages: America's role in the technetronic era**. New York: Viking Press,

material possibilities. Although nature's role, especially land, is much more pronounced in the industrial than in the information society, its significance remains since the digital character does not mean the absence of a material dimension. Before moving on to the more sensitive aspects concerning the digitalisation of the human dimension, it is essential to see how the digital revolution impacts the human relationship with the material world.

While the industrial revolution incorporated nature in its rhetoric in constructing a production space, the digital revolution needed a structure specifically designed to meet its material needs. Thus, although associated with the idea of a virtual environment, the cyberspace results from a set of initiatives that involve constant public and private efforts.[718] The digital sector presupposes a system of layers in which the more digitalised the business is, the higher it lies on the Internet structure. Hence, the idea that high digitalisation will necessarily correspond to a more significant virtual character leads to the digital economy's material dimension's obliteration. Nonetheless, these layers emerge from a set of physical structures that depend on the local conditions in which users find themselves. Given the necessary existence of a material basis to manifest itself economically, it is necessary to identify the point at which the interaction between the virtual and the physical plane occurs.

Albeit emerging from a material base towards a logical plane, the cyberspace does not limit its existence to an exclusively virtual dimension. The expansion of this network goes through a continuous process of incorporating the material technological culture, transforming the physical environment into an expression of the network infrastructure, mainly through the Internet of Things (IoT).[719] IoT implies a genre of interconnectivity between devices

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1970, pp. 8-30.

[718] Usually associated with the absence of materiality, the digital economy depends on complex material supports whose viability is affected by physical characteristics, such as the quality of the electrical network and geographical or topographic elements. Although in many countries the development of the physical layer of the Internet has taken advantage of pre-existing communication networks or cable television infrastructure, the user experience and, therefore, the possibilities of developing the digital ecosystem depend on the high quality of access. In this sense, the G20 has advocated on the need for countries to promote digital infrastructure development, either by establishing national broadband plans or by encouraging digital platforms to develop solutions. See "Digital Infrastructures" in OECD. **Key Issues for Digital Transformation in the G20: report prepared for a joint G20 German Presidency/OECD conference**. Paris: OECD Publishing, 2017b, pp. 47-60.

[719] In this sense, Uckelmann, Harrison, and Michahelles point out that IoT does not refer to any limited form of connection between devices (such as an intranet or an extranet of things) but is moving towards becoming the link between objects and their virtual representations on the internet plane. The technology that underlies this connection means an increase in information capable of modifying both production processes and society. See "An Architectural Approach Towards the Future Internet of Things" in UCKELMANN, D., HARRISON, M. and MICHAHELLES,

currently associated with high technology. Notwithstanding, there is no reason to believe that IoT will indefinitely restrict itself to a defined set of technological objects since the principle that moves it has the potential to reaches any material object. Such connectivity is not the same as that of the beginnings of the Internet since it is not anymore a matter of developing communication elements compatible with each other. It is the beginning of a process of viewing information as a natural phenomenon whose understanding allows interaction at the matter's most elementary level.

Digitalising the environment.

Information as a phenomenon present in the natural environment is an idea that signifies a rupture with a passive attitude before the material universe. This change in attitude implies that the material base becomes a massive set of information codes whose content reveals how the physical universe manifests itself on the material plane.[720] Such revelation introduces a new perspective on how human beings interact with the natural dimension, allowing intervention at the matter's informational level. The result of that intervention would be the prevalence of digital language as an essential manner of meeting human beings' material necessities.[721] As demonstrated in the previous sub-chapter, the digital language's prevalence is responsible for developing a new understanding of the production process, breaking with the linear processing mode. This emergence corresponds to a new circular economy resulting from a continuous structural transformation of the traditional industrial economy.[722]

F. **Architecting the Internet of Things**. Heidelberg: Springer, 2011.

[720] Vedral argues that information is the phenomenological basis responsible for connecting all other phenomena. In this sense, understanding the information encoded in the universe would mean understanding the very material reality. See "Creation Ex Nihilo: Something from Nothing" in VEDRAL, V. **Decoding Reality: the universe as quantum information**. Oxford: Oxford University Press, 2018, pp. 5-13.

[721] Gershenfeld highlights the importance of differentiating the digital character of the computer control from a type of fabrication in which the materials themselves are digital. In this case, 3D assemblers, instead of 3D printers, operate at the molecular level, forming nanostructures that give rise to complete functional systems in a single process. Gershenfeld explains that, far from a purely theoretical exercise, several laboratories worldwide have been developing this form of production. See GERSHENFELD, N. How to Make Almost Anything: the digital fabrication revolution. **Foreign Affairs,** v. 91, n. 6, pp. 43-57, Nov/Dec 2012.

[722] In the introductory article of the special edition of the California Management Review dedicated to the circular economy, Esposito, Tse, and Soufani explain that this concept has several definitions, from the concern with the control of waste in the production process to issues related to design thinking involving production and consumption. However, all approaches propose a reorientation of the productive process towards exploring information as a central phenomenon. The most radical change consists in reversing the current process by emulating nature's mode of production. Instead of the top-down transformation from the exclusion of unnecessary elements to the final prod-

The expression "circular" suggests that understanding the informational dimension of matter allows for a potential change in nature's status as the leading raw materials supplier. Circular economy presents ecological concerns, which imply the maximisation of the materials' usefulness, including reusing the products and recycling the waste they generate.[723] In this sense, human needs would not depend on the constant exploitation of natural resources, but the continuous rearrangements of materials initially explored. Consequently, intervention at the informational level of the matter would potentially end the idea of scarcity as a characteristic of the object itself, transforming it into the result of a given informational arrangement.[724] Such change in understanding would affect a central element of the liberal paradigm about wealth generation. Price would cease to be an outcome of natural behaviours to become the corollary of a deliberate production based on social phenomenology.

The idea of price as the result of artificially produced phenomena is part of a broader effect of the natural dimension's digitalisation. A technology capable of exploring the information encoded in nature's fundamental structure calls into question the cognitive division between the natural and the artificial.[725] In this sense, the natural manifestations could result

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uct, what the circular economy suggests is the possibility of adding matter at the most elementary level possible (the atomic level being the ideal one). What guarantees this possibility are digital technologies, especially the dissemination of sensors provided by the IoT, and the development of intelligent and biomaterials. See ESPOSITO, M., TSE, T. and SOUFANI, K. Introducing a Circular Economy: new thinking with new managerial and policy implications. **California Management Review,** v. 60, n. 3, pp. 5-19, Spring 2018.

[723] Based on London's metropolitan area, Garmulewicz, Holweg, Veldhuis, and Yang claim that three-dimensional (3D) printing has great potential to foster the circular economy. The authors argue that 3D printing can change the economy of the existing manufacturing value chain, allowing for economically viable small-scale local production. Besides, all the technologies needed to collect and process plastic waste to transform it into 3D printing raw material are now available. Finally, they state that waste streams can supply plastic raw materials of sufficient quality and quantity. See GARMULEWICZ, A., HOLWEG, M., VELDHUIS, H. and YANG, A. Disruptive Technology as an Enabler of the Circular Economy: what potential does 3D printing hold? **California Management Review,** v. 60, n. 3, pp. 112-132, 2018.

[724] Rifkin argues that the partial effects of the lack of scarcity concerning various products, brought about by digital technology, is already resulting in a mixed economy. For the author, we are living in a global society in which two systems sometimes work together, sometimes compete: on the one hand, a dominant capitalist system supported by a narrative about human nature and based on the exchange of commodities in the marketplace; on the other, Collaborative Commons as an ascending paradigm in which human behaviour defies the capitalist's assumptions. See "The Great Paradigm Shift From Market Capitalism to the Collaborative Commons" in RIFKIN, J. **The Zero Marginal Cost Society: the Internet of Things, the collaborative commons, and the eclipse of capitalism**. New York: Palgrave Macmillan Trade, 2014, pp. 11-44.

[725] The processing of the information encoded in the physical world is not conceptually impossible but just materially constrained by the technology available in a given era. Vedral affirms that any living organism or even atomic phenomena can function as an information processing instrument. The author justifies his claim based on a broad idea about computers as any objects capable of receiving and performing instructions. In this sense, he understands that the incipient quantum computing has an enormous potential to push the material limits of the information processing, allowing the simulation of complex physical systems or any other systems. See "Surfing the Waves: hy-

from human choices, while the idea of nature could reach the scope of artificiality itself. It turns out that the naturalisation of the artificial may have normative implications, especially given the potential human inability to identify the design choices within a given informational arrangement. However, a clear definition of nature is not just a conceptual strategy to define the technology, but it is also the basis of the project to build the human dimension. Thus, the digitalisation of nature has reached the human dimension by reducing it to a merely phenomenological condition and artificialising its environment.

Digitalisation and the human dimension.

Digital technology advancements, especially concerning artificial intelligence, raise several questions about its ability to emulate creativity, cognition, or even human emotions. As this evolution occurs, the argument according to which technological development only causes a migration from manual to intellectual work loses meaning. The field of robotics, related to the technology known as deep learning, consists of developing an automatic form of self-cognition. Deep learning technology comprises identifying algorithmic processes related to acquiring knowledge from a perspective that does not depend on the forms organically developed by human experience.[726] In this sense, the digital revolution would reach the last bastion of the wealth generation process along the lines in which the liberal paradigm idealised it. In doing so, the complete digitalisation of the market would result in both a material and an intellectual collapse of the liberal social order, mainly at the international level.

The complete digitalisation of the natural and human dimensions means that information occupies the most elementary position in the phenomenology related to wealth generation. Thus, any social organisation that intends to establish normative criteria for the division of wealth based on the distinction between natural, human, social, and technological phe-

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per-fast computers" in VEDRAL, V. **Decoding Reality: the universe as quantum information**. Oxford: Oxford University Press, 2018, pp. 134-151.

[726] According to Martins, it is from digital technology that experts debate about the possible emergence of what the author calls ultra-technology, understood as projects for raising technology to a stage of development in which the technological production of knowledge will surpass the cognitive ability of human beings. This rupture's effects are both the impossibility of understanding the history of technology as human history and the mechanisation of natural life. See "A Ultra-Tecnologia" in MARTINS, H. **Experimentum Humanum: civilização tecnológica e condição humana**. Belo Horizonte: Fino Traço, 2011, pp. 106-122.

nomena in the strict sense will be doomed to failure.[727] On the other hand, even the centralisation of the wealth generation process around informational phenomenology is not free from structural problems. The tendency of the marginal cost of digital production to drop to near zero, in the long run, would turn the wealth generation into a mere function of initial technological ownership. This situation would change the traditional way of understanding the wealth considered dynamically, requiring a review of how to meet the state's financial needs. However, the problem involving state funding is only a symptom of a much broader dilemma that involves the project to build the human dimension.

At the first level, the digital revolution has resulted in an unprecedented ability to extract, process, and communicate personal information. This ability has led to debates about the impacts of digitalisation on people's right to privacy, rescuing a narrative that traditionally opposes individual freedom to collective security as opposed values.[728] Nevertheless, these debates go far beyond the questions related to life exposure or personal information, involving the individual's submission to a merely informational condition. Although the economic perspective tends to see this situation in commercial terms, it evokes a broader struggle for control, rescuing the problem of power in social life. Digital technologies may separate and explore human phenomenology's particular aspects independently, fragmenting the individual to its most primary informational dimension. The result is the deconstruction of the individual sphere as idealised by the liberal paradigm, starting with the exercise of the will itself.

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[727] This situation explains why the tax debate involving the digital economy is not limited to technical issues concerning the technology sector exclusively. At the international level, the asymmetry between countries has made the digital economy debate a real forum for defining the international division of labour, revealing more profound issues. Roxan highlights the need to establish an international tax policy that is not limited to the traditional dualities between source and residence (translated into the economic debate as an opposition between Capital Export versus Capital Import Neutrality). Accordingly, this policy belongs to a discursive tradition that invokes the idea of international fairness and inter-nation equity and is closely related to the legal discourse. In this sense, Roxan tries to unify both theoretical justifications by what he calls the "principle of participation" through which it would be possible to reconcile the asymmetries already existing at the international level with the developments resulting from digitalisation. See ROXAN, I. Limits to Globalisation: some implications for taxation, tax policy, and the developing world. **LSE law, society and economy working paper series,** v. 3, Oct 2012.

[728] Solove questions this opposition, arguing that the idea that privacy, in the United States, is an individual value is mistaken. Rescuing John Dewey's thought, the author asserts that the individual's protection is a social value, since this protection is not external to society, but emerges from its internal dimension. The author concludes that the debate on privacy corresponds to a debate on the power to privilege different social values. See "Why Privacy Isn't Merely an Individual Right" in SOLOVE, D. J. **Nothing to Hide: the false tradeoff between privacy and security**. New Haven: Yale University Press, 2011, pp. 47-52.

Data, will, and the social dimension.

As the last subchapter has demonstrated, the computer has taken the bureaucracy's place in processing information, turning data simplification unnecessary. The result of an increasing amount of information, especially after the emergence of the Internet, was the perception that these data's analysis would permit inferring specific aspects of the human phenomenology.[729] This analysis initially referred to information whose disclosure was partially perceived by users and presumed exclusively commercial objectives. With the ubiquity of sensors made possible by the IoT and the new artificial cognition processes operated on these objects, such inference has reached more profound levels. This deepening allowed the development of business models based on a high capacity to explore particular consumer preferences. However, this capacity, associated with advances in neuroscience, has the power to explore convincing cognitive processes with the potential to create distortions within the liberal social order.

More than affecting personal consumer choices and tastes, the prevalence of digital language over the cognitive process undermines the social order's organisation in the terms established by the liberal paradigm.[730] This process can be seen from two different perspectives, depending on a greater or lesser degree of scepticism about the liberal project. On the one hand, the influence of information control may represent an external interference on the democratic mechanisms that constitute the social order. On the other hand, digitalisation may just be highlighting a pre-existing problem related to the false premise that individuals could ex-

[729] Pietsch explains that the amount of information offered by the Internet, associated with more significant storage and processing capacity, resulted in a transformation in the field of statistics that culminated in the emergence of big data. The author explains that, although it is common to think that data science, based on big data, operates only at the level of correlations between events, it is possible to understand this scientific process as centred on the analysis of their causality relationship. In this sense, although operating at the phenomenological level and less subject to a strict hierarchy of laws and axioms, data-intensive science allows identifying causal relationships horizontally. Pietsch argues that this possibility would result from applying a type of eliminative induction (in the face of different possibilities of causality) associated with various aspects of causal complexity (as opposed to the reductionism characteristic of excessively theoretical sciences, such as physics). See PIETSCH, W. The Causal Nature of Modeling with Big Data. **Philosophy & Technology,** v. 29, n. 2, pp. 137-171, 1st Jun 2016.

[730] The main event that shed light on the topic was how Cambridge Analytica used the data of millions of American citizens, without their consent, to influence the outcome of the 2016 elections in the United States. However, Manokha argues that this case is just the tip of the iceberg of what he calls the "platform capital". For the author, the commodification of data, along the same lines as the commodification of other fictitious merchandises (land, labour, and money), results in a "surveillance capitalism" that allows for the monetisation of data for all purposes. Manokha points out that the Cambridge Analytica case's problem was that the focus was restricted to the absence of consent, not to the issue of the massive use of data itself. See MANOKHA, I. Le Scandale Cambridge Analytica Contextualisé: le capital de plateforme, la surveillance et les données comme nouvelle « marchandise fictive ». **Cultures et Conflits**, n. 109, pp. 39-60, 2018.

ercise their own free will. Whether considered sabotaged by an external factor or ineffective by its very nature, the liberal social order faces a drawback in a scenario of disbelief about its rational foundations. The result is the emergence of discourses and feelings of frustration with the liberal project and the consequent rise of violent reactions.

Digital revolution has affected the tension between economic goals and social values initiated in the industrial society, turning more challenging to identify the source and characteristics of this transformation process, given its immaterial character. Such a character diminishes the perception that it is a deliberate social project conducted by identified or identifiable agents.[731] The lack of awareness that a specific type of technological design largely determines the individual's material conditions provokes a deterministic attitude towards technology. The main result of the prevalence of a deterministic view is the acceptance of digital technology design as a natural evolution of society. This feeling encourages excessive passivity before the different technological designs that materially constrain the social order. In turn, social indifference to these technological design choices implies the withdrawal of the digital revolution from the political sphere, reinforcing the private dimension's prevalence over the collective.[732]

Conclusions.

The rise of violent social reactions within the information society is associated with the digital revolution's effects on the intellectual project to build the human dimen-

[731] Lessig explains that, in addition to the social norms arising from different traditions (moral, religious, cultural, among others), the price system, and the law, the design is an essential mechanism for regulating social behaviour. Unlike other mechanisms, establishing a particular architecture operates within the scope of the material possibility of making individual choices. According to the author, however, although the digital design does not differ in essence from a material design, it diminishes the perception of the restriction of freedom, naturalising specific political options. In this way, the digital design would be less transparent about the political premises it carries and, therefore, less likely to generate adverse reactions. See LESSIG, L. The Law of the Horse: what cyberlaw might teach. **Harvard Law Review,** v. 113, n. 2, pp. 501-549, 1999.

[732] Simon highlights, among the obstacles and techniques to design artefacts on a social scale, the need to know how the client affects planning. After affirming that this activity must consider the whole society as a client and recognising the existence of a lengthy debate on the duality between the public and private spheres, the author concludes that, even from a rational perspective, the social organisation is not only a matter of specialised opinion but a broader public concern. See "Social Planning: Designing the Evolving Artifact" in SIMON, H. A. **The Science of the Artificial**. 3rd ed. Cambridge, Massachusetts: The MIT Press, 1996, pp. 139-169. We argue that, when appropriated by technological design, the liberal idea of the market loses its naturalist appeal and becomes subject to the tension between specialists' rationalism and the wishes of the political plane.

sion. Such a project bases on an intellectual distinction between two worlds, a natural and an artificial one, clearly distinguishable until recently. Digital paradigm is continually destroying the cognitive distinction between natural and artificial by reducing them to their informational dimension. Besides, constant technological advances at the cellular, molecular, and atomic levels, supported by the increasingly specific use of natural phenomenology, result in the inability to discern these two dimensions materially. In a more specific sense, the inability to distinguish natural from human or social phenomenology undermines the very intellectual separation between technique and technology. As a result, such a situation causes reverberations in the elements that constitute the very social organisation based on the liberal paradigm on wealth generation.

The social organisation based on the liberal paradigm transports the cognitive separation between technology and technique to the social plane. As a result, the liberal social order presumes the distinction between human labour and the instruments or elements of nature external to it. Notwithstanding, the digital paradigm has made it less clear to establish a cognitive distinction between the labourers, nature, techniques, and technologies in their participation in the process of wealth generation. Such a fusion of concepts has coincided with the material transformations resulting from a production process increasingly independent of the human intervention. The annulment of the human element in the production process results in the destruction of economic interaction as a central element of the liberal project, characterised by the relationship between supply and demand. This relationship is not only the basis of the liberal discourse on the wealth generation process, but it also supports the very idea of modern taxation.

By allowing the satisfaction of human needs from a model that does not consider the relationship between supply and demand, the digital revolution transforms the liberal idea of wealth generation. This generation traditionally depended on commercial interactions subject to market laws carried out within the private economic sphere. Digital revolution's tendency to reduce all material dimension to its informational condition prevents a cognitive separation of these different economic spheres. Taken to the extreme by the increasingly specific capture and use of human, social, and natural phenomenology, the digital revolution ignores the economic dimension of exchanges and reaches the code encrypted in the generation of wealth. Therefore, the digital revolution is transforming the most critical elements for the modern dis-

course on taxation. This fact implies the necessity to re-evaluate the legal discourse on international taxation's fundamental categories, which the next chapter will provide.

Chapter's conclusions.

This chapter has demonstrated that the same intellectual project for the rational organisation of the social life led to the systematic use of natural phenomenology for specific purposes. Such use resulted in popularising the expression "technology", either to refer to the knowledge related to the phenomena harnessing or to name the objects responsible for the exploration itself. This knowledge is similar to that produced in the scientific field, differing by its singular historicity and teleology. Whether such phenomena are considered natural, human, or social, technology implies exploring some of their particular aspects, albeit distancing from the phenomenon in its original state. However, as an unfolding of the intellectual construction of a human dimension separate from the natural one, the type of phenomenon explored impacts the definition of technology. The exploration of human and social phenomena gives rise to the technique, while the natural phenomena use results in technology in its strict sense.

The design determining the mode of exploration of the phenomena is not entirely free of constraints but conditioned by several contextual elements of material and cognitive order. Hence, the economic and social environment offers elements that help the design activity and demands answers to specific problems. These contextual factors interfere with the internal mechanisms related to how technology develops, potentially resulting in new phenomena to explore, new ways to explore already known phenomena or new technological architectures. These architectures correlate with the technological recursiveness, that is, the generation of new technologies from the combination of previous ones. Such rearrangements imply a specific type of devices' interconnection responsible for producing both a technological domain as its corresponding language. When a new domain interrupts a recursive chain, generating a new language and absorbing the previous languages in a new paradigm, there is a technological revolution.

The complex relationship between technological revolutions and their socio-economic environment produced a narrative associating them with industrial revolutions. However, the (first) industrial revolution did not imply a technological revolution in the strict

sense but a social restructuring imposing demands for controlling the information produced. The technical response to the demand for information control in the new industrial society was the consolidation of bureaucracy as an expression of the modern state rationality. In turn, the strict sense technological response was the emergence of the computer, the development of which has increasingly allowed it to deal with social information in its original amount. Besides responding to the industrial society's demand for information control, digital technology was responsible for a process affecting this social organisation form. The rise of an information-centred post-industrial society has demonstrated that the digital revolution effects were not limited to the technological field.

The digital revolution's spread beyond the technological field stemmed from computers' popularisation and their interconnection process that resulted on the Internet. Initially governmental, the Internet submitted to a privatisation process giving rise to a social and economic culture based on its architecture. This architecture entails a system formed by a physical base of wires and devices from which several layers emerge, making the technological principle gradually less dependent on material aspects as these layers distance from the physical bottom. Hence, this interdependent structure influenced the economic vision of the Internet, resulting in a narrative about companies in this sector in the same terms as the technologies they represent. The result was the emulation of a digital technological language in terms of economic relations, influencing the perception of the productive process itself. A digital economic language's emergence is the chief discursive outcome of a cognitive and material process of the economy's digitalisation.

On a basic level, the economy's digitalisation means transforming traditional economic activities, producing a dichotomy between a real and a virtual economy. Initially restricted to commercial operations carried out electronically, technological developments transported such transformations to the production, distribution, and consumption stages. On an intermediary level, the economy's digitalisation comprehends new business models only possible thanks to digital technology. As they do not correspond to traditional models, these deemed highly digitalised business models became the expression of the digitalisation process itself. On an upper level, the perception of a digital dimension not corresponding to the traditional economy has given rise to economic interactions that do not necessarily have a business objective.

However, the rise of companies economically exploring such interactions, mainly from the massive use of data, gave rise to the perception that digitalisation could affect the wealth generation process.

The wealth generation process has a central role in constructing the modern economic discourse, corresponding to the main liberal argument justifying its social organisation project. The concept of value lies at this process's centre, and the value debate abandonment implied the wealth's substantive dimension obliteration. Such dimension highlights the phenomenological aspects that underlie the wealth generation process and evidence the meaning of the transition from the mercantilist static model to the liberal dynamic one. By privileging labour over nature, the liberal paradigm not only contrasted these wealth generation phenomenologies but opened up space for a third. Besides its apparent physical dimension, the division of labour highlighted the role of productive technique in wealth generation, revealing an informational component. With digitalisation, this component acquired autonomy, resulting in a digital wealth generation based on informational phenomenology potentially affecting the very liberal social order.

The liberal social order presumes that the wealth generation process occurs within the market, a private economic space opposing the political sphere represented by the state. In this sense, albeit the European national markets formation resulted from a deliberate political intervention in social reality, the liberal narrative attributed to these markets aspects of naturalness and spontaneity. However, outside the domestic plane, this narrative acknowledged that it was impossible to build a free international market without political interference. Thus, the narrative of preserving the market's natural aspects restricted itself to the possible interference of local sovereignties in international free trade. It happens that the digital revolution has turned the construction of an international market immune to state intervention into an increasingly achievable objective. On the other hand, given its undisputable artificiality, the digital market implies denying the fundamental premise justifying the liberal social order in the first place.

Similarly, the liberal discourse ignored the political processes behind national currencies' social construction in Europe, favouring a naturalistic narrative to explain money commodification. This naturalisation's main symbol corresponds to linking the social

phenomenology of money to natural phenomena associated with specific elements, especially gold. The problems caused by the natural phenomenology emulation at the international level resulted in the need to return to the currency's social origins. Such return assigned a new role to central banks, besides fostering monetary nationalism associated with social interests not necessarily related to trade expansion. The rise of digital currencies has rekindled the liberal narrative separating state from money and defending the idea of a necessarily private value expressed in these currencies. However, reality shows that digital currencies do not represent a parallel wealth but the parasitism of the state currencies' wealth, permitting these actors to avoid any form of social accountability.

Besides money, constructing national markets depended on transforming nature and labour into fictitious merchandises, subjecting them to the price system. Nonetheless, the commodification experienced by human beings and their environment has traditionally given rise to tensions and revolts, a fact aggravated by digitalisation. The natural environment digitalisation involves the digital technology's ubiquity and the informational phenomenology increasing prevalence. These factors blur the boundary between spontaneous and deliberate arrangements, naturalising the artificial dimension and making the design choices imperceptible. Digitalisation's impacts on human beings, especially their cognition, raise questions about the social assumptions related to the autonomy of the will and result in the human sphere's reduction to a merely informational condition. This reduction corresponds to a threat to the human dimension's intellectual construction project, from which both international tax law and digital technology are consequences.

CHAPTER 3 DIGITAL REVOLUTION AND INTERNATIONAL TAX LAW.

The previous chapters have presented the two major categories of this work and proposed an approach capable of relating its seemingly incompatible elements. International tax law corresponds to a discursive tradition formed from the internationalisation of the encounter between legal and tax discourses. This description presupposes actors sharing a common way of thinking about objects in the field and may present minor variations in attitude as one moves to the individual level. The digital revolution consists of a paradigmatic change in the technological field whose effects extend to social life and economic relations. Such transformation reaches the main categories of the liberal paradigm on wealth generation, putting in check the social organisation model based on its premises and, consequently, the modern tax discourse. Therefore, although the digital revolution has evident material importance, its effects are most influential in the international tax law's intellectual dimension.

Digital revolution's impacts on international tax law's intellectual dimension influence constructing its discourse and the resulting interaction process. Consequently, the international tax actors' digital-related texts conserve this influence's genetic code within themselves. In turn, such texts become the input for a new process of interpretation by these same actors, transporting the digital elements to the international tax legal vocabulary. Therefore, these texts have a double character, meaning both a product and an input of a continuous interaction process between the actors. Nonetheless, such a process does not occur in a vacuum, locating itself in a social context that establishes the material and cognitive conditions for text production and interpretation. This context results from the dominance of a given paradigm, and this paradigm's inability to deal with the digital elements incorporated in the international tax legal discourse reveals its failure to explain the anomalies caused by the digital revolution.

This chapter aims to demonstrate the digital revolution's influence on the elements constituting international tax law's intellectual dimension. The premise is that this influence manifests itself in the governmental documents' texts, the actors' attitudes in their interaction process, and the social context's material and cognitive plane. The hypothesis is that the liberal paradigm's inability to face the digital revolution's anomalies turned a specific tax debate about digitalisation into a broad international tax discourse's reassessment. Sub-chapter 3.1 pre-

sents the official documents that materialise the digital revolution's tax debate and establish its central themes. Sub-chapter 3.2 interprets the actors' interaction process and identifies the different dimensions that evidence a debate expansion. Sub-chapter 3.3 explains the interaction process's social context, rethinks its actors, objects, and system of ideas, and advocates a realistic discursive legal perspective to face the digital revolution's impacts on international taxation.

3.1. Describing the documents.

Along with the interaction and the context, the text is one of the three elements of the discourse, and its description is the first step in discourse analysis. From this description process, one can obtain the elements that allow the interpretation of the relationships between text and interaction and explain the relationship between interaction and the social context. This description process, in turn, presupposes some level of interpretation, which the following subchapter will develop more comprehensively. Consequently, the difference between this and the following subchapter's objectives is less of a kind and more of an emphasis on some aspects of the chosen documental and bibliographical information. Hence, and considering the presumed knowledge about the texts from this work's audience, the focus must be on the attitudes they reflect. These attitudes materialise in the actors' choices when preparing the documents' narrative, giving relevance to the contrast between what was incorporated and what was left out.

However, this is not a work on discourse analysis but a legal analysis of the international tax discourse on the economy's digitalisation. Thus, although texts are not necessarily in written form, the focus will be on documents reflecting the digital revolution's impact on the economic and tax discourse. Such an analysis must face the fact that these documents are sparse, not being issued by a single but a myriad of actors. The answer is to focus on the work of the Organisation for Economic Cooperation and Development (OECD), around which other texts gravitate, which is in line with the assumption that power relations are central to the legal discourse's development. On the other hand, the OECD documents on taxation and the digital economy have their roots in a previous debate on electronic commerce (e-commerce). This debate divided into a specific stream considering taxation as a barrier to e-commerce and a broader

discussion about the need for political construction of a global economy supported by digital technologies.

This subchapter intends to describe the OECD documents that materialise the digital revolution's influence on international taxation's legal discourse. The premise is that these documents are at the centre of the global debate on the digital revolution's impacts on international taxation. The hypothesis is that the historical description of the OECD's documents reveals a constant change in the players' attitude towards the relationship between the international tax phenomenon and the digital revolution. Item 3.1.1 describes the documents related to the debate about international taxation as a potential political barrier to e-commerce. Item 3.1.2 describes the documents that form the broader debate about the need for a global market's political construction based on digital technologies. Item 3.1.3 describes OECD documents issued after 2013, initially restricted to the debate on digital economy and international taxation, and later reaching the entire international tax legal discourse.

3.1.1. Taxation and e-commerce.

The last chapter has shown that the debate on the digitalisation of the economy began with the realisation that this process consisted of redefining consolidated economic categories. The earliest discourses relating digital technologies to the economic order's transformations intended to frame traditional businesses within the digital logic. Such framing stemmed from the layered system's influence on Internet companies' economic narratives, correlating their services to their respective technological functions. It was the beginning of translating the language associated with the digital technological domain to the economic field, resulting in a dichotomous vision based on virtualisation. In this sense, the Internet would be the frontier between actual economic activities and their emulations on the virtual plane represented by technological metaphors. This dichotomy characterised the context in which the field of international taxation has developed its debate on electronic commerce (e-commerce).

The end of the nineties witnessed the institutionalisation of the debate about the challenges and opportunities that e-commerce brought to international taxation. The 1997 Turku Conference and the 1998 Ottawa Conference have placed e-commerce at the centre

of the agenda of the world's wealthiest economies. This centrality has permitted the Organisation for Economic Co-operation and Development (OECD) to produce the first documents responsible for constructing the future tax agenda. These documents have identified the major problems, assigned specific functions to the main actors, and determined the work dynamics, consolidating a specific methodology. Subsequently, the Task Force on the Digital Economy (TFDE) adopted this same *modus operandi* in its work to face the tax challenges resulting from the digital revolution. Therefore, the description of the OECD's documents considering taxation as a barrier to e-commerce exposes the genealogy of the debate on international taxation and the digital economy.

This item aims to describe the documents that constitute the international tax debate on e-commerce, from the 1997 Turku Conference until the BEPS Project launch. The premise is that the choices recorded in these documents affect the current debate promoted by the OECD on international taxation and the digital economy. The hypothesis is that the e-commerce debate has established the methodology of work and the main international actors' perspective on how to relate the international tax discourse to the digitalisation process. The item begins by describing the documents responsible for generating a political commitment to action in the face of the rise of e-commerce and for giving OECD the leading role in managing the tax agenda. The item then describes the documents establishing an action plan and the framework to address e-commerce's tax issues. Finally, the item describes the documents that report the modus operandi and present the various specific working groups' results.

1997 - Dismantling the Barriers to Global Electronic Commerce.

Several international fora were already promoting debates about electronic commerce, especially among the world's wealthiest economies. Notwithstanding, the OECD's first step towards becoming a locus for constructing a new international discourse on the topic took place in 1997, following the conference in Turku, Finland, to address electronic commerce barriers.[733] The conference presented two parts, the first being a public and private forum organised by the Business and Industry Advisory Committee (BIAC). This forum aimed to identify the

[733] See OECD. **Dismantling the Barriers to Global Electronic Commerce, Turku (Finland): 19-21 November 1997 - Conference Report**. OECD: Paris: 6 Jul. 1998b.

barriers to e-commerce, how they would affect business, what solutions the private sector would recommend, and what priorities the business sector has recognised.[734] The second part consisted of an international conference organised by the BIAC in conjunction with several public sector actors. This conference dealt with initiatives that governments and international organisations could implement to reduce barriers and uncertainties related to the development of e-commerce.[735]

The conference report indicates the format adopted, revealing the structure through which the debate on e-commerce initially established itself. The business sector should identify the problems, governments should discuss how to deal with them, and international organisations should implement solutions globally.[736] This format has allowed the definition of general principles, the indication of areas where the state's role was needed, and the identification of the international organisations able to implement solutions. However, given the plurality of participants, it was not possible to reach a consensus on all issues, remaining the feeling of frustration for the lack of a final detailed plan.[737] These frustrations became a short-term agenda to present an action plan to be endorsed by the ministers who would attend the Ottawa Conference one year later. This agenda assumed a division of tasks between the private sector, the OECD, and the other international organisations, determining these actors' future functions.[738]

The conference's final report has mentioned taxation as an example of a subject where a global state action would be most necessary. In this sense, the solutions to the problems that taxation could cause to the development of electronic commerce should be discussed by the states and implemented globally through international organisations.[739] However, in highlighting each of the actors' role in conducting the debate, the report emphasised the

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[734] See OECD. **Dismantling the Barriers to Global Electronic Commerce, Turku (Finland): 19-21 November 1997 - Conference Report**. OECD: Paris: 6 Jul. 1998b, p. 4.
[735] See OECD. **Dismantling the Barriers to Global Electronic Commerce, Turku (Finland): 19-21 November 1997 - Conference Report**. OECD: Paris: 6 Jul. 1998b, pp. 4-5.
[736] Academics, as well as non-governmental organisations, also attended some sessions. See OECD. **Dismantling the Barriers to Global Electronic Commerce, Turku (Finland): 19-21 November 1997 - Conference Report**. OECD: Paris: 6 Jul. 1998b, p. 5.
[737] See OECD. **Dismantling the Barriers to Global Electronic Commerce, Turku (Finland): 19-21 November 1997 - Conference Report**. OECD: Paris: 6 Jul. 1998b, p. 6.
[738] See OECD. **Dismantling the Barriers to Global Electronic Commerce, Turku (Finland): 19-21 November 1997 - Conference Report**. OECD: Paris: 6 Jul. 1998b, p. 7.
[739] See OECD. **Dismantling the Barriers to Global Electronic Commerce, Turku (Finland): 19-21 November 1997 - Conference Report**. OECD: Paris: 6 Jul. 1998b, p. 7.

OECD's expertise concerning taxation, assigning it a specific agenda. The OECD should create a forum for virtual discussions, engage the business sector, prepare principles applicable to e-commerce, in addition to looking at how tax administrations should adapt to them.[740] It is noteworthy that taxation has entered the international debate on electronic commerce in the context of discussions on possible barriers to its development. In this sense, this discussion started very similarly to the first debates on international taxation at the turn of the nineteenth to the twentieth century.[741]

1997 - Electronic Commerce: the challenges to tax authorities and taxpayers.

On the day before the Turku Conference, government and business representatives had met at an informal round table to discuss the Internet's characteristics most relevant to taxation. Thus, when the conference began, there was already an idea of how these characteristics would affect income and consumption taxation and the possible governments' alternatives to address them.[742] The Committee on Fiscal Affairs (CFA), the main OECD tax policy body, prepared the document supporting this meeting. The document, however, adopted a more restrictive position, referring only to e-commerce in the strict sense, leaving aside other forms of electronic data interchange.[743] This document results from the CFA's effort to identify and understand the digital revolution's consequences on tax administration and policy. This effort cor-

[740] The report has separated the economic analysis of e-commerce from tax issues. Although the broad debate on e-commerce took place in the Committee for Information, Computer and Communications Policy, the Committee on Fiscal Affairs (CFA) has become responsible for its tax implications. The OECD has given a mandate to the CFA to "prepare principles for the taxation of electronic commerce that could be endorsed by Ministers in Ottawa". See OECD. **Dismantling the Barriers to Global Electronic Commerce, Turku (Finland): 19-21 November 1997 - Conference Report**. OECD: Paris: 6 Jul. 1998b, p. 8.

[741] The speech by the then OECD Secretary-General Donald Johnston illustrates the spirit of the time. From the idea of *terra incognita* (unknown territory), the discourse rescues several metaphors that allude to the expansion of the market and its confrontation with local realities. The speech is manifestly opposed to the institution of some form of "bit tax", highlighting the possibility that commercial gains surpass any new taxes. See "Address by the Honourable Donald J. Johnston, Secretary-General of the OECD" in OECD. **Dismantling the Barriers to Global Electronic Commerce, Turku (Finland): 19-21 November 1997 - Conference Report**. OECD: Paris: 6 Jul. 1998b, pp. 18-20.

[742] The Conference Report highlights the significance of this preliminary meeting. See OECD. **Dismantling the Barriers to Global Electronic Commerce, Turku (Finland): 19-21 November 1997 - Conference Report**. OECD: Paris: 6 Jul. 1998b, p. 39.

[743] It is noteworthy that the CFA had initially adopted a language which was forgotten as the debate advanced, emphasising that the fight against tax barriers to e-commerce should not produce an unacceptable administrative burden for tax administrations nor an inappropriate allocation of revenues between countries, considering "each country's role in creating the underlying income". See "Introduction" in OECD. **Electronic Commerce: the challenges to tax authorities and taxpayers, an informal round table discussion between business and government**. 18 Nov. 1997a, pp. 4-5.

responded to the work intensification of several CFA subsidiary bodies since June 1996 to examine those impacts on their respective areas of competence.[744]

The document states that the Internet offers both a new way to advertise, sell, and deliver products and services, in addition to allowing a global collaboration of business activity associated with the decentralisation of production. This new scenario is associated with the lack of a physical location, the difficulty in identifying users, and a decrease in the intermediaries' role in operations.[745] These factors resulted in greater complexity for the tax authority to identify taxable events concerning activities carried out on the Internet. On the other hand, the document's narrative about such activities limited itself to describing virtual and global forms of traditional activities.[746] The document suggests that tax changes brought about by the Internet should be treated with caution, highlighting the need for consensus and attention to several criteria for taxation considered appropriate. The document identified specific issues involving compliance, consumption taxes, tax treaties, and transfer pricing while advocating prudence.[747]

The document states that consumption taxation faces problems related to identifying services provided over the Internet and the difficulty of differentiating goods and services. These problems result in obstacles to the customs procedure related to business activities' characterisation for tax inspection purposes, mainly due to increased cross-border transactions.[748]

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[744] The four involved groups, according to their names at the time, were the Working Party no. 1 on Double Taxation and Related Questions, the Working Party no. 6 on the Taxation of Multinational Enterprises, the Working Party No. 8 on Tax Avoidance and Evasion, and the Special Session on Consumption Taxes. However, both the CFA and its subsidiary bodies refer to a "Communications" instead of a "Digital" Revolution. The division of competence of these groups reflects the thematic fragmentation shown below. See "Annex" in OECD. **Electronic Commerce: the challenges to tax authorities and taxpayers, an informal round table discussion between business and government**. 18 Nov. 1997a, p. 36.

[745] Along with the issues related to the operation itself, the document highlights the emergence of electronic payment systems as a potential danger to tax administrations, given the possibility of digital representation of the value. See "Aspects of Internet Electronic Commerce relevant for Tax Policy Makers" in OECD. **Electronic Commerce: the challenges to tax authorities and taxpayers, an informal round table discussion between business and government**. 18 Nov. 1997a, pp. 5-7.

[746] These activities correspond to the sale-lease of goods, provision of services, provision of information, advertising, gambling, and dealing. See "The types of economic activities that can be carried out on the Internet" in OECD. **Electronic Commerce: the challenges to tax authorities and taxpayers, an informal round table discussion between business and government**. 18 Nov. 1997a, pp. 8-9.

[747] These issues were the subject of CFA subsidiary bodies. For a summary of how each body tackled its respective issue, see "The Response of Governments" in OECD. **Electronic Commerce: the challenges to tax authorities and taxpayers, an informal round table discussion between business and government**. 18 Nov. 1997a, pp. 32-35.

[748] The central problem concerning characterisation consisted of identifying the service's provider's location and the origin of the merchandise's shipment, in cases where the recipient was not registered to collect the VAT. See "The

Regarding income taxation, the main problems concerned the permanent establishment (PE) concept as defined in the treaties against double taxation. The document highlights the possible difficulty in applying the existing PE rules and the broader problems associated with characterising income and attributing profits.[749] Concerning transfer pricing rules, the document affirmed not have identified any fundamentally new or categorically different problem. The document, however, warns of the possibility that this revolution could increase the existing problems of these rules regarding intangibles or lack of comparability.[750]

1998 - The Ottawa Ministerial Conference.

The document summarising the Ottawa conference's conclusions has established the vision of global e-commerce shared by the actors involved in preparing the final documents. This view has adopted the liberal paradigm and the neutral approach to the relationship between technology and law.[751] In turn, this vision's implementation reinforced the role division between the OECD, other international organisations, and the business sector. The report has stated that the Ministers reaffirmed the significance of OECD's work, attaching particular importance to taxation and expressly welcoming the OECD's efforts to set tax principles applicable to e-commerce.[752] Regarding international organisations, the report also recognised their

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Challenge to Consumption Taxes" in OECD. **Electronic Commerce: the challenges to tax authorities and taxpayers, an informal round table discussion between business and government**. 18 Nov. 1997a, pp. 15-22. This preoccupation lost importance in the OECD when the European Union countries began to adopt taxation in the destination's jurisdiction.

[749] The document offers several examples of how the digital format can modify the understanding of the transactions' nature, especially regarding the difference between profit and royalties, raising questions about whether these changes would be sufficient to justify altering traditional forms of taxation. See "Income Taxation: The Challenges to Existing International Taxation Arrangements" in OECD. **Electronic Commerce: the challenges to tax authorities and taxpayers, an informal round table discussion between business and government**. 18 Nov. 1997a, pp. 22-29.

[750] According to the document, this increase derives from the high global integration of business activities and the difficulty of the arm's length principle in dealing with unique situations or involving intangibles' valuation. See "The challenge to Transfer Pricing" in OECD. **Electronic Commerce: the challenges to tax authorities and taxpayers, an informal round table discussion between business and government**. 18 Nov. 1997a, pp. 29-32.

[751] See OECD. Conference Conclusions. In: OECD, **Conference: A Borderless World: realising the potential of global electronic commerce**. Ottawa. 7-9 Oct. 1998a, pp. 4-5. However, the idea of neutrality, not only of regulation in general but of taxation in particular, had already been repeatedly highlighted by the BIAC since the Turku Conference, being endorsed by the OECD Deputy Secretary-General, Joanna Shelton. See "BIAC Declaration of Policy Principles for Global Electronic Commerce" in OECD. **Dismantling the Barriers to Global Electronic Commerce, Turku (Finland): 19-21 November 1997 - Conference Report**. OECD: Paris: 6 Jul. 1998b, pp. 21-22 and 44.

[752] The Ministers have mentioned the report "Electronic Commerce: taxation framework conditions" as the one that establishes the principles of taxation applicable to e-commerce. The report will be analysed later. See "The Work of

importance in developing standards applicable to electronic commerce. Notwithstanding, the report did not mention the establishment of international tax standards amongst other international organisations' activities and initiatives.[753]

On the other hand, the private sector had a decisive participation in the text incorporated in the Ottawa conference's final report. A coalition of international business organisations has elaborated a global action plan whose conclusions appeared in the main document resulting from the conference.[754] In addition to the business positions, the conference conclusions also mentioned perspectives considered social, presented by trade unions, consumer organisations, and other non-governmental groups. The document has recognised the importance of examining, from these perspectives, the economic and social effects of e-commerce and information technology in general.[755] The document concludes by portraying the conference as a milestone in promoting a global debate on e-commerce and developing the information society, setting the next steps. The document has given the OECD the leading role in continuing the debate through its ability to publish documents and dialogue with other public and private actors.[756]

The document has three annexes, integrated as instruments of the OECD, the first of them concerning the problem of privacy protection. Annexe 1 reaffirms previous OECD meetings' commitments and establishes new ones, calls on the OECD to support its members, and invites the international community to consider its outcomes.[757] Annexe 2 deals with consumer protection, acknowledging the growth, the benefit, and the need for cooperation

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the OECD – Agreement by OECD Ministers" in OECD. Conference Conclusions. In: OECD, **Conference: A Borderless World: realising the potential of global electronic commerce**. Ottawa. 7-9 Oct. 1998a, pp. 7-8.

[753] Such patterns are necessarily associated with trade liberalisation. See "Activities and Initiatives of International Organisations" in OECD. Conference Conclusions. In: OECD, **Conference: A Borderless World: realising the potential of global electronic commerce**. Ottawa. 7-9 Oct. 1998a, p. 8.

[754] The document provided to the conference was named "A Global Action Plan for Electronic Commerce prepared by Business with Recommendations for Government". See "Priorities for the Business Sector" in OECD. Conference Conclusions. In: OECD, **Conference: A Borderless World: realising the potential of global electronic commerce**. Ottawa. 7-9 Oct. 1998a, pp. 8-9.

[755] The Trade Union Advisory Committee (TUAC) has presented a discussion paper entitled "Electronic Commerce Developments and Challenges", also recognised as a Conference document. See "Social perspectives" in OECD. Conference Conclusions. In: OECD, **Conference: A Borderless World: realising the potential of global electronic commerce**. Ottawa. 7-9 Oct. 1998a, pp. 10-11.

[756] While recognising its global character, the document centralises the debate within the OECD. See "Next steps – Realising the potential" in OECD. Conference Conclusions. In: OECD, **Conference: A Borderless World: realising the potential of global electronic commerce**. Ottawa. 7-9 Oct. 1998a, pp. 11-12.

[757] See "Declaration on the Protection of Privacy on Global Networks" in OECD. Conference Conclusions. In: OECD, **Conference: A Borderless World: realising the potential of global electronic commerce**. Ottawa. 7-9

and continuous dialogue. It also highlights the revision of standards and practices, "if necessary", encouraging self-regulating market mechanisms and the use of technology to protect consumers, calling on the OECD to develop guidelines.[758] Annexe 3 deals with authentication for e-commerce, recognising the industry's participation in developing technologies and the potential impact of different national solutions. It emphasises the state's role as a user of technology, highlighting, where appropriate, the use of market-driven standards and practices to develop user confidence.[759]

1998 - OECD Action Plan for Electronic Commerce.

The conclusions above-mentioned refereed to three supplementary documents proposed during the Ottawa conference in 1998. The OECD Action Plan for Electronic Commerce is the first referred document, summarising recommendations and determining future activities.[760] The document describes itself as a complement to the works developed by other international organisations and the private sector. To that end, it lists four thematic lines, namely, building trust for users and consumers, enhancing the information infrastructure for electronic commerce, maximising the benefits of electronic commerce, and establishing ground rules for the digital marketplace.[761] The document also has a single annexe in which it lists other works developed by the OECD. These works involve developing guidelines for cryptography, trade policy and market access, Internet governance, small and medium enterprises, educational software, and multimedia, emphasising the need for global participation.[762]

Oct. 1998a, pp. 13-15.

[758] See "Declaration on Consumer Protection in the Context of Electronic Commerce" in OECD. Conference Conclusions. In: OECD, **Conference: A Borderless World: realising the potential of global electronic commerce**. Ottawa. 7-9 Oct. 1998a, pp. 16-17.

[759] See "Declaration on Authentication for Electronic Commerce" in OECD. Conference Conclusions. In: OECD, **Conference: A Borderless World: realising the potential of global electronic commerce**. Ottawa. 7-9 Oct. 1998a, pp. 18-19.

[760] The other two were the "Report on International and Regional Bodies: Activities and Initiatives in Electronic Commerce" and the "Global Action Plan for Electronic Commerce prepared by Business with Recommendations to Governments". See "Implementing the vision" in OECD. Conference Conclusions. In: OECD, **Conference: A Borderless World: realising the potential of global electronic commerce**. Ottawa. 7-9 Oct. 1998a, pp. 6-7.

[761] See OECD. OECD Action Plan for Electronic Commerce. In: OECD, **Conference: A Borderless World: realising the potential of global electronic commerce**. Ottawa. 7-9 Oct 1998e, p. 3.

[762] All of these works correspond to one of the four thematic lines mentioned above. It is important to note that, in order to reach non-member countries, the document states that the dissemination of these works at the international level must take place in coordination with other international organisations. See "Additional OECD Work on Electronic Commerce" in OECD. OECD Action Plan for Electronic Commerce. In: OECD, **Conference: A Borderless**

In the thematic line relating to users and consumers' trust, the document highlights consumers' desire to control the utilisation of their data, carry out secure transactions, and have mechanisms for redress against possible damages. The document focuses on protecting consumers, which depends on secure network infrastructures and exchanging information and experiences between public and private actors.[763] The thematic line concerning information infrastructure highlights the need for adequate telecommunications policies and regulatory frameworks. This idea of adequacy presupposes examining the impacts of transformations in information and network technologies on public policies.[764] The thematic line regarding the maximisation of e-commerce benefits presupposes its widespread use by businesses, consumers, and institutions. In this sense, the measurement of the economic and social impacts of e-commerce depended on the ability to measure electronic commerce itself.[765]

The thematic line concerning ground rules for the digital marketplace highlights that the legal framework applicable to electronic commerce should be equivalent to that of the physical world. Recognising that this framework's conception occurred in a non-digital era, the document highlights the need to institute new rules only when necessary.[766] Within the scope of this debate about the limits of the relationship between legal norms and international commercial practice, taxation arises in the document. After recognising the OECD's leading role in the international tax debate, the document refers to the organisation's mandate in 1997 to develop taxation framework conditions applicable to electronic commerce. It then welcomes the report "Electronic Commerce: Taxation Framework Conditions", which conveys the member countries' agreed conditions. This report has established the tax principles applicable to

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World: realising the potential of global electronic commerce. Ottawa. 7-9 Oct 1998e, pp. 9-11.

[763] It is noteworthy that, although the title of the thematic line refers to users and consumers, the text refers only to the latter. The category "users" is only used again in the annexe. See "Building Trust for Users and Consumers" in OECD. OECD Action Plan for Electronic Commerce. In: OECD, **Conference: A Borderless World: realising the potential of global electronic commerce**. Ottawa. 7-9 Oct 1998e, pp. 4-5.

[764] This thematic line refers to the document entitled "Global Information Infrastructure / Global Information Society", analysed in the next item. See "Enhancing the Information Infrastructure for Electronic Commerce" in OECD. OECD Action Plan for Electronic Commerce. In: OECD, **Conference: A Borderless World: realising the potential of global electronic commerce**. Ottawa. 7-9 Oct 1998e, p. 7.

[765] This thematic line establishes a relationship between electronic commerce, the economy, and society. See "Maximising the Benefits" in OECD. OECD Action Plan for Electronic Commerce. In: OECD, **Conference: A Borderless World: realising the potential of global electronic commerce**. Ottawa. 7-9 Oct 1998e, p. 8.

[766] The document highlights that, when these new rules are justified, consumers and companies expect governments to ensure their transparency and predictability. See "Establishing Ground Rules for the Digital Marketplace" in OECD. OECD Action Plan for Electronic Commerce. In: OECD, **Conference: A Borderless World: realising the potential of global electronic commerce**. Ottawa. 7-9 Oct 1998e, p. 6.

electronic commerce that had dominated the debate for years to come.

1998 - Electronic Commerce: taxation framework conditions.

Ministers present at the Ottawa Convention endorsed the proposals made by the OECD's Committee on Fiscal Affairs (CFA) related to electronic commerce. These proposals aimed to find the right balance between the need for tax collection by the states and the climate considered adequate for developing electronic commerce and profiting from its benefits.[767] The CFA has concluded that it was necessary to apply to electronic commerce the same principles already applicable to conventional commerce. This conclusion did not prevent the elaboration of new norms if these were in line with the listed principles, the preservation of fiscal sovereignty, the fair division of tax base, in addition to combating double taxation and unintentional non-taxation.[768] The CFA stressed the importance of communication and information technologies in improving services to taxpayers. These improvements concern access to information, reduced compliance costs, and the enhancement of voluntary compliance.[769]

The document stands out for establishing the general principles of taxation necessarily applicable in the context of electronic commerce.[770] In this sense, taxation in e-commerce should be neutral and equitable compared to conventional commerce and among the different forms of e-commerce so that only economic reasons, and not tax, influence business decisions. Likewise, in terms of efficiency, taxpayers' costs to comply with their fiscal responsibilities must be as minimal as possible. Concerning certainty and simplicity, the tax rules must be transparent and straightforward to understand, allowing the taxpayers to anticipate all possible tax consequences. In terms of effectiveness and fairness, taxation should produce, in the words of the report, "the correct amount of tax at the right time", minimising the potential for tax avoidance and evasion. Finally, taxation must occur flexibly and dynamically to allow its timely adaptation to the potential technological and business developments of e-commerce.

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[767] See "Introduction" in OECD. **Electronic Commerce: taxation framework conditions**. OECD: Paris. 1998c, p. 3.
[768] See "Main conclusions" in OECD. **Electronic Commerce: taxation framework conditions**. OECD: Paris. 1998c, p. 3.
[769] See "Taxpayer service opportunities" in OECD. **Electronic Commerce: taxation framework conditions**. OECD: Paris. 1998c, pp. 3-4.
[770] See "The broad taxation principles which should apply to electronic commerce" in OECD. **Electronic Commerce: taxation framework conditions**. OECD: Paris. 1998c, p. 4.

On the other hand, the document recognises the difficulty of implementing the listed principles, calling for continuous monitoring of the technological and commercial developments. By attributing a global nature to electronic commerce, the document highlights the need for international cooperation and multilateral administrative assistance measures.[771] In this sense, the document proposes an agenda to obtain international consensus on tax simplification, identify practices, develop guidelines, and establish information requirements. The agenda also includes improving compliance, defining the place of consumption, and guaranteeing the consumption tax's collection.[772] The document listed several themes that deserve to be the subject of international arrangements and cooperation. These themes became the focus of the "post-Ottawa process", lying at the centre of the discussions for the following two decades, reaching the then future debate about the digital economy.[773]

2001 - Taxation and Electronic Commerce: implementing the Ottawa taxation framework cond*i-tions.*

As a result of the general framework proposed by the CFA and endorsed by the ministers present at the 1998 Ottawa Convention, the OECD produced a report to implement the decisions concerning taxation.[774] The report initiates by highlighting the need for international consensus and the necessity of non-member countries' participation in the work. The report contains three parts, the first comprising the presentation of the conclusions produced and the CFA's recommendations. The second part presents each of the Technical Advisory Groups' (TAGs) conclusions related to technology, data, taxation of consumption, application of treaties, and treaty characterisation. Part three contains the approved guidelines for continuing the work within the OECD and strengthening the international debate. Finally, the document presents a list of annexes containing each TAG's composition and the previous documents that served as a basis for preparing the report.

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[771] See "The challenge of implementing these broad principles" in OECD. **Electronic Commerce: taxation framework conditions**. OECD: Paris. 1998c, p. 5.
[772] See "Box 4. The post-Ottawa agenda" in OECD. **Electronic Commerce: taxation framework conditions**. OECD: Paris. 1998c, pp. 6-7.
[773] See "Box 5. The post-Ottawa process" in OECD. **Electronic Commerce: taxation framework conditions**. OECD: Paris. 1998c, p. 7.
[774] See OECD. **Taxation and Electronic Commerce: implementing the Ottawa taxation framework conditions**. OECD Publishing: Paris. 2001e.

The first part starts by recapitulating all the work developed since the Ottawa Convention in 1998, emphasises non-member countries' participation, and explains the criteria for allocating the themes amongst the different TAGs. This allocation reveals a tripartition of the tax debate between consumption tax, tax administration, and international direct tax issues.[775] The main result of the debate on consumption tax concerns the recognition and prevalence of taxation in the jurisdiction where consumption occurs. This debate also resulted in recommendations made by the CFA concerning the possible mechanisms to facilitate tax collection.[776] As for the debate on tax administration issues, there was an increased focus on analysing the opportunities that technology related to e-commerce provides for compliance. Likewise, regarding the challenges brought by technology, the debate focused on the possibility of increasing tax avoidance and evasion.[777]

The international direct tax issues comprised three topics analysed separately: permanent establishment (PE) definition in e-commerce, payment characterisation, and business profits. The PE debate revolved around the need, or not, for changing Article 5 of the OECD Model Convention and what elements of e-commerce would serve as requirements for its application.[778] Treaty characterisation issues involve several possible interpretation conflicts, but the central question concerns the doubt on applying article 7 or 12 for payments related to typical e-commerce transactions. Related to these issues was the problem of treaty residence characteri-

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[775] See "An Overview of Progress Since the Ottawa 1998 Conference" in OECD. **Taxation and Electronic Commerce: implementing the Ottawa taxation framework conditions**. OECD Publishing: Paris. 2001e, pp. 9-16.

[776] These recommendations were the result of the work carried out by the Sub-group on Electronic Commerce of the Working Party No. 9 on Consumption Taxes. The suggested mechanisms were the self-assessment and the registration in the consumer jurisdiction, although both present problems concerning low-value B2C transactions. See "Consumption Tax Aspects of Electronic Commerce: Developing International Guidelines and Recommended Approaches" OECD. **Taxation and Electronic Commerce: implementing the Ottawa taxation framework conditions**. OECD Publishing: Paris. 2001e, pp. 17-47.

[777] The reasons for this were the mobility of electronic commerce associated with its geographic sensitivity to tax differentials, which may exacerbate harmful tax competition. See "Tax Administration Aspects of Electronic Commerce: Responding to the Challenges and Opportunities" OECD. **Taxation and Electronic Commerce: implementing the Ottawa taxation framework conditions**. OECD Publishing: Paris. 2001e, pp. 49-77. Since then, the issue of mobility has acquired a central position in the tax debate on the digital economy.

[778] Two issues in this debate are noteworthy. The first was the fact that Spain and Portugal understood that e-commerce meant that physical presence was no longer a requirement for the existence of a PE and that a website could result in this characterisation. The second concerns the general conclusion that human intervention would no longer be a requirement for the existence of a PE. See "Clarification on the Application of the Permanent Establishment Definition in E-commerce: Changes to the Commentary on Article 5" OECD. **Taxation and Electronic Commerce: implementing the Ottawa taxation framework conditions**. OECD Publishing: Paris. 2001e, pp. 79-85.

sation raised from the technological revolution in communications.[779] The business profit debate focuses on the particularities surrounding the attribution of profits to a PE in the context of e-commerce. In summary, the central point was the inability of traditional rules to deal with the new business models associated with the rise of e-commerce.[780]

The second part has presented the work process of the five TAGs and informed the objectives pursued and conclusions reached by these groups. Two TAGs involved ancillary issues related to the impact of technological changes and the usefulness of applying private audit techniques to fiscal activity.[781] The Technology TAG provided technological expertise to other TAGs, presenting solutions already available and possible developments. According to the group, the main question refers to the jurisdiction identification for tax purposes, which impacts the other issues related to registration, calculation, collection, and auditing.[782] The Professional Data Assessment TAG has suggested the approximation between tax authorities and software developers to obtain mechanisms capable of assisting in applying private audit techniques to the public sphere. The central issue lies in identifying the e-commerce particularities in the face of traditional businesses and detecting risks arising from the new business models.[783]

The Consumption Taxation TAG has primarily dedicated to analysing papers produced by the private sector, assuming a business perspective. The group has stressed that taxation should occur in the jurisdiction of consumption and highlighted the possibility of insti-

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[779] See "Treaty characterisation issues" and "Impact of the Communications Revolution on the Application of 'Place of Effective Management' as a Tie Breaker Rule (A Discussion Paper from the Technical Advisory Group on Monitoring the Application of Existing Treaty Norms for the Taxation of Business Profits)" in OECD. **Taxation and Electronic Commerce: implementing the Ottawa taxation framework conditions**. OECD Publishing: Paris. 2001e, pp. 85-102 and 143-157, respectively.

[780] See "Attribution of Profit to a Permanent Establishment Involved in Electronic Commerce Transactions (A Discussion Paper from the Technical Advisory Group on Monitoring the Application of Existing Treaty Norms for the Taxation of Business Profits)" in OECD. **Taxation and Electronic Commerce: implementing the Ottawa taxation framework conditions**. OECD Publishing: Paris. 2001e, pp. 102-143.

[781] See "An Overview of the TAG Process and its Contribution to the CFA's Work" in OECD. **Taxation and Electronic Commerce: implementing the Ottawa taxation framework conditions**. OECD Publishing: Paris. 2001e, pp. 181-182.

[782] See "Main findings/conclusions of the Technology Technical Advisory Group (TAG)" in OECD. **Taxation and Electronic Commerce: implementing the Ottawa taxation framework conditions**. OECD Publishing: Paris. 2001e, pp. 188-199.

[783] See "Main findings/conclusions of the Professional Data Assessment Technical Advisory Group (TAG)" in OECD. **Taxation and Electronic Commerce: implementing the Ottawa taxation framework conditions**. OECD Publishing: Paris. 2001e, pp. 199-211.

tuting self-assessment mechanisms for business-to-business (B2B) but not for business-to-consumer (B2C) transactions.[784] The Business Profit TAG focused on the profit allocation to a PE and the tie-breaker rule to define the place of effective management. The problem lay in the mobility provided by communication technologies, which made it difficult to determine the management activities geographically.[785] The Treaty Characterisation TAG has identified 28 types of transactions in e-commerce and offered suggestions for distinguishing various payments' nature. Given the importance of intellectual property in e-commerce operations, the central problem is differentiating royalty payments from revenues associated with providing services.[786]

The third part has highlighted the need for further work on the topics and problems identified, maintaining the Ottawa conference's methodology. Thus, it has proposed to continue the work through its subsidiary bodies, such as the Working Parties (WPs) and their e-commerce subgroups.[787] The report also highlighted the need to maintain the tripartite structure formed by OECD member countries, non-member countries, and the business community. Likewise, it has maintained the work system in which experts from the business and technological communities supported the specific debates on direct taxation, consumption taxation, and administration issues. The report had a considerable impact on the international tax field as it has consolidated categories and subjects that came to dominate the future debate on the digital economy. It was responsible for determining the construction of the international tax discourse on electronic commerce and, later, on the digital economy.

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[784] See "Main findings/conclusions of the Consumption Tax Technical Advisory Group (TAG)" in OECD. **Taxation and Electronic Commerce: implementing the Ottawa taxation framework conditions**. OECD Publishing: Paris. 2001e, pp. 182-188.

[785] See "Main findings/conclusions of the Technical Advisory Group on Monitoring the Application of Existing Treaty Norms for the Taxation of Business Profits (Business Profits TAG)" in OECD. **Taxation and Electronic Commerce: implementing the Ottawa taxation framework conditions**. OECD Publishing: Paris. 2001e, pp. 211-214.

[786] See "Main findings/conclusions of the Treaty Characterisation Technical Advisory Group (TAG)" in OECD. **Taxation and Electronic Commerce: implementing the Ottawa taxation framework conditions**. OECD Publishing: Paris. 2001e, pp. 214-217.

[787] See "The Next Phase of Implementing the Taxation Framework Conditions: Progressing Further Work and Strengthening the International Dialogue" in OECD. **Taxation and Electronic Commerce: implementing the**

2003 - Documents from the Centre for Tax Policy and Administration.

Since the 1998 Ottawa conference, the e-commerce debate has concluded that consumption taxation should occur in the jurisdiction where consumption takes place. As a result, the OECD's Centre for Tax Policy and Administration (CTPA) has produced some documents addressing the issue.[788] In 2003, the CTPA initially presented some guidelines for defining the place where consumption occurs within the scope of e-commerce. The guidelines aimed to give practical applicability to the Taxation Framework Conditions, avoiding the occurrence of double taxation and unintentional non-taxation.[789] To eliminate conflicts, distortions, and disincentives to international trade, the CTPA also released a document establishing criteria to identify commercial presence within the B2B transactions. In this way, although the residence rule is the main criterion adopted, an override rule may apply when the consumption occurs in a place different from the consuming company's residence.[790]

Concerning B2C transactions, the CTPA also published a document that, founded on OECD member countries' experiences, presents guidance for implementing a simplified registration system. The idea is to allow non-resident vendors to register, for tax purposes, in the jurisdictions where they carry out their commercial activities through an electronic and standardised system.[791] For facilitating compliance, the electronic medium is also suggested in the case of taxpayers presenting tax statements. In the same manner, the document emphasises the necessity for declaration procedures to require as little data as possible and harmonise internationally. The document also states the need to modify the country's internal legislation when the legal framework does not permit registering tax records in electronic mode. In addition to this, such records must reflect generally accepted business practices, contributing to the genera-

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Ottawa taxation framework conditions. OECD Publishing: Paris. 2001e, pp. 223-224.

[788] It is important to highlight an essential difference between the CFA and the CTPA. The former encompasses the countries' representatives, and the latter comprises the OECD staff. In this sense, while the CFA makes up the international bureaucracy in a broad sense, the CTPA is part of the supranational bureaucracy, representing the interests of the OECD as an institution.

[789] The document refers to the Taxation Framework Conditions welcomed by OECD Ministers in 1998. Thus, it also highlights the need to differentiate the supply of digital and physical products, and the possibility of adopting reverse charge, self-assessment, or other equivalent mechanisms in B2B transactions. In this sense, the document invites OECD member countries to modify their domestic legislation in order to harmonise with the guidelines. See OECD. **Consumption Taxation of Cross Border Services and Intangible Property in the context of E-commerce, Guidelines on the Definition of Place of Consumption**. OECD Publisher: Paris. 2003a.

[790] See OECD. **Electronic Commerce-Commentary on Place of Consumption for Business to Business Supplies (Business Presence)**. OECD Publisher: Paris. 2003b.

[791] See OECD. **Electronic Commerce-Simplified Registration Guidance**. OECD Publisher: Paris. 2003c.

tion of a standardised and simplified international format.

Therefore, the above documents demonstrate that the central issue concerns the relationship's nature (whether B2B or B2C) and the taxable jurisdiction. To offer practical guidance on the mechanisms capable of solving such issue, the CTPA has published a report to address low-value transactions in which vendor and consumers have no established relationship.[792] The report states that the vendor's needlessness to collect the tax in B2B transactions offers private consumers an incentive to claim themselves being businesses. Thus, the report recommends that, besides the declaration, tax authorities consider alternative verification methods such as registration numbers, digital certificates, and other indicia. It suggests comparing the taxpayer's statement with other information related to payment, geolocation, and the transaction's nature. The report recommends constant monitoring of the evolution of business models and technology development, as these factors affect the jurisdiction's determination and the consumer's status.

2005 - E-commerce: transfer pricing and business profits taxation.

In 2005, the OECD published a document dealing with transfer pricing issues and the taxation of corporate profits in the context of electronic commerce. Although conceived amid working groups formed by representatives of the OECD's member and non-member countries, the OECD Secretary-General has published the document under its responsibility.[793] In its first part, the document contains the outcomes of a study prepared by the Sub-group of Working Party No. 6 (WP6) on Electronic Commerce. Such a study based on a preliminary study on the Internet singularities in transfer pricing, entitled Communications Revolution and its Effects on Transfer Pricing. The second part refers to the Technical Advisory Group (TAG) on Monitoring the Application of Existing Treaty Norms for Taxing Business Profits final report. The report offers a description of the new economy's business models to depict the current treaty rules, describe their deficiencies, and recommend solutions.[794]

While highlighting the various impacts of the communications revolution

[792] See OECD. **Verification of Customer Status and Jurisdiction**. OECD Publisher: Paris. 2003e.
[793] See "Forward" in OECD. **E-commerce: transfer pricing and business profits taxation**. Paris. 2005a, pp. 3-4.
[794] The results of this work are contained in the above-mentioned document OECD. **Taxation and Electronic**

on traditional businesses, the central idea in the first part is that this revolution did not present fundamentally new or categorically different problems to transfer pricing rules. Thus, the report aims at demonstrating how the current OCDE Transfer Pricing Guidelines were already capable of dealing with electronic commerce.[795] This conclusion led to the idea that it would be possible to identify the arm's length profit of subsidiaries operating in the e-commerce environment. For that, it would be enough to identify the different variations found in operations involving single or multiple servers, technical support, and website development.[796] This methodology depends on an analysis of the standards related to the different business models then operating within the scope of electronic commerce. The models mentioned in the report are the auction, the airline's computer reservation systems, and web-hosting arrangements.[797]

The second part follows the tradition of analysing business models, describing novel forms of transactions in the new economy. The document then explains the tax treaty rules in force regarding tax liability, permanent establishment, computation of profits, and the tax base's sharing.[798] Afterwards, the document confronts the new business models with the described rules, offering a critical analysis of these rules' applicability to the electronic commerce environment. Unlike the first part, the conclusion here was that it would be necessary to establish new universally accepted rules with the purpose of both avoiding double taxation and non-taxation of corporate profits.[799] On the one hand, the report presented a group of proposals for change that would not require a fundamental modification of the existing rules. On the other hand, the report suggested a fundamental modification regarding passive income taxation, creating a new nexus rule, and replacing arm's length with a formulary apportionment of profits.[800]

Commerce: implementing the Ottawa taxation framework conditions. OECD Publishing: Paris. 2001e.

[795] See "Introduction" in OECD. **E-commerce: transfer pricing and business profits taxation**. Paris. 2005a, pp. 11-12.

[796] See "Determination of the arm's length profit of a subsidiary performing transactions in an e-commerce environment" in OECD. **E-commerce: transfer pricing and business profits taxation**. Paris. 2005a, pp. 13-33.

[797] See "Typical fact patterns of the e-commerce auction model", "Typical fact patterns of b2b models: airline computer reservations systems", and "Typical fact patterns of b2b models: web-hosting arrangement" in OECD. **E-commerce: transfer pricing and business profits taxation**. Paris. 2005a, pp. 35-54.

[798] See "Background: the emergence of new business models" and "Description of the current treaty rules for taxing business profits" in OECD. **E-commerce: transfer pricing and business profits taxation**. Paris. 2005a, pp. 73-80.

[799] See "A critical evaluation of the current treaty rules with respect to e-commerce" in OECD. **E-commerce: transfer pricing and business profits taxation**. Paris. 2005a, pp. 80-104.

[800] The PE rules considered appropriate were related to the absence of human intervention and use of servers, general exceptions on the auxiliary or preparatory nature of activities and storage, as well as rules concerning the force of attraction. See "Some alternatives to the current treaty rules for taxing business profits" in OECD. **E-commerce:**

Conclusions.

The description of the documents above has demonstrated how international taxation emerged in OECD's debate regarding electronic commerce. Taxation has appeared portrayed as a potential barrier to international trade, a perspective embraced by governments but whose origin lies in the business demands. Such a narrative on the tax phenomenon was responsible for delimiting the states' initial role, assigning them the task of offering solutions, while the business sector would indicate the problems' content and urgency. In turn, international organisations would have to obtain a consensus capable of implementing state decisions at the international level. The OECD stood out among the international organisations from its recognised expertise in tax matters, receiving a particular assignment. OECD's technical body has become responsible for developing a work agenda related to international taxation of electronic commerce, thus assuming both a political and technical role in the subject.

OECD's agenda's starting point was the tax principles applicable to electronic commerce resulting from the Ottawa Ministerial Conference. In practice, this meant that the political choices made by the group of actors present at that meeting became the basis for a narrative with technical aspirations that established the framework conditions for the taxation of e-commerce. Furthermore, the recognition of the intrinsically global nature of electronic commerce required a forum capable of articulating the interests of all the economies involved. This fact attributed an even more significant political role to the OECD, although the agenda's justification had a technical connotation. Such interests' articulation occurred within technical working groups responsible for choosing the topics and establishing the perspectives that have dominated the tax debate. Through these groups, OECD took its first step towards approaching the leading developing economies aiming a global tax project.

Within the CFA scope, the international tax debate divided itself between consumption taxes and international taxation in the strict sense. In the first case, the attention was on declaration issues, registration, and tax collection concerning the provision of cross-border services. Regarding income taxation, the duality between source and residence has resulted in a conceptual debate limited by the OECD treaty categories. This debate involved the

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transfer pricing and business profits taxation. Paris. 2005a, pp. 105-150.

characterisation of payments corresponding to the OECD Model Convention's articles and the attribution of profits according to the permanent establishment's logic. Nevertheless, although the tax debate was relatively conservative and focused on preserving its traditional characteristics, a parallel debate took place. Outside the CFA, the OECD was increasingly aware that commercial metaphors would not be able to deal with the economic reality brought about by digital technology, resulting in a transformation of its discourse, as the next item will demonstrate.

3.1.2. Information and the Internet economy.

The previous item has shown that the origins of the international tax debate on the digital economy date back to a context of protecting electronic commerce (e-commerce). Such context is similar to the international tax debate's emergence at the end of the nineteenth century, guided by a vision of protecting free trade. However, the current debate presupposed intellectual categories consolidated within the treaty-related international tax vocabulary, influenced by the OECD Model Convention. Moreover, this debate was committed to preserving this social practice so that the transformations caused by e-commerce's emergence were analysed based on their framing within the tax discourse. Nonetheless, these changes are not a tax particularity, and their analysis by the OECD did not limit itself to the Committee on Fiscal Affairs (CFA) or its ancillary branches. Another debate has adopted new categories and a broader view of information and communication technologies' economic and social impacts.

Outside the CFA, the OECD was conducting an agenda to understand the changes resulting from digital technology and elaborate on this phenomenon's economic discourse. The documents resulting from this agenda were responsible for building a bridge between the first debates related to e-commerce and the then future debates about the economy's digitalisation. From the analysis of these documents, it is possible to observe that the OECD started to emulate several categories present in the digital revolution debate. This broad approach was not the result a revolutionary impetus but the initial realisation of the traditional paradigms' inadequacy to explain the new social and economic reality. However, this finding does not mean a rupture with the liberal premises, and the digital discourse construction by the OECD reveals the attempt to preserve this paradigm. Such an effort defined the context for the emergence of the

debate concerning the digital economy's tax challenges within the scope of the BEPS Action 1.

This item presents the documents that transformed the OECD's digital economy vocabulary, adding new categories related to the digital revolution to the international tax debate initially restricted to e-commerce. The premise is that this parallel debate was less conservative and not so attached to formal categories vis-à-vis the tax discussions within the CFA. The hypothesis is that, although recognising the transformations resulting from the digital revolution, this approach aimed to preserve the intellectual categories traditionally associated with the liberal paradigm on wealth generation. The item initially presents the documents that demonstrate the centrality of information as a characteristic of this new social and economic moment. Afterwards, the item describes the documents revealing an attempt to portray the Internet as an economic space marked by peculiar business models. Finally, the item shows documents evidencing the importance of creating categories representing the demand side for understanding the new economy.

The central role of information.

In response to the OECD Council ministerial-level meeting in May 1995, the Committee for Information, Computer and Communication Policy (ICCP) presented a report placing the information at the centre of a global project to transform society.[801] The Global Information Society (GIS) results from a necessary political, economic, social, and cultural adaptation effort by the world community in the face of the emergence of the Global Information Infrastructure (GII). The GII corresponds to a worldwide network infrastructure allowing economic activities based on the use of information. According to the report, governments and international organisations should enable the private sector to lead the process of building the GIS from the GII. The report recommends policy and regulatory frameworks, highlighting the role of governments in addressing information issues. These issues involve constructing a global market from the adaptation of global society to the global infrastructure.

In the following year, the ICCP issued a new report in which it further clarifies the relationship between the construction of a GIS and the need for governments to de-

[801] See OECD. **Global Information Infrastructure and Global Information Society (GII-GIS): statement of**

sign and implement competitive market structures. The development of electronic commerce and a multimedia content market was at the heart of building a global information economy.[802] This report has explicitly recognised a paradigmatic shift in the economic field equivalent to the (first) Industrial Revolution. As a result, the report points to the necessity for a global effort to open closed economies, highlighting the need for participation by non-OECD member economic actors.[803] Therefore, the information economy was not a spontaneous result of technological developments, but a global political project guided by one specific rationality. This rationality adopted the digital paradigm as its intellectual dimension and expressed materially through the development and diffusion of information and communication technologies (ICTs).[804]

As its material dimension, the measurement of the development of ICTs represented the information economy's measurement. This factor, associated with the OECD's vocation for the production of statistical reports, resulted in several analyses of ICTs as products of a specific market, emphasising the classification of products, their international trade, price, and quality.[805] However, in conjunction with their analysis as products, it was necessary to consider ICTs from their ability to interact and the consequent formation of an infrastructure. This infrastructure, designed from the digital language applicable to the Internet's layered system, has identified services belonging to the information economy's scope.[806] Since then, the successive OECD's statistical assessments on the development of ICTs have adopted a double perspective. On the one hand, ICTs represented products from a specific economic sector, while their connectivity's effects expressed the digital language's influence over other economic sectors.

ICT as an economic sector.

As a product, ICTs are the material result of a production process based on

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policy recommendations made by the ICCP committee. Paris. 1996.

[802] See "The economic and social impacts of GII-GIS" in OECD. **Global Information Infrastructure -- Global Information Society (GII-GIS): policy requirements**. Paris. 1997b, pp. 21-24.

[803] See "Access to the GII-GIS" in OECD. **Global Information Infrastructure -- Global Information Society (GII-GIS): policy requirements**. Paris. 1997b, pp. 26-53.

[804] See "The economic drivers" in OECD. **Global Information Infrastructure -- Global Information Society (GII-GIS): policy requirements**. Paris. 1997b, pp. 12-20.

[805] See "ICT Products" in OECD. **OECD Guide to Measuring the Information Society 2011**. Paris: OECD Publishing, 2011a, pp. 19-47.

[806] See "ICT Infrastructure" in OECD. **OECD Guide to Measuring the Information Society 2011**. Paris: OECD Publishing, 2011a, pp. 49-56.

traditional economic paradigms concerning the matter's processing. In this sense, it is possible to identify and measure an ICT industry sector responsible for ensuring the information economy's material basis.[807] Notwithstanding, this same material basis corresponds to the physical layer over which the other layers develop to form the Internet. In this sense, by identifying the economic activities that overlap with the structure provided by the ICTs, the OECD could measure the services that form the economic complement of the material base of the Internet. Therefore, and although the reports do not expressly recognise this feature, it is possible to identify a pattern in the OECD's statistical analyses about the Internet. These analyses consider the Internet as a complex economic environment formed by a material structure provided by the ICT industry over which several "less material" economic activities overlap.

Based on its definition as a complex economic environment, the OECD could measure the Internet's impact on other economic sectors. An intense transformation of traditional businesses followed the adoption and initial use of digital technology provided by the Internet.[808] Such a process has resulted in the idea of electronic business (e-business), a concept directly related to the vocation of ICTs to globalisation. This vocation manifested a material perspective, but it is much more noticeable at the interoperability level and from its potential for forming a global structure. Although the first OECD documents described the structuring of a global network of devices as a phenomenon associated with the emergence of a global market, the users' role has acquired a new importance. Individuals' behavioural patterns on the Internet, combined with the political and material local context, determine the speed of the diffusion of ICTs and, consequently, the emergence of the global market.

The first OECD reports highlighted the possibility of "digital delivery" as a critical element in the globalisation process resulting from ICTs advances. Thus, business services and other traditionally face-to-face activities could be emulated on the Internet, resulting in digital delivery.[809] However, due to technological advances, especially related to the connec-

[807] See "Recent Developments and Outlook" in OECD. **OECD Information Technology Outlook 2004**. Paris: OECD Publishing, 2004, pp. 23-64 and in OECD. **OECD Information Technology Outlook 2010**. Paris: OECD Publishing, 2010, pp. 21-63. See also "The IT Industry: Recent Developments and Outlook" in OECD. **OECD Information Technology Outlook 2006**. Paris: OECD Publishing, 2006a, pp. 23-62, and in OECD. **OECD Information Technology Outlook 2008**. Paris: OECD Publishing, 2008b, pp. 23-69.
[808] See "E-business Developments" in OECD. **OECD Information Technology Outlook 2004**. Paris: OECD Publishing, 2004, pp. 105-140.
[809] See "Digital Delivery" in OECD. **OECD Information Technology Outlook 2004**. Paris: OECD Publishing,

tion's speed, new commercial relationships operated by the Internet did not fit the digital delivery notion. As a form of direct marketing of content, broadband represented a transition in the possibilities of commercial exploitation of digital content. The connectivity explosion provided by advances in connection structures enabled new ways of exploring information as a phenomenon. Vis-à-vis other economic sectors, the Internet no longer was just a mean of disseminating the production conceived in another dimension, becoming a source of a new exploitable wealth.

Information and knowledge economy.

Internet's notion as a complex economic environment has shifted according to the ICT's advancements that permitted developing new wealth generation methods. ICT's innovation and diffusion expanded the Internet's reach and velocity, fostering the view that knowledge exploitation was central in the new Internet economy.[810] Once it is traditionally associated with the human dimension, knowledge investment presumed the human being an economic development instrument. Thus, education and business behaviour became elements of the discourse on the Internet-centric economy.[811] Nevertheless, identifying this new Internet economy has not necessarily suggested a fundamental change in the paradigm determining how to conceive the production process. These new forms of wealth generation have initially strengthened the liberal foundations that have traditionally oriented the OECD's economic vision.[812]

The attempt to submit the wealth generation process to the traditional economic view has generated a sectoral language that started to identify the immaterial dimension of the ICTs. This effort's main result was the conceptual construction of a software economic sector, corresponding to an industry of knowledge processing.[813] As a specific type of e-business, the software sector has become increasingly impacted by technological developments

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2004, pp. 177-216.

[810] See "Growth Patterns in the OECD Area", "Seizing the Benefits of ICT", and "Harnessing the Potential of Innovation and Technology Diffusion" in OECD. **The New Economy: beyond the hype - the OECD Growth Project**. Paris: OECD Publishing, 2001d, pp. 13-54.

[811] See "Enhancing Human Capital and Realising its Potential" and "Fostering Firm Creation and Entrepreneurship" in OECD. **The New Economy: beyond the hype - the OECD Growth Project**. Paris: OECD Publishing, 2001d, pp. 55-88.

[812] See "Getting the Fundamentals Right" in OECD. **The New Economy: beyond the hype - the OECD Growth Project**. Paris: OECD Publishing, 2001d, pp. 89-95.

[813] See "The Software Sector" in OECD. **OECD Information Technology Outlook 2002: ICTs and the information economy**. Paris: OECD Publishing, 2002b, pp. 105-127.

on the Internet. In addition to its ancillary effect on e-business, the possibility of applications based directly on the Internet was gradually introducing a new form of harnessing the information as a phenomenon.[814] As a knowledge product, the software initially correlated to human skills, and its emergence required efforts to measure employment-related factors. However, the inherently technological character of software, associated with the Internet's growing interconnectedness, resulted in a very different view about the knowledge economy.[815]

The vision of knowledge construction as an industrial input became evident, placing the idea of science on the same level as technological innovations. Investment in knowledge has come to understand investment in human resources as a type of knowledge-based capital whose learning focuses on innovation.[816] The connection possibilities provided by digital technology, in turn, led to a form of international collaboration in innovation that transformed the sector itself. The science-oriented view expanded the influence of digital language to traditional sectors that historically had nothing to do with the emergence of ICTs.[817] Sectors in which technical knowledge is the determining factor for success have observed a migration from the human to the technological dimension. As a result, the competition in the knowledge economy's scope has become increasingly dependent on obtaining technological advantages related to digital technology, revealing a facet hitherto hidden from the Internet as an economic environment.[818]

The language of the Internet economy.

Despite historically linked to the idea of knowledge and, consequently, to one rhetoric of investment in human beings as an input to the wealth produced in this economy, the Internet, as a technology in a strict sense, tends towards a mechanistic exploration of information. In this sense, intelligent agents' notion meant recognising the software's importance as

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[814] See "The use of the Internet in transaction-related business processes" in OECD. **OECD Information Technology Outlook 2002: ICTs and the information economy**. Paris: OECD Publishing, 2002b, pp. 131-139.
[815] See "ICT Skills and Employment" in OECD. **OECD Information Technology Outlook 2002: ICTs and the information economy**. Paris: OECD Publishing, 2002b, pp. 157-186.
[816] See "Knowledge economies: Trends and features" and "Building knowledge" in OECD. **OECD Science, Technology and Industry Scoreboard 2013**. 2013g, pp. 17-119. This report is a biennial publication, starting in 1999. The choice for citing the 2013 edition is justified because it was the last published before the BEPS project started.
[817] See "Connecting to knowledge", "Targeting new growth areas", and "Unleashing innovation in firms" in OECD. **OECD Science, Technology and Industry Scoreboard 2013**. 2013g, pp. 121-211.
[818] See "Competing in the knowledge economy" and "Participating in the global economy" in OECD. **OECD**

an Internet economy's fundamental element and implied the human role's depreciation in wealth generation.[819] However, a new perspective soon overshadowed this representation, favouring a quantitative view of the Internet's influence on business activities. The Internet economy became an expression of the Internet's impacts, as a technology, on traditional economic activities' productivity.[820] As a result, the Internet economy analysis has come to mean investigating the particular types of businesses operated by the Internet.[821] Notwithstanding, the complexity of these models has resulted in joint international efforts to address the problem.

The Ministerial Meeting on the Future of the Internet Economy that took place in Seoul in 2008 was a watershed in the international economic debate concerning the wealth generation process from Internet development. The meeting has established a political commitment around the topic and empowered the OECD bureaucracy to develop a work agenda. Consequently, the member states who have contributed to the meeting have delivered a statement recognising the Internet economy's eminently global character. These participants also have urged the OECD to put its agenda into practice by reaching out to other economic actors who were not present at the meeting.[822] In this regard, the OECD has released a document considering the Internet as a catalyst technology capable of increasing the global economy by expanding its infrastructure. However, the document also opened space to understand the Internet as a real global economy, with characteristics that would mark the subsequent economic discourse.[823]

One of the meeting results was recognising the importance of protecting digital identity as a factor of trust and security that contributes to the development of the Internet economy. This identity derives mainly from the attributes that an individual owns in the real world but has features characteristic of the digital universe.[824] The concept of identity is closely related to access, a characteristic of the global digital market construction that differs from in-

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Science, Technology and Industry Scoreboard 2013. 2013g, pp. 213-261.

[819] See "Agent Technologies for the Internet" in OECD. **OECD Information Technology Outlook 2000: ICTs, e-commerce and the information economy**. Paris: OECD Publishing, 2000b, pp. 151-166.

[820] See "Impact of the Internet on business performance" and "Policy issues" in OECD. **The Internet and Business Performance**. Paris. 2001b, pp. 9-22 and 29-35, respectively.

[821] See OECD. **Online Computer and Video Games**. Paris. 2005b, OECD. **B2B E-Commerce in Publishing, Retail Distribution and Pharmaceuticals Distribution in France**. Paris. 2001a.

[822] See OECD. **The Seoul Declaration for the Future of the Internet Economy**. Paris. 2008d.

[823] See "Developing a truly global Internet economy" in OECD. **Shaping Policies for the Future of the Internet Economy**. Paris. 2008e, pp. 29-31.

[824] See OECD. **The Role of Digital Identity Management in the Internet Economy: a primer for policy**

dustrial globalisation.[825] Access and the market have always historically related in the context of an expansion of commercial activities to pre-existing local social structures. In the context of the Internet economy, trade liberalisation and the formation of a global digital market depends on the construction of local structures specifically designed to allow new individuals to access the network. In this sense, the development of a global digital market is more dependent on the elements located on the demand side than on the supply side.[826]

A new vision of the Internet economy.

In a new economic environment whose material base was still under development, the relationship between supply and demand depended on several intermediaries' participation. Thus, understanding how these intermediaries' activities took place and their role in the value chain led to an analysis of their business models.[827] However, as these intermediaries reacted to a demand arising from the way the Internet economy was structured, they also represented a specific intermediation market formation. As intermediaries cannot indefinitely trust other intermediaries, the analysis of this intermediation market corresponded to the analysis of the process by which trust could establish itself in the network.[828] Thus, more than any other actors, intermediaries had a structuring social and economic function in the relationships developed on the Internet. Understanding how these functions contributed to establishing the Internet economy has permitted a new perspective about its connectivity process.[829]

There is no doubt that the Internet economy is a space for connectivity since the Internet, as a technology, emerges from a physical base formed by communication and information technologies. Nonetheless, the idea of connectivity acquired new meanings as the elements located on the demand side of the economic relationship started to gain more promi-

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makers. Paris. 2009c.

[825] See OECD. **Internet Access for Development: the development dimension**. Paris: OECD Publishing, 2009a.

[826] See "Paradigm shift: from supply-led to demand-driven development" in OECD. **Internet Access for Development: the development dimension**. Paris: OECD Publishing, 2009a, pp. 24-30.

[827] See "Internet intermediaries: Definitions, economic models and role in the value chain" in OECD. **The Role of Internet Intermediaries in Advancing Public Policy Objectives**. Paris: OECD Publishing, 2011b, pp. 19-36.

[828] See "Developments in Internet intermediary markets" in OECD. **The Role of Internet Intermediaries in Advancing Public Policy Objectives**. Paris: OECD Publishing, 2011b, pp. 37-57.

[829] See "Social and economic purposes of Internet intermediaries" in OECD. **The Role of Internet Intermediaries in Advancing Public Policy Objectives**. Paris: OECD Publishing, 2011b, pp. 59-70.

nence.[830] In this way, the Internet economy measurement activity now includes new metrics and more conservative analysis models on increased connectivity. Besides measuring the Internet as a sector, all economic growth in a given economy resulting from the Internet's impacts as a general-purpose technology has come to be measured. Furthermore, and despite the difficulty of measurement, the demand side's economic phenomenology has become part of the OECD's official statistics. The indirect impacts of the Internet on consumer surplus and gains related to social well-being have become part of the Internet economy's discourse.[831]

The development of a new perspective on the Internet economy, associated with identifying the building blocks that comprise it, resulted in the revision of the Seoul meeting's commitments. These building blocks correspond to the structure of high-speed Internet access, the growth resulting from digital content, and the impact of smart applications on the data-driven economy.[832] The revision also framed these elements in a new context of building the necessary conditions for developing the Internet economy. This context emphasised several aspects regarding the demand side, such as privacy, security, openness, plus consumer protection and empowerment.[833] The revision of the Seoul declaration not merely has emphasised the afore-mentioned need for global participation but also highlighted new socio-economic goals in building the Internet economy. These new objectives stem from the effects of the demand side on the Internet economy, whose characteristics contrast with the liberal tradition of the industrial economy.[834]

Beyond the production side.

The last item has demonstrated that the first tax documents related to e-commerce have also identified the disparity between factors situated in the Internet economy's supply and demand sides. However, the debate involving consumer protection in the new eco-

[830] See "Expanding connectivity and measuring the Internet economy" in OECD. **OECD Internet Economy Outlook 2012**. Paris: OECD Publishing, 2012a, pp. 19-29.
[831] See OECD. **Measuring the Internet Economy: a contribution to the research agenda**. Paris. 2013f.
[832] See OECD. **Review of the Seoul Declaration for the Future of the Internet Economy: synthesis report**. Paris. 2013i.
[833] See "The framework conditions for the Internet economy" in OECD. **The Internet Economy on the Rise: progress since the Seoul Declaration**. Paris: OECD Publishing, 2013e, pp. 34-42.
[834] See "Socio-economic objectives for the Internet economy" in OECD. **The Internet Economy on the Rise: progress since the Seoul Declaration**. Paris: OECD Publishing, 2013e, pp. 42-46.

nomic context further established guidelines for facing this contrast.[835] In this sense, OECD reports on related public policies soon began to include identifying measures to protect consumers. As a result, public policies, and the practices applicable to e-commerce in the scope of OECD member countries, became an object of analysis considering their suitability in the light of the guidelines.[836] Likewise, the principles established in the guidelines allowed the construction of one rhetoric on good practices aimed at consumers in the context of e-commerce. Albeit they involved a broad diversity of topics, all of these good practices aimed at minimising the harmful impacts of information asymmetry between the supply and demand sides.[837]

Information asymmetry concerns led to a debate on how to rebalance the relations between supply and demand within the scope of e-commerce. Given the distinct nature of digital business relationships, this analysis focused on alternative ways of solving problems that are more in line with this environment's practices.[838] Equally worrying was the problematics concerning personal privacy, since data is the fundamental element of information as a phenomenon. This question is part of a broader context about security and trust in the online environment, with results that can undermine the very project of building a global Internet economy.[839] Nonetheless, the event that completely transformed this debate was the proliferation of mobile accesses, which changed quantitatively and qualitatively the already uneven relationship between supply and demand. The reaction to this unevenness could no longer be limited to alternative conflict resolution measures but should adopt a consumer empowerment agenda.[840]

The considerable expansion of the consumer market in the Internet economy provided by the spread of mobile access resulted in the sharp growth of business-to-consumer operations. This movement has accompanied an agenda of public policy issues

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[835] See OECD. **Guidelines for Consumer Protection in the Context of Electronic Commerce**. Paris: OECD Publishing, 2000a.
[836] See OECD. **Inventory of Consumer Protection Laws, Policies and Practices Applied to Electronic Commerce**. Paris. 2001c.
[837] See OECD. **Best Practice Examples under the OECD Guidelines on Consumer Protection in the Context of Electronic Commerce**. Paris. 2002a.
[838] See OECD. **Resolving E-commerce Disputes Online: asking the right questions about ADR**. Paris. 2002c.
[839] See OECD. **Measuring Security and Trust in the Online Environment: a view using official data**. Paris. 2008a, OECD. **Privacy Online: OECD guidance on policy and practice**. Paris: OECD Publishing, 2003d.
[840] See OECD. **Mobile Commerce**. Paris. 2007a, OECD. **OECD Policy Guidance for Addressing Emerging Consumer Protection and Empowerment Issues in Mobile Commerce**. Paris. 2008c, OECD. **Report on Consumer Protection in Online and Mobile Payments**. OECD Digital Economy Papers: Paris. 2012b.

to offer instruments so that the consumer could protect itself in the new environment.[841] Nonetheless, given the transformation of the types of products sold through mobile access, the consumer empowerment agenda took on a very peculiar connotation. This empowerment was initially concerned with the capacity to consume in the new environment, that is, to acquire the new digital content products typical of mobile systems.[842] However, the problems related to identity theft in the Internet economy scope, already debated as a problem of trust in the network, resulted in new conceptual possibilities about identification and identity. It was evident that the traditional view based on supply and demand could not explain the digital economic environment's complex reality.[843]

Users, content, and data.

The emergence of the so-called Web 2.0 and the proliferation of social networks revealed that consumers' definition in the strict sense did not apply to all the actors interacting with the e-commerce companies. Several technological, social, economic, and institutional factors have caused a large production of content created by Internet users, resulting in a participative web.[844] This content comprises photos and other images, music, videos and films, and any content whose dissemination was made possible by the platforms. Such platforms include collaboration in creating texts, social networks, group aggregation and bookmarking, and the effort to build a virtual world. Although not necessarily created for profitable ends, this content presents a great potential for monetisation. This potential was responsible for the emergence of business models and value chains with significant social and economic impacts, creating new business opportunities and regulatory difficulties.

The preeminent status obtained by the user-generated content has reflected itself within the Internet's very vision as a technology. In this sense, the Internet has stood out as an instrument for creating, preserving, disseminating, and using local content, leading to ev-

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[841] See OECD. **Empowering and Protecting Consumers in the Internet Economy**. OECD Publishing: Paris. 2013c.
[842] See OECD. **Protecting and Empowering Consumers in the Purchase of Digital Content Products**. Paris. 2013h.
[843] See OECD. **Online Identity Theft**. Paris: OECD Publishing, 2009b.
[844] See "Drivers of User-Created Content" in OECD. **Participative Web and User-Created Content: web 2.0, wikis and social networking**. Paris: OECD Publishing, 2007b, pp. 27-30.

er-increasing knowledge sharing.[845] This ancillary role of the Internet complements several other existing technical or technological instruments supporting local content. Such instruments consist primarily of other text, audio, or video technologies, but they also encompass oral knowledge sharing. Given the correlation between developing a network structure and local content growth, the Internet became the leading technology associated with local content development, prompting economic effects to the digital divide between developed and developing countries. This technological difference's main implications concern developing a reliable connectivity structure and determining the price of access for the end-user.

Notwithstanding, the importance acquired by the user's participation in the construction of informational content on the Internet is not limited to the material deliberately produced. All information generated from users' behaviour on the Internet is subject to technological harnessing, which explains the big data debate.[846] The technological exploration of big data as a measurable dimension of the information as a phenomenon has an economic equivalent. In this sense, it is possible to affirm that, for a given technology capable of harnessing information, the increase in the amount of data generated and collected implies an increase in value in the Internet economy. The verification of this relationship has permitted the mapping of the possible types of business involving administering a considerable amount of data. Likewise, the OECD has identified several opportunities and challenges in public policies related to data-driven innovations' economic exploitation.

Conclusions.

The description of the documents mentioned in this item reveals that the OECD's view on the Internet as an economic space has undergone profound changes from 1995 to 2013. Initial political commitments to constitute a Global Information Society as a reaction to constructing a Global Information Infrastructure had the ICTs as its building blocks. The ICTs personified the Internet's material dimension, and its sector's measuring represented measuring the Internet economy itself. This economy considered information its main element, and the

[845] See "Knowledge sharing and local content" in OECD, ISOC and UNESCO. **The Relationship between Local Content, Internet Development and Access Prices**. Paris. 2013, pp. 14-17.
[846] See "Understanding data and the drivers of their generation and use" in OECD. **Exploring Data-Driven Innovation as a New Source of Growth: mapping the policy issues raised by "big data"**. Paris. 2013d, pp. 8-12.

problems associated with the asymmetry in its distribution led to several correction efforts. One of these efforts resulted in identifying intermediaries as central players in conveying trust and security to the network, primarily due to increased B2C operations resulting from the substantial expansion in mobile access. This expansion shed light on the need for consumer empowerment, opening up a debate about the demand side's characteristics in the Internet economy.

The migration of the debate from the ICT sector to the demand's scope is in line with a more general aspect of building a truly global Internet economy. The necessity for technological structuring and sufficient access capacity to make up the global digital market requires dealing with the consumers and their material environment. Accessibility, in turn, is associated with several behavioural factors, which are not just about consumer preferences in this new economic environment. The Internet economy, rescuing the tradition of the early days of ARPANET, has been growing not just from technological innovations on the production side but also by its own users' growing amount of content. These users are not confused with consumers in the strict sense, and their structuring function in this economy has some distinguishing characteristics. Such characteristics enabled the development of new business models that exploit the enormous amount of data generated by merely using the Internet.

The emergence of the big data debate highlights the most distinctive characteristic that the OECD attributed to the Internet economy in 2013. The idea was that this economy was formed not only by the ICT sector or by the electronic emulation of traditional commercial activities but by the economic exploitation of a massive amount of information produced by users. In turn, this information was not limited to content deliberately created and made available on the network but encompassed behavioural standards about which users were not even aware. In the Internet economy, information is considered a phenomenon exploitable through the Internet as a general-purpose technology. This context helped form the framework within which the digital economy debate has initiated under the Base Erosion and Profit Shifting Project. Although this debate corresponds to a extension of the tax discussions on e-commerce, it has been strongly affected by the circumstances presented in this item, as shown next.

3.1.3. Taxation and Digital Economy.

The previous items showed two sets of documents reflecting both a tax

debate on electronic commerce and a broader political and economic construction of the Internet as an economic space. Although the Base Erosion and Profit Shifting (BEPS) Project was a watershed in adapting the tax discourse to the digital revolution, it represents the encounter of these independent and, to a certain extent, conflicting debates. On the one hand, the view of taxation as a potential political barrier to the development of electronic commerce (e-commerce) understood as a result of private activities. On the other, a political effort to create and connect local digital markets, building the global Internet economy in which e-commerce manifests itself. The tensions between these two perspectives were the background of the new debate on international taxation and the digital economy from 2013 on. Such tensions were not limited to defining the debate's initial terms, remaining present in the field even after the end of the BEPS Project in 2015.

The BEPS Project has consolidated the expression "digital economy" in the tax vocabulary, formalising a locus of discussion and identifying the central actors. Thus, Action 1 and the resulting Task Force on the Digital Economy (TFDE) became the beacon that guided the debate even outside the OECD. Nonetheless, the frustration associated with the 2015 Final Report made the TFDE extend its activities even after the BEPS Project ending. TFDE should continue its work until delivering a new final report, initially scheduled for the end of 2020 but later postponed due to the COVID-19 pandemic and the lack of consensus between countries. However, instead of its gradually ending, one witnessed the debate's expansion to areas not initially associated with the digital economy discussion. A constant linguistic change and a successive fragmentation of the themes have characterised this expansion, turning a debate restricted formerly to the digital economy into a comprehensive revision of the international tax discourse.

This item aims to describe the documents that constitute the international tax debate on the digital economy initiated within the scope of the TFDE. The premise is that these documents' analysis demonstrates that the digital economy debate has become a broad discussion about the international tax discourse itself. The hypothesis is that the digital revolution is responsible for the fragmentation of the debate and its conversion into a comprehensive discussion about the international tax discourse's main categories. The item begins by describing the initial terms of the debate under Action 1, the content of the 2014 deliverable, and the feeling

of frustration that followed its final report's publication in 2015. Afterwards, the item describes the TFDE's intermediary documents produced from 2016 to 2019 to support a new final report in 2020. Finally, the item describes the documents published in 2020 and 2021, demonstrating an expansion of its agenda beyond the TFDE in place of ending the debate.

BEPS and Action 1.

The document that defines BEPS and guides the subsequent discussion presents substantial remnants of the e-commerce debate's language.[847] It invokes the idea of digital goods in opposition to digital services, emulates an industrial aesthetic for its production, and highlights the digital economy as a driver for global business practices. The document also considers the digital economy as an element of a broad debate on BEPS, highlighting digitalisation as an incidental factor related to globalisation. Based on a perspective emphasising the virtualisation process, it highlights the dematerialisation of production and geographical aspects. Thus, the impacts of the digital economy in the international tax field categories were evident, especially concerning the worsening of the intangibles pricing issue and the determination of profits allocation. The digital economy also presented difficulties related to the definition of permanent establishment and taxable jurisdiction, threatening international tax principles.

After defining BEPS and its harmful impacts, the OECD published a new document in which it delimited the boundaries of the debate on the digital economy within the scope of Action 1.[848] This document utilises a broader language vis-à-vis its predecessor, attributing a new meaning to the digital economy. Although maintaining the expression in an exogenous and causal sense in several passages concerning globalisation and trade expansion, the document introduces a more omnipresent connotation. The digital economy was no longer an accessory factor to trade, encompassing the very context in which business relations occur. The hybrid character acquired by the digital economy is manifest in the way it relates to the themes belonging to the other actions that form the plan to combat BEPS. While the digital economy is the central subject of a specific agenda, Action 1 behaves as a meta-action, interacting with the

[847] See OECD. **Addressing Base Erosion and Profit Shifting**. OECD Publishing: Paris. 2013b.
[848] See OECD. **Action Plan on Base Erosion and Profit Shifting**. OECD Publishing: Paris. 2013a.

other actions without belonging to any specific subgroup.[849]

Action 1 presupposes the idea that traditional practices have proved inadequate to deal with the changes resulting from the digital economy's emergence. Hence, the document proposed repairing the field's instruments to preserve those practices' essence, especially the international tax principles.[850] This objective explains the close relationship of Action 1 with the other actions of the BEPS Project, since these, as a whole, also seek to adapt the field's instruments to the current reality. However, Action 1 highlights the digital economy as a catalyst for this inadequacy, resulting in the technological metaphors' popularisation, like "significant digital presence". In the same vein, from the idea of digital goods and services, a preoccupation arises concerning identifying how the respective business models create value and allocate the resulting profits. Finally, Action 1 maintained the electronic commerce debate tradition of separating direct from indirect taxes, restricting value-added tax (VAT) to a tax collection debate.

The 2014 deliverable.

Among the various deliverables published by the OECD in 2014, the organisation issued a report presenting the background of adopting the BEPS Action Plan, summarising the TFDE's work. The document went further and itemised the fundamental principles applicable to both cross-border income taxation and VAT.[851] It maintained the tradition of measuring the digital economy's material development by identifying the influence of ICTs' developments on the economy. Thus, the document presents the evolution of ICTs, lists emerging technologies, and elaborates on the Internet's layered system to facilitate business models' exposure.[852] These business models play a fundamental role in the report's logic, as they represent

[849] The document cites four groups of actions: (i) establishing international coherence of corporate income taxation; (ii) restoring the full effects and benefits of international standards; (iii) ensuring transparency while promoting increased certainty and predictability; (iv) from agreed policies to tax rules: the need for a swift implementation of the measure. Action 1 does not belong to any of them, appearing in the document before the groups' division. See "Actions" in OECD. **Action Plan on Base Erosion and Profit Shifting**. OECD Publishing: Paris. 2013a, pp. 14-24.
[850] See "Action 1 Address the tax challenges of the digital economy" in OECD. **Action Plan on Base Erosion and Profit Shifting**. OECD Publishing: Paris. 2013a, pp. 14-15.
[851] See "Fundamental principles of taxation" in OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2014 Deliverable**. OECD Publishing: Paris. 2014, pp. 29-50.
[852] See "Information and communication technology and its impact on the economy" in OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2014 Deliverable**. OECD Publishing: Paris. 2014, pp. 51-67.

the essence of the presented idea of the digital economy. The characteristics associated with traditional businesses made virtual, plus the new business models resulting from technological advances, are described as features of the digital economy itself.[853]

The document recapitulates the most critical BEPS strategies by contextualising them from the digital economy's new scenario. It then informs how the work developed in other actions may address these BEPS issues, highlighting the digital economy's main features to consider.[854] Among the tax challenges arising from the digital economy, the document cites the nexus issue and the possibility of significant presence without tax liability. Likewise, the document highlights the role of data and the difficulty in attributing the value created, and the problems associated with the characterisation of income and VAT collection.[855] Assuming that the other actions will also impact solving the digital economy's challenges, the document ends by presenting some possible options to be adopted. Although suggesting an exemption in importing low-value goods and the institution of registration for remote sales to consumers, it is in the field of direct taxation that the document left its mark.[856]

The document was responsible for consolidating one of the central beliefs that started to appear in the digital economy's tax vocabulary. The assumption that it would not be possible to ring-fence the digital economy stems from the premise that it is becoming the economy itself.[857] The lack of distinction between digital and traditional economies also made the report conclude that the digitalisation process brought about no strictly new challenges. In this sense, the digital economy's characteristics, identified from the new business models it provides, would be responsible for merely exacerbating the already existing BEPS risks.[858] This

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[853] See "The digital economy, new business models and key features" OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2014 Deliverable**. OECD Publishing: Paris. 2014, pp. 69-97.

[854] See "Identifying opportunities for BEPS in the digital economy" and "Tackling BEPS in the digital economy" in OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2014 Deliverable**. OECD Publishing: Paris. 2014, pp. 99-121.

[855] See "Broader tax challenges raised by the digital economy" in OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2014 Deliverable**. OECD Publishing: Paris. 2014, pp. 123-139.

[856] See "Potential options to address the broader tax challenges raised by the digital economy" in OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2014 Deliverable**. OECD Publishing: Paris. 2014, pp. 141-155.

[857] See "The digital economy, its business models, and its key features" in OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2014 Deliverable**. OECD Publishing: Paris. 2014, p. 157.

[858] See "BEPS issues in the digital economy and how to address them" and "Broader tax policy challenges raised by the digital economy" in OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2014 Deliverable**. OECD Publishing: Paris. 2014, pp. 157-159.

transversal view of the digital economy resulted in the idea that it would be necessary to wait to conclude the other BEPS Project's actions, as they would also contribute to face such risks. With that, TFDE did not advance in an agenda focused on the digital economy but only to analyse the business models that operate within it.[859]

The 2015 Final Report.

Although essentially repeating the content of the 2014 deliverable, the final report of 2015 was responsible for consolidating some positions that were developing during the TFDE debate. The main one was to relate the digital economy to remote operations that permit full economic involvement with a local market in a fragmented manner without characterising a permanent establishment (PE).[860] What would allow this situation would be the intensive utilisation of intangibles, especially data, in expanding companies' global value chain. These elements belong to a specific debate related to the adequacy of transfer pricing rules to the new economic reality, the object of Actions 8, 9, and 10.[861] Likewise, such a new economic scenario has also produced a debate about applying Controlled Foreign Corporation (CFC) rules to mobile incomes deriving from intangible goods.[862] For this reason, the report also highlighted the correlation between the TFDE's work with the CFC debate promoted under Action 3.

The final report also has offered suggestions for measures that countries could implement, which have become part of some national agendas.[863] The first was the recommendation that the imposition of a withholding tax by market jurisdictions could minimise digitalisation's deleterious effects. The second was the idea of significant economic presence, in harmony with the endeavour to offer specific reactions to business activities associated with the

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[859] See "Next steps" OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2014 Deliverable**. OECD Publishing: Paris. 2014, p. 159.

[860] For this reason, the report highlighted the particular importance of Action 7 (preventing the artificial avoidance of PE Status) for TFDE's work. See "BEPS issues in the digital economy and how to address them" in OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2015 Final Report**. OECD Publishing: Paris. 2015a, pp. 144-145.

[861] See "The importance of intangibles, the use of data, and the spread of global value chains, and their impact on transfer pricing rules" in OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2015 Final Report**. OECD Publishing: Paris. 2015a, pp. 145-146.

[862] See "The possible need to adapt CFC rules to the digital economy" in OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2015 Final Report**. OECD Publishing: Paris. 2015a, p. 146.

[863] See "Broader tax policy challenges raised by the digital economy" in OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2015 Final Report**. OECD Publishing: Paris. 2015a, pp. 146-148.

digital economy's virtual character. Although referring to an "economic" instead of a "digital" presence, the report merged economic and digital elements when listing the factors capable of establishing a new nexus for the concept. The third was the equalisation levy, a tax imposition that aims to repair the imbalances caused by digitalisation without identifying the actual existence of income. It is essential to highlight that the final report dealt separately with income taxation, related to the three suggestions mentioned, and consumption taxation, concerning VAT.

Although the document theoretically marked the end of Action 1 within the BEPS Project's scope, it concluded that there was a need to extend the work of the TFDE.[864] Consequently, the report affirmed the necessity to grant a new mandate to the TFDE in 2016 to continue its work until 2020, when it should have produced a new final report. The 2015 final report has also indicated the central object in the post-BEPS debate on the digital economy, maintaining the *modus operandi* established in the old TAGs about electronic commerce. In this sense, the TFDE must dedicate itself to analysing the so-called highly digitalised business models as the digital economy's expression. The document also served to definitively separate the debate on the direct taxation of the Value Added Tax and Goods and Services Tax (VAT/GST). Accordingly, the report concluded that it was necessary to adopt the VAT/GST Guidelines, attributing to the Working Party 9 the prerogative to conduct this debate.

The post-BEPS debate and the 2018 Interim Report.

The 2018 interim report brought a linguistic innovation, adopting a dynamic perspective when referring to a "digitalisation" in place of a "digital economy". Instead of the traditional static description, the interim report stresses the occurrence of a digitalisation process, presenting a new narrative on the work done so far.[865] Therefore, the report highlighted the impacts of digitalisation on society and the global economy caused by communication and information technologies. In this sense, the document applies this reconstruction to the history of the work carried out under BEPS Action 1 since the final report of 2015.[866] However, the interim

[864] See "Next steps" in OECD. **Addressing the Tax Challenges of the Digital Economy, Action 1 - 2015 Final Report**. OECD Publishing: Paris. 2015a, p. 149.
[865] See "Foreword" in OECD. **Tax Challenges Arising from Digitalisation – Interim Report 2018: Inclusive Framework on BEPS**. OECD Publishing: Paris. 2018b, pp. 3-4.
[866] See "Introduction to the Interim Report on the Tax Challenges Arising from Digitalisation" in OECD. **Tax Challenges Arising from Digitalisation – Interim Report 2018: Inclusive Framework on BEPS**. OECD

report has chosen to keep the analysis centred on business models understood as highly digitalised, adopting a casuistic perspective that restricted the economy to business. Such an analysis revealed the new digital value creation characteristics: cross-jurisdictional scale without mass, reliance on intangible assets, and big data and user participation.[867]

The report also resumed the connection between the digital economy debate with the other actions of the BEPS Project, as mentioned in previous reports. In this sense, it presented the results of implementing the BEPS packages in several countries, highlighting the actions that have a more significant relationship with the digitalisation process.[868] In the same vein, the report presents a general overview of the main unilateral measures adopted by countries in response to the digitalisation process. These measures consist of adopting alternative parameters to characterise a permanent establishment, instituting a withholding tax, using turnover taxes, and creating specific regimes.[869] The report also highlights countries' different positions concerning the tax impacts arising from the economy's digitalisation. Although the business models' description and the definition of their essential elements were well received, the countries disagreed about the actual necessity to modify the then established international tax rules.[870]

Given the lack of agreement between countries, the report has preferred to present a list of parameters to deal with the possible temporary measures to be implemented unilaterally by local jurisdictions to mitigate the digitalisation impacts. Such measures should be in line with obligations internationally assumed, not conflicting with tax treaties, be temporary and targeted, and be concerned with minimising over taxation, its impact on small businesses, costs, and complexity.[871] However, the report was not limited to the impacts of digitalisation on international tax rules. The dynamic view adopted in the report has opened space for the analysis of

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Publishing: Paris. 2018b, pp. 11-22.

[867] See "Digitalisation, business models and value creation" in OECD. **Tax Challenges Arising from Digitalisation – Interim Report 2018: Inclusive Framework on BEPS**. OECD Publishing: Paris. 2018b, pp. 23-87.

[868] See "Implementation and impact of the BEPS package" in OECD. **Tax Challenges Arising from Digitalisation – Interim Report 2018: Inclusive Framework on BEPS**. OECD Publishing: Paris. 2018b, pp. 89-131.

[869] See "Relevant tax policy developments" in OECD. **Tax Challenges Arising from Digitalisation – Interim Report 2018: Inclusive Framework on BEPS**. OECD Publishing: Paris. 2018b, pp. 133-164.

[870] See "Adapting the international tax system to the digitalisation of the economy" in OECD. **Tax Challenges Arising from Digitalisation – Interim Report 2018: Inclusive Framework on BEPS**. OECD Publishing: Paris. 2018b, pp. 165-176.

[871] See "Interim measures to address the tax challenges arising from digitalisation" in OECD. **Tax Challenges Arising from Digitalisation – Interim Report 2018: Inclusive Framework on BEPS**. OECD Publishing: Paris.

the impact of the process on the government's activities and the tax administration.[872] Finally, the report has concluded that more work was necessary for the areas described above, highlighting the Inclusive Framework's legitimating role. The report also highlighted the necessity of a work update in 2019, reiterating the need for a new final report in 2020.[873]

The 2019 Programme of Work.

The characteristics of the highly digitalised businesses pointed out by the 2018 Interim Report caused an opening of the debate within the scope of TFDE, resulting in several proposals by the members of the Inclusive Framework (IF). As a reaction to this openness, the OECD Secretariat took the initiative to elaborate a work proposal condensing the debate in two strands baptised as "pillars".[874] Pillar One brought together the proposals identified as "user participation", "marketing intangibles", and "significant economic presence". Although differing in some respects, they all involve shifting part of taxation to the consumers' or users' jurisdiction.[875] Pillar Two, in turn, consisted of an attempt by the OECD to condense all proposals related to the perception that there would still be BEPS aspects not resolved. The consequence was the fragmentation of the digital economy's tax agenda in an apparent effort by the OECD's supranational bureaucracy to advance the political debate.

Pillar One aimed to unify the different positions adopted by countries in reaction to the 2015 Final Report and the 2018 Interim Report. Its approach aims at revisiting profit allocation and nexus rules applicable to consumer-facing businesses, offering solutions

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2018b, pp. 177-192.

[872] See "Special feature - Beyond the international tax rules: The impact of digitalisation on other aspects of the tax system" in OECD. **Tax Challenges Arising from Digitalisation – Interim Report 2018: Inclusive Framework on BEPS**. OECD Publishing: Paris. 2018b, pp. 193-210.

[873] See "Conclusion to the Interim Report on the tax challenges arising from digitalisation" in OECD. **Tax Challenges Arising from Digitalisation – Interim Report 2018: Inclusive Framework on BEPS**. OECD Publishing: Paris. 2018b, pp. 211-213.

[874] While highlighting the need for strong political engagement, the document that conveys this proposal for narrowing the debate recognises having left out some options related to the allocation of taxing rights. See "Introduction" in OECD. **Programme of Work to Develop a Consensus Solution to the Tax Challenges Arising from the Digitalisation of the Economy**. OECD/G20 Inclusive Framework on BEPS: Paris. 2019d, pp. 5-9.

[875] The proposals also coincide in establishing new nexus rules regardless of physical presence and adopting more simplified profit allocation models alongside the current rules. See "Revised Nexus and Profit Allocation Rules (Pillar One)" in OECD. **Programme of Work to Develop a Consensus Solution to the Tax Challenges Arising from the Digitalisation of the Economy**. OECD/G20 Inclusive Framework on BEPS: Paris. 2019d, p. 11.

related to the allocation of new taxing rights.[876] Such solutions reallocate taxing rights to the market or users' jurisdiction given the unnecessary physical presence of the Multinational Enterprises (MNEs). This reallocation adopts a hybrid transfer pricing formulary system in line with the Arm's Length Principle (ALP), avoiding double taxation and proposing a robust tax disputes prevention mechanism. This system applies to consumer-facing businesses considering three profit categories, the first consisting of some portion of the group's profits deemed residual. The second category refers to fixed remuneration for baseline marketing and distribution activities in market jurisdictions, while the third reflects local group functions beyond these activities as determined in light of the ALP.

In parallel, Pillar Two corresponds to the so-called Global Anti-Base Erosion (GloBE) proposal, aiming to establish a minimum taxation level for internationally operated businesses. Unlike the previous one, this pillar did not arise from a conflict of competing proposals but only from the alleged finding that specific facts were taking place.[877] These facts correspond to the remaining BEPS issues whose uncoordinated combat can increase system complexity and provoke excessive taxation. Thus, the GloBE proposal intends to face the profit shifting risks associated with the use of intangibles without, however, supporting the ring-fence of the digital economy. Although the proposal is associated with a multilateral effort whose results allow to remove the pressure on developing countries, it has equivalents at the states' domestic level. The most notorious example is the American debate over the imposition of minimum taxation that introduced the global intangible low-taxed income (GILTI) regime.

The 2020 Blueprint on Pillar One.

In the COVID-19 pandemic context, the OECD published its report on the Blueprint on Pillar One to adapt international income taxation to the new digital business models. The report foresees a new allocation of taxing rights related to a tax base called Quantity A,

[876] See "Revised Nexus and Profit Allocation Rules (Pillar One)" in OECD. **Programme of Work to Develop a Consensus Solution to the Tax Challenges Arising from the Digitalisation of the Economy**. OECD/G20 Inclusive Framework on BEPS: Paris. 2019d, pp. 9-23.

[877] See "Global anti-base erosion proposal (Pillar Two)" in OECD. **Programme of Work to Develop a Consensus Solution to the Tax Challenges Arising from the Digitalisation of the Economy**. OECD/G20 Inclusive Framework on BEPS: Paris. 2019d, pp. 23-33.

depending on the activity performed and the monetary amount involved.[878] This attribution comes from new nexus rules aiming to protect smaller jurisdictions, representing a migration of the tax base to the market country. These rules involve the establishment of quantitative limits and time requirements associated with specific tests that necessitate, however, additional technical work.[879] This migration symbolises a new orientation in the duality between source and residence, implying an appreciation of income taxation in the jurisdiction where the consumption of goods and services occurs. Thus, the report lists several activities submitted to the new nexus rules and whose volume of operation will be subject to formulas for allocating amounts to the country of source.[880]

When a company belongs to a grouping, the tax base determination derives from three categories recognised in the group's consolidated financial accounts. Such determination includes the definition of a profit measure, the election of a technical segmentation criterion, and the design of carry-forward rules to guarantee the compensation of eventual losses.[881] Such a method applies a three-phase profit allocation formula, which does not necessarily harmonise with the ALP. Thus, a residual profit potentially subject to reallocation is determined by a profitability threshold, applying an allocating percentage to, finally, distribute the portion according to the nexus rules and the revenue obtained locally.[882] Nonetheless, these rules do not exclude applying traditional allocation rules, which raised double taxation concerns. Hence, the report proposes eliminating double taxation by identifying the paying entity and employing exemption and credit methods with a safe harbour for marketing and distribution profits.[883]

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[878] See "Executive summary" and "Scope" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project (Launch version)**. Paris: OECD Publishing, 2020b, pp. 10-64.

[879] See "Nexus" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project (Launch version)**. Paris: OECD Publishing, 2020b, pp. 65-70.

[880] See "Revenue sourcing rules" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project (Launch version)**. Paris: OECD Publishing, 2020b, pp. 71-99.

[881] See "Tax base determinations" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project (Launch version)**. Paris: OECD Publishing, 2020b, pp. 100-122.

[882] See "Profit allocation" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project (Launch version)**. Paris: OECD Publishing, 2020b, pp. 123-138.

[883] See "Elimination of double taxation" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project**

Nevertheless, the document maintained the ALP applicable to the related parties' remunerations when the distributors carry out "baseline marketing and distribution activities". This remuneration, called Amount B, is subject to the OECD's functional analysis, which considers risks assumed, assets employed, and functions performed.[884] The use of a formulary system complemented by the ALP application resulted in concern with tax certainty in determining each amount. Hence, the document dealt with the process of preventing disputes both concerning Amount A and beyond, suggesting mandatory and binding dispute resolution mechanisms.[885] Following the procedure consolidated since the e-commerce debate, the document suggested an implementation founded on the international articulation of domestic legislative modifications. As a result, the internationalisation of domestic changes should be accompanied by eliminating unilateral measures and providing technical assistance to tax administrations and taxpayers.[886]

The 2020 Blueprint on Pillar Two.

The Report on Pillar Two Blueprint intends to present rules to address the remaining BEPS challenges so that all internationally operating businesses submit to a minimum taxation level. These rules aim to identify groups and entities reached, determine exclusions, and establish a minimum incidence parameter.[887] The idea is to define an effective tax rate based on a metric that considers the company's jurisdiction of residence, in addition to several consolidation adjustment factors. This effective rate applies to a tax base determined from the company's balance sheet, determining profits or losses following specific financial accounting standards.[888]

(Launch version). Paris: OECD Publishing, 2020b, pp. 123-138.

[884] See "Amount B" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project (Launch version)**. Paris: OECD Publishing, 2020b, pp. 160-173.

[885] See "Tax Certainty" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project (Launch version)**. Paris: OECD Publishing, 2020b, pp. 174-204.

[886] See "Implementation and administration" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project (Launch version)**. Paris: OECD Publishing, 2020b, pp. 205-211.

[887] See "Executive Summary" and "Scope of the GloBE rules" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar Two Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project**. Paris: OECD Publishing, 2020c, pp. 13-43.

[888] See "Calculating the ETR under the GloBE rules" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar Two Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project**. Paris: OECD Publishing, 2020c, pp. 44-80.

In this determination, it is possible to make two adjustments, the first relating to the carry-forward of losses incurred due to the excess of taxes paid in previous periods. The second consists of a substance-based formulaic carve-out to exclude a fixed return for substantive activities within a jurisdiction from the GloBE rules' scope.[889]

In response to the December 2019 Public Consultation, the report presented simplification options for establishing the GloBE rules. These options included an ETR safe-harbour, a *de minimis* profit exclusion, a single jurisdictional ETR calculation to cover several years, and a tax administrative guidance.[890] Thus, the document suggested a top-down Income Inclusion Rule (IIR) subjected to a further rule concerning "split-ownership structures". The document also proposed a switch-over rule allowing the exemption method's limitation when PE's profits are low tax profits of a Constituent Entity under the GloBE rules.[891] The Undertaxed Payments Rule (UTPR), in turn, applies to cases of income of low-tax Constituent Entities, aiming at protecting jurisdictions against base erosion deriving from intra-group payments. Although with similar purposes, UTPR is a backstop to IIR, reducing incentives for tax-driven inversions through a mechanism for adjustment concerning Constituent Entity's profits not in the scope of the IIR.[892]

Besides the general rules mentioned above, the document also dealt with two specific rules for associates and joint ventures, plus orphan entities. The first case relates to a simplified form of IIR, while the second concerns the extension of UTPR application to situations potentially resulting in BEPS risk.[893] The preoccupation with this risk is the very foundation of Pillar Two, which also led the document to suggest a "subject to tax" rule to complement

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[889] See "Carry-forwards and carve-out" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar Two Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project**. Paris: OECD Publishing, 2020c, pp. 81-102.

[890] See "Simplification options" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar Two Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project**. Paris: OECD Publishing, 2020c, pp. 103-108.

[891] See "Income Inclusion and Switch-Over Rules" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar Two Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project**. Paris: OECD Publishing, 2020c, pp. 109-119.

[892] See "Undertaxed Payments Rule" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar Two Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project**. Paris: OECD Publishing, 2020c, pp. 120-140.

[893] See "Special rules for Associates, joint ventures and orphan entities" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar Two Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project**. Paris: OECD Publishing, 2020c, pp. 141-146.

all the previous rules. The "subject to tax" consists of a treaty-based rule aimed explicitly at minimising BEPS risks in the source jurisdiction arising from intra-group payments taking advantage of low nominal rates.[894] The articulation of all these rules with the preservation of Pillar Two's objectives, in turn, depends on international coordination efforts to give effectiveness and certainty to the measures adopted. In this way, the document ends by presenting a rule order framework within which the different elements of Pillar Two should operate.[895]

Conclusions.

The analysis of the documents associated with the digital economy debate since the BEPS Project's release has demonstrated its initial characteristics and subsequent transformations. The BEPS Project is the inheritor of two distinct discursive trajectories: a specific debate on taxation as a barrier to electronic commerce and a general debate on the political construction of a global Internet economy. The encounter of these trajectories explains the dual character incorporated in the BEPS Project's initial documents. The digital economy was both the object of a particular action and the context in which all other actions have placed themselves. The digital economy's preponderance as a context over its image as a particular object has resulted in a fundamental linguistic transformation in the documents. The OECD started to adopt a dynamic perspective when employing the expression "digitalisation of the economy" instead of "digital economy", albeit restricting the analysis to its business models.

The analysis of business models goes back to technical documents that precede the BEPS Project and is associated with searching for "digital patterns" identified in the economic activities. However, and especially after the BEPS Project's conclusion in 2015, this methodology resulted in quite different perceptions from the growing number of actors involved in the debate. Digitalisation is a complex phenomenon, and this complexity, associated with the different political views of countries, has resulted in conflicting positions. This divergence made

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[894] See "Subject to tax rule" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar Two Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project**. Paris: OECD Publishing, 2020c, pp. 147-167.

[895] See "Implementation and Rule Co-ordination" in OECD. **Tax Challenges Arising from Digitalisation – Report on Pillar Two Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project**. Paris: OECD Publishing, 2020c, pp. 168-177.

clear the difficulty of obtaining the necessary consensus for producing a final report in 2020, requiring intervention by the supranational bureaucracy. The result was an effort by the OECD Secretariat to create a unified approach, addressing the main actors' central concerns. This effort produced a new metaphorical language invoking two pillars to return to the original BEPS concerns and solve the emerging dissatisfaction with the criteria for allocating taxing rights.

Despite the OECD's efforts, both as an international forum as a supranational bureaucracy, the debate has treated the economy's digitalisation as a black box. Traditional businesses are submitted to this phenomenon, while relatively digitalised businesses are the consequence of an unfamiliar process. Nonetheless, the lack of knowledge on this process's essence, associated with the constant transformation of its results, makes an imminent end of the OECD's digital tax debate unlikely. Such a context has caused the countries to reach different conclusions and has shifted the debate's focus from formal elements towards substantial aspects to, finally, assume an undeniable political character. Regardless of the interests responsible for these divergent positions, the disagreement may be legitimate depending on the premises assumed. This divergence also appears in other stakeholders' equally conflicting positions, notably of taxpayers, academics, and other governmental entities, as the following subchapter will demonstrate.

3.2. Interpretation and interaction.

The description made in the previous subchapter about the documents published by the OECD on the process of digitalisation of the economy has a fundamental assumption. Although usually treated as given, these documents are, at the same time, the result of previous discursive interaction and the source from which this interaction process continues. Consequently, external actors have produced new texts from their reaction to the earlier documents so that such succession of texts forms a broader debate. This debate involves all other participants that constitute the epistemological community of specialists in international taxation. In addition to the public sector, two different groups of actors have traditionally occupied a crucial position in constructing international tax discourse, having participated in the making of the analysed governmental texts. As international tax actors, taxpayers and academics have a central

role in understanding the context of the digital economy debate centred on the OECD's work.

The digital economy debate's interpretation depends on the capacity to move from reading the previous subchapter texts to understanding their context. Such a move is only possible if the interpreter has prior knowledge about the debate's structuring elements, such as previous debates, actor's features and, mainly, the system of ideas unifying the epistemic community. This notion means that the interpretation presupposes an incursion into the ideological foundations of the actors' conduct in the interaction process. In other words, interpreting this process corresponds to analysing each of the actors' cognitive assumptions. However, given the plurality of taxpayers and academics, a detailed analysis of each singular ideological presumptions is impossible. On the other hand, this plurality is not so accentuated as to make unfeasible the construction of a matrix of attitudes directed towards the digital economy debate, revealing behaviours associated with specific moments of the interaction process.

This subchapter aims to identify taxpayers' and academics' reactions to the OECD's work, interpreting the context of the international tax debate on the digital economy. The premise is that this interpretation presupposes the identification of the actors' conducts and that it is possible to build a matrix of attitudes from the texts produced by these actors. The hypothesis is that the interaction analysis reveals that the debate is structured on formal considerations, goes through the material aspects involving tax incidence, and reaches international taxation's political dimension. Item 3.2.1 presents taxpayers' different reactions to the OECD's work, mainly from the documents presented at public consultations. Item 3.2.2 identifies the academic's attitudes towards the digital revolution's influence on the international tax legal discourse. Finally, item 3.2.3 consolidates the interaction process and explores the debate's development in its formal, material, and political dimensions.

3.2.1. Taxpayers and the public consultations.

The previous subchapter presented an overview of the tax debate involving the digital revolution based on international and supranational bureaucracies' perspective. According to the dichotomy that dominates the tax thinking, the antagonists to those governmental agents are the taxpayers. Although, as will be demonstrated in this chapter, the expression

is not very precise, “taxpayers” here alludes to actors who do not necessarily compromise with an academic attitude or belong to the public sphere. The importance of identifying these actors stems from the fact that it is on them that the phenomenon of taxation imposes its effects, directly or indirectly. Therefore, for their connection with the international taxation’s phenomenological dimension, analysing these actors’ behaviour becomes relevant. Taxpayers had central participation in the debate promoted by the Task Force on the Digital Economy (TFDE), offering inputs and criticisms on the work, mainly through public consultations.

On the other hand, the sense of unity offered by the expression “taxpayers” obscures these actors’ multiplicity of attitudes towards the digital economy debate. Such diversity is strongly associated with their distinct roles before the phenomenon of taxation, but it goes beyond the traditional dichotomy between bearing the tax burden *de facto* or *de jure*. The divergent ways individual taxpayers and multinational companies experience the effects of taxation and build their perceptions of it are evident. However, different activities, sizes, business cultures, or even internal cleavages within the organisation may also result in distinct reactions. These reactions range from protecting their most private commercial interests to searching to preserve tax values considered fundamental in the field. Although it is not possible to analyse each of the countless documents presented, the selected interventions allow elaborating a general framework of arguments and attitudes that demonstrate the evolution of taxpayers’ discourse.

This item aims at presenting a condensation of the attitudes expressed by the distinct taxpayers towards the work started within the TFDE. The premise is that the analysis of oral and written manifestations presented at public consultations allows classifying the taxpayers’ reactions. The hypothesis is that the first reactions against the work itself gave rise to taxpayers’ greater involvement, embodied in a struggle to build a technical discourse in contrast to the debate’s political dimension. The item begins by presenting the first public consultations regarding the 2014 and 2018 reports, in which the taxpayers outlined their initial reactions to the debate. Afterwards, the item demonstrates the debate’s intensification in 2019 from the three public consultations related to Pillars One and Two and its growing acceptance. Finally, the item presents the 2021 public consultation on Pillar One and Two Blueprints, evidencing the rise of a robust technical attitude in response to the political dimension of international taxation.

23 April 2014 - The Tax Challenges of the Digital Economy.

On 23 March 2014, the OECD welcomed public comments to a discussion draft elaborated on the digital economy's tax challenges. The invitation resulted from an effort to include all stakeholders interested in the subject, such as businesses (particularly the BIAC), non-governmental organisations, think tanks, and academia.[896] The discussion draft was the basis of the 2014 deliverable, almost entirely repeated in the 2015 Final Report. Hence, its content involved the digital economy's essential features, its relationship with BEPS issues, and the potential broader tax challenges.[897] Notwithstanding, the discussion draft's content emerged from the information obtained from different stakeholders about the digital revolution's impacts on business activities. Therefore, before a more general public consultation, the TFDE had already received several responses regarding the intersection between the nature of the business activities and the effects of the information and communication technologies' evolution.[898]

The first group of responses has emphasised elements connected to the necessity of adequate treatment instituted according to the taxpayer's specific circumstances. Such a treatment ranges from excluding highly regulated sectors from the OECD-sponsored debate to competitiveness issues involving digital versus traditional companies.[899] The second group of responses emphasised the significance of control in understanding the digitalisation phenomenon and highlighted the difficulty in pricing, especially intangibles. The control argument referred both to the provision of goods and services in particular, as to the business opera-

[896] The invitation for public comments on the discussion draft on the tax challenges of the digital economy is available in http://www.oecd.org/tax/discussion-draft-action-1-tax-challenges-digital-economy.htm. Access date: 3 Feb 2021.

[897] Item "3.1.3. The Task Force on the Digital Economy" has presented the 2014 deliverable and the 2015 Final Report, see "BEPS and Action 1". The Discussion Draft on Action 1 is available in http://www.oecd.org/tax/discussion-draft-action-1-tax-challenges-digital-economy.htm. Access date: 7 Feb 2021.

[898] See the Compilation of Comments Received in Response to Request for Input on Tax Challenges of the Digital Economy available in https://www.oecd.org/ctp/comments-received-tax-challenges-digital-economy.pdf. Access date: 7 Feb 2021. The page numbers quoted in the next paragraph refer to this document.

[899] AFME and the BBA (p. 4) maintained the need to exclude the financial sector since it would already be highly regulated. EBF (p. 55) highlighted the emergence of e-banking and states that the OECD models' primary objective is to avoid double taxation, which is why the Mutual Agreement Procedure must apply to any suggestion. GSM (p. 61) underlined the existence of inconsistencies in domestic tax systems and the distortions between regulated and unregulated telecommunications services. Anonymous 2 (p. 91) affirmed that there are disadvantages for Japanese domestic advertising companies compared to foreign rivals. Solocal (p. 92) reported that the "yellow pages" have just migrated from the paper advertisement to the Internet and that their fear is the global advertising companies' tax planning. Baker & McKenzie (p. 40) said that the debate focuses on remote sales and on-line advertising, suggesting its expansion to different platforms involving sharing economy, intermediation, content, software, and aggregated data, including social networks.

tion as a whole, while the pricing issue rescued the vocabulary of transfer pricing rules.[900] The third group contrasted, to some extent, with the first by arguing that the digital is not so different from the traditional economy. According to this group, despite significant changes in doing business, the digital revolution would not have affected the value creation process.[901]

The taxpayers commented on the discussion draft, supporting the OECD initiative, and ratifying the principles set out in the 1998 Ottawa Ministerial Conference. The dominant position was one of extreme caution, emphasising the dangers of adopting the proposals suggested in the draft and highlighting the need to wait for the end of the other actions of the BEPS Project to analyse their results.[902] However, some taxpayers underscored the need to

[900] Bates White Economic (p. 6) indicated the ability to control as a differential between the sale of a digital asset and streaming, highlighting the difficulty of pricing based on comparisons with alternatives. The BEPS Monitoring Group (p. 18) highlighted that the digital economy is a vast phenomenon and separates the change in traditional arrangements and structures from new types of relationships. In both cases, the issue of control is central, so that firms integrated under central control must be considered as one unit for tax purposes. Accountancy Bodies Ireland (p. 24) claimed not being able to determine where its tax residence is, raising the issue of control over the company's management. WTS (p. 99) focused on transfer pricing rules, stating that the most important asset in the digital economy is intellectual property: brand, logistical concepts, software, and user-based network. Greenwich Consulting (p. 57) adopted a descriptive posture, presenting the schemes and impacts of OTTs. Similarly, the International Bar Association (p. 63) differentiated digital ordering of physical goods from digital downloads, explaining the cloud-based services.

[901] The Chartered Institute of Taxation (p. 28) questioned whether the digital economy is different, claims that data has no intrinsic value, and highlights the danger of switching taxation to consumption to discover that the decision was not the right one. Deloitte (p. 31) claimed that there is no separate digital economy, highlighting three business models: high-frequency trading, cloud computing services, and advertising. Informa Group (p. 80) said that, in essence, the dissemination and media activity has not changed, only its vehicle, seeing potential difficulty in allocating profits given the dispersion of content creation sources. Swiss Banking (p. 96) stated that the generation of value remained the same; the change was only concerning the customer's communication channel.

[902] The Comments Received On Public Discussion Draft are available in http://www.oecd.org/tax/comments-action-1-tax-challenges-digital-economy.htm. Access date: 12 Mar 2021. The page numbers quoted in this paragraph refer to this document. AmCham EU (p. 16) highlighted the role of the OECD in the debate, alleges that the assumption that business can be "conducted wholly digitally" is wrong, criticises withholding tax for contrasting with the attempt to avoid the ring-fence, and condemns taxation of data for negatively affecting the economy. Also supporting the work of the OECD, ABI (p. 21) argued that the Draft suggestions should not be implemented before the end of the other Actions. The Austrian Federal Economic Chamber (p. 23) was concerned with the impacts of the system's inconsistencies on the loss of the Austrian tax authority's tax base and market competition distortions. Banking and Finance Company Working Group on BEPS (p. 28) recommended waiting for the BEPS Project to end, having shown concern about applying the consumption tax model to the financial sector. The BIAC (p. 43) demonstrated preoccupation about opening the debate to topics that belong to the other actions of the project, suggesting that the Draft is not the best place to debate issues of source and residence, in addition to sustaining the separation between taxation in origin and destination based on income and consumption, respectively. British Sky Broadcasting (p. 83) reiterated the Ottawa Convention's principles, suggesting a new one, according to which no new taxes should result from the project's responses to the digital economy's challenges. Business Europe (p. 91) was emphatic in stating that "market" and "place of consumption" should not be a factor in allocating income for tax purposes. Adopting the same wording, the Confederation of Swedish Enterprise (p. 132) added the negative impact that this criterion could have on Swedish revenues. The Confederation of British Industries (p. 110) argued that Draft options present enormous practical difficulties and are likely to result in double

define some conceptual issues and adapt old categories, theorising about elements not included in the draft. There was a concern to establish the content of the digital economy concept as something different from electronic commerce and to indicate the role of intermediaries in this context.[903] A few taxpayers differed from the majority, supporting a review of the categories enshrined in the tax field's tradition. Some agreed with the document's proposals, offering conceptual contributions to the debate, and even suggesting the institution of new taxes.[904]

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or multiple taxation. After presenting several arguments why the options presented by TFDE could not work, Harris Consulting (p. 226) defended taxation where "mind and management" are exercised by humans instead of any tax on machines. The International Underwriting Association (p. 284) called for caution and pointed out that although big data is relevant for designing new insurance products, it has not raised new income tax issues. The Japan Machinery Center for Trade and Investment (p. 311 and 313) recognised that other actions of the BEPS Project may help with the digital economy issues but maintained that the draft options impose an excessive administrative burden. Liberty Global (p. 338) asserted that the introduction of specific rules for data use taxation would potentially challenge the neutrality principle. Albeit recognising the digital economy's impact, Macfarlanes LLP (p. 341) maintained that solutions should fit the existing framework of international tax principles that underlie the OECD Model Tax Convention. TechAmerica Europe (p. 411 and 412) noted that the focus on "substance" is a theme that underlies the project, asserted that the digital revolution has not changed the foundation of business models, and concluded that determining taxation from the use of data does not make any sense. The Dutch Association Tax Advisers (p. 415 and 416) argued existing no need for new concepts or rules, concluding that indirect taxation may be the best solution to face the digital revolution. The Confederation of Netherlands Industry and Employers (p. 457) considered unlikely existing digital enterprises with no physical presence whatsoever and whose corporate income tax base is not attributable to any jurisdiction.

[903] The Association Française des Femmes Fiscalistes (p. 5) highlighted the confusion between e-commerce and the digital economy, in addition to highlighting the absence of scenarios involving intermediaries in the Draft. Boku Inc (p. 81) pointed out that not all services are subject to the Value-Added-Tax, highlighting potential confusion between different payment methods. Reed Elsevier (p. 370 and 372) stressed the difficult theoretical questions regarding the appropriate balance between direct and indirect taxation and the necessity to update the Transfer Pricing Guidelines for cost-sharing arrangements involving the joint development of intangibles such as technology platforms. TAJ Société d'Avocats (p. 403 and 404) regretted the absence of scenarios involving intermediaries and stated that the rules on e-commerce in the EU only refer to telecom, broadcasting, and electronic services.

[904] Banana Fric (p. 24) opposed any taxation on data collection or use but suggested taxing "websites' bandwidth use". CFE Tax Advisors Europe (p. 117) was contrary to the other proposals but noted only some difficulties in withholding tax, suggesting the use of indirect taxation to face digitalisation challenges. In general, the Confederation of Indian Industry (p. 127) judged all possibilities acceptable, just raising some concerns and suggesting adaptations like a new Article relating to permanent establishment and attribution of profits. Crowe Horwath Italy (p. 146) considered consumption taxation to be "the most urgent area of attention as cross-border B2C transactions". However, the European Business Initiative on Taxation (p. 198) claimed that this alternative would not offer any solution, worrying about the departure from trends based on an international consensus. The European Tax Circle (p. 201), in general, showed support for the Draft proposals. Finfacts.ie (p. 209) supported the BEPS Project by claiming not being in Ireland's economic interest to be a facilitator of massive corporate tax avoidance while accusing the Irish Revenue of aggressively investigating domestic taxpayers and closing the eyes to foreign companies. King & Wood Mallesons (p. 321 and 322) stated that it is not reasonable to think of the digital economy as something mature that will not change, concluding being necessary to renew and adapt the permanent establishment's exemptions. Meridian Global Services (p. 349) suggested that another option to be considered in the VAT debate is the additional burden placed on the third-party service providers. SAP (p. 390) affirmed that the amendment of the exception contained in Article 5(4) of the OECD Model Tax Convention seems to be the only feasible approach.

1 November 2017 - BEPS public consultation on the tax challenges of digitalisation.

The production of the 2018 Interim Report also involved conducting a public consultation to understand the impacts of digitalisation on business models and value creation. More than a mere repetition of the 2014 event, this consultation gave more importance to matters of substance than of form and sensed the possibilities of unilateral and uncoordinated measures.[905] In addition to the central issue regarding the digitalisation process itself, the document raised questions about possible challenges or opportunities for tax systems and the effects of implementing the BEPS package. The document called on stakeholders to comment on the options presented in the 2015 Final Report and to submit any additional comments.[906] The occurrence of another public consultation on topics already discussed has faced some criticism. Nevertheless, the new event has witnessed an increase in the number of participants interested in the debate and the volume of information presented.[907]

Although more than two years had passed since the end of the BEPS Project, the taxpayers' majority position was still that of caution. There was a great concern to avoid abandoning the international tax field's traditions and losing the multilateral coordination of the measures adopted by the countries.[908] On the other hand, there was a significant increase in tax-

[905] The invitation for public comments on the tax challenges of digitalisation is available in http://www.oecd.org/tax/beps/oecd-invites-public-input-on-the-tax-challenges-of-digitalisation.htm. Access date: 23 Jan 2021.

[906] The document containing the questions presented is available in http://www.oecd.org/tax/tax-policy/tax-challenges-digital-economy-request-for-input.pdf. Access date: 2 Mar 2021.

[907] See OECD. **Tax Challenges of Digitalisation: comments received on the request for input - Part I**. 25 Oct. 2017d and OECD. **Tax Challenges of Digitalisation: comments received on the request for input - Part II**. 25 Oct. 2017e. As quoted in the following two paragraphs, the page number followed by I or II refers to Part I and Part II of the comments, respectively.

[908] Airbnb (p. 11 I) only claimed existing no separate digital sector within the global economy. Ernst & Young (p. 165 I) showed concern with the abandonment of the international tax field's tradition. Although Grant Thornton (p. 175 I) suggested a focus on data and its role in business models, it said that digital technology would not have fundamentally changed activities, so the ALP would remain applicable. Ibec (p. 4 and 6 II) claimed that any carveout would soon become obsolete, stating that although products may be new or radical, the businesses are not. The Information Technology Industry (p. 79 and 81) suggested not focusing on business models and claimed that the idea of a digital PE would depart from the tradition of the field. Loyens & Loeff (p. 142-143 II) argued that, because it is challenging to separate digital from non-digital, one should not even attempt. Maisto and Associati (p. 151 II) only commented on the OECD's proposals claiming that the proposition of tax policies would be outside the scope of their work. The Mouvement des Entreprises de France (p. 166 II) not only commented on the OECD's proposals but reiterated that taxation in the market's jurisdiction (source) must refer to consumption taxes, while the provider's jurisdiction (offer) should tax net income. The National Foreign Trade Council (p. 170 and 171 II) said that digitalisation has not changed the reliance on personal skills, neither the process nor the value creation location, since this creation stems from production and development. NERA Economic Consulting (p. 175 II) maintained that the arm's

payers' recognition of the necessity for updating the international tax rules for dealing with the new digital economic reality in this public consultation. Unlike the first event, many more comments emerged in this public consultation accepting some or the totality of the proposals suggested in the 2015 Final Report.[909] Some taxpayers went further, calling on the OECD to move forward on some issues out of the agenda. In general, the result was an increase in concern with the digitalisation process's material dimension, advancing the discussion to elements related to the economic substance to the detriment of the debate's formal origins.[910]

The comments have also revealed an increase in the perception of the debate's political dimension, embodied in the repeated statement that there would be a "pressure" for measures to be adopted soon. This perception caused many taxpayers to articulate economic arguments concerning efficiency with tax policy and political considerations.[911] In this way, several arguments involved the impacts of possible measures on some jurisdictions' tax reality, constraining their fiscal sovereignty. Such possibility became more evident from the idea that the

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length standard remains relevant in the digital context. The PWC (p. 194 and 204) showed concern with the debate's pace and its impact on the results' quality, concluding that it is not appropriate to deviate from the principles consolidated in the practice of the field. The Silicon Valley Tax Directors Group (p. 208 III) stated that goods and services' consumption does not create value, but their production or development does. Sony (p. 224 II) claimed that the content it develops and distributes has always been and continues to be the basis of the value of its intellectual property and, ultimately, its main profit driver. Spotify (p. 227, 229 and 235 II) stated that, for some countries, "fair taxation" means paying where there is no value creation, claiming that data have no value in themselves, and that the BEPS Project's actions would have already solved all the problems faced.

[909] Blablacar (p. 50-56 I) recognised the need to modify the international tax rules, made its tax structure available for analysis by the OECD, and warned of the danger of creating tough rules for new companies while the old ones took advantage of softer rules. Confcommercio (p. 99 I) favoured the OECD options, highlighting the sharing economy's problems involving competition. DET3 (p. 117-118 I) saw the importance of changing the international tax system, elaborated conceptual separations between value creation and source of income and between user and customer, and highlighted the role of data as a new class of assets. Deutscher Steuerberaterverband e.V. (p. 170 I) stated that the existing international tax framework is not compatible with the digital economy. Telefónica (p. 252 and 256 II) highlighted the client's (not user's) role in value co-creation, stating that the main change caused by digitalisation was the migration of client interaction to the digital space "in the new world of client centricity".

[910] Breslin Consulting (p. 58 I) stressed the need to go beyond categorisations out of context, separating the digitalisation process (as a driver of innovation and growth) from business models' digitalisation. The Intercontinental Hotels Group (p. 26 II) highlighted the phenomenon of delocalisation of activities in the face of the separation caused by digitalisation in the hotel sector. Ludovici Piccone & Partners (p. 144 and 145) emphasised that international tax rules were not made for the digital economy, suggesting the idea of "unconscious contribution" as a proxy for data provision. Orontes Pedro A. Mariani (p. 181) asked the OECD to address the issue of virtual currencies. Porus Kaka (p. 192-193 II) suggested changing Articles 5(8), 5(9), 7(5) and 7(6) of the OECD Model Convention. The Tax Executives Institute (p. 238 and 241 I) claimed that it was not yet clear what problem the OECD intended to solve, stressing that what was needed was to find a way to tax net income.

[911] The Institute of Chartered Accountants in England & Wales (p. 16 II) called on the OECD to fight unilateral measures. The Japan Association of New Economy (p. 83 II) demanded the OECD to obtain cooperation from countries, especially the United States. Khincha and Nayak (p. 186 and 188) realised a growing pressure to increase revenue in almost every nation, fearing that the absence of physical presence could lead the taxation to fall on con-

debate over fairer taxation would be hiding a new configuration of the relationship between source and residence.[912] What the documents showed, in general, was that, whether they agreed or not, taxpayers perceived the existence of a significant tendency for change. The result was the weakening of the most reluctant stances, forcing interested parties to abandon generic arguments for rejecting modifications favouring more sophisticated articulations.[913]

13 March 2019 - Addressing the Tax Challenges of the Digitalisation of the Economy.

In 2019, the TFDE's work entered a new phase, making the following public consultations start to explore the two challenges that would constitute the already mentioned Pillars One and Two. In this sense, the invitation document presented two sets of questions, involving both the so-called "broader tax challenges" and the "exacerbated BEPS issues".[914] The first set of questions refers to the debate on the allocation of taxing rights, suggesting modifications to the nexus rules consolidated by the international tax practice. Such modifications correspond to the three proposals that became known as "user participation", "marketing intangibles", and "significant economic presence".[915] The second set involves the

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sumer.

[912] The Irish Tax Institute (p. 70 II) emphasised the digital economy's political importance for Ireland's finances. The United States Council for International Business (p. 267 and 270 II) claimed that the international tax debate consists of a zero-sum game in which smaller markets will suffer the most.

[913] The Italian Banking Association (p. 3 I) underscored political pressure but stressed the need to target only digital companies that do not pay their fair share. BDI German Industries (p. 13 and 14 I) highlighted the need to change the political discourse for the institution of new taxes, emphasising the importance of multilateralism. The International Chamber of Commerce (p. 20 II) claimed that unilateral measures would be counterproductive. KPMG (p. 116, 117 e 123 II) recognised the political pressure but suggested that the struggle for the tax base should take place in terms of competition between countries to attract digital companies, concluding that a desire to revisit the source versus residence tax debate is what drives the "fair taxation" discourse.

[914] See OECD. **Addressing the Tax Challenges of the Digitalisation of the Economy - Public Consultation Document (13 February – 6 March 2019)**. 2019a. The document is available in http://www.oecd.org/tax/beps/public-consultation-document-addressing-the-tax-challenges-of-the-digitalisation-of-the-economy.pdf. Access date: 3 Mar 2021. Given that, until then, the TFDE had not yet submitted many details on Pillars One and Two, and that the specific public consultations on each will be the object of further examination, the present analysis will not address the comments' specificities. The taxpayer's comments are available individually in https://www.dropbox.com/s/zrj1e14mdxd7fmv/OECD-Comments-Received-Digital-March-2019.zip?dl=0. Access date: 12 Feb 2021. The pages cited in the footnotes of the next two paragraphs refer to the documents sent by each taxpayer mentioned. The replay videos are available in https://oecdtv.webtv-solution.com/5524/or/Public-Consultation-Tax-Challenges-of-Digitalisation.html, https://oecdtv.webtv-solution.com/5525/or/Public-Consultation-Tax-Challenges-of-Digitalisation.html, and https://oecdtv.webtv-solution.com/5526/or/Public-Consultation-Tax-Challenges-of-Digitalisation.html. Access date: 14 Mar 2021. The chronological references followed by I, II, and III refer to the instant of the morning and afternoon videos of the first consultation day and the morning of the second, respectively.

[915] See "Revised profit allocation and nexus rules" in OECD. **Addressing the Tax Challenges of the Digitalisation of the Economy - Public Consultation Document (13 February – 6 March 2019)**. 2019a, pp. 8-23.

Global anti-base erosion proposal and aims to address the deemed unresolved BEPS issues.[916] Although the public consultation document indicates a very sober and technical theme, the debate took on an aesthetic of conflict of forces, while the participants' reactions invoked political elements that became increasingly explicit.

From the outset, the participants made it clear that they realised that the debate had gained volume and importance, showing concern with its complexity and velocity. Accordingly, many insisted on waiting for the practical results of the BEPS Project before seeking any specific alternative related to the digital economy.[917] Such preoccupations went beyond the business aspects, reaching elements that concern the state sphere or the international tax discourse. In this sense, the companies themselves expressed concern about harmonising the tax payment place and value creation.[918] Notwithstanding, the taxpayers did not consider this harmonisation defence attitude as an unfolding of the international taxation's political dimension. This dimension was associated with a potential fragmentation process resulting from the exces-

[916] See "Global anti-base erosion proposal" in OECD. **Addressing the Tax Challenges of the Digitalisation of the Economy - Public Consultation Document (13 February – 6 March 2019)**. 2019a, pp. 24-29.

[917] Regarding the deadline considered excessively short for submitting proposals, the Corporate Taxpayers Group and the Corporate Tax Association (p. 1) indicated that the minimal consultation period did not allow each of the OECD issues to be dealt with separately. The European Banking Federation (p. 1) considered that a consultation period of three or four weeks was insufficient for this magnitude debate. AB Volvo (p. 1) observed the very reduced timeframe for public comment, not allowing an adequate assessment and analysis of the "draconian policy changes envisaged". Regarding the need to wait for the effects of the BEPS project, KONE Corporation (p. 1) said that it was essential to analyse the economic impacts of the new nexus and benefit allocation framework introduced by BEPS in a period sufficient to ascertain whether new measures are needed. Technology Industries of Finland (p. 12) said that, before reaching an agreement on the minimum tax proposal, a sound and in-depth economic impact analysis was necessary. Procter & Gamble (p. 3) believed that the most prudent course of action for the Inclusive Framework would be to continue studying the BEPS Project's results and encourage greater adoption of existing BEPS recommendations. The Swiss Bankers Association (p. 1 and 2) said that the proposals, perhaps except for the "user participation", no longer served their initial purposes, regretting the absence of a more thorough analysis on why the current rules no longer work and why the BEPS measures failed.

[918] Claiming that companies do not care where they pay their taxes, The 100 Group (p. 2) said that businesses are relatively agnostic about the location in which a tax burden might arise. Similarly, Jesper Barenfeld, from AB Volvo (1h32' I), stated that businesses care more about being taxed once then where to get taxed. Nonetheless, Maria Volanen, from Technology Industries of Finland (3h13' I) asserted that this is true, in a way, but it is not valid for smaller companies, which are more linked to their country of residence. Showing concern about a possible migration from taxation to market jurisdiction, the American Chamber of Commerce Ireland (p. 4) affirmed that the digitalised global economy should ensure fairness and not disadvantage smaller open economies favouring larger market jurisdictions. Likewise, the American Chamber of Commerce in the Netherlands (p. 1-2) argued that the user participation model for taxing the digitalising global economy is not desirable but artificial and opportunistic. Finally, the Confederation of Swedish Enterprise (p. 2) stressed that this would essentially mean an arbitrary shift of taxable income from smaller net exporting countries with high levels of R&D-activities and associated entrepreneurial risk-taking to larger net importing jurisdictions with large consumer bases. Presenting a technical concern, the American Petroleum Institute (p. 2) stated that a minimum taxation approach encourages taxation of profits irrespective of where one creates value.

sive pluralism, against which the best remedy would be the debate's centralisation within the OECD and the development of more robust dispute settlement systems.[919]

On the other hand, the discourse of apprehension towards pluralism was not an isolated attitude but involved an emerging meta-debate concerned with recognising stakeholders' different contexts and interests. In this sense, the speech position itself in the interaction process became an issue of dispute in the forum, invoking differences between taxpayers.[920] Such differences involve central qualities for the debate, such as whether a business is considered digital or not, like other traditional elements of the tax field's discourse. Consequently, the debate advanced to the effects of taxation on companies' relationship within the digital sector and its repercussion on final consumers.[921] The result was the reopening of a discussion

[919] Booking.com (p. 6) argued that the basic principle of any proposal should be to have a well-designed system that minimises disputes in the first place. The Association of International Certified Professional Accountants (p. 1) placed a robust dispute resolution system among the issues that any proposed changes must address. Ernst & Young (p. 4) claimed that new standards for MAP would need to be developed. On behalf of an informal coalition of Netherlands-based technology companies, Baker & McKenzie (p. 3) affirmed that any OECD consensus proposal should include a commitment by the OECD and IF states to withdraw recent or proposed unilateral actions. Anitec-Assinform (p. 2) and Jalan & Peshori (p. 8) argued for mandatory binding arbitration adopted as a BEPS minimum standard. On the necessity of centralisation, Accountancy Europe (p. 2) stated that since the Inclusive Framework's introduction, the OECD has been the best forum to reach international consensus. The Association for Financial Markets for Europe (p. 1) also expressed the belief that the OECD would be the right forum for developing proposals for the digital economy's taxation and welcomed that the OECD set out an ambitious timetable to achieve this. The Mouvement des Entreprises de France (p. 2) claimed that the OECD would be the best-placed organisation to tackle the issue and so that States should choose and implement the choice in a consistent way.

[920] Will Morris, from the BIAC (0h26' I), stated that there was a central debate on the allocation of tax rights in which the victory of one country would necessarily mean the defeat of another, highlighting the need for joint action between tax administrations and the business community, concluding that the OECD would be the only place where this debate may occur. Pierre Habbard, from the Trade Union Advising Committee (0h31' I), showed concern on whether the debate would be just a bilateral conversation between the tax administrations and businesses. Moore Stephens (p. 2) highlighted the importance of considering the issue from an African perspective, providing a viewpoint other than those of the most highly developed countries. Public Services International (p. 2) affirmed that the primary stakeholders in this debate are not multinationals and their lobbyists, nor tax professionals interested in keeping international taxation as complex and negotiable as possible, but workers and citizens who depend on public revenues raised by taxation. Information Technology Industry (p. 4) claimed being concerned whether all tax authorities represented in the Inclusive Framework have the expertise or capability to administer such an approach.

[921] Norwegian Shipowners Association (p. 2) stated the belief that tax challenges related to more traditional industries should be discussed separately from the highly digitalised businesses, and its measures should be subject to a separate assessment and consultation paper. The Swiss Bankers Association (p. 2) remembered that albeit many 'old' industries experience some digital transformation, their business models stayed the same, and their value drivers did not suddenly shift to 'big data', 'data analytics', and algorithms. American Chamber of Commerce in the Netherlands (p. 3) argued being essential to realise who the taxpayer would be in case of no physical presence. Technology Industries of Finland (p. 5) affirmed that digitalised companies and digital businesses constitute ecosystems where players are dependent on each other, and an additional tax targeted to one will inevitably impact the others. The Association of the Luxembourg Fund Industry (p. 3) argued that the end-users or consumers should not ultimately bear any new taxation of profits from digital activities. Tremonti Romagnoli Piccardi e Associati (p. 16) said that to achieve a fair and effective taxation model, the most critical design consideration is the proper categorisation of the businesses operating in the digital economy.

that seemed to be the only consensus reached so far. The challenge to the very idea that the digital economy could not be separated from the traditional economy, although latent in some previous manifestations, came to be expressly defended as an argument favouring taxation aligned with value creation.[922]

21 November 2019 - 'Unified Approach' under Pillar One.

The theme's division into two pillars, and the OECD Secretariat's efforts to transform the three Pillar One's proposals into a unified approach, resulted in the debate's intensification and the change of its context. A new public consultation invited interested parties to submit contributions related to what the Secretariat has understood as the previous proposals' common points.[923] The technicality of the consultation document's content contrasted with an introductory part revealing a political tension behind the debate. The document emphasises that the proposal belongs to the supranational bureaucracy and does not represent any Inclusive Framework countries' commitment.[924] The questions deal with nexus rules and calculation methods related to deemed residual profits and fixed return for baseline distribution functions allocated to consumers or users' jurisdictions. The questions also entail additional return for activities not covered above and mechanisms of dispute prevention and resolution.[925]

The great concern with the complexity of the topic outlined in the previous public consultation has migrated to the Secretariat's proposal. However, both the request for more clarity presented by most taxpayers and the general perception of an existing tension in the

[922] The Japan Foreign Trade Council (p. 2) affirmed that the application of nexus should be limited to highly digitalised businesses when the market jurisdiction or user participation contribute to its value and when transfer pricing rules are insufficient. Ludovici Piccone & Partners (p. 3) recommended that the new set of rules should initially be limited to specific highly digitalised businesses, defending that such a ring-fencing would help in defining the concept of value creation properly.

[923] The invitation, the stakeholders' responses, and the replay videos are available in https://www.oecd.org/tax/beps/public-consultation-meeting-secretariat-proposal-unified-approach-pillar-one-21-22-november-2019.htm. Access date: 5 Mar 2021. The page numbers cited in the following two paragraphs refer to the individual documents submitted by each taxpayer. The chronological references followed by I, II, and III refer to the instant of the morning and afternoon videos of the first consultation day and the morning of the second, respectively.

[924] The document emphasises that even the two-pillar approach in the Program of Work adopted by the Inclusive Framework and approved by the G20 Finance Ministers and Leaders respective meetings in Japan 2019 was done on a "without prejudice basis". See OECD. **Secretariat Proposal for a "Unified Approach" under Pillar One - Public Consultation Document 9 October 2019 – 12 November 2019**. 2019e, p. 2.

[925] See "Questions for public comments" in OECD. **Secretariat Proposal for a "Unified Approach" under Pillar One - Public Consultation Document 9 October 2019 – 12 November 2019**. 2019e, pp. 17-18.

debate referred to different preoccupations.[926] Despite the technical density of the proposed measures, some taxpayers understood that they were insufficient to bring about a relevant transformation. This argument was used both regarding multinational companies' activities as the countries' necessary submission to the final results of the TFDE's work.[927] In any case, this public consultation marked a general change in attitude towards the debate, with several aesthetic elements that highlighted important aspects not captured by the documents' cold writing. The common idea that, from then on, it would be necessary to be "realistic" gave a more pragmatic tone to the debate and made taxpayers focus on the content of the proposal.[928]

Given its deemed narrow and segmented approach to taxpayers, Amount A was the main target of criticisms involving the proposal's complexity. Likewise, this specific-

[926] The excessive complexity made the BIAC (43'40" I) deliver a different discourse from the one presented in the 2014 public consultation (when it submitted a document supposedly representing the consensus of the business sector in general), admitting that it was practically impossible to reach a business consensus on the scope, nexus, and calculation. In the same vein, the TUAC (50'10" I) highlighted the problem of complexity, but this time to argue that it would allow for more fragmented business structures, making it challenging to enforce employers' liability. Oxfam (2h52'40" III) pointed out that, although there was a general feeling of tension by the companies regarding the proposals' complexity, its concern was with the impacts on the countries' ability to collect the level of revenue they deserve. Still on the tension of the debate, after Gary Sprague, from the Digital Economy Group (3h41' II), invoke the need for governments that opted for unilateral measures outside the international treaty framework to commit themselves to the results of the work, withdrawing such measures, Gaël Perraud, co-chair of the TFDE, replied affirming that "if anyone has forgotten its tax obligations in this room, it certainly is not governments".

[927] The ICRICT (2h10' I) stated that real progress would only come with a unitary treatment of companies and wide adoption of formulaic approaches, claiming that the low potential for tax increases in the Secretariat's proposal would not bring the necessary political adherence.

[928] Several companies' repeated request for carve-out, observed since the first public consultation, became a mockery, causing laughter at various moments (2h11' I, 3h17' I, 59'35" II). Although without making any verbal reference, the ICRICT (2h10' I) illustrated its presentation with the image of a mountain giving birth to a mouse. Noting not having heard a single reference to the words "digital" or "digitalisation" on the morning of the second day, Jean Baeten, from the Federation of Enterprises in Belgian (1h47'), questioned whether the objective of the debate would not be to reform the international tax system. In response, Gaël Perraud, Co-chair of the TFDE, replied "indeed, it is" (1h48'10" III).

About the realistic attitude:

Referring to Amount A, Pahlman (p. 7) affirmed that the consolidated financials approach would be the only feasible alternative since there was no proposal or realistic prospect for agreeing on a common consolidated tax base. The Association of Chartered Certified Accountants (p. 7) recognised the need to be realistic and to acknowledge the impossibility of a world divided into separate, independent countries to produce a perfect fit between the tax system and economic activity. Booking.com (p. 15) claimed that concluding unilateral or multilateral APAs with all more than 200 jurisdictions would not be realistic. Harrington (p. 9) argued that the more contingent and complex the dispute between the competent authorities, the less likely a taxpayer is to obtain a Full Win or Full Loss outcome realistically. Grant Thornton (p. 2) said that, given the concern of small market economies about missing additional taxes, one should be realistic, understanding that every extra 'market' territory will potentially result in a more complex residual profit split calculation. The Federation of Austrian Industries (p. 2) stated that the only realistic approach for implementing the new regulations would be a multilateral agreement between all participating member states. It is noteworthy that, among the 17 comments by taxpayers that referred to the adoption of a realistic attitude, 6 used it exclusively in order to recognise the political dimension of international taxation.

ity raised concerns regarding the allocation of losses between jurisdictions, still due to applying the idea of fractioning business activities.[929] Amount B, in turn, was understood as a critical element for the success of the TFDE's work since it materialises the effort to depart from the transfer pricing rules. This perception is necessarily associated with a political sensitivity regarding the importance of adopting a formulary methodology while offering taxpayers more clarity.[930] This same political perception explains some taxpayers' criticism towards Amount C, claiming that it is not an actual "amount" but a mere attempt to preserve the transfer pricing rules. This criticism brings together political and technical arguments that uphold that the formally unified approach does not correspond to a coherent attitude towards tax phenomenology.[931]

9 December 2019 - Global Anti-Base Erosion (GloBE) Proposal under Pillar Two.

Following the public consultation on Pillar One, the OECD asked for contributions to the Global Anti-Base Erosion ("GloBE") proposal, Pillar Two's object. The occurrence of two different public consultations has reasons that go beyond logistical issues, meaning a fractioning of the debate and its expansion outside the TFDE.[932] In this case, the debate refers to the proposal made by France and Germany to combat BEPS issues considered not adequately

[929] Unilever (58'30" I) structured its presentation around a possible trade-off between Amount A's complexity and its possible tax impacts.

[930] Procter & Gamble (38' III) affirmed that Amount B would be critical for the project's success for several reasons, but mainly for its potential for certainty since several IF countries would not have comparables or even expertise to apply the transfer pricing rules. However, some taxpayers still advocated for the ALP. Before answering the questions, Breslin Consulting (p. 2-4) made a case for the arm's length principle. Giammarco Cottani, from Netflix (4h11' II), said that one should not disregard six-year work on Chapter VI of the Transfer Pricing Guidelines, containing 36 application examples for intangibles. Conversely, Vector TP (p. 2), invoking real-life evidence collected over the 20 years of experience in transfer pricing, claimed that, despite all technical efforts to improve Chapter IX of the OECD Transfer Pricing Guidelines, both tax administrations and business operators were not better off.

[931] OXFAM (2h49'38" III) stated that Amount C would not be a proper "amount" but an attempt to preserve the transfer pricing rules. EY (2h57'55" III) agreed with OXFAM that it would not be an "amount", stating, however, that the conflict resolution system would not rule out the need for clear rules and principles. Carol Klein, from the USCIB (2h41' III), affirmed that she initially understood the expression "unified approach" as an articulation between the Amount C with the others, concluding later that each one would deal with different elements.

[932] Although Pillar Two emerged from proposals presented during the TFDE debates, the theme has migrated to the Working Party No. 11 on Aggressive Tax Planning (WP11). Marco Iuvinale, Chair of WP11, has presided the public consultation. The invitation, the consultation document, and the stakeholders' responses are available in http://www.oecd.org/tax/beps/oecd-secretariat-invites-public-input-on-the-global-anti-base-erosion-proposal-pillar-two.htm. The replay video is available in https://oecdtv.webtv-solution.com/6041/or/Public-Consultation-on-Pillar-2.html. The page numbers cited in the following two paragraphs refer to the individual documents submitted by each taxpayer. The chronological marks refer to the instant of the video.

addressed. In practice, the consultation concerns the tax base's determination, the identification of the tax rate, and the potential exceptions to establishing a global minimum tax.[933] Specifically, the questions involved the use of financial accounts as a starting point to determine the taxable base, in addition to the limits of the articulation between different levels of taxation in determining the applicable rate. The consultation also asked about possible exceptions to the rule and invited taxpayers to submit more general comments on the proposal.[934]

Most of the taxpayers understood that utilising financial statements as a starting point for determining the amount to be taxed was the best alternative available. Notwithstanding, the opinions related to easiness and tradition, especially concerning the parent company's records, were challenged by arguments involving the accounting and tax records' distinct objectives.[935] Regarding the determination of the rate, taxpayers mostly favoured global consolidation, arguing that worldwide blending is the most appropriate approach. The argument suggests that the jurisdictional blending would be burdensome, which conflicted with the idea that it would be the only alternative to serve developing countries' interests.[936] The issue concerning carve-outs has presented a pretty different approach than how it has appeared in the Pillar One debate. In this case, instead of general arguments against applying the rules to their specific sectors, taxpayers focused on presenting formal and substantive elements to be considered by the countries.[937]

Compared to the Pillar One debate, this public consultation has evidenced less interest by the stakeholders and greater attention on the proposal's technical details. Besides,

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[933] See "Introduction" OECD. **Global Anti-Base Erosion Proposal ("GloBE") - Pillar Two Public consultation document 8 November 2019 – 2 December 2019**. 2019b, pp. 5-8.

[934] See "Tax base determination", "Blending", and "Carve-outs" in OECD. **Global Anti-Base Erosion Proposal ("GloBE") - Pillar Two Public consultation document 8 November 2019 – 2 December 2019**. 2019b, pp. 9-24.

[935] Tremonti Romagnoli Piccardi and Associati (3h55'30"), KPMG (4h12'14"), and Ernst & Young (4h35'25") were all in favour of adopting financial accounts to determine the tax base. Siemens (4h46'11") was also in favour, suggesting a Pillar Three concerning legal certainty. Nevertheless, PWC (4h25'30") highlighted the different purposes of financial and tax records as a reason for not using them.

[936] Danone (1h53'11") defended the use of the information already available, highlighting the need to avoid new compliance obligations and costs for the taxpayer. Deloitte (2h1'24") said that worldwide blending would help to ease this tension but that there would still be adjustments to be made. On the other hand, the Independent Commission for the Reform of International Corporate Taxation (2h8'20") argued that jurisdictional blending would be the only way to impose a minimum tax since it would not avoid developing countries from offering tax incentives.

[937] Among these elements, Deloitte (1h54'22") mentioned the schemes compliant with BEPS Action 5, activities in which the creation of value is aligned with the attribution of profit, and the construction of a "white list" of countries.

the comments did not invoke emotional elements or raised alleged conflicts between technical and political attitudes.[938] As a consequence, some taxpayers have expressed more tolerance towards the inevitable complexity that the topic entails. In the same sense, the idea of complexity signified both the harmful institution of intricate new rules as the consequential reaction to structures the companies themselves have developed.[939] Although, in theory, the represented taxpayers were the same who have participated in the public consultation of Pillar One, their representatives had a different profile. The GloBE proposal's debate involved more accountants than lawyers and economists, presenting a general climate that was less confrontational and more concerned with finding solutions than opposing the measures.[940]

14-15 January 2021 - Public consultation meeting on the Pillar One and Pillar Two Blueprints.

Initially scheduled for March 2020, the public consultation on Pillar One and Pillar Two Blueprints took place in 2021 in a virtual format. The COVID-19 epidemic compromised the initial deadline for the 2020 final report, affected the interaction dynamics, and made the debate lose the previous aesthetic elements.[941] The public consultation document presented questions involving the Blueprints published in the previous year, structured in two groups. The first group dealt with scope, nexus, prevention and dispute resolution, and other rules involving Amounts A and B, while the second group involved technical aspects of the ten chapters of the Report on the Pillar Two Blueprint.[942] The OECD has selected some topics that

[938] The number of empty seats at this meeting contrasted with the overcrowding at the Pillar One consultation. Although the repeatedly mentioned weather conditions and transport services strike have contributed to this situation, other factors indicate lesser participation. The OECD invitation already referred to a smaller location than the traditional Conference Centre. Even among those present, few interventions occurred when the Chair invited the audience to participate (six after the first panel, two after the second, one after the third, and none after the fourth). Finally, the number of stakeholders sending comments (186) was much smaller than those related to Pillar One (306).

[939] The United States Council for International Business (4h56'30") affirmed that a tax system intended to apply a worldwide minimum corporate tax across 135 countries is a too complex undertaking, concluding that complexity is a baseline, not a reason for criticism. Oxfam (5h9') approached complexity from the countries perspective, arguing that some companies use overly complex structures to avoid taxes while asking for non-complex rules.

[940] The issue involving the profile of the actors and the different attitudes assumed is central to this work and will be taken up in the next subchapter.

[941] The invitation, the stakeholders' responses, the consultation document, and the replay videos are available in http://www.oecd.org/tax/beps/public-consultation-meeting-reports-on-the-pillar-one-and-pillar-two-blueprints.htm. Access date: 10 Mar 2021. The page numbers cited in the following two paragraphs refer to the individual documents submitted by each taxpayer. The chronological references followed by I and II refer to the instant of the first and second consultation day videos, respectively.

[942] See OECD. **Reports on the Pillar One and Pillar Two Blueprints Public consultation document 12 October 2020 – 14 December 2020**. 2020a. Item "3.1.3. Taxation and Digital Economy" has analised the content of the two

are considered the most relevant and dedicated specific panels to them in the two-day virtual meeting. The first day, dedicated to Pillar One, involved complexity, certainty, and administration, while the second day dealt with the tax base and general Pillar Two issues.

As a result of a more realistic attitude, the taxpayers have placed "complexity" in a framework to preserve the field's traditional categories. Hence, although defending the ALP, some taxpayers accepted formulary methods as an alternative to avoid the complexity associated with the pluralism of jurisdictions and business activities.[943] These formulary methods are associated with Amount B, so that its adoption means the very effort to search for tax certainty. The consequence was the debate's incorporation of a dichotomy between Amounts A and B as a tension between preserving tradition and the institution of a manageable practice in the new scenario.[944] Thus, some taxpayers argued that Amount A's adoption would increase the volume of disputes among tax administrations and between these and taxpayers. Besides, they accused Amount A of failing to deliver more fairness, sustainability, and redistributive capacity, just binding developing countries while preventing unilateral compensatory actions.[945]

The taxpayers have submitted several alternatives for simplifying the tax base determination, mainly related to the starting point for its calculation. They identified deferred tax accounting as an element representing a significant simplification of implementing global taxation.[946] As far as the Income Inclusion Rule (IIR) is concerned, many have expressed a preoccupation with the split-ownership rules' complexity. Likewise, the Undertaxed Payment Rule (UTPR) complexity has resulted in requests for simplification, especially regarding low-profit taxes, which has led several taxpayers to underscore repeatedly the necessity for coor-

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Blueprints. See "Fragmentation and expansion".

[943] Johnson & Johnson (58'30" I) stated that the main problems derive from the industries' specific approach (made even more complicated by the segmentation of businesses) and Amount A's pricing model (since the ALP would be the only method capable of pricing complex value-driving activities, but too complicated for low-value routine activities).

[944] Procter & Gamble (2h25'36" I) invoked horizontal equity considerations to justify modifications in Amounts A and B, reconciling simplification with companies' particularities and avoiding arbitrary carve-out concessions on a case-by-case basis.

[945] UBER (2h44'07") forecasted an increase in litigation related to Amount A's determination for the coming years. Oxfam (2h51'18") maintained that Amount A proposal should not be legally binding, or else it would mean a "policy trap" for developing countries.

[946] According to Rio Tinto (1h6'4" II), deferred tax accounting would be the only way to achieve a global approach as envisaged in Pillar Two.

dination.[947] The taxpayers have referred to coordination in two distinct ways, revealing the dichotomy underlying the collective imagination. From a technical perspective, coordination referred to the harmonisation of Pillar Two with other similar regimes, while, in a political sense, it referred to harmonisation between different countries, invoking mechanisms to limit possible unilateral actions.

Conclusions.

This item has demonstrated that, behind the expression "taxpayers", there are practices, attitudes, and narratives that are somewhat contrasting with each other. The differences between civil society representatives and companies, among different business sectors, and between large and small companies, are evident and even expected. However, the historical analysis of public consultations has shown that even the discourse of large multinational companies and their representatives has constantly been changing. The narratives questioning the necessity for such debate gave way to a pragmatism marked by a feeling of resignation in the face of an inexorable transformation. In general, taxpayers chose to intervene in the debate's structural elements, assuming an allegedly technical posture in the face of the intellectual constructions presented by the OECD. Along with the change in attitude, there was a replacement in the individuals chosen to speak on behalf of taxpayers, implying significant aesthetic transformations.

Although the COVID-19 pandemic has its share of the blame, the lower participation of lawyers, economists, and independent consultants favouring accountants and tax managers restricted the divergences to minor instrumental issues. The general accusation of politicisation gave rise to a duality between establishing simple and straightforward rules and searching to preserve taxation's essence. The debate on formulary methods evidenced the perception of a tax phenomenological dimension not confused with the rules and methods that overlap it. It is noteworthy that this stance contrasts with the essentially formalist narrative, quite common in justifying international tax planning. When confronted, some taxpayers argued to be paying what the legislation imposed, and any dissatisfaction should be against the norm, not their behaviour. In contrast, the current debate presupposes one taxation deemed "accurate", "ade-

[947] MEDEF (p. 2) claimed that excessive complexity could lead the countries to adapt the rules to their context or introduce a UTPR as a protective measure against unclear IIR.

quate", or "aligned with value creation" potentially harmed by formal models considered "arbitrary".

Taxpayers' change in attitude may even result from an attempt to preserve individual interests, but this does not exclude the presence of solid collective elements. The convergence of the discourse around specific themes and common concerns is not the result of a general agreement but the expression of shared ideas. Only this fact explains why companies and NGOs, even when defending opposed goals, presented similar narratives when dealing with the trade-off between accurate taxation and simplicity. An objective technical character, different from politics' subjectiveness, only makes sense if the parts agree about the field's categories semantic content. Nevertheless, although taxpayers have articulated these contents in the OECD debate, their concern was merely instrumental, not a systematic effort to preserve the field's discourse. This effort is closer to another group of actors with a specific preoccupation here called "academic attitude", as the next item will demonstrate.

3.2.2. The academics' attitudes.

This work has addressed the actors located in the two poles of the tax field's classic dichotomy between tax administration and taxpayers, presenting their positions. In addition to these, the academy assumes a different attitude towards the tax phenomenon, not necessarily connected to fiscal or business interests. Notwithstanding, as a group, the academy possesses internal cleavages that may arise from particular legal or tax traditions or even from its individuals' greater or lesser connection with the field's practice. Similarly, different academic life moments may contribute to distinct perspectives and, consequently, different reactions before the digital economy's governmental tax debate. However, such differences do not prevent the identification of an academic attitude, nor turn it impossible to contrast it with the state and business attitudes. The academic attitude manifests itself in the form and content of the academics' reactions to the digital economy tax debate, whether criticising the whole or just specific elements.

The international tax field's pluralism, expressed by its members' cultural divisions, makes it exceedingly problematic to describe academic attitude generally. This diffi-

culty calls for some epistemological choices to preserve such pluralist character while offering a broad functional description. The selected alternative focuses on English-language texts published in periodicals known for their international reach and books targeting a global audience. Likewise, since the digital economy is a subject matter present in several local debates, it was necessary to privilege those that dialogue with the OECD's work. Although it is imprecise to draw a rigid boundary between domestic and international taxation, the focus will rest on the strand of the debate concerned with taxation as a global phenomenon. Such circumstances affected the present choice for offering a narrative, from a legal perspective, on the academic attitude towards the international tax debate on the digital revolution.

This item aims to present a description of academic's attitudes towards the digital revolution's impact on international tax legal discourse. The premise is that it is possible to identify an academic attitude assumed by some actors involved in the international tax debate on the digital revolution. The hypothesis is that such an attitude involves reactions to the debate as a whole or its specific categories and the desire to expand the scope or offer new perspectives. The item begins by presenting the academia's reactions to the debate's very existence, the adequacy between the means adopted and ends pursued, and the proposals offered, especially the institution of new taxes. Afterwards, the item highlights academics' reactions to the concepts of significant economic presence, user participation, and marketing intangibles. Finally, the item presents the academics' efforts to expand the digital debate, advance to the major categories of the liberal paradigm on wealth generation, and suggest new perspectives and discursive elements.

General reactions to the debate.

It is important to note that the academics were already highlighting the elements identified with the digital economy's emergence before the Turku Conference and the Ottawa Convention. The virtualisation associated with the emergence of electronic commerce already provoked discussions about its possible effects on the phenomenon of taxation.[948] Alt-

[948] Kingson was one of the first to highlight the implications of the digital revolution on the American tax environment, citing the paradigm of physical presence, the question of determining prices in inter-company operations, and the characterisation of income according to the treaties' rules as traditional elements of the field potentially affected. In response, the author suggested ending the tax deferral, understanding what business activity consists of, and rede-

hough initially seen from its similarities with other institutes previously incorporated into the tax discourse, this debate soon gained its autonomy. This fact was due to the perception that the Internet had characteristics with which the tax field had not yet dealt, being necessary to develop new concepts and approaches.[949] With this, the turn to the twenty-first century witnessed the first texts adapting the academic tax discourse to the digital vocabulary.[950] Nonetheless, and despite the importance of these first attempts to offer new categories to the tax discourse, the BEPS Project emergence was responsible for popularising such vocabulary within the academic field.

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fining the field's categories. See KINGSON, C. I. Taxing the Future. **Tax Law Review,** v. 51, n. 4, pp. 639-662, 1995. In the same vein, Ring suggests understanding the impacts of the revolution by drawing a parallel with financial instruments, since they pose similar problems related to mobility, activity identification, geographical location, rapid changes, and the importance of multi-jurisdictional coordination. See RING, D. M. Exploring the Challenges of Electronic Commerce Taxation through the Experience of Financial Instruments Commentary. **Tax Law Review,** v. 51, n. 4, pp. 663-676, 1995.

[949] McLure argues that the idea that e-commerce should be subject to the same existing taxes deserves to be analysed carefully. The author highlights the impossibility of applying physical and geographic criteria, mentioning the need for substantial cooperation between jurisdictions, and concluding with the possibility (albeit remote) that the best answer is precisely the institution of a new tax. See "Introduction" in MCLURE, C. E., Jr. Taxation of Electronic Commerce: economic objectives, technological constraints, and tax laws. **Tax Law Review,** v. 52, pp. 269-424, 1997, pp. 273-280. By emphasising features such as the "death of distance", the removing of intermediate agents, the marginal cost tending to zero, and the different impacts in the USA and Europe, Soete and Kamp warned of the dangers of adopting the duty-free electronic commerce policy. See SOETE, L. and KAMP, K. Taxing Consumption in the Electronic Age. **Intermedia,** v. 25, n. 4, pp. 19-22, Aug 1997. According to Abrams and Doernberg, only by understanding the underlying technology that one can apply tax rules sensically. In this sense, the authors explain the Internet, digitisation, physical and logical network structure, in addition to e-commerce and its payment system. See ABRAMS, H. E. and DOERNBERG, R. L. How Electronic Commerce Works. **Tax Notes International,** v. 14, pp. 1573-1602, 12 May 1997. Avi-Yonah argues that the new elements brought by e-commerce are interactivity, speed, and electronic payment. See "What Is New About Electronic Commerce?" in AVI-YONAH, R. S. International Taxation of Electronic Commerce. **Tax Law Review,** v. 52, n. 3, pp. 507-556, 1997, pp. 510-516. The influence of the Internet discourse on the tax debate resulted in comparing servers to permanent establishments, raising questions about the legitimacy of regulating the Internet for tax purposes. The work carried out by the OECD in the late 1990s has influenced this new Internet tax approach, opening a debate on the need to adapt the permanent establishment rules. See COCKFIELD, A. J. Transforming the Internet into a Taxable Forum: a case study in e-commerce taxation. **Minnesota Law Review,** v. 85, pp. 1171-1266, 2001. Pinto undertakes an analysis of three possible approaches to reconceptualise permanent establishment: the base-erosion approach, the virtual permanent establishment approach, and the refundable withholding approach. See PINTO, D. The Need to Reconceptualize the Permanent Establishment Threshold. **Bulletin for International Taxation,** v. 60, n. 7, pp. 266-279, 1 Jul 2006.

[950] This association turned information into an element that induces transformation, allowing the perception of potential taxation on deemed informational goods. See "The Nature of a Digital Economy" in COCKFIELD, A. J. The Law and Economics of Digital Taxation: challenges to traditional tax laws and principles. **Bulletin for International Taxation,** v. 56, n. 12, pp. 606-619, 1 Dec 2002, p. 607. Tadmore defends a coherent framework for taxing intellectual property by adapting the royalty definition to include digital intellectual supplies. See TADMORE, N. Source Taxation of Cross-Border Intellectual Supplies: concepts, history and evolution into the digital age. **Bulletin for International Taxation,** v. 61, n. 1, pp. 2-16, 1 Jan 2007. The transformation of language is evident in the updating of the work "Taxing Global Digital Commerce". Even when referring to the same events, the 2019 update replaced the term "e-commerce" with "digital commerce". Cf. COCKFIELD, A. J., HELLERSTEIN, W., MILLAR, R. and WAERZEGGERS, C. **Taxing Global Digital Commerce**. Croydon: Kluwer Law International, 2013 and COCKFIELD, A. J., HELLERSTEIN, W. and LAMENSCH, M. **Taxing Global Digital Commerce**. 2nd ed. Alphen aan den Rijn: Kluwer Law International, 2019.

Academic reactions to the BEPS Project and, more specifically, to its Action 1 took on different perspectives, highlighting distinct aspects of the governmental debate. While recognising the impacts of the digital economy, Avi-Yonah has demonstrated scepticism about the OECD's ability to develop solutions to such issues in the terms initially established.[951] Academic scepticism has also reached the content of the OECD's work, revealing an incredulity about the necessity to propose such solutions. In this sense, Schön proved to be contrary to the argument that there would be a way considered more appropriate to tax the digital economy.[952] This criticism presupposes that the process of digitalisation would not have caused relevant economic changes and, therefore, does not impose the need for a review of tax institutes. Sharing this thought, Kemmeren argued that the wealth generation process would not have been affected by the digital revolution, still depending on elements associated with the human and social dimensions.[953]

Nevertheless, as the work progressed within the OECD's scope, the academics began to recognise the importance of the digital economy tax debate. This recognition expresses itself from the more extensive production of texts both reacting to the governmental debate as addressing specific aspects of the digitalisation process.[954] Consequently, the criticism on the debate's existence has given way to a critique of academia's inertia in accepting its importance. According to Brauner, such importance would go far beyond the mere adaptation of concepts to the new reality, imposing the need to abandon the conservative approach favouring

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[951] Avi-Yonah states that Action 1 could not propose solutions in the terms initially envisaged, citing two reasons. The digital economy's impacts on taxation interconnect with other actions, not generating genuinely unique BEPS issues. Besides, the TFDE could not anticipate and analyse the future developments of the digitalisation of the economy. See "The Limits of Action 1" in AVI-YONAH, R. S. and XU, H. Evaluating BEPS: a reconsideration of the benefits principle and proposal for UN oversight. **Harvard Business Law Review,** v. 6, n. 2, pp. 185-238, Summer 2016, pp. 212-213.

[952] Schön asserts that this phenomenon did not cause significant changes that warranted a reassessment of the tax categories used until then. See "Why change the international tax regime?" in SCHÖN, W. Ten Questions About Why and How to Tax the Digitalized Economy. **Bulletin for International Taxation,** v. 72, n. 4/5, pp. 278-292, 6 Mar 2018, pp. 1-6.

[953] Drawing a parallel with a hammer's use by a carpenter, Kemmeren maintains that it is the intellectual use of the thing, not the thing itself, that adds value. The creation of value, therefore, is in the human element, notably, labour. See "Where is the value added in the digital economy?" in KEMMEREN, E. C. C. M. Should the Taxation of the Digital Economy Really Be Different? **EC Tax Review,** v. 27, n. 2, pp. 72-73, 2018, pp. 72-73.

[954] As an illustration, the Intertax periodical published its first special edition entirely dedicated to the digital economy in 2018, repeating in 2019. See DOURADO, A. P. Editorial Note on the Digital Tax Special Issue. **Intertax,** v. 46, n. 6/7, pp. 461-461, 2018b and DOURADO, A. P. Taxing the Digital Economy. **Intertax,** v. 47, n. 2, pp. 138-139, 2019.

more significant structural changes.[955] The result was a considerable increase in articles and books accepting the debate's relevance and addressing the intersection between international taxation and the digital economy.[956] However, the cooling down of criticisms to the debate's existence did not mean the absence of critical positions, but only its migration to the OECD's work's internal aspects.

Consistency and adequacy.

The academics' criticisms towards the BEPS Project's internal consistency are similar to those of taxpayers but with additional elements. Mosquera Valderrama highlighted the problems involving the lack of participation of developing countries in the work's agenda and content and a potential disregard for their regional characteristics during the implementation.[957] In general, this criticism relates to a broader one presuming the failure of the OECD's standards to deliver the results it proposes. Hence, Falcão and Michel have questioned whether the OECD proposals could face the challenges this very organisation has attributed to the digital economy.[958] Similarly to the concern outlined by taxpayers, De Wilde pointed out that, although initially saying that there is no digital economy segregated from the rest of the economy, the OECD has proposed a sort of ring-fence.[959] In addition to a mere question of coherence, this critique involves a broader criticism related to the project's fundamental issues.

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[955] Brauner maintains that this approach should not prevail, highlighting that in 2018 still existed "serious" academics questioning the reform's wisdom. See BRAUNER, Y. Taxing the Digital Economy Post-BEPS, Seriously. **Intertax,** v. 46, n. 6/7, pp. 462-465, 2018.

[956] The bibliographic references cited throughout this item reveals how this debate has gained momentum.

[957] Mosquera Valderrama defines these two circumstances as input and output legitimacy, concluding that the lack of input legitimacy, that is, of effective participation in the debate, can be supplied by searching for collective solutions in the work's implementation. See MOSQUERA VALDERRAMA, I. J. Output Legitimacy Deficits and the Inclusive Framework of the OECD/G20 Base Erosion and Profit Shifting Initiative. **Bulletin for International Taxation,** v. 72, n. 3, pp. 160-170, 31 Jan 2018.

[958] Falcão and Michel stated, in 2014, that the OECD Model Tax Convention's provisions were not able to prevent a digital service provider from avoiding being subject to taxation in the jurisdictions it operates. See FALCÃO, T. and MICHEL, B. Assessing the Tax Challenges of the Digital Economy: an eye-opening case study. **Intertax,** v. 42, n. 5, pp. 317-324, May 2014. Although not specifically referring to the digital economy, Devereux and Vella have criticised the BEPS Project for just trying to close some loopholes instead of re-examining international taxation's fundamental problems. See DEVEREUX, M. P. and VELLA, J. Are We Heading Towards a Corporate Tax System Fit for the 21st Century? **Fiscal Studies,** v. 35, n. 4, pp. 449-475, 2014.

[959] De Wilde maintains that the turnover-based equalisation levies, the withholding taxes, and the envisaged modifications to the tech sector's permanent establishment threshold were all attempts at ring-fencing the digital economy. See DE WILDE, M. F. Comparing Tax Policy Responses for the Digitalizing Economy: fold or all-in. **Intertax,** v. 46, n. 6/7, pp. 466-475, 2018.

Cockfield has pointed out that the OECD's debate was related to substantive issues not revealed by the literalness of the texts produced. One of these issues concerns a dissatisfaction with the current international tax regime that would be fomenting disputes by countries capable of compromising the project itself.[960] In the same sense, the discussion provoked by Action 1 could reach elements submitted to parallel debates promoted by other actions of the BEPS Project. Such would have been the case for the debate involving permanent establishments (PE), the object of Action 7 of the BEPS Project. Furthermore, the breadth acquired by the Action 1 debate would not be reaching only the instruments of the field discussed in other actions but the very principles that underlie them. For Escribano, this is what would have happened with the arm's length principle (ALP), impacted by the digitalisation and weakened by the manifestation of preference for formulary methods in determining the allocation of taxing rights.[961]

Since the BEPS Project launch, the OECD has made its position clear in favour of reconstructing the international tax discourse to align taxation with the value creation process. Nonetheless, Devereux and Vella have criticised such a stance, arguing that value creation was never a relevant criterion for determining the place of taxation.[962] Specifically, some academics have also criticised the OECD preoccupation with value creation as a relevant criterion in the digital economy debate. While some authors have chosen to dismantle the OECD's narrative defending this criterion, others have tried to understand the rationale behind the concern, aiming to offer alternatives understood as more appropriate.[963] However, the very idea of

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[960] Cockfield says that this dissatisfaction started with the first debates about e-commerce and culminated in several unilateral measures. See COCKFIELD, A. J. Tax Wars: the battle over taxing global digital commerce. **Tax Notes International**, pp. 1331-1339, 10 Dec 2018.

[961] Escribano points out, as an example, the promotion of profit split over other methods in relation to intangibles. According to the author, although the OECD remains faithful to the ALP, that method resembles a formulary apportionment since it aggregates and distributes a company's profits among its entities. See "Is it reasonable to insist on the separate entity approach in a globalized world?" in ESCRIBANO, E. Is the OECD/G20 BEPS Initiative Heading in the Right Direction? some forgotten (and uncomfortable) questions. **Bulletin for International Taxation,** v. 71, n. 5, pp. 250-258, 4 Apr 2017, pp. 253-254.

[962] Devereux and Vella consider value an irrelevant category to international taxation as a whole. See DEVEREUX, M. P. and VELLA, J. **Value Creation As the Fundamental Principle of the International Corporate Tax System**. European Tax Policy Forum: 31 Jul. 2018c.

[963] For critiques in the context of digital economy, see DEVEREUX, M. P. and VELLA, J. Taxing the Digitalised Economy: targeted or system-wide reform? **British Tax Review**, n. 4, pp. 387-406, 2018b, "Value creation as a guiding principle: what does it mean?" in BECKER, J. and ENGLISCH, J. Taxing Where Value Is Created: what's 'user involvement' got to do with it? **Intertax,** v. 47, n. 2, pp. 161-171, 2019, pp. 161-166, and HEY, J. "Taxation Where Value is Created" and the OECD/G20 Base Erosion and Profit Shifting Initiative. **Bulletin for International Taxation,** v. 72, n. 4/5, pp. 203-208, 25 Mar 2018.

confronting temporary measures with definitive solutions was also considered meaningless by some academics. Hence, the temporary measures were criticised for their auxiliary character, considered an ineffective tool, and associated with an excessive politicisation of the debate.[964]

New taxes.

The results of the 2015 Final Report received different reactions from the academic texts, especially concerning the possibility of imposing new taxes as an intermediary measure to be adopted by the countries. On the one hand, Moreno and Brauner have pointed out that the imposition of a withholding tax would be the best way to combat the effects of digitalisation.[965] In the same vein, Dourado has highlighted the legitimacy of the institution of taxes to deal with the digitalisation process, considered a way of giving urgency to the search for multilateral solutions. Nonetheless, the author has argued that an equalisation levy would be a better alternative, as it would not conflict with international agreements' provisions.[966] Despite this apparent conflict, most of the debate involving the imposition of taxes did not focus on comparing withholding tax and equalisation levy. The academics have concentrated on the merits of adopting this suggestion from the 2015 Final Report and its possible effects.

On the other hand, most academics have demonstrated resistance in employing new taxes to address the economy's digitalisation process's challenges. In this sense, Ismer and Jescheck have mentioned several potential problems associated with the proliferation

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In the "Summer Conference 2018: Taxing the digitalised economy: Tailored change or wide-ranging reform?", organised by the Saïd Business School, University of Oxford, Stephen Shay has said that "(...) taxing where the value is created has about as much value as a Trump tweet. It is best to ignore it most of the time." Available in https://www.youtube.com/watch?v=tWh-TdREFow, 7'20", accessed in 31 Jan 2021.

[964] "Quick Fixes Using Alternative Levies: a mirage, an effective tool or a punishment for the digital economy?" in BRAUNER, Y. and PISTONE, P. Adapting Current International Taxation to New Business Models: two proposals for the European Union. **Bulletin for International Taxation,** v. 71, n. 12, 5 Oct 2017, pp. 2-3. Assisting the implementation of "quick fixes", see KOFLER, G., MAYR, G. and SCHLAGER, C. Taxation of the Digital Economy: a pragmatic approach to short-term measures. **European Taxation,** v. 58, n. 4, pp. 123-129, 26 Feb 2018.

[965] Moreno and Brauner argue that the best alternative is the withholding tax. According to the authors, this proposal does not ring-fence the digital economy, avoids controversial definitions, and provides more taxing opportunities for source jurisdictions, resulting in a fairer allocation of global taxing rights. See "The proposed solution: withholding on digital transactions" in MORENO, A. B. and BRAUNER, Y. Taxing the Digital Economy Post-BEPS…Seriously. **Columbia Journal of Transnational Law,** v. 58, n. 1, pp. 121-188, 2019, pp. 128-153.

[966] Arguing that the best alternative is the equalisation levy, see "The Legitimacy of Temporary Targeted Measures and the Equalization Levy" in DOURADO, A. P. Digital Taxation Opens the Pandora Box: the OECD Interim Report and the European Commission proposals. **Intertax,** v. 46, n. 6/7, pp. 565-572, 2018a, pp. 568-569.

of unilateral measures.[967] Amongst the mentioned uncertainties resulting from these measures lies the potential conflict with international agreements signed by the countries. Thus, according to some academics, it would not be clear whether the new taxes would harmonise with the provisions that aim to combat international double taxation or meet international or community principles.[968] Among these principles are the fundamental freedoms established within the European Union (EU) scope, which is why the topic has gained prominence. As a result, there was a whole debate related to the EU proposal known as Digital Single Market (DSM) in light of the possible impacts that the institution of a targeted tax could cause.[969]

The Digital Services Tax (DST) is an EU response to the OECD 2015 final report, considered potentially discriminatory and protectionist. The academics have also questioned its adequacy to the OECD Model Convention (OECD MC), leading to the conclusion that it would not be covered by Article 2.[970] These difficulties have led some authors to propose tax alternatives to prevent the deleterious effects resulting from the unilateral measures. Kofler, Mayr, and Schlager have suggested the institution of a simple tax incidence on companies' turnover with a lower rate than traditional withholding taxes.[971] The search for alternatives to creat-

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[967] Ismer and Jescheck claim that the problem lies in the difficulty of knowing whether it is a tax on income or turnover, creating uncertainty regarding its possible submission to Article 2(4) of the OECD Model Convention. See ISMER, R. and JESCHECK, C. Taxes on Digital Services and the Substantive Scope of Application of Tax Treaties: pushing the boundaries of article 2 of the OECD Model? **Intertax,** v. 46, n. 6/7, pp. 573-578, 2018.

[968] Arguing conflicts with international rules, see KOFLER, G. and SINNIG, J. Equalization Taxes and the EU's 'Digital Services Tax'. **Intertax,** v. 47, n. 2, pp. 176-200, 2019 and TURINA, A. Which 'Source Taxation' for the Digital Economy? **Intertax,** v. 46, n. 6/7, pp. 495-519, 2018.

[969] Dimitropoulou argues that in order not to confront the EU's fundamental freedoms, the digital services tax should be limited to online advertising. See DIMITROPOULOU, C. The Digital Services Tax and Fundamental Freedoms: appraisal under the doctrine of measures having equivalent effect to quantitative restrictions. **Intertax,** v. 47, n. 2, pp. 201-218, 2019a. The reaction of the European Union to the categories popularised by TFDE were also the object of analysis by the academy, one of the most commented being the DSM strategy. Authors proposed ideas and solutions related to the DSM in order to preserve the economics of taxation, respect differences between companies, combat distortions and avoid double taxation. See PAARDEKOOPER, W. J. G., VAN DER VEN, M., VAN ESDONK, A. and CATTEL, Y. C. Tax Considerations for the European Union's Digital Single Market Strategy. **Intertax,** v. 44, n. 6/7, pp. 513-524, 2016.

[970] Dimitropoulou calls into question the DST's ability to minimise the distortions caused by the unilateral measures already in place, concluding that it runs the risk of being considered discriminatory in the light of Article 100 of the Treaty on The Functioning of the European Union. See DIMITROPOULOU, C. The Proposed EU Digital Services Tax: an anti-protectionist appraisal under EU primary law. **Intertax,** v. 47, n. 3, pp. 268-281, 2019b. Arguing that DST is a tax on transactions and turnover and, therefore, not covered by Article 2 of the OECD MC, see HOHENWARTER, D., KOFLER, G., MAYR, G. and SINNIG, J. Qualification of the digital services tax under tax treaties. **Intertax,** v. 47, n. 2, pp. 140-147, 2019. See also HASLEHNER, W. EU and WTO Law Limits on Digital Business Taxation. In: Haslehner, W., Kofler, G., Pantazatou, K. and Rust, A. (Ed.). **Tax and the Digital Economy: challenges and proposals for reform**. Alphen aan den Rijn: Kluwer Law International, 2019, pp. 25-48.

[971] For a turnover tax on advertisement, similar to Dimitropoulou's proposal, see KOFLER, G., MAYR, G. and SCHLAGER, C. Taxation of the Digital Economy: a pragmatic approach to short-term measures. **European**

ing new taxes results from the perception that the digital economy debate rescued some central assumptions of the field and inserted them in a new context, affecting the actors' language.[972] In this case, the emergent digital language and the general idea of a significant digital presence have influenced the old debate about a virtual permanent establishment.

Digital PE.

The recognition of significant digital presence, also included in the 2015 final report, has been addressed by the literature through the idea of a digital or a virtual permanent establishment (PE). The idea of a digital PE was one of the first academic alternatives related to the debate on international taxation and the digital economy, based on the benefit theory and consequently not limited to a tax base erosion issue.[973] Notwithstanding, in the context of the unilateral measures triggered by the final report of 2015, Brauner and Pistone have depicted the virtual PE as the best solution for the European Union. Thus, the authors considered the virtual PE in harmony with the necessity of producing significant changes in the international tax regime.[974] In the same sense, Santoso suggested expanding this concept to traditional economic transactions, given their current digital format. The result was a proposal to characterise a digital PE even when there is no establishment in the strict sense.[975]

On the other hand, Singh has emphasised the difficulty of translating the permanent establishment's traditional concept into the digital economic environment. Some of

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Taxation, v. 58, n. 4, pp. 123-129, 26 Feb 2018.

[972] Chand says that this debate has brought to light the conflict between the global calculation of the companies' profits and the preservation of the separate entity principle linked to the ALP. According to the author, the profit allocation proposals articulate elements belonging to this duality. See CHAND, V. Achieving Certainty in an Uncertain Profit Allocation Environment. **Intertax,** v. 47, n. 12, pp. 1000-1002, 2019a.

[973] Arguing that the digital PE bases on the benefit theory, not limiting itself to BEPS issues, see HONGLER, P. and PISTONE, P. **Blueprints for a New PE Nexus to Tax Business Income in the Era of the Digital Economy**. IBFD. 2015. Blum analyses the 2015 Action 1 Final Report's outcomes and concludes that adopting a broader "digital service PE" is conceptually more convincing than a narrow "significant digital presence" test. See BLUM, D. W. Permanent Establishments and Action 1 on the Digital Economy of the OECD Base Erosion and Profit Shifting Initiative: the nexus criterion redefined? **Bulletin for International Taxation,** v. 69, n. 6/7, pp. 314-325, 28 Apr 2015.

[974] Nonetheless, the authors emphasise that this measure can be complemented with the institution of a withholding tax. See BRAUNER, Y. and PISTONE, P. Adapting Current International Taxation to New Business Models: two proposals for the European Union. **Bulletin for International Taxation,** v. 71, n. 12, 5 Oct 2017.

[975] Arguing that the relation between a seller and a buyer can be deemed as a virtual permanent establishment, see SANTOSO, M. R. Virtual Permanent Establishment for Digital Economy. **Economy & Business,** v. 11, n. 268-280, 2017.

these difficulties relate to determining the service's location, given the historical dependence on a material structure for its characterisation.[976] Notwithstanding, even if the geographical determination were a straightforward undertaking, there would still be the complexity involving profit allocation. This difficulty has led some authors to state that this is the major problem of using this concept in the digital economy, questioning the very reason for its adoption.[977] Collier and Vella went beyond the indication of difficulties in its implementation, developing arguments against using a digital PE as a plausible response to the economy's digitalisation. Analysing the source, nature, and impact of several problems associated with profits' attribution to PE, the authors concluded that this process is the most critical obstacle.[978]

In addition to these theoretical considerations, Spinosa and Chand have raised more pragmatic arguments against adopting a digital PE, related to the very lack of political consensus. In this way, the authors argued that most states would not support digital PE and raised several issues regarding treatment equality vis-à-vis non-digital PE situations.[979] Arguing specifically on cloud providers, Bal agreed that the use of a nexus derived from the significant digital presence would generate more theoretical and practical problems. The author claimed that, besides causing complexities and uncertainties, digital PE would create barriers to global trade.[980] Bräumann observed in this attachment to the category an attempt to cover up purposes

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[976] Highlighting the difficulty in determining the "fixed place of business", see SINGH, M. K. Taxing E-Commerce on the Basis of Permanent Establishment: critical evaluation. **Intertax,** v. 42, n. 5, pp. 325-333, May 2014.

[977] Analysing a Swedish case, Monsenego says that it is possible to create a permanent establishment without physical presence but concludes that the attribution of profits depends on people performing functions. See MONSENEGO, J. May a Server Create a Permanent Establishment? Reflections on Certain Questions of Principle in Light of a Swedish Case. **International Transfer Pricing Journal,** v. 21, n. 4, pp. 247-257, 28 Jul 2014. Still on the difficulty in attributing profits, see BRAUNER, Y. and PISTONE, P. Some Comments on the Attribution of Profits to the Digital Permanent Establishment. **Bulletin for International Taxation,** v. 72, n. 4a/Special Issue, 26 Mar 2018. Saying that the Achilles' heel of all of the current proposals that favours a new virtual PE is the attribution of profits to whatever newly created PE, see "The Nexus Approach" in MORENO, A. B. and BRAUNER, Y. Taxing the Digital Economy Post-BEPS…Seriously. **Columbia Journal of Transnational Law,** v. 58, n. 1, pp. 121-188, 2019, pp. 168-169.

[978] The other problems are the absence of a single standard for PE profit attribution, conceptual and practical problems arising in the application of the Authorised OECD Approach, new pressures arising as a result of the changes made to the PE threshold rules by the BEPS Project, and the failure to deal with the uncertainties between the transfer pricing rules and the PE attribution rules in the aftermath of BEPS. See "The digital taxation issue and future challenges to the PE rules" in COLLIER, R. S. and VELLA, J. Five Core Problems in the Attribution of Profits to Permanent Establishments. **World Tax Journal,** v. 11, n. 2, pp. 159-187, 2019, pp. 181-186.

[979] Arguing that some states do not want to, that the allocation of profits will be limited, and the lack of equity with non-digital PE, see SPINOSA, L. and CHAND, V. A Long-Term Solution for Taxing Digitalized Business Models: should the permanent establishment definition be modified to resolve the issue or should the focus be on a shared taxing rights mechanism? **Intertax,** v. 46, n. 6/7, pp. 476-494, 2018.

[980] Bal concludes that a nexus based on significant digital presence would not only create complexity and uncer-

considered much more plausible. In this sense, this author suggested abandoning the digital PE concept and recognising that its institution's intention was the simple migration of taxation from the jurisdiction of residence to that of the market.[981]

User participation.

The debates concerning the significant economic presence resulted in parallel discussions around the suggested criteria for determining such presence. Thus, Lammers analysed the plausibility of employing the concept of user participation as a tax incidence criterion, concluding for its ineffectiveness, and considering alternative means.[982] The general feeling was that this concept would not have a technical tax connotation capable of justifying an effort to modify the field's discourse. Accordingly, Grinberg has pointed out that the user participation proposal's elements have always been present in the tax discourse but never deserved specific treatment.[983] In this sense, the use of this criterion could not be restricted to the digital economy but should reach other sectors that also generate value from the information extracted from its users. For this reason, Chand affirmed that raw data is not a novelty brought by the digital economy but a regular input to any business, which is why this proposal is conceptually incorrect.[984]

Although not attacking the proposal's principle, Becker and Englisch have rejected the premise that the mere user location should determine taxing rights' attribution. In

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tainty, but it is also unlikely to work in practice. See BAL, A. The Sky's the Limit – Cloud-Based Services in an International Perspective. **Bulletin for International Taxation**, pp. 515-521, 2014.

[981] The author justifies this lack of clarity concerning the true intentions because they are unfavourable to "non-digital" exporting nations. See BRÄUMANN, P. Digital Permanent Establishments on Its Way to Becoming a Reality? the EU Commission's proposal on taxing 'significant digital presence'. In: Haslehner, W., Kofler, G., Pantazatou, K. and Rust, A. (Ed.). **Tax and the Digital Economy: challenges and proposals for reform**. Alphen aan den Rijn: Kluwer Law International, 2019. 7, pp. 147-176.

[982] The author suggests that the focus should be on using taxation to remedy specific aspects typically associated with the digital economy, such as monopolies' emergence. See LAMMERS, J. The OECD Concept of User Participation and a More Pragmatic Way to Tax Rent Seeking. **Tax Notes International,** v. 96, pp. 611-622, 2019.

[983] Analysing traditional businesses that also relied on user data to create value, like pharmaceutical industries and financial services, Grinberg argues that this proposal should not be restricted to digital companies. See GRINBERG, I. User Participation in Value Creation. **British Tax Review**, n. 4, pp. 407-421, 2018.

[984] Furthermore, because it imposes a ring-fence and does not adapt to future situations, the author affirms that proposal also does not harmonise with tax policy principles. See "The User Participation Proposal" in CHAND, V. Allocation of Taxing Rights in the Digitalized Economy: assessment of potential policy solutions and recommendation for a simplified residual profit split method. **Intertax,** v. 47, n. 12, pp. 1023-1041, 2019b, pp. 1028-1029.

this sense, the authors suggested alternative ways of determining such rights based on another criterion equally connected to the idea of user participation.[985] This alternative applies a business perspective to users' traditional definition, associating the market elements related to the value creation with the companies' features. Schön criticised this attempt to assign new taxing rights to market jurisdiction, arguing that the presence of a large user base and its potential contribution to value creation has always existed.[986] Consequently, although incorporated into a business perspective, the idea of user participation remained associated with taxation in the jurisdiction of the market. This association provoked several reactions against the attempt to separate users from consumers and exclude the latter from the debate on value creation.

Devereux and Vella have criticised the rationality behind the user participation concept and its reference to users, not consumers, as responsible for creating value. The authors suggested that this effort stems from the attempt to maintain the premise that the value creation belongs exclusively to the supply side.[987] More broadly, De Wilde criticised the attachment to the tax field's tradition, claiming that the debate has exposed problems already existent in the international tax discourse. The question would be to decide whether it is worth trying to adapt the concepts to preserve outdated paradigms or offer more radical solutions.[988] However, despite these criticisms and the possible implications of advancing the debate towards the defence of market jurisdiction, most academics have chosen to preserve the elements linked to business activity. The problems associated with user participation often attracted a discursive reaction emulating the supply side's features and harmonising with the marketing intangibles proposal.

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[985] They argue that a better option is to apply the concept of sustained user relationships (SURE), aligned with the rationale of a consistently defined notion of value creation. See "User Involvement in a Firm's Value Creation?" in BECKER, J. and ENGLISCH, J. Taxing Where Value Is Created: what's 'user involvement' got to do with it? **Intertax,** v. 47, n. 2, pp. 161-171, 2019, pp. 166-170.

[986] For this reason, Schön stresses that it still has to be explained why the digital economy should deserve such specific rules. See "How to tax the demand side of the market?" in SCHÖN, W. Ten Questions About Why and How to Tax the Digitalized Economy. **Bulletin for International Taxation,** v. 72, n. 4/5, pp. 278-292, 6 Mar 2018, pp. 16-18.

[987] The authors state that ignoring consumers as factors that produce income is economically incorrect, concluding that the existence or not of a consumption tax in the market jurisdiction does not affect the consumer's economic importance in generating corporate profits in any way. See "An economically unsound understanding of value creation" in DEVEREUX, M. P. and VELLA, J. Taxing the Digitalised Economy: targeted or system-wide reform? **British Tax Review**, n. 4, pp. 387-406, 2018b, pp. 5-6.

[988] De Wilde accuses all proposals of establishing a ring-fence and concludes that there is no readily available quick fix. See DE WILDE, M. F. Comparing Tax Policy Responses for the Digitalizing Economy: fold or all-in. **Intertax,** v. 46, n. 6/7, pp. 466-475, 2018.

Marketing intangibles.

The marketing intangibles proposal extends the premise that the company is digitally present in the market jurisdiction, corroborating the idea that value creation belongs to the supply side. For this reason, Chand concluded that it is the most feasible proposal to be implemented.[989] Pistone, Nogueira, and Andrade highlighted its similarity with the user participation proposal as both acknowledge business profits to the market beyond the current nexus and allocation rules. Despite some practical problems, the authors considered it a remarkable achievement that creates a middle ground between transfer pricing rules and the destination-based approach.[990] Likewise, Moreno and Brauner argued that the proposal is theoretically more sophisticated than the user participation for avoiding ring-fencing, not reformulating the PE definition, and suggesting the use of current transfer pricing rules. On the other hand, the authors criticised it for not having a robust background theory capable of reshaping the digital economy debate.[991]

The lack of a theoretical foundation does not mean the absence of a rationale in the marketing intangibles proposal when dissociating the user or consumer from the demand side. Such rationale considers user participation and the data generated as companies' intangible assets. The idea behind the commodification of these factors presupposes that the market jurisdiction constitutes a genuine goodwill source. In other words, all the economic efforts made by a company in a given jurisdiction in order to maintain or develop its business activities correspond to a consumer-based intangible. The relationship between the idea of intangibles and the company's investments has evidenced this criterion as an alternative to the pure

[989] In other words, the proposal would be 'less flawed' since the author still suggests numerous adaptations to achieve certainty. See "Marketing Intangibles Proposal" and "Recommendation: the design of a solution" in CHAND, V. Allocation of Taxing Rights in the Digitalized Economy: assessment of potential policy solutions and recommendation for a simplified residual profit split method. **Intertax,** v. 47, n. 12, pp. 1023-1041, 2019b, pp. 1032-1040.

[990] Among the practical problems, there is the difficulty of separating value creation at the level of marketing and trade intangibles, the constant re-categorisation of intangibles, pricing, and separation between routine and non-routine functions and profits, as well as the difficulty of applying the transfer pricing guidelines. See "The 'Marketing Intangibles' Proposal" in PISTONE, P., NOGUEIRA, J. F. P. and ANDRADE, B. The 2019 OECD Proposals for Addressing the Tax Challenges of the Digitalization of the Economy: an assessment. **International Tax Studies,** v. 2, n. 2, 29 Mar 2019, pp. 23-29.

[991] It is noteworthy that, at the time of their analysis, the authors had not yet had access to the details of the proposal, concluding that the best alternative would still be the institution of a withholding tax. See "Focus on Profit Attribution Rules" in MORENO, A. B. and BRAUNER, Y. Taxing the Digital Economy Post-BEPS…Seriously. **Columbia Journal of Transnational Law,** v. 58, n. 1, pp. 121-188, 2019, pp. 172-178.

form of the marketing intangibles proposal. Thus, Schön considered the proposal a mix of elements involving anti-avoidance, residual profit allocation theory, and specific investment foundation, suggesting abandoning the first two elements and favouring the third.[992]

Although more accepted than the user participation, the marketing intangibles proposal also faced questions about its possible conflict with other traditional categories in the field. Some authors understood that the proposal violates principles that govern specific methodologies' application considered as values in themselves. Besides, the very idea of allocating taxing rights to the market jurisdiction based on the number of investments made received criticisms for not representing the interests of most developing countries. As such investment is associated with the size of the market, Castro argues that it is beneficial for India or China but does not favour small developing economies.[993] The proposal also raised criticisms related to the problematic separation between intangible and business assets, weakening its chances of being implemented in practice. For this reason, Collier and Vella have proposed the adoption of more objective ways of attributing taxing rights based on simplified and formulaic approaches.[994]

Expanding the debate.

The consolidation of the three proposals to modify the criteria for attributing taxing rights also affected the academic reaction's aesthetics. As it highlighted some common aspects of the proposals, Dourado described the unified approach as an intermediate movement between transfer pricing rules and a shift to market jurisdiction.[995] However, this consolidation of different elements also suffered criticism based on the perception that the proposal lacked a shared principle. The unified approach was considered a patchwork resulting from rec-

[992] For Schön, the proposal is in harmony with the idea that any financial effort to enter a given market consists of a specific investment whose return is not limited to the digital economy. See "Marketing Intangible Base" in SCHÖN, W. One Answer to Why and How to Tax the Digitalized Economy. **Intertax,** v. 47, n. 12, pp. 1003-1022, 2019, pp. 1016-1018.

[993] Besides, according to the author, marketing strategies aim at a global market or target actual or potential customers. See "The Marketing Intangibles Proposal" in CASTRO, A. S. Administrative Capability Analysis of OECD Proposals from the Perspective of Developing Countries. **Intertax,** v. 48, n. 2, pp. 218-232, 2020, pp. 223-225.

[994] The authors suggest a Destination Based Cash Flow Tax. See COLLIER, R. S. and VELLA, J. Five Core Problems in the Attribution of Profits to Permanent Establishments. **World Tax Journal,** v. 11, n. 2, pp. 159-187, 2019.

[995] For this reason, Dourado stated that the unified approach surprised many international tax lawyers and not just those who supported the supply-side approach. See DOURADO, A. P. The OECD Unified Approach and the New International Tax System: a half-way solution. **Intertax,** v. 48, n. 1, pp. 3-8, 2020b.

onciling transfer pricing rules with formulary methods, causing a complexity that potentially nullifies its benefits.[996] Even with this plural character, the academics questioned the unified approach's ability to express the opinion of the large number of countries that form the Inclusive Framework. Christians also criticised it for not leading to the necessary consensus to end the clash of proposals nor allowing the project to deliver some practical results within the initially scheduled term.[997]

In parallel with the unified approach, and even before its disclosure by the OECD, the mere idea of global minimum taxation received critical reactions related to its possible inclination favouring the residence's jurisdiction to the source's detriment. Moreno and Brauner accused the proposal of trying to rescue propositions rejected during the BEPS Project and reinserting them on the TFDE agenda.[998] In turn, Dourado realised that the proposal adopted a discourse distinct from the field's tradition, speculating on this shift's possible consequences. The author stressed the uncertainties regarding the actors' behaviours after its implementation, potentially resulting in mistrust and reciprocal surveillance.[999] It is noteworthy that, unlike the taxpayers, academics, in general, did not oppose the institution of a minimum level of global taxation. The criticisms were not directed at the proposal's technical foundations but at the political problems caused by technical inconsistencies identified between its lines.

Notwithstanding, the academics not just reacted to the debate promoted by

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[996] De Wilde says that, like Victor Frankenstein, from the same name novel, the OECD created a monster of its own. See DE WILDE, M. F. On the OECD's 'Unified Approach' as Frankenstein's Monster and a Dented Shape Sorter. **Intertax,** v. 48, n. 1, pp. 9-13, 2020. Graetz concludes that taxpayers' objections to the complexity of Pillar One are justified, highlighting the report's lack of clarity in exposing its basic principles and sustaining the need for a "dramatic simplification" of the proposal. See GRAETZ, M. J. A Major Simplification of the OECD's Pillar 1 Proposal. **Tax Notes International,** v. 101, pp. 199-211, 11 Jan 2021.

[997] Christians believes that the unified approach represents an effort to transform the specific OECD member countries' agenda into a broad Inclusive Framework's objective, clearly marginalising other topics. The author cites the significant economic presence proposal, led by India in the scope of the G24, as a debate deliberately left aside to favour the US and Europe debate on tech giants. See CHRISTIANS, A. A Unified Approach to International Tax Consensus. **Tax Notes International,** v. 96, pp. 497-500, 11 Nov 2019.

[998] The authors state that "the devil is in the details", highlighting political aspects related to who should decide the level of taxation and the countries that will lose with the proposal. The authors also raise technical aspects such as the fact that the proposal relates to universal taxation rules discussed and rejected during Action 3, foreseeing that it would be considered illegal in light of the World Trade Organization law. See "GILTI & Co." in MORENO, A. B. and BRAUNER, Y. Taxing the Digital Economy Post-BEPS…Seriously. **Columbia Journal of Transnational Law,** v. 58, n. 1, pp. 121-188, 2019, pp. 183-186.

[999] Dourado emphasises, however, that the proposal does not use terms such as "harmful" or "aggressive", concluding that it is not an issue of naming and shaming non-cooperative jurisdictions. See DOURADO, A. P. The Global Anti-Base Erosion Proposal (GloBE) in Pillar II. **Intertax,** v. 48, n. 2, pp. 152-156, 2020a.

TFDE in its original terms but also have presented some additional alternatives to the proposals emerging during the project. The first one concerned adopting a more prominent position on the discussion involving the tax location's determination, whether it should be the origin or destination jurisdiction.[1000] The second was concerned with dividing the result of tax collection when the employment of mathematical and objective methods prevailed. Academics presented some formulary suggestions, the emulation of proposals from other entities, and even mathematical formulas for allocating profits.[1001] Finally, some authors have also suggested adopting non-mobile criteria for establishing a link with the market or other jurisdiction. These criteria are related to factors associated with the jurisdiction where the shareholders or consumers are located and seek to provide more efficiency than the mobile factors allow.[1002]

Market, State, and citizens.

The expansion of the debate provoked by the academy necessarily passes through the main categories that structure the modern tax discourse, and the most evident of them is the market. In this sense, Carvalho has highlighted the impacts of artificial intelligence on the taxation of consumption and the possible implications of digital technology development on personality and residence.[1003] Likewise, the advances in Cloud Computing and 3D Printing

[1000] See AVI-YONAH, R. S. The Case for a Destination-Based Corporate Tax. **International Tax Journal,** v. 41, n. 5, pp. 11-47, 2015, AVI-YONAH, R. S. and XU, H. Evaluating BEPS: a reconsideration of the benefits principle and proposal for UN oversight. **Harvard Business Law Review,** v. 6, n. 2, pp. 185-238, Summer 2016, DE WILDE, M. F. Tax Jurisdiction in a Digitalizing Economy; why online profits are so hard to pin down. **Intertax,** v. 43, n. 12, pp. 796-803, 2015, DE WILDE, M. F. **Sharing The Pie: taxing multinationals in a global market**. Amsterdam: IBFD, 2017, AUERBACH, A. J., DEVEREUX, M. P., KEEN, M. and VELLA, J. **Destination-Based Cash Flow Taxation**. Oxford University Centre for Business Taxation: Jan. 2017. See also "The DBCFT" in MORENO, A. B. and BRAUNER, Y. Taxing the Digital Economy Post-BEPS…Seriously. **Columbia Journal of Transnational Law,** v. 58, n. 1, pp. 121-188, 2019, pp. 181-183.

[1001] See AVI-YONAH, R. S., CLAUSING, K. A. and DURST, M. C. Allocating Business Profits for Tax Purposes: a proposal to adopt a formulary profit split. **Florida Tax Review,** v. 9, pp. 497-554, 2008. See "What About CCCTB?" in SINNIG, J. The Reflection of Data-Driven Value Creation in the 2018 OECD and EU Proposals. **EC Tax Review,** v. 27, n. 6, pp. 325-334, 2018, p. 331. See also "Profit allocation methods" in PISTONE, P., NOGUEIRA, J. F. P. and ANDRADE, B. The 2019 OECD Proposals for Addressing the Tax Challenges of the Digitalization of the Economy: an assessment. **International Tax Studies,** v. 2, n. 2, 29 Mar 2019, pp. 11-12.

[1002] Devereux and Vella argue that the tax base should be linked to relatively immobile factors. See DEVEREUX, M. P. and VELLA, J. Implications of Digitalization for International Corporate Tax Reform. **Intertax,** v. 46, n. 6/7, pp. 550-559, 2018a. See also "Efficiency – Mobile Versus Immobile Factors" in SCHÖN, W. One Answer to Why and How to Tax the Digitalized Economy. **Intertax,** v. 47, n. 12, pp. 1003-1022, 2019, p. 1007.

[1003] The author states that important issues were left out of his analysis, such as the taxation of the relationship between artificial intelligence systems and "inheritance" issues involving chains of systems designed by other systems. See CARVALHO, L. d. L. Spiritus Ex Machina: addressing the unique BEPS issues of autonomous artificial intelligence by using 'Personality' and 'Residence'. **Intertax,** v. 47, n. 5, pp. 425-443, 2019.

technologies were analysed based on their impact on some legal categories' characterisation. This issue is particularly problematic concerning the distinction between income or consumption taxation and separating digital goods from services.[1004] The emergence of the sharing economy also started to be analysed as a possible transforming element of the international tax discourse. The debate involves understanding the models of production and consumption and discussing the substantive dimension of "taxing the sharing".[1005]

As a result of the dualism between the public and private spheres, the analysis of digitalisation impacts on the state's activity also corresponds to the academic effort to expand the tax debate. The main issue concerns the effects of technology advancement on the state's capability to combat tax fraud.[1006] This debate is associated with the growing literature on Blockchain technology's important role in taxation, both as a tax administration tool and as a challenge for its regulation. Consequently, the tax aspects related to consumption and the developments brought about by digital technology have become the subject of intense debate.[1007] One of these developments concerns the emergence of decentralised digital currencies, notably Bitcoin, as the phenomenon responsible for developing Blockchain technology. This emergency resulted in several issues related to the possibility that these currencies have the same tax effects as tax havens and the tax authorities' possible reactions to tackle them.[1008]

[1004] See REQUENA, J. Á. G. Tax Treaty Characterization of Income Derived from Cloud Computing and 3D Printing and the Spanish Approach. **Intertax,** v. 46, n. 5, pp. 408-421, 2018 and BAL, A. The Sky's the Limit – Cloud-Based Services in an International Perspective. **Bulletin for International Taxation**, pp. 515-521, 2014.

[1005] See BERETTA, G. The Taxation of the "Sharing Economy". **Bulletin for International Taxation,** v. 70, n. 11, 20 Oct 2016 and OEI, S.-Y. and RING, D. M. Can Sharing Be Taxed? **Washington University Law Review,** v. 93, n. 4, pp. 989-1070, 2016. See also PANTAZATOU, K. The Taxation of the Sharing Economy. In: Haslehner, W., Kofler, G., Pantazatou, K. and Rust, A. (Ed.). **Tax and the Digital Economy: challenges and proposals for reform**. Alphen aan den Rijn: Kluwer Law International, 2019, pp. 215-236.

[1006] See EHRKE-RABEL, T. Data in Tax Collection and Enforcement. In: Haslehner, W., Kofler, G., Pantazatou, K. and Rust, A. (Ed.). **Tax and the Digital Economy: challenges and proposals for reform**. Alphen aan den Rijn: Kluwer Law International, 2019, pp. 283-334. On the impact of digitalisation on the bureaucracy itself, see DIMITROPOULOU, C., GOVIND, S. and TURCAN, L. Applying Modern, Disruptive Technologies to Improve the Effectiveness of Tax Treaty Dispute Resolution: Part 1. **Intertax,** v. 46, n. 11, 2018 and HERBAIN, C. A. Fighting VAT Fraud and Enhancing VAT Collection in a Digitalized Environment. **Intertax,** v. 46, n. 6/7, pp. 579-583, 2018. See also in COCKFIELD, A. J. BEPS and Global Digital Taxation. **Tax Notes International,** v. 75, n. 11, pp. 933-940, 15 Sep 2014.

[1007] See MERKX, M. VAT and Blockchain: challenges and opportunities ahead. **EC Tax Review**, pp. 83-89, 2019 and VALENTE, P. Bitcoin and Virtual Currencies Are Real: are regulators still virtual? **Intertax,** v. 46, n. 6/7, pp. 541-549, 2018a. See also TUMPEL, M. and KOFLER, J. Treatment of Digital Currencies. In: Haslehner, W., Kofler, G., Pantazatou, K. and Rust, A. (Ed.). **Tax and the Digital Economy: challenges and proposals for reform**. Alphen aan den Rijn: Kluwer Law International, 2019, pp. 177-188.

[1008] See BAL, A. Taxing Virtual Currency: challenges and solutions. **Intertax,** v. 43, n. 5, pp. 380-394, 2015 and BAL, A. Developing a Regulatory Framework for the Taxation of Virtual Currencies. **Intertax,** v. 47, n. 2, pp.

Finally, the third central category of modern tax discourse corresponds to the citizens, and academics have also developed a specific debate on it, especially concerning the effects of digitalisation on labour. One of the critical points is the question of the impact of robot technology development on labour relations and the capability of obtaining tax revenue to face job losses.[1009] This debate is related to a broader one regarding the very nature of the employment relationship and the possible effects of the digitalisation process. As a result, new characterisation proposals emerged from the realisation that the digital economy produced new forms of work that are not suited to the liberal paradigm.[1010] The issue of protecting personal data has also gained prominence in the international tax field, given the growing perception of the correlation between user participation and value creation. Thus, the tax debate met with the broader discussion related to Internet users' rights, notably concerning personal information confidentiality.[1011]

Other perspectives and elements.

In addition to broadening the debate, some authors have offered different perspectives to analyse the digitalisation process's effects. In this sense, Ting has re-evaluated the very idea of tax planning based on the developments provided by the tax debate on the digital economy.[1012] Valente has considered geopolitical aspects and transported them to the digital debate scope to understand the international tax scenario. With this, the author opened space to

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219-233, 2019. See also MARIAN, O. Are Cryptocurrencies Super Tax Havens? **Michigan Law Review First Impressions,** v. 112, pp. 38-48, 2013 and BILANEY, S. K. From Value Chain to Blockchain – Transfer Pricing 2.0. **International Transfer Pricing Journal,** v. 25, n. 4, pp. 294-296, 16 May 2018.

[1009] See OBERSON, X. Taxing Robots? from the emergence of an electronic ability to pay to a tax on robots or the use of robots. **World Tax Journal,** v. 9, n. 2, pp. 247-261, 2017 and ENGLISCH, J. Digitalization and the Future of National Tax Systems: taxing robots? In: Haslehner, W., Kofler, G., Pantazatou, K. and Rust, A. (Ed.). **Tax and the Digital Economy: challenges and proposals for reform**. Alphen aan den Rijn: Kluwer Law International, 2019, pp. 261-282.

[1010] See KOSTIĆ, S. V. In Search of the Digital Nomad: rethinking the taxation of employment income under tax treaties. **World Tax Journal,** v. 11, n. 2, pp. 189-225, 2019.

[1011] See WÖHRER, V. Effective Taxation Versus Effective Data Protection? In: Haslehner, W., Kofler, G., Pantazatou, K. and Rust, A. (Ed.). **Tax and the Digital Economy: challenges and proposals for reform**. Alphen aan den Rijn: Kluwer Law International, 2019, pp. 237-260 and KRÄHENBÜHL, B. Personal Data Protection Rights within the Framework of International Automatic Exchange of Financial Account Information. **European Taxation,** v. 58, n. 8, pp. 354-362, 12 Jul 2018.

[1012] The author analyses Apple's international tax structure and investigates how it achieved the "double non-taxation" of US $44 billion, reviewing the possible responses of both the residence and source countries to Apple's tax avoidance structure. See TING, A. iTax - Apple's International Tax Structure and the Double Non-Taxation Issue. **British Tax Review**, n. 1, pp. 40-71, 2014.

recognise the roles of international and supranational actors in the debate, identifying a severe crisis in the Westphalian paradigm.[1013] Similarly, Hellerstein has suggested considering the American subnational experience to understand the potential problems of taxing the digital economy at the international level. The author justified his choice by arguing that cross-border taxation often presents common problems, even in different contexts, from federal states like the United States, Canada, and Brazil, to countries with a common legal framework, like the European Union.[1014]

Faced with the perception that the digital economy debate reopened old questions concerning the tax field's main categories, some authors offered new discussion elements. Olbert, Spengel, and Werner analysed the locations' attractiveness for investments, identifying the tax rules affecting domestic and cross-border digital business models.[1015] This movement was the beginning of a realisation that digitalisation's impacts on international taxation were not limited to the digital sector. Dourado treats the digital economy debate as a revamp of the entire international tax discourse, caused by a new reality that has unearthed old problems not yet solved.[1016] One of the results of this new context was the possibility of thinking about new relationships between the categories of the field and emerging interests. Concerning the COVID-19 pandemic, Christians and Magalhães perceived an imbalance caused by a general fiscal crisis accompanied by a massive increase in particular companies' profits, especially in the digital sector.[1017]

[1013] Assuming that cyberspace exists beyond the state's ability to exercise its authority, Valente concludes that the result will be revising the classical idea of sovereignty. See in VALENTE, P. Geotaxation and the digital: Janus in the mirror. **Intertax,** v. 47, n. 4, pp. 382-390, 2019.

[1014] Hellerstein's article dialogues with the fundamental propositions advanced by Wolfgang Schön's examination of "Ten Questions about Why and How to Tax the Digitalized Economy", mentioned elsewhere. See HELLERSTEIN, W. A US Subnational Perspective on the "Logic" of Taxing Income on a "Market" Basis. **Bulletin for International Taxation,** v. 72, n. 4/5, pp. 293-296, 6 Mar 2018.

[1015] The conclusion was that investments in digital business models generally face lower average effective tax rates than those in traditional business models. See OLBERT, M., SPENGEL, C. and WERNER, A.-C. Measuring and Interpreting Countries' Tax Attractiveness for Investments in Digital Business Models. **Intertax,** v. 47, n. 2, pp. 148-160, 2019.

[1016] The author highlighted that one of the main criticisms of the debate (in mid-2018) was its silence on source and residence issues. See DOURADO, A. P. Digital Taxation Opens the Pandora Box: the OECD Interim Report and the European Commission proposals. **Intertax,** v. 46, n. 6/7, pp. 565-572, 2018a. In 2020, however, these elements became manifest in the OECD's work.

[1017] Although the idea of taxing excess profits is not restricted to the digital economy, the digitalisation process has played a central role both in the election of those who have benefited economically from the pandemic, as in the generation and control of the information necessary to make such taxation occur at the global level. See CHRISTIANS, A. and MAGALHÃES, T. D. It's Time for Pillar 3: a global excess profits tax for COVID-19 and

Conclusions.

The present description of the academic reactions to the international tax debate on the digital revolution shows a plurality of behaviours gravitating around three identifiable attitudes. Although prominent initially, the attitude of total scepticism towards the debate has weakened as the reality has demonstrated the theme's omnipresence. On the other side of the spectrum, the defence of a radical change in the international tax discourse, whether only concerning the digital economy or as a whole, has constantly gained strength. Nonetheless, these groups still comprise a relatively small quantity of authors, despite their importance to the field. The vast majority of academics who have devoted themselves to analysing the debate have taken an intermediate and relatively reactive position. Without necessarily denying existing an effort to modify the international tax field, these academics have limited themselves to dealing with how the legal discourse should adapt to the digital economy's particularities.

Although less conservative than most multinational companies, the academics' intermediate position is also concerned with preserving the international tax legal discourse. As a result, these academics attempt to respond to the transformation efforts through limited and precise adaptations of the field's traditional categories. Although such a position also invokes realistic arguments concerning practicality or feasibility, this adaptation is usually associated with preserving the field's values. This attitude presupposes the existence of international tax principles concerning which academics would be true guardians. These principles form the basis of a way of thinking considered technical and opposed to interests of other kinds, notably political interests. In this sense, the attitude of preserving the field's categories observed in academics presupposes a cognitive separation between political and technical elements and the prevalence of the latter over the former.

The duality between technical and political, present in the academics' attitude, mirrors the cognitive separation between public and private spheres. In this sense, while political interests would belong to an emotional and thoughtless dimension, the technical attitude would represent the field's rational foundations' very materialisation. This rationality, in turn, is supported by the liberal paradigm on the wealth generation, responsible for making specific

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beyond. **Tax Notes International**, 1 May 2020.

themes central and marginalising others. Thus, the conclusion should be that the debate's greater complexity would inevitably push it towards technicality, moving it away from politics. The historical analysis showed that this trend was present in an initial moment when the articulation of merely conceptual categories gave way to complex elements of substance. However, the rise of substantial elements led the debate beyond the initial limits of Action 1, paradoxically reinforcing a political dimension widely criticised by most academics, as the next item will demonstrate.

3.2.3. The different dimensions of the debate.

The narrative on the governmental texts produced in the last sub-chapter and the interpretation of taxpayers' and academics' attitudes made in the previous two items reveal these actors' interaction process. Although occupying different positions, these actors share a relatively uniform way of thinking that gives cohesion to this debate, allowing a mutual understanding. This discursive interaction is only possible because they adopt a shared paradigm, allowing them to differentiate central from peripheral issues in the debate. In this case, the dominance of the liberal paradigm on wealth generation is responsible for making the tax debate on the digital economy take on the form it presents. Hence, this paradigm is the reference for the discursive activity as it indicates which problems must be solved and which solutions are considered adequate. Since it is also responsible for how the discursive elements interact, the liberal paradigm influences the tax debate's transformations over time.

This chapter has shown that the digital economy's tax debate was initially concerned with characterisation issues, primarily involving abstract categories used in international tax treaties. The articulation of these categories corresponds to an essentially formalist exercise deeply influenced by the international tax legal tradition. Although this formal discussion has never ceased to exist, it has lost importance before the growing concern over material elements related to economic substance. Such elements gained prominence as the debate on transfer pricing rules, especially involving intangibles, paid more attention to the idea of value creation. In addition to determining the taxable quantum, the debate on value creation has highlighted normative elements related to the justification of taxation, shedding light on the phenomenon's political dimension. The result was the production of an allegedly technical discourse of rupture

with this dimension, raising doubts about the actors' role in this interaction process.

This item synthesises the interaction process in the digital economy debate verified from the last sub-chapter documents and the two previous items' reactions. The premise is that this interaction has migrated from a formal and abstract debate on characterisation to a material debate on economic substance, which later has evidenced the political dimension of international taxation. The hypothesis is that this deemed politicisation of the debate is not opposed to the technical attitude but consists of its unfolding. The item begins by describing how different formalist attitudes in the characterisation debate have collided with tax legal discourse's traditional elements. After, the item reveals the implications behind the importance gained by value creation within the scope of the material debate on transfer pricing rules. Finally, the item illustrates how the inability of these rules' assumptions to deal with the digital revolution produced normative effects, causing an allegedly technical reaction to the politicisation of the debate.

Abstraction and characterisation.

The formal is the most fundamental dimension of the international tax debate about the digital revolution, presenting particular importance to lawyers. This dimension concerns the international tax discourse's coherence and the preservation of meaning in articulating its traditional categories.[1018] The documents' analysis has shown an initial concern with identifying and capturing the digital revolution's social phenomena in the tax vocabulary. Such phenomena relate with the archetypes created by the international tax field, notably those referring to the articles of the model conventions on double taxation.[1019] However, to solve this problem, it would be enough if the actors involved agreed on how to characterise certain events in the light of the instruments contained in the vocabulary resulting from the tax social practice.[1020]

[1018] This exclusive concern with the internal coherence of the categories of legal discourse is similar to the aforementioned sophistical reaction to the rise of discourse as an instrument of power within the polis's scope. See "The emergence of discourse and the problem of power" in the item "1.1.1. Rationality, legal forms, and emerging interests".

[1019] As seen in item "3.1.1. Taxation and e-commerce", the Treaty Characterisation TAG represents this formal concern's institutionalisation within the OECD's scope. See "Main findings / conclusions of the Treaty Characterization Technical Advisory Group (TAG)" in OECD. **Taxation and Electronic Commerce: implementing the Ottawa taxation framework conditions**. OECD Publishing: Paris. 2001e, pp. 214-217.

[1020] Such pragmatism implies the concern to reach a consensus without considering the material effects of the revenue sharing. Dorey, for example, suggests that prioritising Pillar Two would facilitate reaching a consensus on Pillar One since, among other things, countries would likely be more prone to accept a minor part of a "new revenue" in-

Although potentially ending the debate, this agreement raises other questions concerning the implications of these actors' choices in the debate's material scope, shedding light on substance problems.

While some actors appear to satisfy themselves with the certainty provided by a potential general agreement, others expressed concern with a solution supported by empty rhetoric. Therefore, even in the face of a formal consensus, these other actors are worried about the digital revolution debate's material results.[1021] On the one hand, some defend the responses' adequacy to the international taxation principles, condemning proposals lacking the values these principles convey. For this group, eventual changes in the international tax field's social practices must observe the values that orientate the tax phenomenon itself.[1022] On the other hand, some understand that such values originate from the social practice and not from an ideal plan responsible for guiding the actors' behaviour. In this sense, eventual transformations would be justified only when confronted with the reality resulting from the field's tradition, and any preservation of values could only be applicable on a case-by-case basis.[1023]

This double possibility of understanding the substance debate raises important questions about the origin of these defended values. Whether ideal or resulting from the actors' attitudes, it is necessary to identify the source from which these values emanate; other-

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stead of abandoning a "piece of the pie" that they already have. See DOREY, M. A Road Map for Reaching Global Consensus on How to Tax the Digitalized Economy. **International Transfer Pricing Journal,** v. 26, n. 5, 22 Aug 2019.

[1021] Highlighting the need to go beyond formalism, recognising the material dimension of taxation, and admitting that the legal approach can limit the understanding of the tax phenomenon at the international level, Gutmann states that, in an environment devoid of a formal textual source, there would be room to seek in philosophy the answers for the internationalisation of the redistributive function of taxes. See GUTMANN, D. Du Droit à la Philosophie de l'Impôt. **Archives de Philosophie du Droit**, pp. 7-13, 2002. For being concerned with obtaining a solution that, in addition to being consensual, is considered "good" according to some criterion not limited to the discourse's internal coherence, this position is similar to the mentioned philosophical reaction to the sophistic attitude. See "The emergence of discourse and the problem of power" in the item "1.1.1. Rationality, legal forms, and emerging interests".

[1022] For an opinion about how the absence of any discernible economic principles prevents a more smoothly multilateral consensus on a novel nexus standard, see FINLEY, R. Lack of Clear Principles May Delay Consensus on Digital Taxation. **Tax Notes International,** v. 100, p. 560, 26 Oct 2020. On how the European Union hopes that, in addition to consensus, the solution obtained yield tax fairness, see PAEZ, S. EU Will Act Unilaterally if OECD Tax Deal Doesn't Yield Fairness. **Tax Notes International,** v. 99, p. 1624, 21 Sep 2020.

[1023] Lykken argues that a digital taxation system must have very well-defined theory and objectives, arguing that one should analyse the "old economy" rules on their possible contemporary applicability. The author also cites thoughts he claims have affected past policies and that still influence current thinking. See LYKKEN, M. The Philosophy of Digital Taxation. **Tax Notes International,** v. 93, pp. 859-863, 25 Feb 2019.

wise, the debate over substance will return to its merely rhetorical dimension.[1024] In invoking a tax idealism, the actor must indicate the receptacle where these principles are kept, revealing the axiological authority that overrides the agents responsible for the choice. When defending the Ottawa Convention's principles, or the Smithian canons, the actors legitimise the authority that establishes how the tax categories should articulate with the digital revolution. In the same sense, by indicating the field's practice as a value to be preserved, the actor would be privileging specific social actions over others. The result would be the establishment of path dependence, submitting new tax actors to choices made previously.[1025]

Taxpayers' and academics' reactions.

The appeal to preserve the field's principles, especially those related to freedom, was raised mainly by taxpayers, and was not necessarily accompanied by an indication of their source. The public consultations were not environments that demanded a solid foundation on the presented arguments.[1026] However, the axiological argument's preponderance among taxpayers did not mean a consensus on what values should prevail in the digital revolution's tax debate. Supporters of the business activity have mostly invoked arguments involving tax certainty, predictability, simplicity, and efficiency, in addition to vehemently attacking the possibility of double taxation. Arguments on tax justice, debate participation, the asymmetry between tax administrations, and even equity among stakeholders were invoked mostly by unions, non-profit associations, and non-governmental organisations. It is noteworthy that the defenders of business activity have predominantly invoked equity arguments to support the need for carve-out.

On the other hand, academics' situation was much more problematic, revealing particularities highlighting the tax field's characteristics. The association between sub-

[1024] The source's problem is central to the legal tradition, situated at the intersection of the historical debate between natural law, legal positivism, and legal realism. See "1.1.2. Jurisprudence as the intellectual dimension of the law".
[1025] Separating different types of "good reasons", among them those of substance and authority, Summers analyses the problem of "original error" in the case system adopted in the common law tradition. According to the author, a precedent can only be considered flawed or obsolete in the light of a substantive reason, and only if this is strong enough it can transform a given tradition. See "The variety of good reasons" and "Substantive reasons and the failure of precedent: original error and obsolescence" in SUMMERS, R. S. Two Types of Substantive Reasons: the core of a theory of common-law justification. **Cornell Law Review,** v. 63, n. 5, Jun 1978, pp. 714-727 and 733-735, respectively.
[1026] As seen above, the public consultation constituted a locus to manifest several dissatisfactions without any epistemological commitment. See "3.2.1. Taxpayers and the public consultations".

stance and the economic tradition made some of the most influential articles about tax materiality and the digital revolution present economic, accounting, and business perspectives.[1027] Among the first lawyers to tackle substance issues helpless in economic arguments, there is a preponderance of authors from the common law tradition where legal realism is widespread. The substance debate does not harmonise with the doctrinal tools for going beyond the textual analysis of the discussed categories.[1028] Therefore, doctrinal academics' participation was much more significant when OECD reports interacted with the provisions of model conventions or when countries internalised the measures. In one way or another, the analyses primarily focused on the adequacy of these measures to the countries' domestic legislation, or the international commitments assumed.

The historical analysis reveals that the doctrinal academic participation increased significantly as more documents considered technical were published. Equally, the publication increase coincides with a migration from a relatively distrustful attitude towards the debate to a more intense involvement.[1029] From a somewhat scarce production in 2013, an explosion of opinions about how the tax discourse should adapt to the new digital economic reality occurred in 2019. Such opinions, however, are mostly made up of reactions to texts produced by the OECD or other government actors, either to criticise them or to describe their content. This reactive attitude illuminates traditional aspects of the legal social practice, highlighting elements that have historically conditioned the field's discourse. The complex relationship between law and power, the universalism problem at the international level, and the question of the legal

[1027] For an economic approach, see GRAMBECK, H.-M. B2C Supplies of Electronic Services from 1 January 2015 from a German Perspective. **International VAT Monitor,** v. 24, n. 4, pp. 215-221, 4 Jul 2013. For an economic and accounting perspective, see OLBERT, M. and SPENGEL, C. International Taxation in the Digital Economy: challenge accepted? **World Tax Journal,** v. 9, n. 1, pp. 3-46, 1 Feb 2017 and SCHREIBER, U. and FELL, L. M. International Profit Allocation, Intangibles and Sales-Based Transactional Profit Split. **World Tax Journal,** v. 9, n. 1, pp. 99-115, 25 Jan 2017. Some examples of the collaboration between lawyers and economists include: DEVEREUX, M. P. and VELLA, J. Taxing the Digitalised Economy: targeted or system-wide reform? **British Tax Review**, n. 4, pp. 387-406, 2018b and ENGLISCH, J. and BECKER, J. International Effective Minimum Taxation: the GLOBE proposal. **World Tax Journal,** v. 11, n. 4, 20 Sep 2019.

[1028] The item "3.2.2. The academic attitude" showed that the first authors to address the issue of taxation on e-commerce were mainly Americans, Canadians, and Australians. Other possible reasons for this preponderance could be that e-commerce first developed in North America and that the United States and Australia's tax administrations were the first within the OECD to comment on the issue. See "The response of governments" in OECD. **Electronic Commerce: the challenges to tax authorities and taxpayers, an informal round table discussion between business and government**. 18 Nov. 1997a, pp. 32-35. However, this second situation resembles more a consequence than the cause of a realistic over a conceptualist attitude.

[1029] The item "3.2.2. The academic attitude" showed how the criticism of the debate gave way to criticism of scepticism regarding the theme's importance. See, specifically, "General reactions to the debate".

field's limits have conditioned how the academics have reacted to the debate's evolution.

Power, universalism, and the field limits.

While arising from an external source of power, the legal discourse constitutes an instrument of power, creating a tension between the legal scholars and the external authority. Thus, the dispute between academic and governmental discourses on the meaning of legal tax categories constitutes a struggle for the power to dictate the tax law.[1030] Two reactions to this dispute show distinct perspectives on the legal phenomenon, translating different understandings about the authority's role in the legal discourse. Some lawyers affirm that legal categories possess a specific content that does not depend on authority, while others consider authority itself the source of meaning. Lawyers in the first group feel more comfortable criticising the proposed solutions or even offering additional answers to the authorities' arguments. Lawyers in the second group could not even challenge the substance of the categories conveyed by the authorities or, at most, could only question the consistency of this substance with past choices.

By assuming an attitude of distinguishing the authority from the categories it manages, the tax lawyer faces a uniformity problem at the international level. If the internal perspective facilitates the defence of a universally good way of conceiving the application of a given category, the pluralism of the current international tax debate weakens such an initiative.[1031] It is not by chance that several authors reacted to the OECD debate claiming to be adopting the perspective of developing countries, or of a specific country, or even of the European Union. By dissociating the authority from the meaning of the categories, the legal scholar must build an objective meaning that may not reflect other actors' experience in the field. The result would be a paradoxical contingent universalism, in which the supposed intrinsic meaning of a category would only be present in certain circumstances. The determination of these circumstances brings up another traditional debate in the field related to the legal discourse's limits to construct its argument.

When confronting the authority's choices with an idea about the good, be

[1030] As demonstrated earlier, this tension is at the root of the rise of law as an autonomous intellectual tradition. See subchapter "1.1. Identifying the legal field".
[1031] As seen earlier, this same pluralism had already aggravated the feeling of crisis towards international law since

it a derivation of an idealist archetype or a result of social practice, the lawyers open space for questions about the nature of their arguments. The premise that the law emanates from a legitimate authority implies that any argument contrary to this authority's choices will be an extra-legal argument.[1032] Such a premise implies that any material concerns about the governmental debate's practical results on the digital economy would be outside the attitude expected from legal scholars. This idea results in the conclusion that, by definition, academics could not contribute to the impacts of the governmental debate on substance issues, assuming a merely instrumental role.[1033] However, in the international tax debate, the substance issue is not limited to taxation's economic effects on business activities. Although the liberal paradigm has made this perspective dominant, the substance debate also articulates itself with several other categories that constitute the international plane.[1034]

Realism and substance.

The substance debate in the legal tax field is not just a by-product of a reaction against empty rhetoric but also an element responsible for this field's independence. As previously seen, economic substance is at the heart of the idea of tax realism as an intellectual argument for defending the autonomy of the field vis-à-vis other legal branches, notably private law.[1035] Thus, to speak of economic substance for tax purposes is to invoke a realistic attitude that opposes the closure of the idea of taxation around abstract and self-referenced categories. It is an opening process that admits an articulation between the legal discourse and other discourses

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the second process of decolonisation. See item "1.1.3. From natural order to international law."

[1032] This premise explains why Bin argues, analysing the French legal experience, that the rise of legal positivism led to the marginalisation of the tax justice debate. The author assumes that this debate is outside of what is strictly legal, even suggesting the existence of an apparent "paradox" of some positivist approaches that sometimes develop analyses of tax justice. See BIN, F. À l'Ombre du Positivisme : quelle place pour une doctrine de la justice fiscale propre aux juristes fiscalistes (XIXe - XXe siècle) ? In: (Ed.). **La justice fiscale (Xe - XXIe siècle)**. Paris: Éditions Larcier, 2020.

[1033] Schön is categorical in this sense: "Academics should accept the inherent limits of their contributions to this debate. Their obligation is to analyse the pros and cons sine ira et studio and to refrain from offering intellectual camouflage for a mere fight about money." See SCHÖN, W. One Answer to Why and How to Tax the Digitalized Economy. **Intertax,** v. 47, n. 12, pp. 1003-1022, 2019, p. 1005.

[1034] Musgrave was one of the authors who best managed to articulate the debate on economic substance with legal and international relations categories. Speaking at a legal symposium, she curiously understood that she could be "bold enough" to go beyond traditional economic concerns by conducting a systematic analysis of unilateral, bilateral, and multilateral tax arrangements involving international income taxation. See MUSGRAVE, P. B. Sovereignty, Entitlement, and Cooperation in International Taxation. **Brooklyn Journal of International Law,** v. 26, n. 4, pp. 1335-1356, 2001.

[1035] For a description of this autonomy process, see the item "1.2.3. The legal discourse on taxation".

around taxation's material dimension. In the field of international tax law, no category best incorporates this ethos as the idea of economic transactions performed at arm's length. The arm's length principle (ALP) presents a material and objective dimension within the international tax discourse while implying an abstract value to be pursued.

The transfer pricing (TP) methods have embedded the ALP dual aspect, ranging from a simple comparison between identified transactions to disregarding an actual situation favouring an idealism. This methodology presumes an ideology opposing prices empirically identified but supported by undesired behaviours and other prices that, even when merely idealised, express a central value of the field.[1036] The relationship between TP rules and tax materiality becomes visible from how the formal concerns on treaty characterisation lost importance in favour of a substantive debate. Since these rules' inapplicability to a digital reality demanded a material response, TP has given rise to a debate on value creation.[1037] However, this debate did not mean returning to the old dichotomies between objective and subjective value but incorporated the TP rules' assumptions. In this way, following the tradition of the debate about TP rules, the value creation issue has become an effort to identify the location of business activity.

The main effect of associating value creation determination to transfer pricing rules is the abandonment of the objective elements. Although the mercantile characteristics of the goods or services are essential for identifying the ALP price, digitalisation's intangible character represents an exception to this broad rule.[1038] The second perspective abandoned in the

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[1036] However, the ALP dualism presupposes the prevalence of the objective dimension over idealism. In this sense, when they are equally applicable, the traditional transaction methods prevail over the transactional profit methods. Even among the traditional transaction methods, the uncontrolled price obtained by the direct observation of the market behaviour will always prevail over its indirect determination from the resale price or the goods' cost. See "Selection of the most appropriate transfer pricing method to the circumstances of the case" in OECD. **OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations 2017**. Paris: OECD Publishing, 2017c, pp. 97-100.

[1037] This migration from formality to substance expresses itself in the OECD narrative about revising TP rules. From the perception that the contractual allocation between associated companies could be vulnerable to manipulation, the OECD justified the need to reinforce the arm's length principle. The alignment of the allocation of profits with the value creation (and, consequently, with the economic activity) corresponds to that principle's very materialisation. See "Executive summary" in OECD. **Aligning Transfer Pricing Outcomes with Value Creation, Actions 8-10 - 2015 Final Reports**. OECD Publishing: Paris. 2015b, pp. 9-12.

[1038] As seen above, the prices objective determination by comparability prevails over indirect modes. However, the growing dominance of intangibles and their specificities correspond to this rule's main exception, giving importance to business behaviour instead of analysing the commercialised object. For this reason, Actions 8-10 of the BEPS Project caused a complete revision of the chapter on intangibles of the OECD Transfer Pricing Guidelines, emphasising the importance of the company's activities in determining the arm's length price. Such activities correspond to

new value debate is the marginalists' subjective theory which attributes the utility of a good to consumer behaviour.[1039] The observation of the tax debate on the digital revolution has evidenced an attempt to integrate this perspective into the scope of business activity. This effort highlights the central element of this new debate, consisting of an endeavour to identify the value as a particular result of business activities, even if it means explaining the entire phenomenology of market relations from the firm's perspective.[1040] Such an idea symbolises the prevalence of supply over demand and has implications that are not limited to economic discourse categories.

Value creation as a debate on residence.

Therefore, the BEPS Project's necessity to deliver material outcomes has contributed to the value creation's achievement of a central position in the debate. Despite some initial adverse reactions to the premise that taxation should align with value creation, value has always had a central role in the liberal paradigm.[1041] Nonetheless, the notion of value did not directly enter the international tax vocabulary but through proxies that have become more important than the original category. The liberal discourse has transformed value creation into wealth generation, and the latter has spread in the tax field from a specific notion of income. These changes have undermined value's importance since the idea of income may have connotations diverging from the original substantive concerns.[1042] However, the rescue of the idea of value as a distinct category of income has the purpose of emphasising its material character in

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the verbs "perform", "use", and "assume", respectively related to "functions", "assets", and "risks". As a result, the arm's length price does not depend on the intangible asset itself but its development, enhancement, maintenance, protection, and exploitation. See "Intangibles" in OECD. **Aligning Transfer Pricing Outcomes with Value Creation, Actions 8-10 - 2015 Final Reports**. OECD Publishing: Paris. 2015b, pp. 63-115.

[1039] Item "2.2.3. Digitalisation and wealth generation" has shown that the conflict between subjective and objective value had already lost its centrality in the economic discourse, being replaced by a business-value perspective. See "Wealth in the liberal paradigm and the value debate".

[1040] The analysis of the documents carried out in item "3.1.3. Taxation and Digital Economy" has demonstrated that the unified approach proposed by the OECD Secretariat explained consumers and users' participation in value creation from an exclusively business narrative.

[1041] The item "3.2.2. The academic attitude" presented the scholars' adverse reactions to the idea of value creation as a relevant category for the tax discourse. See "General reactions to the debate". The item "2.2.3. Digitalisation and wealth generation" showed the central role of the value debate in the liberal discourse on wealth generation. See "Wealth in the liberal paradigm and the value debate".

[1042] Vanistendael affirms the while we all know that profits are subject to income taxation, the tax acts do not mention "value" or "value creation". The author suggests that the expression has a more political than technical value, concluding that the designation of the place of incidence and the amount to be paid are subjects for an open political debate. See VANISTENDAEL, F. An Octogenarian on Value Creation. **Tax Notes International,** v. 90, n. 13, pp. 1385-1388, 18 Jun 2018.

the face of the excessive formalism associated with income, especially when it comes to profits earned by multinational companies.

Following this succession of transformations faced by the concept, it is possible to say that the dominance of the idea of income has affected the traditional dichotomy between source and residence. As a result, the very idea of a source in opposition to the establishment's location has gradually incorporated production elements to justify the tax incidence.[1043] Therefore, the international tax debate began to identify elements that contributed to a process of value creation, provided that such creation occurred within the scope of business activity. This condition explains why the marketing intangibles proposals and the significant economic presence were all measurable from the business's perspective. Even the user participation, clearly associated with the consumer's characteristics, was the object of a new reading inserting it in the production process. In general, the debate on value creation structured itself so that any attributes usually associated with the demand side have assumed supply features.

The depiction of all the elements responsible for the value creation in a vocabulary connected to the supply side implied a bias in the digital economy debate. If supply, as opposed to demand, is associated with the idea of production, determining the place of value creation becomes a debate about the different contributions of each element of the production process.[1044] Such relation of implication explains the widespread thought that transfer pricing rules would solve the problems of allocating taxing rights. Transfer pricing regards production, and even the apparent exception to the rule, the permanent establishment, reinforces the premise. Therefore, this rationality's emulation as a parameter to establish new nexus rules removes from the debate any potential legitimate claims related to the demand side. Thus, the virtual permanent establishment metaphor, or even a digital presence, in addition to being a contradiction in terms,

[1043] This association has affected the source's historical conception and the discourse of justification for taxation based on this criterion. Revisiting various views on these justifications and considering the type of income to which it refers, Vogel describes the place of the source as the place where the company establishes itself, provides the services, or invest a given capital, where the process of production or sale of goods and services occur, or the place of the use of the rented or licensed intellectual property. See VOGEL, K. Worldwide vs. Source Taxation of Income - a review and re-evaluation of arguments (Part III). **Intertax,** v. 16, n. 11, pp. 393-402, 1988.

[1044] Picciotto claims that this production fragmentation is at the centre of the main flaw regarding the taxation of multinational companies' operations. According to the author, the failure consists of understanding companies' economic structure as unitary businesses while their national operations are taxed based on the "principle of the independent entity". See PICCIOTTO, S. International Taxation and Economic Substance. **Bulletin for International Taxation,** v. 70, n. 12, pp. 752-759, 1 Nov 2016.

means placing the debate exclusively within the residence scope.

Material and formal income.

Within the substance debate, the residence does not possess a purely formal sense, referring to the means of production's geographical location. This reference explains the permanent establishment's rationale since it defines the material requirements for considering the production in another jurisdiction. However, the tax field has associated this category with the source and residence duality, placing permanent establishment amongst the exceptions authorising taxation in the market jurisdiction. It turns out that "market" does not oppose "residence" when production and consumption occur in the same place, which happens when a company is partially present in the alleged source jurisdiction. Hence, this duality between source and residence, in this debate, only makes sense if it also represents the market versus production duality. The permanent establishment does not mean source taxation but a proxy for verifying when these dualities ceased to exist, at least within the limits of the profits ascribed to that establishment.[1045]

Therefore, identifying value creation in the market jurisdiction represented acknowledging a mismatch between the company's residence and the material effects of its business activity. Although it could be much simpler to accept the market's role in this process, the international tax tradition led to proposals that presumed a partial business migration.[1046] However, digitalisation again produced effects that are not explained by the liberal paradigm, notably, how to justify the migration without "mass" or "physical presence". The problem is that the company's traditional theories do not offer an element considered exported to that jurisdiction.[1047] In other words, it is not possible to explain cross-border production if the production

[1045] For this reason, Skaar states that, although commonly coinciding in practice, it is not accurate, in principle, to relate PE to the state of the source. For the author, the PE conceptually presents aspects of source and residence, resulting in limitation to taxation both by the jurisdiction where the company formally has its residence and where it produces its income. See "The 'Source State,' 'Residence State' and 'PE State'" in SKAAR, A. A. **Permanent Establishment: erosion of a tax treaty principle**. 2nd ed. Alphen aan den Rijn: Kluwer Law International, 2020, pp. 11-12.

[1046] The item "3.2.2. The academic attitude" has shown how the international tax discourse has articulated these categories. See "Virtual PE, user participation, and marketing intangibles".

[1047] These elements' absence resulted in the "significant digital presence" neologism to explain a company's possibility of participating economically in another country without submitting itself to taxation. In 2014 Hellerstein was one of the first authors to face the jurisdictional problems that the idea of significant digital presence causes in sub-

process does not take place in other jurisdictions. More specifically, the digitalisation process has aggravated a problem already existent in the light of the liberal paradigm but forgotten due to the commitments assumed at the League of Nations' period.

One of the digital economy's main characteristics is the users' relevance, which resulted in the growing importance of demand vis-à-vis the supply. This characteristic shed light on the market's importance for producing income, a role obliterated in the consolidation of the treaties' language, restricted to a dualism between a nominal residence and the business-centred substantive debate.[1048] This debate, associated with the complexity of determining multinationals' profits, submitted the income to a purely accounting condition. The idea of income as a mere formal convention has allowed the BEPS strategies in the first place. Thus, the digital economy debate, already involved with substance matters, revealed the market's material importance not reflected in the field's abstract categories. The clash between the material meaning of income and the formalism traditionally rooted in the international tax field has provoked different attitudes from the main actors, rescuing a forgotten political dimension of taxation.

The political implications.

As evidenced by the substance debate, taxation's material aspects involve several normative issues associated with the taxing rights division's rhetoric. The tax materiality is the phenomenological foundation lying at the centre of the field's discourse related to determining the competent jurisdiction for instituting a tax on a given income.[1049] In this sense, the

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stantive and enforcement terms, concluding with the need for appropriate rules for the digital economy capable of aligning these two aspects. See HELLERSTEIN, W. Jurisdiction to Tax in the Digital Economy: permanent and other establishments. **Bulletin for International Taxation,** v. 68, n. 6/7, 16 Apr 2014. Today the significant digital presence has become a common expression in the international tax debate.

[1048] Although "users" and "consumers" are not synonymous, the OECD has made no distinction when highlighting the non-business factors responsible for consolidating the Internet as an economic space. If not all users are necessarily consumers, all consumers fall under the idea of users, and, indeed, neither group corresponds to the notion of business activity in the traditional liberal sense. See OECD. **Participative Web and User-Created Content: web 2.0, wikis and social networking**. Paris: OECD Publishing, 2007b.

[1049] This phenomenological foundation entered the international tax vocabulary in the form of the expression "allegiance", be it social, economic, or political. Even the criticism on the political allegiance (as a justification for taxation based on nationality) grounds on a deemed weakening of the phenomenon's occurrence in the modern world's practice (marked by the international migration of people and capital), and not on the supposed absence of a phenomenological basis. When elaborating the primary document of the debates in the League of Nations' scope, Bruins, Einaudi, Seligman, and Stamp structured their arguments from the idea of (economic) allegiance. See "The Bases of Taxation" in BRUINS, G. W. J., EINAUDI, L., SELIGMAN, E. R. A. and STAMP, J. C. **Report on Double Taxation Submitted to the Financial Committee by Professors Bruins, Einaudi, Seligman and Sir Josiah**

understanding of these phenomenological elements conducts to more intricate matters concerning taxation's justification. Although frequently depicted as a mere criterion for allocating taxing rights, materiality raises questions about why a given jurisdiction would have the right to tax in the first place. Consequently, the field's discourse does not support the possibility of choosing a criterion dissociated from a justification for incidence. This conclusion means that understanding the relationship between tax materiality and the normative aspects that underlie taxing rights' division helps comprehend the discourse of justifying taxation.

Therefore, the debate on the criteria for allocating taxing rights is not a parallel event but a logical consequence of the substance debate, affecting this social interaction's structuring elements. The agenda is the first and foremost, responsible for delineating the frontier between central and marginal topics, besides establishing the pace and sense of urgency.[1050] This agenda, in turn, has a guardian responsible for interpreting and executing it, producing a dual relationship similar to that observed between law and its external source of legitimacy. This relationship explains why the digital economy debate resulted in pressure from other international organisations on the OECD's work, showing a dispute for the forum's status. Finally, the very idea of a central forum implies existing central and marginal actors, shedding light on the international plane's chronic weakness. The tax materiality debate also prompted friction between efforts to centralise the debate within the forum and countries' unilateral attitudes.

This scenario, characterised by several tensions arising from how the international plane performs, still had to deal with an object whose perception was constantly and intensely changing. While the result of a dichotomy between real and virtual production, the digital economy was already sufficient to turn the actors to analysing the categories enshrined in international tax discourse.[1051] Subsequently, this static view gave way to a dynamic perspective, revealing a digitalisation process that continuously transformed and created new business mod-

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Stamp. League of Nations: Geneva: 5 Apr. 1923.

[1050] The item "1.3.2. New approaches to cooperation" addressed these elements in detail, demonstrating the importance of international organisations in constructing the international tax discourse and how the OECD ascended as an international tax organisation *de facto*.

[1051] This change in conception comprises three perspectives on the economic impacts of the digital revolution: an initial dichotomous view that contrasts the real economy and its emulation on the virtual plane, a dynamic view marked by the analysis of business models associated with the digital technology, and the growing perception about the effects of digitalisation on the wealth generation process. Subchapter "2.2. The digitalisation of the economy" has analysed in detail these three moments in understanding the process of digitalisation of the economy.

els. From this moment, the main actors dared to build categories that, although not redefining the field's assumptions, opened space for a reformist debate.[1052] Finally, the substance debate has provoked a sentiment that the traditional discourse could not deal with a wealth generation process based on information processing. This event has produced stronger rhetoric of transformation of the field's discourse, causing more effective actions by the main governmental actors.[1053]

The other governmental actors.

Given the positions taken and the impact on the European reality, the European Union (EU) is probably, after the OECD, the body that has most stood out in this debate. The Eurocentric character of international tax law, associated with the growing importance of the tax discourse's political dimension, has made the EU a potential rival to the OECD's ambitions.[1054] The United Nations (UN) has also participated in the digital economy debate, although constantly reiterating the OECD's primacy. In 2017, the UN's Committee of Experts in International Cooperation in Tax Matters prepared a report identifying and analysing tax issues related to the economy's digitalisation. The Centro Interamericano de Administraciones Tributarias and the African Tax Officials have also supported the OECD's work, participating in the private and public meetings. The World Bank, the International Monetary Fund, and the World Trade Organization have promoted and participated in events related to the digital economy's theme.

[1052] Regarding this moment, Olbert and Spengel take a very peculiar position. After reviewing the tax challenges of digitalisation and presenting their criticisms of the revolutionary proposals emerging from the OECD's work, the authors present a revolutionary suggestion. Although they challenge the proposal for the significant digital presence and the imposition of new taxes, they suggest applying transfer pricing rules in line with the data mining process. While the defence of the application of transfer pricing rules, in this case, can be seen as a conservative attitude, the attempt to associate the generation of value with the handling of information points to the third perspective mentioned below. See OLBERT, M. and SPENGEL, C. Taxation in the Digital Economy – recent policy developments and the question of value creation. **International Tax Studies,** v. 2, n. 3, pp. 1-15, 29 Apr 2019.

[1053] The G-24, a group of emerging and developing economies, illustrates well the dissatisfaction with the field's current discourse. On 17 January 2019, the G-24 Working Group on Tax Policy and International Tax Cooperation issued a document entitled "Proposal for Addressing Tax Challenges Arising from Digitalisation". The document suggests the revision of international tax rules on nexus and profit attribution and concludes by the importance of adopting the concept of significant economic presence. It also highlights that several countries have already opted for unilateral measures, defending their replacement with coordinated global action. The document is available at https://www.g24.org/wp-content/uploads/2019/03/G-24_proposal_for_Taxation_of_Digital_Economy_Jan17_Special_Session_2.pdf. Access date: 25 Feb 2021.

[1054] For this reason, it has become increasingly common to refer to an EU solution in parallel to the OECD solution. See LAMER, E. EU and OECD Digital Taxes Could Coexist, Commission Says. **Tax Notes International,** v. 100, pp. 1375-1376, 7 Dec 2020.

The countries have demonstrated profound differences in recognising the magnitude of the necessary changes in the international tax discourse resulting from the digital revolution's effects. According to some countries, there would not be such a necessity since the BEPS Project's measures would have already solved any stateless taxation problems.[1055] Another group of countries recognises misalignments between the attribution of profits and the value creation resulting from data use and user participation in the production process. Nonetheless, these countries observe such a misalignment exclusively concerning the business models considered highly digitalised. A final group of countries further understands that these problems are not restricted to digital companies in the strict sense but refer to a broader globalisation context. This group of countries advocates the necessity to change the international tax discourse and intend to do so within the scope of traditional tax fora.

The tension between OECD's effort to maintain control of the debate and the pluralism represented by rival organisations and the countries' unilateral measures has given rise to a peculiar narrative. The weakening of the OECD's technical authority would reflect the increase in the field's heterogeneity, politicising the international tax debate on the digital economy.[1056] The countries divergence is usually described based on belligerent rhetoric, invoking aspects of strength and violence in constructing the international tax discourse. Such rhetoric emphasises the existence of winners and losers, ignoring the fundamental issues that caused the divergence in the first place. However, the debate analysis reveals that governmental actors do not defend their positions based on their strength or the simple ability to put their fiscal ambition into practice. There is an effort to articulate the categories enshrined in the field so that the dispute at the political level employs the international tax discourse instruments, especially its legal categories.

[1055] The existence of this divergence was widely publicised, being recognised by the OECD itself. See "Implications for the international tax system" in OECD. **Tax Challenges Arising from Digitalisation – Interim Report 2018: Inclusive Framework on BEPS**. OECD Publishing: Paris. 2018b, pp. 171-172.

[1056] Büttner and Thiemann associated this weakening with the technical inability of OECD transfer pricing guidelines to produce consensus. For the authors, the inconsistency observed in the field's discourse results from the OECD's attempt to preserve its authority by reinforcing political manoeuvring and rhetoric in the absence of technocratic solutions. See BÜTTNER, T. and THIEMANN, M. Breaking Regime Stability? the politicization of expertise in the OECD/G20 process on BEPS and the potential transformation of international taxation. **Accounting, Economics, and Law: A Convivium,** v. 7, n. 1, 2017.

Technique and politics in the tax discourse on technology.

The accusation of political appropriation of the field's technical categories depends on demonstrating the technical content from which governmental actors would be moving away when defending their interests. Nevertheless, one observes a paradoxical emergence of emotional and personal elements in the self-considered technical discourse when attacking the debate's supposed politicisation.[1057] In any case, there is no point in accusing the political use of technical categories as an example of weakening the technocrat attitude. Governmental actors would have no reason to strive to articulate categories that belonged exclusively to the academy's technical discourse. If they do so, it means that there is both a general perception of what is inside and what is outside the set of categories considered technical and an individual interest in ensuring the argument's technicality. Similarly, the accusation of opportunism itself needs a paradigm that informs which attitudes would be genuine and which would reveal mere cynicism.

Accusations of opportunism are part of a broader framework of formal reactions to taxation's political dimension and the importance of the substance debate. They express a certain formalist apathy consisting of presenting alternatives that bring the dispute to an end without worrying about the potential material implications. Several lawyers and economists take similar positions in stating that governmental actors' choices fall within the scope of politics and should not be the object of academic discourse. Therefore, such a discourse would be limited to presenting suggestions to be adopted at the political level. In this case, it is a matter of embracing a stable distribution criterion, regardless of its framing to a broad idea about the genuine taxation's *raison d'être*. This position conveys a nihilistic attitude towards the tax phenomenon in which the intellectual articulation of the categories that make up the international tax discourse would not submit itself to any parameter external to the legal abstractionism.

Although assuming several guises, this nihilism's most ancient manifestation consists of denying the international tax phenomenon's moral dimension. Despite rare exceptions, this moral nihilism connects with the international tax legal field's very origins,

[1057] Herzfeld goes so far as to compare the work of the UN Tax Committee Drafting Group's coordinators to the scam of a con man, devoting an entire paragraph to their home countries' fragile economic situation. See HERZFELD, M. Selling a Digital Brooklyn Bridge. **Tax Notes International,** v. 100, pp. 1015-1018, 23 Nov 2020. Spencer responded to the attack by saying it was hostile and derogatory, validating the committee members' professionalism. See SPENCER, D. E. In Defense of the U.N. Tax Committee. **Tax Notes International,** v. 100, pp.

strongly influenced by the positivist movement and its rejection of metaphysical foundations in the legal argument.[1058] More sophisticated and less perceived, intellectual nihilism affects the field's different categories, especially those related to taxation's justification.[1059] The most visible expression of this attitude is the assumption that taxation lacks a theory of incidence, resulting from the mere exercise of power. In general, tax nihilism carries an attitude of indifference concerning the material results of the field's narratives and the actors' performances. Nevertheless, the current international tax debate has provoked a redefinition of the field, imposing rethinking the elements that compose it according to the new reality brought about by the digital revolution.

Conclusions.

The weakening of the exclusively formal preoccupation concerning adapting the international tax treaties' vocabulary to the new digital economic reality, favouring substance concerns, reveals a lot about the interaction process here analysed. Both the causes and the consequences of this movement exposes attitudes evidencing the actors' positions in the debate. The dissatisfaction with obtaining self-referenced solutions based on merely semantic conventions made the actors search for external elements to corroborate these choices. Such elements refer to ideal forms identified with the international tax phenomenon and social practices consolidated in the field's tradition. The result was the rescue of the material aspects of international taxation, placing the notion of value creation at the centre of the debate on the digital economy. However, by revisiting the field's fundamentals, this debate recovered old normative issues forgotten during the international tax discourse's historical construction.

In turn, the digital debate on value creation aimed to explain the wealth generation process from a perspective exclusively focused on the supply side. Such effort consisted of articulating categories associated with the transfer pricing rules and emulating permanent establishment logic in the digital plane. However, this perspective clashed with a more plu-

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1601-1602, 21 Dec 2020.

[1058] On the importance of the positivist movement in the construction of the tax field, see "Scientific positivism in economics and law" in item "1.2.2. The birth of the tax field".

[1059] Nobis explains that intellectual or epistemological nihilism consists of the view that there are no ways we ought to reason, that no beliefs are reasonable or justified, that nothing is known, or that nothing is intellectually valuable. See NOBIS, N. Moral Nihilism, Intellectual Nihilism & Practical Ethics. **Academia Letters**, Nov 2020.

ralist international context, highlighting the tax phenomenon's political dimension. The obliteration of the demand side's importance in wealth generation provoked reactions that challenged the construction of a tax discourse with rational and universal aspirations. In response to these reactions, many actors, especially in the academy, took an allegedly technical position to move away from what they understood to be the debate's politicisation. This position results in a nihilistic attitude towards the tax phenomenon, either for its indifference to the debate's material results or its disbelief in theoretical elements capable of opposing the mere exercise of power.

However, the tension between power and the discourse with rational aspirations about its exercise is constant in the legal tradition. Any attempt to overlook the problem of power without solving it undermines lawyers' social importance, regardless of whether they represent governments, taxpayers, or the academy. The digital revolution has added a new factor to this problem by placing information as a central element in a new wealth generation process. Control over information became an expression of this process's phenomenology and a variable in the already complex issue of the power to tax at the international level. Furthermore, the paradigmatic shift brought about by the digital revolution has called into question the liberal discourse's assumptions. Informational phenomenology's prevalence blurs the cognitive distinction between natural and artificial, impacting the human dimension's intellectual construction project of which international tax law is a product, as the following sub-chapter will show.

3.3. Explaining the context.

The two previous sub-chapters presented the documents that materialise the debate on the digital economy within the OECD, described the reactions of the main actors in the international tax field, and identified the debate's transformations that took place over time. The analysed texts have a double function, corresponding to the input of an interpretation process and the result of an interaction between the actors. The interaction process is only possible because these actors share the same paradigm, allowing them to identify themselves as belonging to a broad epistemological community. The liberal paradigm on wealth generation informs the texts' possible interpretations, the problems to solve, and the deemed legitimate solutions. However, the liberal paradigm's application to the new economic reality deriving from the digital

revolution produced contradictory results. Tax materiality's prevalence over a merely abstractionist formalism nourished both its political dimension as the technical reaction to the debate's politicisation.

Understanding these events depends on identifying the digital revolution's impacts in the international tax field's discursive context. If this discourse corresponds to a specific social practice, the starting point of this understanding lies in observing the actors forming this epistemological community. From a purely formal perspective, it is easy to conclude that this practice results in intellectual categories representing the discursive objects over which the interaction process develops. It turns out that taxation has a phenomenological dimension that does not submit itself to arbitrary formal choices, creating tension between subjects and objects in the field. The digitalisation process aggravates this tension, deteriorating the adopted system of ideas' effectiveness to guide the field's social practice. Such deterioration results from reducing the field's elements to an exclusively informational condition, leading to the bankruptcy of the liberal paradigm as the international tax discourse's epistemological reference.

This sub-chapter aims to present the impacts of the digital revolution on the context in which the interaction process between international tax actors takes place. The premise is that the digitalisation process imposes the need to rethink the field's actors, objects, and system of ideas. The hypothesis is that the digital revolution tends to submit the tax field's elements to a purely informational condition, making the realistic legal perspective the sole apt to preserve the human dimension's intellectual construction project. Item 3.3.1 shows the different nuances involving the tax actors, speculating about the effects of their attitudes on constructing the field's discourse. Item 3.3.2 presents the effects of making a new reading of objects in the field, understanding international tax law and its categories as an extension of the actors' social practice. Item 3.3.3 demonstrates the impacts of digitalisation on the field's system of ideas and the importance of the realistic legal perspective to preserve the human dimension's intellectual construction project.

3.3.1. Rethinking the actors.

The previous two sub-chapters have demonstrated that, despite occasional

exceptions, an idealised view of the actors in the international tax legal field predominates. This view describes government actors as agents with political objectives oriented to predominantly fiscal purposes translated in the struggle to maximise the tax collection. The taxpayers occupy the diametrically opposite position, and their business interests lead to preserving economic freedom and the resulting increase in well-being. While non-governmental organisations and trade unions would be the exception in calling for justice issues, the business sector would monopolise the wealth generation process. Finally, the academy would be the third cluster of actors that forms the field, characterised by having neither fiscal nor business interests. The academy would assume a technical position, not being committed to the material outcomes resulting from the taxpayers' and tax authorities' choices.

This simplified view does not resist a realistic analysis concerned with understanding the actors' attitudes and their impacts on the international tax field's construction. The government agents' essentially political view clashes with the tax bureaucracy tradition, influenced by the cameralist movement's rise in the seventeenth and resurgence in the nineteenth century. Likewise, the public consultations showed the difference between taxpayers in the strict sense and the set of actors specialised in speaking on their behalf. Moreover, different specialities result in distinct discourses, while unique characteristics differentiate those who bear the tax burden. Finally, the academy manifests itself as a place endowed with a specific social tradition and an attitude towards the field's discourse. In the first case, it is necessary to understand the scholars' different behaviours in their academic trajectory, while the second comprises the academic behaviour vis-à-vis the other tax actors.

This item aims to present an alternative view to the tax field's actors' idealisation, identifying their singularities and specific interests in constructing the international tax legal discourse. The premise is that the substance debate's prevalence imposes a realistic perspective in analysing the actor's involvement in the field's social practice. The hypothesis is that, regardless of the group to which they belong, lawyers cannot ignore the problem of power in the international tax field under the penalty of undermining their social importance. The item demonstrates the tension between political and bureaucratic interests in constructing government agents' image, mainly at the international level. Afterwards, the item traces the difference between the experts who speak for the taxpayers and the actors on whom taxation falls, exploring

each subgroup of actors' particularities. Finally, the item evidences the academy's different characteristics, demonstrating its importance in legitimising the international tax legal discourse's technical dimension.

Government and the bureaucracy.

The liberal rhetoric aesthetics, when building a discourse of opposition to the mercantilist model of production, left an essential mark in the tax field's imagination. The rupture between the generation of wealth and the sovereign's intervention has resulted in the government's image as the production process's antagonist.[1060] However, as presented in the first chapter, modern taxation was also the result of the state bureaucracy's rise as a constitutive tax discourse element. Although traditionally associated with the sovereign figure, this bureaucracy obtained its own space from the modern state's emergence.[1061] Consequently, and even though gravitating around the constituted power, the bureaucracy started to build an agenda that was not confused with the government interests. In contrast to the transitory movements resulting from emerging political interests, the permanence of the bureaucracy allowed it to build values that corresponded to the continuation of its role in the tax field.[1062]

[1060] The dichotomous view assuming the government's existence as a unitary figure intervening in and in opposition to market processes is not a peculiarity of common sense, being found in the specialised literature. Wagner points out that, although it leads to models that are easier to manage, this vision captures a distorted reality of public governance. In this sense, the author suggests a polycentric formulation of governance in which it is not the state that governs the people but the people who govern themselves. See WAGNER, R. E. Polycentric Public Finance and the Organization of Governance. In: Backhaus, J. G. (Ed.). **Essays on fiscal sociology**. Frankfurt am Main: Peter Lang, 2005, pp. 103-116.

[1061] Because it emerges as a liberal alternative to the monarch-centred model, this modern state is plural. This plurality led Morriss and Moberg to make the following statement: "We begin with the uncontroversial proposition that states do not themselves act. Rather, individuals in positions of authority take actions, which together constitute the actions of the state. A state may thus act inconsistently in different forums, as different interest groups obtain the upper hand in determining a particular position or where different actors have greater influence in one arena relative to another. In discussing tax issues, it is important to remember that even those interest groups that share a broad agenda and operate in coalition within a particular government may have divergent interests. We will use the shorthand of referring to 'states' because the more accurate phrase 'the coalition of interest groups governing states' is too awkward for general use." See MORRISS, A. P. and MOBERG, L. Cartelizing Taxes: understanding the OECD's campaign against "harmful tax competition". **Columbia Journal of Tax Law,** v. 4, n. 1, pp. 1-64, 2012, p. 6.

[1062] At the most basic level, this stability makes the bureaucracy distinguished by a technical attitude unworried with its actions' potential impacts on the electoral results. Such is the division employed by Alesina and Tabellini to build an analysis model based on the idea that while politicians are concerned with re-election, bureaucrats would be motivated by "career concerns," aiming to improve their external professional prospects in the public or private sector. See ALESINA, A. F. and TABELLINI, G. Bureaucrats or Politicians? Part I: a single policy task. **The American Economic Review,** v. 97, n. 1, pp. 169-179, Mar 2007. It turns out that this analysis concerns the American reality

Nonetheless, bureaucracy is not immune to internal cleavages, which explains different expectations related to the relationship between public policies and the phenomenon of taxation. The different ways of observing this phenomenon results in conflicts between tax interests in the strict sense and other state issues involving taxation. Even within the fiscal bureaucracy in the strict sense, it is possible to identify a view more oriented by taxation's economic results, contrasting to tax collection interests. This cleavage is present in the field's discourse, which presupposes a tax policy dimension opposing tax administration issues.[1063] However, these cleavages persist even within tax administrations, revealing different attitudes towards the phenomenon of international taxation. Administrative aspects associated with international tax relations contrast with potentially conflicting fiscal interests within a paradigmatic framework resulting from an attempt to constitute a cohesive legal discourse.

Within these different orientations that form the relationship between the tax administration and the phenomenon of international taxation, it is still possible to identify two attitudes assumed by the actors. The first concerns the respect for the hierarchy, resulting in the idea that the tax bureaucrat's fundamental role is to meet the demands originating from higher command positions. The second involves preserving the organisation's interests in the face of a possible divergence between its institutional mission and the superior commands. Such an attitude assumes a tax administration's ideal behaviour potentially threatened by manipulation resulting from the search for conflicting agendas. This position leads to questioning what this ideal of tax administration would be since it would not be confused with the mere meeting of hierarchically superior demands. A mere attachment to the normative plan would not resolve the issue, even when adopted an international perspective.[1064]

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and does not explain what the motivations (if any) would exist in institutional cultures in which the bureaucrats would have no incentive to leave their positions. This theme will be taken up again throughout the item.

[1063] This division leads to the idea that different governance elements apply to the government's political dimension, which refers to the Ministries of Finance in general, and the tax authorities in the strict sense. However, Végh and Gribnau clarify that, in their analysis, governance has a broad sense, which gives the tax administration some level of political authority, embracing the use of institutional resources to manage society. See VÉGH, G. and GRIBNAU, H. Tax Administration Good Governance. **EC Tax Review,** v. 27, n. 6, pp. 48-60, 2018.

[1064] Dean states that, although contemporary tax discourse rejects the notion that taxation is the product of a unitary and economically rational actor's action, this resistance tends to disappear at the international level. In this case, the author identifies and criticises a model that he calls the "philosopher king", presented in two versions. In its strong form, the model assumes that government actions aim to increase the nation's economic growth, while the weak form would be more realistic, recognising that there are other values to be preserved, such as liberty before international commitments. The author concludes that the model must be abandoned, especially in its strong form, arguing be necessary to develop a more complete and nuanced understanding of the reasons that lead to governmental ac-

The international dimension.

These different actors that compose the tax administrations and deal with the international tax phenomenon at the domestic level also contribute to constituting the international tax field. The international plane has traditionally manifested itself at the domestic level through the national institutions responsible for giving international law effectiveness.[1065] Notwithstanding, the internationalisation process in the tax field brought this bureaucracy to the scope of international organisations. Consequently, the questions concerning the type of loyalty that the bureaucrat must maintain, whether concerning their superiors or the institution to which they belong, have gained a new dimension. Besides, international organisations' very existence as a locus for the international tax discourse production has brought a new perspective to this role. This locus gave rise to a supranational bureaucracy that is not necessarily confused with those of the countries that compose the organisations.

Although it is common to describe international organisations as an instrument that countries use to achieve their interests, this simplification does not correspond to the tax field's practice. Despite existing emerging interests within these organisations, these interests are not manifested as mere emanations of political power, demanding a translation to the international tax legal vocabulary. From this translation process, the supranational bureaucracy justifies its existence disassociated from the countries' national interests. This bureaucracy presents itself as the guardian of this state discourse, not only as agents responsible for its formal register but as actors highly capable of handling it. This discourse produces a peculiar relationship between the supranational bureaucracy and the forces that underlie the very international organisations' existence. Since the tax legal discourse has become the expression of power at the international level, this bureaucracy has acquired power in the tax field from its mastery.[1066]

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tions at the international level. See DEAN, S. A. Philosopher Kings and International Tax: a new approach to tax havens, tax flight, and international tax cooperation. **Hastings Law Journal,** v. 58, pp. 911-966, 2006.

[1065] For a long time, until the emergence of international organisations, international law only manifested itself from the existing institutions at the domestic level. The item "1.1.3. From natural order to international law" demonstrated how the alleged problems involving the uniqueness or duality of domestic and international legal systems are not characteristic of international law itself but a problem of inconsistency in the discourse of legal positivism. See "A realistic alternative to the crisis of international law".

[1066] The same reasoning applies to the domestic plan. A tax administration with a higher mastery of the legal tax discourse would have a greater power to implement its institutional agenda despite efforts to use taxation for other purposes. In this sense, Blinder argues that, although the elected representatives should still establish the ultimate political goals, a hypothetical independent tax authority would have the salutary effect of making political decisions

The attempt to influence international tax discourse construction reveals its importance since the states could already satisfy their interests via domestic responses. These actors do not intend to sacrifice the discourse favouring a domestic agenda but express their national interests through the discourse's categories.[1067] The perception of this discourse's importance leads the bureaucracy to preserve it against potential destructive short-term interests. Such preservation occurs by identifying the intermediate distance between the legal discourse and the power sources providing its legitimacy. In this case, the bureaucracy must understand that emerging interests can lead to the destruction of the field and try to satisfy them by the mechanisms that the field itself offers. Therefore, the maintenance of the double relationship between the legal discourse and the emerging power groups occurs through the articulation between the discourse's technicality and the political interests at stake in the field.[1068]

Emerging interests and the role of bureaucracy.

The difficulty for bureaucrats stems from the absence of a clear distinction between public and private interests at the international level. Concerning the digital economy debate, this approximation of interests appears as a threat to the very notion of multilateral construction of a technically cohesive international tax discourse.[1069] This lack of cohesion expresses itself by a growing invasion of interests in the international tax discourse that do not harmo-

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more explicit, achieving such ends through technocratic and non-partisan means. See "Taxation without obfuscation" in BLINDER, A. S. Is Government too Political? **Foreign Affairs,** v. 76, n. 6, pp. 115-126, 1997, pp. 123-124.

[1067] However, the satisfaction of state interests at the international level is not a simple event. Dagan managed to capture this complex relationship between the domestic and international planes well, emphasising two distinct ways of constructing the discourse of the countryside. In the first case, a competitive attitude would provoke a dialectical relationship between national and international levels: states would act domestically but seeking results at the international level, whereas this external competition scenario would have the power to reshape the national policy. On the other hand, an attitude of cooperation, whether bilateral or multilateral, would benefit some countries at the expense of others. According to the author, the result would be serving the interests of strong and rich countries to the detriment of developing countries. See DAGAN, T. **International Tax Policy: between competition and cooperation**. Cambridge: Cambridge University Press, 2018.

[1068] Although not related to the tax field, an anecdote reported by Alan Greenspan, Chair of the Federal Reserve (Fed) of the United States from 1987 to 2006, exemplifies this situation well. According to Greenspan, his predecessor, Paul Volcker, avoided meeting with President Ronald Reagan, claiming that a possible encounter with the president would be "inappropriate", given that the Fed is an independent institution. When the two finally met at a dinner, the president addressed Volcker: "I'm curious. People are asking why we need a Fed at all". GREENSPAN, A. **The Age Of Turbulence: adventures in a new world**. New York: Penguin Press, 2007, p. 93.

[1069] Ting concludes that the United States' attitude of facilitating its multinational companies to avoid foreign income tax, as supposedly recognised by a study prepared by the US Senate itself, did not change even during the BEPS Project in 2015. See TING, A. The Politics of BEPS: Apple's international tax structure and the US attitude towards BEPS. **Bulletin for International Taxation,** v. 69, n. 6/7, pp. 410-415, 12 May 2015.

nise with dualist narratives supported by the liberal paradigm. Even when the international tax discourse results in taxation inconsistent with its premises, it is possible to verify some countries' behaviour in preserving such a situation.[1070] This behaviour is not an anomaly in the field but the result of distinct cultures existing in a plural environment of actors with different interests. Countries have different legal cultures, and historically they have developed quite different forms of relationship between bureaucracy and government, and it is necessary to understand these nuances.

As far as the formation of a well-established bureaucracy is concerned, there is a difference between countries in which the tax administration has produced its own culture from others in which this culture mixes with other views. This contrast is most visible in the duality between tax administrations marked by public servers committed to long-term projects and others in which actors from the private sector transit through the tax authorities. Likewise, the digital economy debate involves countries whose representatives are mostly from tax policy and others who send tax administrations representatives. Such plurality results in different attitudes towards the debate's objectives, being more or less prone to a broader result according to the actors' experiences. However, preserving the field means recognising these differences and producing a discourse capable of encompassing them. Abandoning this attitude can result in the collapse of the field and the very belief in the multilateral solutions for problems related to the digital economy.

In a complex environment marked by a myriad of interests and different cultures, the international tax legal bureaucrat emerges as a character capable of giving cohesion and a sense of field to international taxation. If they are to be accountable to the society from which their constituting power emanates and not exclusively to any hierarchical authority, these actors must recognise their participation in maintaining the field. This attitude does not mean provoking a rupture with the other actors in the international field, nor does it imply treating their or national interests as illegitimate. Such interests may harmonise with values dear to the field,

[1070] Daly attributes to cultural differences the distinct repercussions generated by the accusations targeting Ireland's and the United Kingdom's tax administrations of maintaining a "cosy relationship" with multinational companies. According to the author, while, in the United Kingdom, there was unrest in both the political and civil fields, the Irish reaction was one of total acquiescence. See DALY, S. The Relationship Between Tax Authorities, Large Multinationals and the Public. **Bulletin for International Taxation,** v. 71, n. 5, pp. 243-249, 20 Mar 2017.

allowing their satisfaction from the international tax legal discourse instruments.[1071] The constant presence of interests associated with the taxpayers' reality conducts to the necessity of a dialogue with these actors. However, taxpayers are not a homogeneous group, being essential to understand the internal divides and recognise their legitimate interests in the debate.

Payers, practitioners, and the tax burden issue.

The dichotomy proposed by the liberal paradigm resulted in the prevalence of a homogeneous view of taxpayers, constructed in contrast to the tax authorities as their antagonists. This homogeneity leads to the erroneous idea that all actors located in this group relate in the same way to the phenomenon of international taxation.[1072] It turns out that this phenomenon impacts people differently, according to several characteristics that gave rise to some of the most traditional categories of the field. In this way, the state relates differently to taxpayers, referring to this group's members by the same expression, but exploring their distinct experiences and attitudes towards the tax phenomenon. Furthermore, from the increasing complexity of the tax discourse, the taxpayer, as the one who bears the burden of taxation, moved away from constructing the tax discourse. The tax specialist has occupied this discursive space, supposedly representing those taxpayers' interests before the tax authorities.

The tax field's maturing process over the nineteenth century, strongly influenced by the movement of scientific positivism, resulted in a separation of the elements that formed the tax debate and enshrined some specific roles in the field. Both economists and law-

[1071] In 1970, Brzezinski observed the emergence of "transnational elites" formed by international businesspersons, scholars, professionals, and public officials, as an unfolding of the information society (called the technetronic era). According to the author, these elites exceeded domestic traditions, revealing more functional than national interests, generating a global network of information, and facilitating the exchange of knowledge and intellectual interaction. However, Brzezinski concluded that these actors' interaction would give rise to the emergence of a common scientific language that could dangerously depart from the national political masses, allowing nationalist leaders to exploited them against these "cosmopolitan" elites. See "Toward a Planetary Consciousness" in BRZEZINSKI, Z. K. **Between Two Ages: America's role in the technetronic era**. New York: Viking Press, 1970, pp. 28-30. Although indirectly, Brzezinski sensed a risk in separating the technical discourse from its political dimension. This separation affects the problem of power, as will be analysed later.

[1072] Eisenstein presents an instructive classification of the different discourses potentially emerging from the three ideologies he identifies as ability, barriers, and deterrents (as opposed to ability), and equity. According to the author, such ideologies imply the beliefs linked to interest, compensation, or principle. Thus, Eisenstein associates these ideologies respectively with three sets of actors: taxpayers; lawyers, economists, and retired congress members; and bureaucrats, academics, and professional experts. See EISENSTEIN, L. **The Ideologies of Taxation**. New York: The Ronald Press Company, 1961, pp. 13-14. The group labelled "taxpayers" in the digital economy public consultations comprises actors spread over Eisenstein's three sets.

yers have marginalised the political dimension of taxation, relegating it to the field of political science, which only paid attention to this theme much later.[1073] Efficiency issues, or those concerned with the process of wealth generation, took on greater importance. Such questions, in turn, are part of the interest of economists, accountants, and administrators, who have a tradition of harmonising with business interests. As for the taxpayers' relationship with the state, the complexity resulting from the codification processes and the international organisations' emergence placed the issue in lawyers' hands. In some cultures, these actors are the leading spokespersons defending the taxpayers' interests, being the central actors in constructing the international tax discourse.

Within the subgroup of taxpayers responsible for bearing the burden of taxation, it is still possible to verify different situations that highlight their peculiarities. The idiosyncrasies involving capital or labour taxation generate different experiences as the taxpayers relate to one or another tax base. Likewise, the residence criterion has traditionally been used as an element of discrimination to justify different taxation forms. This criterion harmonises with the fact that resident companies' interests may not coincide with that of multinationals that intend to explore the local economy without settling in the country. However, the main factor of discrepancy among taxpayers is still economic inequality and the consequent inequitable participation in constructing the field's discourse. This discrepancy is responsible for generating asymmetries that jeopardise the construction of a cohesive tax discourse and challenge the assumption that all taxpayers are necessarily in a situation of inferiority before the state.[1074]

Taxpayers' speech's holders and beneficiaries.

Nevertheless, even considering taxpayers who can elect a specialist to deal with the tax phenomenon, the tax practice interaction with the tax burden's bearing is not evi-

[1073] The item "1.2.2. The birth of the tax field" has demonstrated the process culminating in this separation. See "Scientific positivism in economics and law."

[1074] Given the topic's importance, the WU Global Tax Policy Center and the African Tax Institute organised a conference in collaboration with the UN Office on Drugs and Crime and the World Bank Group to discuss the difficulties surrounding high net worth individuals' taxation. The conclusion was that the abuse of protection of professional secrecy and the ability to structure complex international operations make these individuals' effective taxation a challenging task, especially for developing countries. These difficulties result in a considerable distortion in taxation between rich and poor. See MAJDANSKA, A., MIGAI, C. and OLOWSKA, M. High Net-Worth Individuals: the challenge for tax administrations, financial intelligence units and law enforcement agencies. **Bulletin for**

dent. Although it is intuitive to conclude that taxation's complexity is responsible for separating these spheres, this fact does not necessarily imply that tax specialists are responsible for the taxpayers' attitudes towards the tax phenomenon.[1075] Regarding the digital economy debate, these actors' object of defence would theoretically be companies' interests associated with the digital economy. Notwithstanding, as has been observed so far, the international tax lawyer has specific interests that are not necessarily the same as those associated with the digital economy. Likewise, these taxpayers have needs not expressed by the arid mainstream discourse of international tax law. The problem occurs when the clients' interests undermine the discourse's characteristics identified with the legal discourse's *raison d'être*.

As they belong to the legal tradition, tax lawyers have a vested interest in preserving the legal discourse on the phenomenon of international taxation. The very existence of this discourse, associated with the possibility of exercising power through its management, makes the lawyer an important actor in the international tax field. However, this interest conflicts with a more immediate one related to the attempt to preserve their clients' interests, customarily associated with discourses of freedom. The importance of this immediate interest can lead the lawyers to neglect their role as actors in the tax field, moving them away from efforts to systematise the discourse. Ultimately, understanding that their clients' interest is limited to not being subject to taxation, the lawyers would be taking the dichotomy between tax authorities and taxpayers to the extreme. The result may be the field's sacrifice as a long-term project, consisting of the lawyers' most precious asset, to benefit fleeting interests.[1076]

International Taxation, v. 72, n. 10, pp. 595-606, 6 Sep 2018.

[1075] After reviewing the literature on the relationship between tax practitioners and taxpayers, Tan concludes that it is impossible to determine the specialists' role in their clients' tax behaviour. The author attributes this deficiency to the lack of a conceptual framework capable of capturing this interaction, presenting the theory of dynamic roles, and suggesting the Role Episode Model as a theoretical instrument for this endeavour. See TAN, L. M. Understanding the Tax Practitioner-Client Relationship: using a role theory framework. **Procedia - Social and Behavioral Sciences,** v. 164, pp. 242-247, 2014.

[1076] Analysing the Australian context and comparing their results with that of previous research conducted in New Zealand and the United States, Sakurai and Braithwaite conclude that there is a tension in the relationship between taxpayers and tax practitioners. Thus, although their research shows that most taxpayers build an idealised view of the tax practitioner as an honest and risk-averse actor, the reality points to contingent results. Taxpayers' specific interests, associated with different local cultures and individual tax practitioners' behaviours, can lead both actors to assume greater or lesser risk or even illegality. Therefore, the same tax practitioner can adopt an attitude more or less prone to illegality to the extent of its dialectical relationship with the taxpayer. See SAKURAI, Y. and BRAITHWAITE, V. Taxpayers' Perceptions of Practitioners: finding one who is effective and does the right thing? **Journal of Business Ethics,** v. 46, n. 4, pp. 375-387, 2003.

On the other hand, the interests of the beneficiaries of the legal discourse on international taxation may not be limited to the incidence or not of taxation. Regarding the debate on the digitalisation of the economy, a new discourse on equality begins to consolidate around novel categories related to the exploitation of information as a phenomenon, especially data. As a result, the tax field's value system started to incorporate elements that express the information phenomenon's importance in the wealth generation process. Categories such as privacy, data flow neutrality, and freedom of entry have become new values pursued by the international tax field actors. As these values' preservation may not be on the radar of those speaking on behalf of taxpayers, these categories are in danger of being forgotten in the digital economy debate. As the primary potential victims of this obliteration, the taxpayers must ensure these values' insertion in international tax law's discursive structure.

Academic and scientific interests.

The analysis of the different academic manifestations towards the digital economy debate raises questions about the relationship between the academy and the government. There is a legitimate academic interest to influence this debate, and this influence reveals a reactive attitude towards the governmental agenda.[1077] Notwithstanding, for demarcating the boundary that divides these territories, the academic discourse presents a distancing posture that is more visible in the rhetoric related to the scepticism involving the project. Such scepticism is salutary and reveals a concern with the project's result, its coherence, and the possibility of affecting the field's *status quo* and its central values. The question is to know what mediate or immediate interests are behind the inertia or militancy of academics concerning the digital economy debate. These interests become more evident when analysing the potential attitudes that these

[1077] Although "intellectuals" and "academics" are not synonymous, these later constitute the leading group of actors identified as intellectuals in a sense employed by Bauman. For this author, the dividing line is drawn by an attitude so that a specific practice is what differentiates intellectuals from non-intellectuals. Such a practice, according to Bauman, results from a relationship between power and knowledge that became more accentuated with the advent of modernity, which produced both a new type of state power based on an ideal model of social organisation and a relatively autonomous discourse on this model. On the other hand, postmodernity would be responsible for distancing the power from its discourse, causing a relativisation of knowledge only visible from an internal perspective. See "Intellectuals: from modern legislators to post-modern interpreters" in BAUMAN, Z. **Legislators and Interpreters: on modernity, post-modernity and intellectuals**. Cambridge: Polity Press, 1987, pp. 1-7. Bauman's description of the change in the intellectuals' behaviour in the transition from modernity to postmodernity is quite similar and helps to understand the attempt at separating the academic's technical discourse from the political dimension of international taxation.

actors can perform.

Concerning the tax bureaucracy and the specialists who speak on behalf of taxpayers, it is usual to imagine whether lawyers aim exclusively to satisfy their clients' interests. Notwithstanding, when this intellectual exercise encompasses academics, it automatically raises questions concerning who these clients would be.[1078] For those who adopt the dichotomous division between tax authorities and taxpayers, the most obvious answer is that this clientele depends on which side the academic places itself. Nevertheless, this dichotomous perspective does not justify the academic's social function since the actors already analysed could defend these clients' interests. Therefore, to assume the clienteles' defence as an academic attitude would mean denying a substantive reason for the tax academy's existence, restricting it to an instrumental role.[1079] On the other hand, the search for a substantive reason opens up several other questions that demand investigating the legal tax academy's social practice.

Adopting a realistic perspective implies understanding the academia both as an ideal category and as a social practice performed by specific academic actors. In this sense, the academy is a space with proper social values so that the interests of scholars in the digital economy debate may be limited to obtaining results within the academic frontiers.[1080] Notwithstanding, this internal struggle within the academic world would not be relevant if this environ-

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[1078] Van Caenegem states that, unlike the judge or the lawgiver, the professor does not have direct power, just influencing or simply serving those in power, the latter being his primary role in history. However, the author recalls episodes in which some professors' subservience infuriated his colleagues, concluding that although the jurist's constant instrumental and servile condition is undeniable, the 'science of law' owes a considerable debt to those who followed their consciences even against the world's rulers. See "Law professors serve the powers that be" in VAN CAENEGEM, R. C. **Judges, Legislators and Professors: chapters in European legal history**. Cambridge: Cambridge University Press, 1987, pp. 155-157.

[1079] The question of the academic's role vis-à-vis the external environment is particularly problematic for the legal field. Comparing the faculties of arts and social sciences with the law (and medicine), Bourdieu concludes that academic power's expression occurs differently. While scientific prestige expresses itself by the research activity's success in the academic universe in the first case, the jurists' academic power is based (or was based at the research time) on accumulating external positions of power. Bourdieu justifies this situation given the law's legitimating role concerning the social order's most basic structures. See "Types of Capital and Forms of Power" in BOURDIEU, P. **Homo Academicus**. Stanford: Stanford University Press, 1988, pp. 73-77.

[1080] Addressing legal education in general, Walker explains that the movement to reject the "service orientation" in the middle of the twentieth century implied an enormous departure from legal practice, especially from the Marxist approaches inherent to critical legal studies in the United States. Although the author identifies such a distancing even in some legal positivism branches, the tension between the academy's autonomous and instrumental interests is more pronounced in humanities-based, and socio-scientific informed legal education conceptions. See "Beyond the Service Orientation" in WALKER, N. The Jurist in a Global Age. In: Gestel, R. v., Micklitz, H.-W. and Rubin, E. L. (Ed.). **Rethinking Legal Scholarship: a transatlantic dialogue**. New York: Cambridge University Press, 2017, pp. 84-111, pp. 94-98.

ment did not enjoy an external reputation of social prestige. Therefore, even admitting a potential tax academic's exclusive internal interest, such interest would be due to a type of power that only the academic position could offer. In this sense, the academy is a place of speech socially recognised, whose intellectual production can affect the international tax field. Consequently, the question is to identify how this flow of influence occurs between the academy and the rest of the field, which demands analysing the academics' nuances.

Different roles and expectations.

The academics' most straightforward means of affecting the international tax legal field is the professors' influence on their students. From the students' perspective, this educational activity consists of its primary process of insertion in the field so that the educational path culminates with its maturation as an actor capable of articulating the categories considered central. Obtaining a doctorate is the most significant symbol of recognising a new member of an intellectual elite authorised to speak on the subject of international taxation. However, new PhD graduates tend to be young people who are beginning to have their first notions within the field and tend to observe it from the paradigm adopted by their professors.[1081] The question that arises is how this training process occurs and results in a new actor capable of thinking like a tax lawyer. If the teaching process is limited to transmitting an existing paradigm, there would be no space for the academy to prepare future generations for unprecedented problems.[1082]

The international tax legal field suffers from a paradox that affects its ability to react to new problems that challenge its dominant paradigm. As its practice occurs through the mastery of its major categories, and these result from the dominant paradigm, the result is that new academics will tend to adopt a more conservative posture. In effect, there is no incen-

[1081] Brownsword exemplifies this situation: "[a]s students, we endeavour to follow the example of our professors - we try to do what they do (mainly dancing around the doctrine and showing some agility in the face of counterfactuals); and as members of the academy, we again try to follow the example set by our mentors and role models, trying to write the kind of paper that we already read in the law reviews. Only many years after publishing papers and books might we pause to reflect on what we were doing as well as how and why we did it." See BROWNSWORD, R. Field, Frame and Focus: methodological issues in the new legal world. In: Gestel, R. v., Micklitz, H.-W. and Rubin, E. L. (Ed.). **Rethinking Legal Scholarship: a transatlantic dialogue**. New York: Cambridge University Press, 2017, pp. 112-172, p. 112.

[1082] The perception that this transmission of paradigms from professors to students would be perpetuating an ideology in the service of social hierarchies in the United States led Kennedy to suggest mechanisms from which progressive or left-wing students could prevent law schools from "demobilising" them. See KENNEDY, D. Legal

tive for a newcomer to move away from the traditional categories if the effort is to demonstrate knowledge about them. Such a rupture would require one first step to prove the mastering of the field's orthodoxy and a second to offer an alternative, while the first would be enough to recognise maturity. The result is that the academy has become the guardian of the international tax field's ideology, being the first to defend the dominant paradigm whenever an anomaly threatens its hegemony. However, because it is subject to the idiosyncrasies that afflict the whole legal field, the liberal paradigm that dominates academic tax thinking is manifested under two unique academic perspectives.

If the academy became the guardian of the field's ideology, an eventual rupture depends on a movement away from an actor who has enough academic capital to be heard by the peers. However, given the time and effort required to obtain this capital, the actor may no longer have the necessary revolutionary impetus, preferring to enjoy this capital's social benefits.[1083] Even if overcoming the personal motivation issues, it would be necessary for the academic to adopt a perspective capable of impacting the legal field and beyond. Because of its introspective character and the absence of a unifying claim, the doctrinal perspective does not present itself as a methodology capable of breaking with orthodoxy. On the other hand, a realistic approach may present several methodological limitations that prevent it from serving this purpose. Concerning the digital economy debate, the realistic perspective must recognise the political element as fundamental to constructing the international tax legal discourse.

The scientific attitude.

An excessive attachment to a technical purism of international taxation can result in opposing an alleged technicality against political influence with the potential to

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Education and the Reproduction of Hierarchy. **Journal of Legal Education,** v. 32, pp. 591-615, 1982.

[1083] The narrow link and relative dependence of the academic universe on the external environment makes such a break even more difficult. Davies argues that market-driven incessant demands have the potential to undermine academic freedom in the United Kingdom. The author analyses this situation from a legal perspective and concludes that the university's idea has gone from an institution focused on research and teaching as a social asset in itself to exploring the "academic enterprise" results. Affirming that the legal protection of academic freedom in the United Kingdom is minimal compared to some other jurisdictions, Davies reiterates that academic results have adopted business models, being exploited by universities as potentially saleable products. See DAVIES, M. Academic Freedom: a lawyer's perspective. **Higher Education,** v. 70, n. 6, pp. 987-1002, 2015. Although this does not seem to be a description entirely applicable to the international tax field, it warns about the effects of the academy's complete subordination to a merely instrumental condition.

contaminate the tax field. This dichotomy emulates the platonic tradition, understanding the international tax legal discourse as an intellectual revelation and not a political process, thus centralising the power to say the discourse.[1084] This tradition results from the tension between law as an instrument of power and the external power source that conferred this condition. In this sense, the purist attitude aims to sacral the academic discourse, distinguishing it from other discourses of "merely" political interests. However, in the liberal project of social organisation, the source of power is the individual who demands the results of the legal discourse, so that this tension opposes the academy to its most crucial recipient. In this case, the academic attitude would, paradoxically, result in the condemnation of the academic discourse's beneficiaries' interests.

As seen in the previous chapter, the idea of technique does not correspond to the denial of human elements but assumes them in constructing its meaning. These elements are closely related to taxation's political dimension, so attacking such a dimension means condemning the tax discourse's human aspects. Therefore, the academic attempt to separate its technicality from the political sphere runs into a paradox with potentially disastrous consequences. This separation legitimises the disregard for preserving the human condition, which has traditionally resulted in extreme social reactions. Such extremisms correspond to alternative social organisation projects that are not committed to the tradition of offering rational alternatives to face the problem of violence in society. The consequence would be the bankruptcy of the intellectual project of society's rational organisation, which had the law as one of its main results, affecting the very necessity for an academy as the guardian of this rational attitude.

Although the tax legal discourse has always gone hand in hand with the economic discourse, it must rescue its tradition and importance. Fighting against taxation's political elements is an economists' attitude that lawyers should not emulate since it disregards the problem of power.[1085] The dual character of law made its historicity marked by this problem's

[1084] Van den Hurk claims, as an academic, to have a "moral obligation" to oppose any development that moves the post-BEPS tax environment away from what he calls "ideal". Based on the assumption that no economy will survive without companies, the author presents a narrative about why rationality and emotions would have mixed in the international tax debate. He claims that people who do not understand what is happening with international taxation are conducting this debate. Besides, even when certain political actors have the best interests in mind, the author argues that such interests are not necessarily "taxation related". Van den Hurk concludes that the changes needed to tax the digital economy will unfortunately still take some years to come. See VAN DEN HURK, H. Tax Planning, Ethics and Our New World. **Bulletin for International Taxation,** v. 72, n. 2, pp. 122-128, 14 Dec 2018.

[1085] Rescuing the tense historical relationship between private law and tax law, Cornut St-Pierre highlights the use-

phantom so that the lawyer cannot afford to ignore violence as a significant category. As a rational alternative for organising society, the legal discourse closely relates to authoritarian attitudes that, at any time, can deprive the academy's legitimacy as a technique's bastion. While these attitudes can also be harmful to tax administrations and taxpayers, these actors would continue to influence the tax phenomenon materially from their traditional dichotomy. Academics have more to lose before a complete separation between technique and politics since their discourse would become a mere adornment in the power struggle between the other actors.

Conclusions.

The present item has demonstrated that the unifying labels "governments", "taxpayers", and "academy" hide internal cleavages responsible for tensions within these groups of tax actors. These cleavages mean that their internal members may have particular interests only shared with members belonging to a distinct group. Such is the case concerning the necessity to recognise international taxation's political dimension within the legal discourse scope. Within the three groups of actors, this recognition involves preserving a meaning in the existence of a legal perspective distinct from the others, notably the economic perspective. This preservation's main result is the rescue of the traditional problem of power in social life, and this perspective makes the law's dual role (as a result of external power and a source of power in itself) becomes more explicit. Before a complete separation between tax legal technicality and the political dimension, the result would be the submission of law to a merely instrumental condition.

Submitting international tax law to an instrumental condition would transform it into a tax collection tool in the tax bureaucracy's hands. In this case, legal norms' interpretation would become a mere rhetorical exercise in the sense of constructing a narrative to justify an incidence or deny a deduction. Tax practitioners would become actors whose sole objective would be to minimise the taxpayers' tax burden by articulating the legal categories. These

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fulness of using civil lawyers' qualification techniques to analyse tax planning. The author recalls that the rhetoric involving the dichotomy between public and private involves removing the possibility of state action or submitting particular aspects to the collective sphere. Thus, based on feminist criticism, Cornut St-Pierre recalls that contractual and commercial practices, usually identified in the private sphere, have a public dimension usually overlooked, proposing its insertion in the public debate on tax avoidance. See CORNUT ST-PIERRE, P. L'Évitement Fiscal vu sous l'Angle du Droit Civil : le privé est politique ! In: Emerich, Y. and Saint-Pierre Harvey, L. (Ed.). **Le Public en droit privé**. Cowansville: Yvon Blais, 2019, pp. 151-181.

categories' content and scope, in turn, would be determined by the economic benefit arising from a specific interpretation and not the other way around. Regarding academics, the problem would be even more significant, starting from the very question of who should benefit from instrumentalising the legal discourse. This question leads to an existential doubt about the academy's very *raison d'être* as an intellectual locus since the defence of the client's interests could already be made by bureaucrats or tax practitioners, depending on who this client is.

However, the caricature described above does not correspond to the international tax lawyer's image that the field has historically built. Not even the most nihilistic tax attitude neglects a minimum technical content not subordinated to the clients' immediate interests. Such technical claim is only justified if the category in question expresses something beyond a purely rhetorical formalism, revealing a tax substance common to the different actors in the field. This substance prevents excessive tax relativism, allowing the actors to advance the discourse's construction towards the categories' materiality. From this perspective, recognising taxation's political dimension takes on a more concrete meaning, permitting identifying the actors' role before the phenomenon of digitalisation. This recognition operates by articulating the field's formal categories, the material results in terms of tax phenomenology, and the clients' emerging interests, as the next item will show.

3.3.2. Rethinking the object.

Unlike the traditional dichotomous description of the international tax actors, the previous item has shown that the realistic analysis reveals a fragmented and complex field. These actors occupy specific functions deriving from their circumstances and constrained by a great tax legal tradition characterised by endogenous tensions. Such tensions indicate particular attitudes necessarily associated with the field's assumptions, always expressed by the actors' discursive actions. The conclusion is that international tax law does not consist of an external element on which the actors focus but an unfolding of their social actions. Hence, although governmental actors seem to be the only ones who determine the phenomenon of taxation, they only do so to the extent of the taxpayers' reaction and from the cognitive elements informed by the academic discourse. Therefore, all the actors participate in creating the international tax field

and, consequently, in the other intellectual categories that form their legal discourse.

The idea that international tax law is an offshoot of the actors' social actions is consistent with their categories' formal dimension. In this sense, the intellectual categories that constitute the international tax discourse result from an abstract articulation of those actors to construct the field's very meaning. However, this creation process has material limits established by the elements that form the tax phenomenology. Such phenomenology is related to the substance aspects traditionally associated with the defence of the field's autonomy, besides impacting the relationship between actors and object. This relationship was particularly affected by the digitalisation process and the transformations made in the phenomenology responsible for wealth generation. Reducing all these elements to an exclusively informational dimension raised several questions about the legal discourse and the problem of power, shedding light on the international tax phenomenon's political dimension.

This item aims to present a new reading of the international tax field's objects based on the digital revolution's impact on the relationship between abstract legal forms and tax phenomenology. The premise is that such an impact highlights the political dimension of the phenomenon and revamps the problem of power in the scope of international tax relations. The hypothesis is that the digital revolution has altered the problem of power when introducing a new variable represented by the control over informational phenomenology. The item initiates by presenting the international tax field's abstract legal categories as an extension of the actors' discursive practice. Afterwards, the item demonstrates the conflicts emerging from the substance limitations imposed by the tax phenomenology. Finally, the item explains why the digital revolution has intensified the political dimension of taxation, revamping the problem of power and causing inconsistencies in the international tax legal discourse.

Formalism, and the object as an actors' extension.

Understanding that international tax law results from a social action involves accepting that some of its elements have a more intimate connection with the field's actors. Consequently, there will not always be a rigid separation between subjects and objects, but a line drawn from the subjects' choices when constituting their action field. This intimate rela-

tionship is quite visible regarding the formal and abstract categories that make up the field's discourse. In this case, it is easy to perceive this construction process since the field has practically abandoned describing the legal categories as metaphysical realities revealed in the interpreter's eyes, at least at the international level. The prevailing idea is that these categories invoke a semantic content considered technical and correlate with the actors' intellectual construction from the formal legal sources. Such a construction harmonises with tax doctrinalism, making the lawyers more comfortable articulating the categories of the field's discourse.

However, the field's discourse is not clear in evidencing when the actor refers to a concept built from the social practice, or a supposed interpretation of a content conveyed by the legal norm. By assuming this practice as an extension of the norms' legal character, the actors are not even concerned with making such a distinction. This lack of concern leads to formal conflicts within the tax field and tensions between this and other fields' categories. The first case comprises the contrast between a specific country's norm and broad formal concepts, while the second entails the conflicts between digital debate's solutions and international commitments, especially involving free trade. Nevertheless, a deeper analysis reveals that these arguments originate from an excessive (but not critical) attachment to the sources from which the field's concepts supposedly come. The endeavour to maintain a cohesive international tax discourse in harmony with the Westphalian paradigm led to a conceptual confusion deserving examination.

From a realistic perspective, international tax concepts are not metaphysical categories resulting from absolute rationality, nor are they a direct result of positive norms. Such intellectual constructs correspond to an epistemic creation based on the primary texts that affect understanding the field's actors. However, legal positivism's dominance resulted in international treaties' election as the most crucial formal source of a supposed international tax regime. It turns out that the immense number of treaties and the differences between them do not allow a precise and universal indication of the semantic content of the categories they employ. This universalising has resulted from the bureaucracy's technical efforts, especially the supranational bureaucrats, associating the definition of content with the instruments of power capable of making them relevant in the field. In this case, the details of the categories found in the treaties occur within the scope of comments on model tax conventions.

Model conventions, paradoxes, and conflicts.

The comments on the model conventions' articles have a great deal of detail, introducing semantic content for the tax categories that treaties against double taxation will incorporate. However, the models to be followed correspond to the articles themselves and not to their respective comments' semantic content construction. Furthermore, models do not represent normative sources in the formal sense, and the introduction of the norm in the so-called international tax regime occurs when the countries sign the treaties. Besides, not all countries are members of the organisations that produced the models, and the adoption of a nomenclature used in a model does not necessarily endorse the semantic content of their comments. Finally, for some jurisdictions, the treaty's validity depends on its internalisation in their domestic legal system. In these cases, the problem would be to reconcile the idea that this internalisation is the normative source of a given category, while its technical content belongs to another plane.

The positivist belief that considers the formal source as the constructor of the field's categories leads to a paradox in how many actors refer to its content. If this content stems from domestic norms, the idea of transfer pricing (TP), or the CFC rule, would be a consequence of the national legislation's language, not a supranational construction. Thus, criticisms about whether a country's legislation would be "truly" CFC or not, or whether its TP rules comply with the arm's length principle, would not make any sense. A domestic rule would be CFC by the simple fact that it provides so, once it is not the rule that should submit to the concept but the concept that consists of a derivation of the rule. The conclusion is that, among those who defend the Westphalian paradigm and the formal source dogma, some act as if the categories transcended the jurisdictional limits. This attitude harmonises with recognising a minimal universal content that prevents an arbitrary treatment of its semantic meaning.

From a formalist perspective, opposing arbitrariness resulted in the argument that the tax legal categories' constructions could not clash with international commitments, notably within the World Trade Organisation (WTO). Such a statement transports the eternal tension between tax and private law, responsible for the tax field's independence, to the international level. However, this argument loses strength given the content under discussion in the digital economy tax debate and how the tax field has traditionally constructed its discourse. This debate has focused on income taxation, and the freedom to rule on this tax base has never col-

lided with any principled rhetoric related to free trade. The argument that specific incidences would fail to reach income, becoming a barrier to trade, is valid but depends on a semantic agreement on income's material definition. Notably, this material identification grounds the idea of taxing according to value creation, opposing a merely nominal determination of corporate profits.

Sovereignty, market, and wealth.

In this sense, the same argument condemning taxation lacking a materially identifiable income legitimates it when this materiality is present. Therefore, pro-free-market criticisms of international tax changes proposals are the flip side of the arguments that justify the tax incidence. This finding also exposes a failure in the argument according to which a global minimum tax would undermine countries' tax sovereignty for not allowing them to establish their tax rate freely. Such countries can always determine their tax level concerning exclusively domestic transactions, and this exclusivity is essential for the measure's meaning. The difference rises when the encounter between supply and demand occurs in a cross-border manner, involving another market that contributes to the generation of wealth in that transaction. The question is whether other impediments disallow this possibility of taxation by the market jurisdiction since the WTO commitments certainly do not prohibit.

As previously seen, although market jurisdiction is associated with the source country, the expression "source" has historically developed meanings that entail both supply and demand aspects. The importance of recognising the market jurisdiction's role becomes more apparent only when this market denotes "demand" as the complementary set of "supply" in the whole that forms the wealth generation process. This demand presupposes a pre-existing income so that its constituting phenomenology contributes to the wealth of future operations. Notwithstanding, this assertion does not implicate that any economic transaction is necessarily responsible for generating new wealth. Individual wealth generation may indicate a mere transfer of pre-existing wealth, not corresponding to an increase in the system's wealth as a whole. Although historically neglected in the international tax field, the distinction between generating and transferring wealth is fundamental to understanding the value creation debate.

The idea of "new" wealth is responsible for the emergence of the economic discourse that inaugurated modern taxation and the efforts to institute a general income tax. In this way, this dynamic wealth will be at the centre of any debate that intends to revise the tax legitimation discourses. In the fragmented international relations environment, this issue becomes even more complex since it will involve the possible transfer of wealth from one jurisdiction to another. For this reason, the liberal discourse defending wealth generation presented itself as an alternative to the belligerent attitude associated with the mercantilist rivalry for the control of static wealth. The question is to know how this distinction is related to the limiting elements on the lawyers' capacity to build the international tax field categories. The answer necessarily correlates with the phenomenology responsible for the wealth generation process and how this phenomenology was affected by the digital revolution.

Phenomenology and the substance limitations.

Presuming impediments to an entirely arbitrary construction of the field's categories' significances brings a different perspective on the subject-object relation. This perspective sheds light on the elements of the field's discourse that do not correspond to mere actors' extensions. Recognising objects' aspects escaping actors' interference highlights the phenomenological issues concerning the field's categories, challenging the idea of tax objects as the exclusive results of the subjects' choices. The relationship between constructing the categories' meanings and the material limits imposed by the phenomena addressed by the legal discourse is at the heart of the tax law's independence process and reveals its inherent tension. Such a relationship results in a type of social action that is neither an omnipotent construction of reality nor a total submission to external circumstances. This intermediate situation gives new meaning to the international dimension of tax law, relating it to a kind of "expanded global tax reality".

Understanding the various phenomenological manifestations of the digital revolution allows a clearer view of the argument involving establishing a ring-fence. The statement that it is not possible to ring-fence the digital economy does not imply the impossibility of taxing differently any of the digital revolution's economic expressions.[1086] Similarly, it would

[1086] Although it initially caused exacerbated reactions for not fitting the traditional archetypes recognised by the international tax discourse, the tax on digital services is gradually being accepted by the field. Sadowsky points out a

not have been possible to institute a hypothetical ring-fence on the industrial economy when it emerged from the feudal economy. However, this conclusion did not lead to the assumption that the industry sectors that formed this "post-feudal economy" could not have specific taxation. The previous chapter has shown that the digitalisation process entailed the emergence of a specific industry sector, transformed traditional businesses, and created new business models. In identifying a particular sector associated with this process, nothing would prevent this identification from giving rise to special taxation without implying a ring-fence over the whole economy.

Therefore, the impossibility to ring-fence the digital economy refers to a hypothetical attempt to solve all its problems by segregating it from a "non-digital" economy. The confusion between the digital economy and its digital business models has turned this argument, intentionally or not, into prohibiting ring-fencing any identifiable companies or models. Furthermore, such confusion obliterates one of the most critical aspects of the digitalisation process, which is not limited to organising wealth production. The digital revolution moves towards the predominance of informational over other phenomenologies traditionally associated with wealth generation. The struggle to avoid a different treatment to the digital economy has prohibited re-discussing the field's categories' construction before perceiving a new phenomenon's dominance. Wealth generation phenomenology's reduction to an informational dimension results in power concentration in the hands of those who control this phenomenon.

Digital product and service.

One of the first results of reducing tax phenomenology to its informational dimension was the confusion between certain services and products. The relatively uncontroversial way these categories have been recognised historically in the field has allowed them to become conditioning criteria for different taxation forms. Although criticised in some respects, the expression "digital product" consists of a neologism that inserted the traditional idea of a product in an environment of immateriality. This expression denotes a separation between the informational dimension and the physical support for its encoding, revealing a trend that escapes the ef-

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curious situation: instead of being the outcome of an identifiable rational assumption, it is the consolidation of this tax that leads to an opening for new ways of understanding the phenomenon of taxation. See SADOWSKY, M. La Taxe sur les Services Numériques: une imposition pas comme les autres. **Revue Européenne et Internationale de Droit Fiscal**, n. 3, pp. 411-431, 2020.

fort to elaborate watertight categories. Such a tendency does not concern understanding whether a specific digital arrangement can give rise to a product, even when lacking materiality. It is about identifying a movement towards an excessive informational reduction with the potential to invalidate the physical criterion's adequacy for constructing the field's categories.

The decrease in the importance of the physical criterion affects the tension between tax law and private law since both use it to construct the meaning of their categories. In the case of WTO rules, recognising that a particular information arrangement is a product, and not a service, can have critical conceptual consequences. The adoption of one or another commercial category, combined with the absence of a clear criterion on the tax materiality of income, can lead to conflicts between the two fields. An income tax imposition resulting from a so-called "digital product" can open space for accusations of commercial protectionism and potential trade disputes. Thus, it is essential to clarify that, although the WTO commitments are not income tax-related, certain international habits can be the object of rhetoric defending free trade. More specifically, the infrequent practice of establishing a withholding tax on payments for importing products may result in the argument that this taxation would have a protectionist character.

Another digital revolution's specific effect on the international tax legal discourse corresponds to using "technical services" as a criterion for allocating taxing rights. Regardless of the reasons that brought the expression to the centre of the discourse, the fact is that it denotes a context associated with the technicality's ascension process. Thus, despite the criticisms of its supposed meaninglessness, the expression involves a high degree of technicality, being potentially dubious in some situations but clear in most cases. This clarity becomes increasingly more remarkable as the informational phenomenon highlights wealth-generating processes more dependent on its control. In this sense, it is not reasonable to argue that every service is technical "to some extent," aiming to confuse incidence criteria. The attitude of building a semantic sense for expression based on the idea of technique as opposed to technology is much healthier, demonstrating a concern with the various phenomena associated with wealth generation.

Digitalisation, political dimension, and the power problem.

The awareness that the digital revolution affects the phenomenological basis supporting the wealth generation process produce effects on the political dimension. Such dimension involves a tension between submitting the field's categories to the actors' control and a material process of transforming the reality potentially harmful for legal discourse's rationality aspirations. Specifically, the discourse's capacity to bring about a taxing reality from the field's social practice clashes with external material limitations to the actors' choices. It turns out that the legal discourse is not a computer program only limited to syntax rules, facing problems related to its discursive origins. The main one is the problem of power and the self-imposition of limits in social life, quite evident regarding governmental actors and present in the other actors' attitudes. What is new is the tax phenomenology reduction to an exclusively informational dimension, making control over the information a new variable in the problem of power.

The problem of power in the international tax legal sphere refers to hypothetical conditions for exercising the authority in constructing the legal categories' meanings. The question is to understand whether the lawyer's attitudes to legitimise any phenomenological situation relate to expected attitudes for the simple fact that these actors are lawyers. More than a purely philosophical exercise, the previous item has demonstrated that the actors' attitudes can result in the annulment of some possible perspectives to justify their social existence. Ultimately, this annulment may result in disbelief in the law's ability to act as a rationality discourse on the international tax phenomenon. At its most elementary level, and because any conditioning elements are external to the actors, the conclusion is that the limitations must reside on the phenomenological plane. In this way, it is from understanding the categories' phenomenological results that the constraints to actors' constructive freedom become evident.

It is no coincidence that the digital economy debate resulted in revising the material criteria related to the so-called "allocation of taxing rights". Although the expression is misleading, it denotes constructing a material significance for exercising tax authority beyond the formalisms associated with the treaties' categories. This debate shifts the problem of power to a much more complex context, in which the exercise of authority generates tensions with its constituents, other authorities, and their constituents. Thus, based on the tax phenomenology, the field's categories will constitute the reality of the relationship between states and taxpayers and

the relationship between distinct jurisdictional realities. The problem of power, in this case, presents a mosaic of elements that make it extremely difficult to identify the possible solutions to be adopted by the legal discourse. However, construction from scratch is unnecessary since the tax field has traditionally handled the wealth generation phenomenology.

Natural, human, and technological dimension.

Wealth resulting from natural phenomena is the most traditional way of understanding the wealth generation process, being associated with resources spontaneously arising in a given territory. Because its importance is easily understood, this dimension has always been present in the wealth discourse, even before the dynamic perspective's emergence. At a more fundamental level, a territory's material existence is confused with the very idea of locus of authority exercise. For this reason, this exercise's physical limits have always gone hand in hand with the construction of the sense of sovereignty in international law. These factors have contributed to the strengthening of an idea that only the authority thus recognised in a given territory should tax the income from the natural phenomenology circumscribed therein. Not even the eminently contingent character of the existence of natural wealth in a given territory has generated a discourse justifying this wealth's taxation by an external authority.

In turn, wealth deriving from human phenomena has allowed the emergence of a dynamic perspective on wealth, whether understanding labour in its individual or collective form. The first case implies a body degradation resulting from physical efforts, while the second entails the division of labour and its specialisation effects among individuals. Individual labour does not pose major international issues since all material circumstances are physically present in a given territory, resembling natural phenomenology. However, the social division of labour separated the supply elements internationally, creating a whole debate on allocating taxing rights. The collective human phenomenology differs from the individual by the rise of aspects related to exploring the phenomena' specific manifestations, acquiring a broad-sense technological connotation. Such connotation made technological advances modify the phenomenology related to the division of labour, especially after the digital revolution.

The continuous development of technology in the strict sense has increas-

ingly evidenced the distinction between matter processing and the information related to this processing. High technology has given a new perspective to wealth generation, going in the direction of autonomous exploration of phenomena. Digital technology, in turn, had a catalytic effect on the relationship between information and its material basis since information became the very phenomenon to be explored. This folding over itself brought greater complexity to the fractionation problems that already existed within the scope of the international division of labour. There was already tension between wealth generation dependent on the physical degradation of nature and the human being, and the processes reliant on labour arrangement techniques and autonomous phenomena exploitation. From the digital technologies advance, the informational phenomenon exploration caused the first group's gradual erosion, benefiting the second.

Imbalance favouring technology.

Although no jurisdiction has an economy based solely on one type of wealth generation, it is possible to think in terms of phenomenological archetypes and their preponderance. Accordingly, globalisation would have caused "physical" and "technological" economies in a broad sense to interact. By admitting the interaction between supply and demand as a relevant element in the generation of wealth, the conclusion is that the material limits of nature and the human being constrain the supply capacity in the first case. In the second, as seen, the limits correspond to that of the energy used in processing information, tending to zero in the long run. The conclusion would be that physical economies would maintain a higher marginal cost, absorbing the wealth of technological economies to the extent of the degradation of nature and human beings. However, what is happening is a massive generation of wealth resulting from technological phenomenology, and the explanation lies in the digital revolution.

The technological exploration of informational phenomenology has an unfolding that generates an imbalance in the distribution of wealth. Advances in the digital economy move towards the maximum exploitation of the phenomenon and greater control over this process. The issue of control has always been important for the international tax field, helping to build the categories of discourse responsible for drawing the separation between the natural and the artificial. Expectations about taxpayers' behaviours have usually considered their ability to intervene or not on the elements that constitute the circumstances submitted to taxation.

At the international level, the issue goes beyond the relationship between the state and taxpayers, affecting the criteria for dividing the so-called taxing rights. Profit allocation rules traditionally presuppose proxies emulating the ability to control economic activities in different jurisdictions, a constrain that the digital revolution has permitted to circumvent.

In this sense, the digital revolution is progressively eroding a dimension usually considered spontaneous in international taxation. Digital technologies advancement turns the intervention in the informational phenomenon into an information asymmetry in favour of those who have control over this technology. This same evolution is practically null in the scope of the generation of "physical wealth" due to the natural or human individual phenomenology. Such a fact adds to the possibility of exploring the information encoded in this physical dimension, reducing all elements to a purely informational condition. The result is the complete failure of the division between physical and technological wealth in a broad sense as a criterion for self-limiting tax sovereignty's exercise. Consequently, insisting on this criterion tends, in the long run, to produce enormous inequalities between the countries, depending on whether their economies are more dependent on one or the other archetype of wealth generation.

Conclusions.

Understanding international tax law's intellectual categories as actors' extensions has the merit of highlighting the role of social action in constructing the sense of the field. Such recognition opposes both the metaphysical view of these categories and the belief that their appearance in the lawyers' vocabulary is the mere result of an objective hermeneutic process starting from the legal norms. However, this understanding clashes with the substantial limitations to the actors' creative freedom related to tax materiality. These limitations' phenomenological expression occurs within the wealth generation process's scope, traditionally built from natural and human elements. Such human elements allowed separating labour as a physical effort from its view as a technique, emphasising the importance of information about the production process. The digital revolution has placed information at the centre of a race for the autonomous exploitation of this phenomenon, bringing a new perspective to the tax field's objects.

More generally, technological advances have intensified the already ex-

istent differences between the wealth generation process based on physical and technological elements in a broad sense. The technical level has become a new category in international tax treaties' language, affecting the self-limitation of exercising power to tax. Specifically, the digital revolution has produced a type of technicality oriented to the autonomous exploration of the informational phenomenon. Such an automation process has caused considerable differences in exercising control over wealth generation, favouring digital technology holders and producing consequences in the state-taxpayers and inter-jurisdictional relations. The emergence of a new type of information harnessing has challenged the naturalistic assumptions of the liberal paradigm on wealth generation. Controlling the product is no longer so distinct from controlling the process and its effects, altering the dynamics of how to articulate the international tax field's categories.

Therefore, the digital revolution introduced yet another variable in the already complex problem of power, affecting the limits of lawyers' creative freedom. In addition to the substance issues associated with tax materiality, lawyers must consider different information control levels' political implications. As a deemed rational social organisation project, the legal discourse has the problem of power in its genes, revealing its ancestral inclination towards political issues. Ignoring these issues is not proof of technicality or impartiality but of assuming a nihilistic attitude before a scenario of transformation in the field's very foundations. Reducing tax phenomenology to an exclusively informational dimension has repercussions beyond the mere problem of coherence in the actors' discourse. This event affects the project for constructing the human dimension responsible for the emergence of law as a social practice, imposing a new way of thinking about the international tax legal discourse, as will be seen below.

3.3.3. Rethinking the system of ideas.

The two previous items presented reinterpretations about the actors' roles and the different dimensions involving the international tax legal field's objects in the face of the digital revolution's effects. The three mentioned groups of actors exhibited significant internal cleavages whose divergent interests impact the construction of the field's discourse. Far from an external and independent element, international tax law presents itself as the result of these ac-

tors' social practice, which brings a new perspective for the tax categories. From a formal standpoint, the field's objects appear as an extension of the actors, contrasting with the tax phenomenology and its resulting material limitations. The tension resulting from this contrast highlights the taxation's political dimension and emphasises the problem of power at the international level. This context is still affected by reducing all tax phenomena to a purely informational condition, making information control a central variable for the international tax legal discourse.

Claiming that the digital revolution has changed such context means more than identifying a shift in the subject-object relationship background. It is about transforming how the actors understand their social practice, altering the system of ideas that constitutes the tax epistemic community. The rise of information control forced the actors to pay more attention to international taxation's political dimension, imposing a redefinition of their discourse. In addition to the new factors brought about by digitalisation, such a view imposes the recognition that the international tax law's centralised and Eurocentric tradition has given way to a fragmented and multicultural environment. This scenario is not foreign to the legal tradition since it has historically reconciled a supposedly rational social organisation discourse with meeting emerging interests. Such reconciliation, however, depends on a personal effort by lawyers to adopt a realistic attitude towards the new phenomenology associated with the wealth generation process.

This item aims to present a new perspective on the system of ideas guiding the international tax lawyers' epistemic community's social practice. The premise is that the tax phenomenology's reduction to a merely informational condition contradicts the human dimension's intellectual construction project. The hypothesis is that the realistic discursive legal perspective best articulates this debate's technical and political elements, facing the new problem of power revamped by the digital revolution. The item begins analysing the relationship between digitalisation and the human dimension's intellectual construction project from the dichotomy between natural and artificial. After, the item stresses the political dimension of the duality between market and taxation and its historical relationship with the legal field's social and intellectual tradition. Finally, the item argues that a realistic discursive legal attitude is the best mechanism to counter the excessive objectification associated with digitalisation, preserving international tax discourse's consistency.

Digitalisation and the human dimension.

In its strict sense, the digital revolution is not the mere result of a flash of creativity within the field of technology devoid of external stimuli. The emergence of a digital domain resulted from a technological reaction to the demand for information control resulting from the industrial society.[1087] Although its language's dominance represents the digital paradigm's prevalence, its transition from the technological to the economic field depended on other elements. The immaterial nature of this technology would make it problematic to establish economic exploitation in traditional terms. Such exploitation only occurred because other technologies in a broad sense, constituted from social phenomenology, conceived digital technology as intellectual property. The conclusion is that the shift from the digital revolution to the digital economy was only possible due to a system of rights that guaranteed this transition, preserving its economic sense as established by the liberal paradigm.

Nonetheless, this process is not limited to a specific economic perspective related to the wealth generation process's efficiency. The virtualisation resulting from the digitalisation process also erodes the distinction between technology and technique, compromising the human dimension's intellectual construction project and its social consequences.[1088] In addition to its instrumental impacts on the legal capacity to establish a rational language on taxation, digitalisation causes structural changes in the legal tax discourse. As a discursive instrument, the legal intellectual project corresponds to the most fundamental social organisation technique in the modern world. Thus, the prevalence of technology over technique would mean the legal discourse's bankruptcy as an intellectual project of society's rational organisation. In this sense, more critical than its instrumental results, it is necessary to understand the role and the impact of technology in the human dimension's intellectual construction project.

The digital omnipresence confuses the very notion of social or natural space with the architectural result of a specific design project. As technology is everywhere, the idea of freedom becomes compromised since one would have a distorted image of which deter-

[1087] The item "2.1.3. Technological revolution" described how the consolidation of bureaucracy and the digital revolution were, respectively, technical and technological responses to the demand for control of information generated by industrial society.

[1088] The item "2.3.3. The digitalisation of the natural, social, and individual" has demonstrated how the erosion of the distinction between technique and technology in the strict sense threatens the human dimension's intellectual

minant elements interfere in humans' cognitive ability to make decisions.[1089] More immediately, the result is the inability to perceive the wealth-generating environment as the outcome of specific designs deliberately chosen from the digital language. The naturalisation of this environment leads to the paradoxical attitude of searching for spontaneous results from artificial structures. At a deeper level, what occurs is a wealth generation process that takes place in a necessarily artificial environment, affecting the resulting taxation. In practice, the tax phenomenon would mean the overlap of a second artificial structure, this time the legal tax discourse, trying to preserve impossible neutrality aiming not distorting business decisions.

Technology in the construction of humanity.

As seen, if there is any distinction between technology and nature, this distinction is not ontological but cognitive, following from a specific purpose. This purpose involves submitting the idea of natural phenomenology to an instrumental role in the human dimension's intellectual construction project, in which artificiality emerges as a concept in opposition to naturalness.[1090] Therefore, technology does not exist alone in opposition to nature, consisting of an unfolding of that project associated with a recent human history moment. Likewise, the distinction between technique and technology is not that clear, and the first efforts in its understanding occurred only after the (first) industrial revolution. However, there is nothing in these efforts that point to a technology conception ontologically distinct from the material world or the human beings and their technical dimension. Thus, the relationship between technique and technology and the potential prevalence of one over the other is not a matter of essence but derives from the actors' attitude.

Therefore, tax actors' attitudes define the technical dimension's preponderance over technological or vice versa, but this choice triggers other issues. Recognising technology as an outcome of the human dimension's intellectual construction project brings a new way of see-

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construction project.

[1089] The item "2.3.3. The digitalisation of the natural, social, and individual" dealt with digital technology's impact on individuals' perception regarding the possibilities of action determined by digital design. See "The digitalisation of the natural environment" and "Digitalisation and the human dimension".

[1090] The item "2.1.1. Technological definition" has demonstrated that the submission of the natural phenomenology to a specific purpose is at the centre of the conceptual separation between science and technology. The effort to explore only particular aspects of this phenomenology makes technology dependent but away from nature in its original state. See "Technology, science, and phenomena".

ing the distinction between natural and artificial. Traditionally, the international tax field has dealt with the idea of naturalness as a quality to preserve before the interference of the tax phenomenon. Although this natural feature is just a symbolic representation, the idea of spontaneity characterises an element that helps to legitimise particular tax choices and condemn others.[1091] Nonetheless, neither the notion of naturalness nor that of spontaneity resist a digitalisation process guided by the idea of processing information encoded in the most diverse ways. This process's result is the failure of the naturalness argument as a limiter of the tax discourse, transforming nature into the object of a policy manifested by digital language.

In the same vein, the notion of artificiality is a crucial category in the international tax field, being causally related to the legitimacy of the actors' conduct. Nor it is accepted that taxation offends the natural emergence of wealth, nor it is allowed that taxpayers allocate wealth in places or production stages unnaturally.[1092] Presuming artificial conducts in the field implies the existence of conducts naturally expected in a given context. Thus, the international tax field's artificial behaviour usually identifies itself by its opposition to an expected standard whose restoration is an end to be sought by the actors. However, if there is no ontological division between what is natural and what is artificial, the expectation of conduct is an element that belongs to the observer's system of ideas, not to the observed object's intrinsic qualities. Therefore, expected patterns are not due to nature but to the paradigm adopted so that a paradigmatic change allows a transformation in these patterns and, consequently, in the artificiality notion.

Separating the natural from the conventional.

The conclusion that the expected patterns correspond to a derivation of the

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[1091] The weight of the naturalistic argument in the tax field can be measured by the effort expended by Murphy and Nagel to demonstrate that private property is a legal convention defined, in part, by the tax system. Recognising that this conventional character is both evident and easy to forget, the authors face the moral narrative resulting from the naturalisation of this convention to demonstrate that the tax system cannot be judged by its impact on private property, as if the existence and validity of the latter were independent of the former. See "Introduction" in MURPHY, L. B. and NAGEL, T. **The Myth of Ownership: taxes and justice**. Oxford: Oxford University Press, 2002, pp. 3-11.

[1092] Even without a precise definition, the idea of artificiality was the central element of Action 7. The work's spirit was to change to remain the same: to adjust the paragraphs of Article 5 of the OECD Model Convention to preserve the permanent establishment concept. Therefore, the text's modification was not intended to modify the criteria to determine when a non-resident company must pay taxes in another jurisdiction but to prevent certain behaviours, even if provided for in the text, from distancing the "natural" application of the concept. See OECD. **Preventing the Artificial Avoidance of Permanent Establishment Status, Action 7 - 2015 Final Report**. OECD Publishing: Paris. 2015d.

dominant paradigm brings a new perspective to the field's categories' analysis. Such perspective evidences a common practice in the tax field concerning the excessive naturalisation of conventional constructions and elaborating a moral discourse dignifying them.[1093] The other side of this coin corresponds to the inability to identify specific events as actors' preferences' extensions and the condemnation of choices deviating from the paradigm's standards. From this condemnation, an attitude of denial of the political sphere appears as a legitimate manifestation of the international tax discourse. Against this background, the discursive analysis of the actors' behaviour emerges as a possible paradigmatic alternative, allowing identifying the conventional character of deemed natural categories. This identification depends on the distinction between the social and natural phenomena underlying the wealth generation process.

Discursive instruments permit the recognition of wealth as an element that, although influenced by the social dimension, has a phenomenological basis independent from human agency. From a broad technological perspective, the wealth generation process corresponds to an architecture based on capturing those phenomena. However, the design preferences related to solving the problems posed correspond to an engineering activity that originates directly from the field's dominant paradigm. Such a paradigm invariably invokes an ideological foundation related to the human being's self-perception and the meaning given to natural phenomena in constructing the social universe. The result is that any intellectual project associated with wealth generation will necessarily be a political endeavour. Although supported by a narrative defending a supposedly technical private sphere, exploring the phenomenology related to wealth depends on field choices, which possess a political character.[1094]

Since the design choice in exploiting wealth phenomenology is a political enterprise, the confrontation between different criteria is a battle between political projects. In this

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[1093] Popper analyses how this cult of naturalness is associated with the origins of authoritarian thinking. After discussing several historical proposals for moralising aspects considered as derivations of nature's laws, the author criticises the premise that if a norm is conventional or artificial, it is necessarily arbitrary. Popper concludes that when Plato speaks of nature, he means the same as "form" or "idea", assuming that the duality between nature and convention corresponds to that between truth and falsehood, creating a dualism that served to justify a perfect universal order (his ideal State) as opposed to a delusional particularism. See "Nature amid convention" in POPPER, K. R. **The Open Society and Its Enemies**. Princeton: Princeton University Press, 2013, pp. 55-80. Regardless of whether the reference to Plato is correct, what is noteworthy is that in the present debate on the digital economy, the universal corresponds to international tax principles while the particularism identifies with the countries' individual actions.

[1094] The item "1.2.2. The birth of the tax field" showed that, given the insolubility of this problem, the marginalists have chosen to incorporate, instead of purging, Smith's political choices in their economic narrative with scientific pretensions. See "Scientific positivism in economics and law".

sense, the defence of tax principles does not correspond to an attitude of preservation of an absolute technicality, but of the values the dominant paradigm conveys.[1095] Accordingly, condemning individual conducts based on their departure from imposed standards corresponds to advocating a specific moral project. This situation results in a paradox when the dominant paradigm assumes an attitude of rejection of moral elements in constructing its discourse. Given that the very adoption of one paradigm to the detriment of others presupposes the prevalence of a moral project over its competitors, the alleged attitude of rejection of morality means only the crystallisation of a specific project. Such a conclusion applies to the international tax field and its attempt to separate technical aspects related to the market from moral elements associated with politics.

Market, politics, and the legal intellectual tradition.

The intellectual efforts to separate what is truly natural from what is just a convention in the international tax field come up against the notion that there would be an ideal market. The myth of an ideal situation in which economic relations would occur almost in a state of nature has resulted in one of the international tax field's central tenets. Such dogma allows a discourse on the factors that make up the wealth generation process with a descriptive character, assuming technical neutrality. This discourse opposes another, more propositional and supported by political choices, which, although legitimate, would lack aspects of rationality. As already stated, in no other category of the international tax field, this technical ambition is more visible than in the idea of the existence of prices resulting from applying the arm's length principle (ALP).[1096] The idea of natural prices, resulting from spontaneous economic transactions governed by the ALP, led to a discourse moralising these prices.

On the other hand, this same moralisation also permitted acknowledging "immoral" prices resulting from abusive or artificial economic conduct or state actions. Since

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[1095] The item "1.2.2. The birth of the tax field" has demonstrated that the distinct ways in which different paradigms dealt with the importance of the state in the face of the tax phenomenon led to two separate intellectual traditions in the United Kingdom and the European continent. See "Public finance and science of finance".

[1096] Canada's Federal Court of Appeal and the Supreme Court of Canada have decided that it was necessary to use a hypothetical uncontrolled transaction as a comparable, regardless of the existence of an actual transaction in the market. See PICHHADZE, A. The Arm's Length Comparable in Transfer Pricing: a search for an "actual" or a "hypothetical" transaction? **World Tax Journal,** v. 7, n. 3, 24 Jul 2015. This position conflicts with OECD guidelines, cited elsewhere, which always prioritise empirically identified comparables.

price is the beacon that guides the actions of the actors involved in the production process, the moralisation would inevitably contaminate all elements correlated to wealth generation. The myth of the ideal market led the international tax field, mainly during the OECD's ascension process, to work with a dichotomy between deemed spontaneous situations versus other considered induced. Thus, during this period, the political effort was not to build a discourse on normality but to find mechanisms to preserve the market's spontaneity.[1097] Consequently, spontaneity would apply to the countries' conduct so that taxation should not interfere with the natural flow of economic transactions. Likewise, taxpayers' spontaneous behaviour would lead to naturally accurate prices, corresponding to the ideal market's quantitative expression.

Market naturalisation lies behind the narrative stating that eventual state and business artificialities would cause harmful tax practices and abusive tax planning, respectively. However, given the international market fragmentation, its naturalisation does not explain the different circumstances that characterise the jurisdictions of supply and demand.[1098] Thus, this price moralisation discourse does not solve the flaw of the simplistic dichotomy between public and private spheres, raising another problem. While restricting the technical aspects to wealth creation, it authorises complete political freedom in deciding about the so-called allocation of the taxing rights. Besides, the ALP's inability to solve anomalous situations involving non-commoditised goods, especially intellectual property, has constantly threatened the natural market myth.[1099] ALP's contradiction as a guiding principle consists of the idea that it works well for easily identifiable prices but finds difficulty in the absence of comparable transactions.

[1097] While acknowledging the existence of more mundane interests resulting from the perception that the ALP can be an excellent instrument for minimising taxes, Park concludes that the obstinate defence of the supposed principle, even in the face of mountains of evidence of failure, denotes a cultish behaviour. See PARKS, B. Arm's Length: principle or cult? **Tax Notes International,** v. 100, pp. 529-534, 26 Oct 2020.

[1098] The item "1.3.1. First reactions to the internationalisation" has demonstrated that market fragmentation lies at the heart of the international double taxation issue, characterising the first phase of constructing the international tax field's discourse. See "Double Taxation and the League of Nations".

[1099] Brauner offers some explanations for this inability. In practical terms, intangibles are rarely traded individually on the market, and even in those rare cases, the compensation involved is not disclosed. In economic terms, the company's option to internalise the operation aims to obtain an advantage concerning the transaction costs, making the comparability require adjustments related to the very difference in cost that the "rational agents' would avoid. See "The Market Approach as Applied to Valuation of Intangibles for Transfer Pricing Purposes" in BRAUNER, Y. Value in the Eye of the Beholder: the valuation of intangibles for transfer pricing purposes. **Virginia Tax Review,** v. 28, n. 1, pp. 1-86, Summer 2008, pp. 107-109.

Recognising international taxation's political dimension.

The arguments above-mentioned demonstrate that the ALP cannot be an authentic principle but only an applicable rule when certain objective elements were present. If it were a principle, the ALP would act as an axiological vector, guiding the determination of prices precisely when the international tax actors needed it most: in situations with no comparable transactions available.[1100] What preserved the ALP as an intellectual project was the relatively homogeneous composition of the leading players associated with a prevalence of physicality in the wealth generation process. Nevertheless, two events contributed to exposing the ALP's inherent deficiencies and the inconsistency of the separation between technique and politics in the international tax discourse. The first was the emergence of the information society and the importance acquired by intangible assets in the digitalising economy. The second was the rise of the new great powers (NGPs) and the consequent new balance in international relations in tax matters.

The current phase in the international tax discourse construction rescued an old tradition in the international field consisting of merging deemed technical and political elements. This tradition is not alien to the liberal paradigm, consisting of the main form of building an international free market.[1101] International law was the primary tool in constructing an international order marked by a tension between universalist yearnings and the emergence of an unprecedented pluralism between nations. The tax field has repeated such history from the tension between building a global tax project vis-à-vis unilateral measures to counter the digital economy. When lawyers and economists affirm that constructing universalism in taxation is a political issue, these actors shift the tax debate to a field that does not have a tradition of articulating this discourse. However, the digital tax debate is evidencing that there is no dividing line between technical and political, just an attitude of departing from specific interests, favouring others.

[1100] On the other hand, after presenting arm's length's rise and decline in the American experience, Avi-Yonah maintains that the fall of comparability in favour of formulary methods does not necessarily imply a conflict, stating that any method could represent an expansion in the arm's length's definition. However, it is noteworthy that the author does not call arm's length a "principle" but a "standard", showing more concern about possible conflicts with the potential violation of existing treaties than with the preservation of a market ideal. See AVI-YONAH, R. S. The Rise and Fall of Arm's Length: a study in the evolution of U.S. international taxation. **Virginia Tax Review,** v. 15, n. 1, pp. 89-160, 1995.

[1101] The item "2.3.1. Markets and the digital revolution" has demonstrated how the construction of an international market was a liberal project that, instead of preaching the removal of state action, considered it as necessary to encapsulate the market against potential local interference. See "The protection of the free international market".

The lawyers cannot forget the historical role of law in alleviating tensions between social organisation proposals and emerging interests.[1102] Given the law's dual role as a source and instrument of power, the legal discourse has traditionally articulated technical rationality with political objectives. So, the search for an epistemological paradigm able to deal with the tax debate's political dimension cannot ignore the law's possible contributions. The law permits understanding politics not as something external and in opposition to an allegedly technical discourse but as a central element of the debate. Without this element, the lawyers would not only be limited in their task of dealing with the current debate on international taxation but would jeopardise their legitimacy as socially recognised actors for this purpose. By following economists searching for a sterile and purportedly technical discourse in opposition to taxation's political dimension, the lawyers would assume a purely accessory role in the debate.

Restoring the intellectual traditions of the legal field.

The historical process resulting in the legal field's emergence has always dealt closely with the problem of power in social life, addressing the limits and legitimacy of power exercise. This debate possesses both a purely intellectual perspective and a social dimension formed by the institutionalisation of interests promoted by emerging power groups. The digitalisation brought a different element to the field, a new conflict not restricted to the superiority of one group of power over another in the dispute for control of the process of social organisation. Such conflict opposes the very notion of social order to a new type of power with the potential to undermine the human dimension's intellectual construction project. This novelty imposed the need to develop new discourses capable of preserving both the results of the advances obtained by digitalisation and the values related to the human dimension. More specifically, the digitalisation's scope and speed erode the categories and the very moral foundation of the liberal paradigm.

The international tax legal debate on the digital revolution's effects corresponds to a particular event in a broader transnational regulation movement. Nonetheless, albeit the understanding of this regulatory debate may offer some important insights for tax lawyers, it is necessary to rescue the international tax field's traditions. There is a technical dimension to the

[1102] The item "1.1.1. Rationality, legal forms, and emerging interests" showed how this role marked the very for-

international tax legal debate that must be identified from its historical trajectory and not in contrast to the political elements. More than a corporatist attitude to protect the lawyer's social role, the legal tradition may contribute to the human dimension's intellectual construction by recognising the technique's importance in this project. The failure of the lawyers' ability to articulate their discourse to reconcile those technical and political interests that may eventually be opposed can lead to extreme reactions. Historically, such extremisms have flirted with the possibility of annihilating the very liberal project of social organisation.

If the Second World War did not lead to the law's hegemonic condition weakening, this was due to the absence of a suitable substitute at the time. Tradition or religion no longer had their usual capacity for cohesion, so law as a whole has not faced criticisms in its function as a social organisation, but only legal positivism as a specific intellectual project. Legal positivism's more formalistic versions' powerlessness to deliver results meeting society's expectations has pressured that discourse. Thus, if the lack of competing candidates did not wipe away the law's importance, it has at least provoked a new search for human elements that could rescue the naturalist tradition. On the other hand, today, the law has found a consistent competitor in its ambition to operate as a social organisation instrument. The emergence of a technological discourse resulting from the dominance of the digital language poses a threat to lawyers' role, symbolising a new duality between technique and technology with the potential to reshape the process of wealth generation.

Legal discourse as a reaction to objectification.

The rescuing of the old legal debates forgotten by the tax field is in line with the importance of the lawyers' role in constructing a discourse capable of dealing with digitalisation. Thus, in addition to understanding what is under discussion, it is necessary to verify what elements or values traditionally essential for the legal field are absent from the debate.[1103] The marginalisation of the law's central themes shows an attitude of rejection of the legal per-

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mation of the Western legal tradition.

[1103] Addressing specifically how the European Union handled tax avoidance strategies after the end of the BEPS Project in 2015, Smit highlighted the need to return to the roots of the problem. Making a playful analogy with a children's song, the author concludes that, in the end, the academy is the main responsible for pointing the direction of this analysis. See SMIT, D. S. International Income Allocation under EU Tax Law: tinker, tailor, soldier, sailor. **EC Tax Review,** v. 26, n. 2, pp. 67-74, 2017.

spective in the digital economy debate.[1104] However, ironically, the digitalisation, associated with a new configuration of forces at the international level, made the international tax debate move towards these themes. The central issue in the debate promoted by TFDE today is the need to coordinate social interests expressed in a new balance of power with the attitude of preserving the tax discourse's technical aspirations. Among the tax actors, the lawyer is the one that has traditionally most articulated the exercise of power with a deemed rational discourse of social organisation.[1105]

The other side of taxation in the modern state concerns the idea of sovereignty or, more specifically, the elaboration of a discourse of tax legitimacy. Given the prevalence, in international tax law, of a rivalry between a positivist perspective based on the nation-state's paradigm and a realistic approach dependent on the economy's tools, this discourse of legitimacy ended up becoming a taboo. However, one cannot overlook tax sovereignty since the idea of taxation based only on the exercise of power generates opposition in the field. The fact is that the lack of a coherent theory on the exercise of fiscal sovereignty helps to explain why it is so difficult to deal with opposing tax interests. Tax sovereignty has historically served an instrumental role in avoiding international commitments or ruling out alien claims on local interest matters.[1106] Such a role is reinforced both by the absence of a theoretical commitment as a nihilistic stance towards political pragmatism, resulting in a cynical attitude towards taxation's

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[1104] Although authority is always associated with the state, whether concerning the political agent or the bureaucracy, the academy is primarily responsible for how these actors "think like tax lawyers". However, many academics act as if their actions had no impact on how power is exercised in the field. Referring to the American reality of 1948, Brown states that, although law professors sincerely desire to improve government quality, they do not clearly see the relationship between such improvement and their educational institutions. Among the reasons highlighted by the author is an inclination towards private practice, which sees public administration as a natural antagonist, and the need for a differentiated preparation. See "Attitudes of Law Teachers Toward Training for Public Service" in BROWN, E. L. **Lawyers, Law Schools and Public Service**. New York: Russel Sage Foundation, 1972, pp. 22-29. Although restricted in time and space, this diagnosis still applies today, at least in Brazil.

[1105] Among the two actors who have traditionally been more concerned with international taxation's technicalities, the lawyer is closer to these political elements than the economist. This proximity led Roxan to affirm that, although important, the economic is only one of the several discourses on taxation, emphasising that the language of fairness around which the policy discourse is based is closely related to that of the legal system. See "Conclusion" in ROXAN, I. Limits to Globalisation: some implications for taxation, tax policy, and the developing world. **LSE law, society and economy working paper series,** v. 3, Oct 2012, pp. 46-47.

[1106] Ring demonstrates that, although historically associated with flourishing rhetoric in the search to serve the most diverse interests at the international level, sovereignty is not a minor concept, having a central role in building the legitimacy of the international cooperation actions. Thus, the author demonstrates how sovereignty has been manipulated in the tax debate, concluding that it still preserves an important protective element of state responsibilities towards its citizens. See RING, D. M. What's at Stake in the Sovereignty Debate: international tax and the nation-state. **Virginia Journal of International Law,** v. 49, n. 1, pp. 155-234, Fall 2008.

legitimacy.

The cynical attitude towards the construction of a tax legitimation discourse at the international level is related, to a greater or lesser extent, to all the tax agendas mentioned above. The set of these forgotten agendas highlights the lack of a consistent and broad theory that explains the phenomenon of taxation from a global perspective. It is necessary to abandon the simplistic reductionism inspired by the dichotomy between subjects and absolutist monarchs to consider taxation in its modern sense. This phenomenon is an instrument of (re)distribution of wealth that, ultimately, identifies who should work and have their health or their own life diminished for the benefit of whom.[1107] When these issues emerge at the international level, they automatically lead to questions about what nations will pay, with the health and working time of their subjects, for the benefit of other nations.[1108] The digital economy debate, in turn, has evidenced new dichotomies represented by the dualities of technology-nature, technology-labour, and capital-labour.

Wealth phenomenology and allocation criteria.

The digital revolution has resulted in a new duality in analysing economic relations involving the encounter between the poles of supply and demand for digital technology. When these poles belong to different jurisdictions, this duality creates tension between the jurisdiction of digital production and that of digital consumption. By the very logic of that dichotomy, the pre-existing wealth necessary for the meeting between supply and demand cannot derive from another transaction involving digital technology. Therefore, the economic transaction must rely on the wealth generated from nature, human labour, or other non-digital technologies. This

[1107] For this reason, Mazzucato suggests that the traditional criticism of modern capitalism, according to which it rewards "rent-seekers" over true "wealth creators", should be replaced by a deeper analysis of the origin of value. In this sense, the author proposes to differentiate "extractors" and "creators" of value as they only move existing assets or create new ones. See "Common critiques of value extraction" in MAZZUCATO, M. **The Value of Everything: making and taking in the global economy**. New York: PublicAffairs, 2018, pp. 4-6.

[1108] Stuart analyses the conceptual and practical difficulties related to redistributing wealth from rich to poor countries through taxation. In addition to the absence of a clear answer to the question of how and why this redistribution should occur, the author highlights the lack of international redistribution mechanisms, concluding that there is a need to establish legitimate processes and institutions capable of emulating, at the international level, the idea of domestic redistribution. See STUART, M. Redistribution Between Rich and Poor Countries. **Bulletin of International Taxation,** v. 72, n. 4/5, pp. 297-309, Apr/May 2018. However, our argument lies in a previous logical and chronological moment, and it is related to the creation of a rationale that justifies the very way international taxation should occur.

conclusion means that this duality invokes, to a large extent, a contrast between wealth based on digital technology and wealth dependent on physical elements. The exception would be the other technologies considered non-digital, making it essential to understand how these technologies behave in a broad digitalisation context.

As seen, the occurrence of revolutions in the technological field involves the rise of a new paradigm and the possible reinsertion of previous technologies in the emerging language. Concerning the digital revolution, information society's notion denotes a global reinterpretation process affecting all previous technologies. Besides, there is a gradual absorption of residual technological elements regarding the tax duality between technological and other wealth types. In other words, there is a tendency for any technological elements to be absorbed by the digital language, favouring the generation of wealth in jurisdictions based on this phenomenology. The conclusion is that digital and non-digital technology's duality corresponds to a merely transitional state of a transformation process not yet finished. In the end, the only existing duality would be that of wealth generation based on technological phenomenology in a broad sense versus wealth dependent on physical elements, whether natural or human.

Therefore, the digital revolution tends to build a hypothetical duality between wealth associated with the control of information and the physical exploitation of human beings or their environment. Such observation allows us to identify two other dualities that have traditionally been part of international tax legal discourse and helped build the field's ideology. The first is the eternal tension between capital and labour, characterised by technology as an intellectual property versus human physical effort. The second is the aforementioned contrast between the natural and the artificial, responsible for conditioning several normative aspects involving the relationship between states and citizens and between jurisdictions. In both cases, the digitalisation process points to an erosion of the meaning traditionally attributed to the tax legal field's categories. Although this process is still relatively incipient, it demonstrates the necessity for tax lawyers, especially academics, to assume a specific attitude.

Necessary attitudes and possible consequences.

The relationship between taxation and the loss of an individual's physical

capacity deserves new thinking as advances in technology invade spheres traditionally exclusive to human beings. The tax actors' role is to differentiate the tools that make sense under the new economic perspective from the non-useful tools. In modernity, taxation's legitimacy involves rational justifications for relating the taxing state to the wealth generated. From this rationality, competitors intellectual projects emerged in the tax field: the ability to pay and the benefit principle. Notwithstanding, these idealistic proposals have coexisted with the pragmatism resulting from elements associated with wealth relatively unrelated to human decisions, such as the mere presence of pre-existing natural resources. On the other hand, technological advances have minimised natural factors' importance, besides imposing a consistent discourse on taxation's legitimacy, mainly over the wealth digitally generated.

The correlation between information and its physical base has constantly been changing, presenting the potential to alter the very needs that justify the discourse on utility, satisfaction, and scarcity. What lies on the horizon is a possible bankruptcy of the ability to demand part of this wealth since it may imply reducing state control over the use of this information. In other words, the digital revolution may put down this dual model of understanding the relationship between wealth generation and taxation. If this is true, tax lawyers' main goal will not be to solve the problem of taxing a completely digitalised economy but to prepare the social order for this transition, ensuring its preservation during this process. Consequently, arguments against the change in attitude cannot be limited to showing that the current moment does not correspond to the description presented here. The critic must demonstrate that the trend identified above does not correspond to the digital revolution's transformation process.

The failure of the digital economy tax debate can mean much more than the failure of TFDE's work, affecting both the forum and the actors responsible for maintaining it. The most evident result of this possibility is the loss, on the part of the OECD, of its condition of guardian of the international tax discourse. However, more than impacting the actors, this bankruptcy may represent the failure of building an eminently international dimension of tax discourse in a scenario of pluralism and power fragmentation. The forum's collapse would also condemn the supranational bureaucracy questioned about its structuring function in the debate. In turn, the tax legal discourse's institutional failure would lead to its intellectual dimension's fiasco, affecting the academy's image as the guardian of the field's ideology. While taxpayers

would suffer the material impacts of uncertainties resulting from the absence of a north, tax practitioners would lose their usefulness as facilitators of the tax discourse's technical aspects.

Conclusions.

This item showed that the digital revolution has made less clear the distinction between spontaneous and planned elements of the environment where wealth generation occurs. This confusion of concepts weakens the factors associated with the legitimacy of the actors' conduct, built from a paradigm that contrasts naturalness and artificiality. Such weakening revealed that identifying prices spontaneously produced in a deemed ideal market is nothing more than a politically constructed moral project. This finding alters the traditional narrative opposing market and international taxation, attributing an exclusive technical character to the first and limiting political elements to the second. Such political elements' existence was the determining factor in constructing a dissociation between public and private spheres that characterised modern taxation's economic discourse. On the other hand, international taxation's legal discourse belongs to a social and intellectual tradition accustomed to articulate political elements with technical aspirations.

The international tax legal discourse is one of the most complex historical outcomes of facing the problem of power in social life. Such discourse keeps the law's dualistic aspect within its genetics, corresponding to the consequence of external disputes for power and an instrument of power in itself from the control of its technique. This dual characteristic has conferred the law the central role as a technical instrument capable of legitimising emerging political interests. However, the digital revolution produced a technological discourse based on the exploitation of information as a phenomenon with the potential to replace the law as an instrument of social organisation. This discourse presupposes the reduction of the human dimension to an informational condition, blurring the distinction between technique and technology in the strict sense. Nevertheless, such a distinction is the basis of the human dimension's intellectual construction, so that technological discourse's dominance would correspond to this project's failure.

Therefore, the legal discourse represents preserving the human dimen-

sion's intellectual construction project itself, affecting both the tax field's intellectual and social plane. In the first case, as an intellectual project, international tax law offers an alternative to the liberal paradigm's deficiencies that resulted in a nihilistic attitude towards the digital revolution. In the second, this paradigmatic change implies rethinking the complex international tax relations between states and their citizens and between different jurisdictions. In any case, it will be necessary for the actors to understand the importance of their role as builders of intellectual categories in the field constrained by the material limits imposed by tax phenomenology. This attitude's front line comprises legal bureaucrats and practitioners since international tax law emerges from these actors' social actions. However, academics are responsible for providing the intellectual elements that form the system of ideas that binds the epistemic community of international tax lawyers.

Chapter's conclusions.

This chapter showed that the relationship between the digital revolution and international taxation entered the governmental documents amid a debate about the tax impacts on electronic commerce (e-commerce). These first documents represented the creation of a political commitment at the same time that they gave the OECD the leading role in the management of this agenda. In this sense, the OECD became the international organisation responsible for drawing up the action plan to tackle the issue. The result was elaborating a general framework containing the principles applied to the relationship between taxation and e-commerce. Such an initial step established the perspective, the procedure, and the actor's role within the works sponsored by the Committee on Fiscal Affairs (CFA). While taxation was considered a barrier to e-commerce, the business sector should identify the tax problems to be solved by the countries, and the other international organisations should implement the solutions agreed.

In parallel with the CFA's tax debate, the OECD led a political effort to build a global Internet economy with informational phenomenology as its central element. Identifying an information society and understanding and measuring communication and information technologies (ICT), both as physical support and an economic sector, were the first steps in this direction. Unlike the first, the Internet economy debate was explicit in adopting a specific lan-

guage emulating the Internet's technological characteristics. Local connectivity's importance has underscored the need for international cooperation in building a global market, bringing new perspectives contrasting with more conservative views. One of these new perspectives was recognising the demand's role in expanding the Internet economy, highlighting the importance of consumers and users. Data's central role makes the Internet economy closely related to the information generated by users and consumers, be it deliberately or unconsciously.

These two parallel debates met in 2013 at the BEPS Project, making the digital economy both the object of Action 1 and the context of all other actions. Nonetheless, while these actions produced multilateral commitments crystallised in several official documents, the Action 1 Final Report produced only general recommendations. This fact led to the Task Force on the Digital Economy's (TFDE) continuity, the analysis of business models considered highly digitalised, and the commitment to producing a new Final Report in 2020. However, instead of the debate's ending, one observed an expansion of its content on subjects not initially identified with the digital economy. Such openness forced the OECD Secretariat to present an approach considered unified, identifying common points observed in the countries' proposals. The result was the debate's fragmentation, the transfer of part of the discussion outside the TFDE, and the rise of unilateral measures, highlighting the existence of underlying political conflicts.

Besides meaning a production process's outcome, the texts of the governmental documents also constitute an interpretation input within the interaction plane, which also involves non-state actors. Among these, taxpayers have actively engaged in the public consultations that influenced the documents drafting. After initial participation marked by conceptual issues aimed at identifying the content and defining the limits of the digital economy, public consultations intensified the debate. Taxpayers reacted both to the shift from conceptual debate to substance aspects as to the perception that the political dimension of international taxation was gaining ground. The result was a change in attitude that incorporated a more realistic tone concerning the debate and assumed a more technical position in the face of OECD's proposals. The taxpayers accepted the inevitability of the political dimension of the debate while transferring the concern about complexity to the details of the proposals conveyed in Pillars One and Two.

Academics have also responded to the governmental discussion, both inside and outside public consultations, beginning with criticism of the very need for a specific digital economy tax debate. Over time, this scepticism gave rise to recognising the debate's importance, causing a profusion of publications involving new and already existing topics. The academics reacted differently to the proposals that emerged during the debate, showing an inclination towards preserving the idea that the wealth generation process occurs within the scope of supply. Hence, the demand-side elements were either reinterpreted as extensions of supply or understood as a politicisation of international taxation. The idea of politicisation of the debate became most widespread when the topic has fragmented within the OECD, resulting in different attitudes. While some academics felt comfortable expanding the discussion, even reaching topics that were not on the OECD's agenda, others assumed a deemed technical stance against the debate's politicisation.

The actors' interaction analysis revealed that the digital economy international tax debate comprehends three easily identifiable moments. In its early days, the debate focused on formal aspects regarding adapting the abstract categories belonging to the international treaties practice to the digital revolution context. Although this preoccupation has never disappeared, it lost importance in the face of the growing concern over aspects of substance represented by the dominance of transfer pricing rules' vocabulary. At this debate's heart lies the idea of value associated with the premise that taxation must occur at the place of its creation. This premise rescued several normative elements historically associated with the discourse of justification of taxation, shedding light on its inescapable political dimension. Among the various reactions of the tax actors to the emergence of the political dimension, a dichotomous perspective stands out that sees in this dimension the antithesis of the tax technique.

The different reactions of the actors to the predominance of the political dimension of taxation do not stem exclusively from the fact that they are government representatives, taxpayers, or academics. There are internal cleavages within each of these groups that reveal this dimension's particular importance for some of their members, especially lawyers. The tax bureaucracy has a specific agenda whose stability contrasts with transitory movements associated with emerging political interests. Tax practitioners only justify their role vis-à-vis taxpayers in a strict sense because they are associated with the management of tax legal discourse as an

end in itself. In turn, the academy only makes sense as a bastion of a technical discourse if its idea of clientele refers to broader social expectations and not to immediate fiscal or business interests. This reframing is related to a contextual analysis that understands international tax law not as a distant object but as the result of the social practice of these actors.

Understanding international tax law as the result of social practice implies recontextualising the tax objects as extensions of the actors that compose this field. This idea brings a new perspective on the subject-object relationship in the tax field and helps to resolve the paradoxes arising from attempts to create distant objects without the aid of metaphysical instruments. On the other hand, this perspective cannot result in the false idea that there would be no substantial limitations to the actors' agency on the field's objects. These limitations refer to tax phenomenology so that the ability to intervene in objects in the field corresponds to the power to explore this phenomenological dimension. In this sense, the perception of a new phenomenology implies new material conditions to the actors' choices and a new interaction process. The conclusion is that the informational phenomenology associated with the digital revolution has impacted both the material plane as the system of ideas responsible for the tax social practice.

The digital revolution implies a constant reduction of other phenomenologies to an exclusively informational condition, affecting the cognitive separation between natural and artificial. This reduction affects the frontier between the spontaneous and the conventional, jeopardising the human dimension's intellectual construction project. These factors impact the essential elements of the liberal paradigm on wealth generation, destroying this process's image as the consequence of spontaneous practices. Information control became a new variable within the problem of power, affecting both the states-citizens and inter-jurisdiction relations. The legal perspective is traditionally related to the power problem, consisting of the best alternative to the excessive objectification caused by the digital revolution. Such perspective best allows understanding the problem of articulating the traditional criteria for allocating taxing rights with the wealth generation phenomenologies impacted by digitalisation.

RESEARCH CONCLUSIONS.

The present research started from a proposal to identify the international tax field from a realistic legal perspective, which conditioned the attitude assumed during this work. Such an attitude demanded reconstructing the field's formation process, which required articulating historical and philosophical elements. This work also presented a proposal to identify the digital revolution from a realistic technological perspective of the phenomenon. The analysis of this technological revolution's transition to the economic and social field has adopted a conceptual separation between technique and technology. From these identifications, it was possible to establish a relationship between the digital revolution's occurrence and the legal discourse on international taxation. Only with the reduction of the idea of international taxation and the digital economy to their discursive dimensions these objects could be related, given that both derive from the human dimension's intellectual construction project.

These proposals should not lead to the idea that this is a work of philosophy of law or technology, although it has imported specific categories belonging to these two domains. Such importation results from the receptivity to non-legal contributions that the realistic perspective imposes, which does not shift this work outside the international tax legal field. For the same reasons, this work did not claim to be a historical account, neither of the legal or economic thought nor the legal institutions. Historicity was a tool to demonstrate the tradition of the tax field as a whole and the legal field in specific but without utilising primary sources or historiographic techniques. Finally, the narrative's relationship with the economic and legal sociology was one of mere clientele, just consuming these two fields' intellectual production. Even the concept of "field" referred to throughout the work does not present the necessary rigour for sociological analysis, expressing only its actor's vision according to its internal position.

From all the presented arguments concerning the digitalisation of the economy, it follows that the international tax debate demands more than what economists and lawyers can provide. This necessity explains the importance of actors from other domains accepting to cross the field's borders to participate in the tax discussion here described. Such a description, in turn, has privileged some events over others, producing an outcome with which some peers in the tax field may not agree. However, the work solely aimed to construct a trajec-

tory explaining the mainstream international tax law's social practice and the possible outcomes of keeping this attitude before the new digital reality. This chapter presents the conclusions extracted from the research carried out, both concerning its central object as the instrumental aspects of the adopted methodological approach. More specifically, it presents the work's general findings and limitations, makes recommendations, and suggests possible further research.

General findings.

The current international tax debate on the digital economy has focused mainly on the material effects of the digital revolution. Such focus explains the obsession with understanding business models as the very expression of this new economy, resulting in identifying the unique characteristics of highly digitalised companies as attributes of the digitalisation process itself. Nevertheless, this debate has provided evidence about the dangers of depicting provisional descriptions about an event that continues to happen in great magnitude. Even if accurate, the definition of business models made in a moment may not reflect the economic reality of a few years ahead. The question that arises concerns what a fully digitalised economy would look like and whether traditional international tax criteria would still make sense in this new economic scenario. Even if this futuristic exercise seems a little exaggerated, it permits the actors to anticipate the changes and minimise the transition's deleterious effects.

Notwithstanding, the digital revolution's most dramatic implications on the international tax law occurs in its intellectual dimension. Despite its evident material effects on the field's objects, the paradigmatic change caused by the emergence of the digital language has also affected both tax actors and their system of ideas. The digitalisation process is gradually eroding the foundations of the liberal paradigm on wealth generation. Consequently, the digital revolution implies the disabling of abstract categories inherited from this paradigm as instruments for constructing the international tax legal discourse. Such finding connects with this work's main conclusion: the digital revolution evidenced an informational phenomenology related to the wealth generation process. Such phenomenology's interaction with the main categories of the liberal paradigm caused profound changes in the international tax phenomenon, impacting its political dimension, its technical aspects, and even the role of the legal discourse in

the tax field.

The first effect of the prevalence of informational phenomenology in the wealth generation process is the relevance acquired by the political dimension of international taxation. Such relevance arises from information control's emergence as a new variable in the already complex power problem at the international level. The second effect occurs in the necessary distinction between the phenomenologies of wealth generation as criteria for self-limiting the exercise of the power to tax. Reducing the whole phenomenology of wealth generation to a purely informational condition calls into question the technical aspirations of the tax discourse. This situation leads to the third effect of informational phenomenology, represented by the dispute between the law and digital technology as the instrument responsible for the social organisation. These three effects of the digital revolution on the intellectual dimension of the international tax law will be described in more detail below.

On the international taxation's political dimension.

Unilateral measures proliferation as a reaction to the lack of a global consensus implies a crisis in the project to build an international discourse on the digital economy taxation. Such crisis is similar to that perceived in the entry of international law in its pragmatic phase when the idea of legal universalism gradually lost strength. Nonetheless, in the present case, it is not just a crisis concerning the OECD's condition as a forum, but of the very idea of an appropriate forum's existence. If international taxation is only the practical result of national casuistry, the existence or not of an international tax forum will also be so. The forum's eminently contingent character would imply the absence of a material reason to justify the project of building a genuinely international tax discourse. This finding would imply that international organisations would be just a place for dialogue between domestic actors, and this or that place's election would only be a matter of convenience, depending on the power balance.

The casuistry involving the role of international organisations implies a paradox concerning the technical vision attributed to the OECD. This forum would be reputed adequate given that it does not consider political but technical issues, albeit the very discredit of political elements would remove such particular condition from the forum. Such an imbroglio

exists because a two-stage process was historically responsible for constructing the international tax law's technical aspects. This process consisted of making a discourse with a technical aspiration whose legitimacy in the field depended on subsequent political validation. The OECD had found a fair measure when it adopted a concise agenda for dealing with technical elements, opening them up for validation through the Inclusive Framework. This same model had already emerged in the BEPS project, when the G20 countries, notably the BRICS, have committed to debating the BEPS issues without modifying the "tax principles accepted internationally".

Notwithstanding, the natural and the social phenomenologies were not part of this agreement, resulting in tensions between the technical discourses of the international bureaucracy and the political discourses of emerging interests. These tensions, in turn, were further exacerbated by the evolution of digital technology and its impacts on the economic environment. More basically, this mismatch may implicate a constant delay by international bureaucracy concerning advances in information and communication technologies. At a higher level, this can lead to a situation in which technology acquires a particular configuration, not allowing the states' action, even if they eventually reached a global consensus. The economy's digitalisation process can lead to the loss, at least in part, of the states' ability to intervene in aspects of the economy now considered central. Unlike the liberal paradigm of industrial society, it is practically impossible for a state to act in isolation in this new scenario.

The use of volatile parameters in a changing environment has the enormous potential to lead to more uncertainties, mainly when such parameters originate from private agents. Adopting value determination criteria created by private agents may subject the digital economy tax debate to the ingenuity of individuals not socially chosen to decide on fiscal sovereignty exercise. Furthermore, with the rise of services virtualisation, the transformation of products into services, and the anonymity of payment methods, fiscal sovereignty's sense has acquired a new meaning. It is essential to highlight that, while working with "photos" of the digitalisation phenomenon, the economic reality continues to change. Therefore, although it corresponds to only part of the solution, understanding digital phenomenology is fundamental to realise its tax implications. Such implications, in turn, needs to be seen from all the elements that form it and not based on just one of the arbitrarily chosen possible dimensions.

An analysis of the past experiences can help understand the potential dangers concerning the choices made in the present digital economy international tax debate. In this case, it is illustrative to take as an example the process that led to the emergence of tax havens and preferential tax regimes. Such an emergence has resulted from the economy's liberalisation associated with market deregulation, especially in the exchange rate, coupled with the information and communication technologies advancements. This phenomenon has generated strong results decades later, which led to the fiscal crisis that served as a political trigger for the launch of the BEPS Project. Base erosion, as a phenomenon, transcends the idea of challenges caused by the digital economy, consisting of a tax anomaly already existing under the traditional economic paradigm. The BEPS Project, especially in its Action 1, was responsible for putting this problem in a new perspective, adding digital elements identified in previous tax and non-tax debates.

It happens that, in the present days, it is not about intentional deregulation but a potential non-regulation resulting from the technological advancements themselves. These advancements occur at a scale and speed never observed before, pointing to unprecedented socio-economic consequences. As the physical factor is not so relevant in the digital economy, a proposal that does not resolve the issue will inevitably lead to the emergence of "digital tax havens". Unlike the traditional tax havens, such a digital version can manifest phenomenologically within the jurisdiction of the affected state, undermining this states' ability to enforce social choices in the tax field. This situation is an offspring of the inability of states to provide unilateral responses to the socio-economic implications of the digital revolution, as presented in the second chapter. In addition to aggravating the various unsolved problems in the field, the digital revolution has imposed several new problems for the legal discourse on international taxation.

Market digitalisation raises problems concerning using value creation to self-limit the fiscal sovereignty's exercise on a geographical basis. The assumption that value creation occurs in a specific place imposes an identification effort that may not match the reality of this phenomenon. Digitalisation also implies difficulties in identifying the cost structure itself to determine the realisation of profits resulting from business done "in" a given jurisdiction. Even if it were possible to ascertain the place where one has created value, this would not help identify the appropriate allocation of costs, revenues, and credits necessary to determine the taxable income. Finally, there are problems in the traditional use of the very concept of residence,

not only as a criterion to self-limit the fiscal sovereignty's exercise but for recognising whether the taxation is genuinely international. This factor becomes vital as different countries conceive distinct forms of taxation, depending on whether taxpayers are resident or not.

The loss of currency monopoly by the state due to the digitalisation of money, although not a viable threat in the short term, calls into question the state's ability to implement a given tax policy. Notwithstanding, this potential problem does not involve the tax dimension exclusively, reaching the fiscal and monetary policy as a whole. However, at the tax level, the emergence of digital money would also result in problems related to the state's ability to measure wealth and apply tax justice principles. As a typical characteristic of digital currencies, anonymity would undermine state ambitions to implement horizontal equity projects. In addition to tax issues related to the incidence, this anonymity would create tax inspection and criminal investigation problems. In effect, the tax administration's capacity to capture the financial reality of the taxpayers would remain damaged in a scenario in which the storage and representation of value express itself through the digital phenomenology.

Finally, the digital revolution also implies several problems related to the characterisation of revenues from selling products or services, both for consumption tax purposes and to determine the taxable income. Some jurisdictions depend upon these distinct characterisations to establish different tax rates or even different forms of tax incidence. Nevertheless, the difficulty in differentiating products and services goes beyond problems involving tax allocation among internal federated entities. This factor can lead to the loss of the ability to identify a particular element that allows the segregation of income from labour and capital for tax purposes. The tendency to situate all factors of production within the scope of capital is associated with a more significant problem regarding the role of the human dimension in the wealth generation process. Such a problem imposes challenges to elaborating a tax protection policy for the workers themselves, involving social security, assistance, and retirement.

On technique, wealth generation, and the tax actors.

Influenced by the scientific positivism of the nineteenth century, the search for technical tools in the tax field meant a break with moral elements considered meta-

physical. In this sense, both in economics and law, the technicality acquired by the tax discourse aimed to break with its political origins. Simultaneously, the development of automation resulting from the industrial revolution caused a reinterpretation of the idea of technique in the face of the rise of a new concept. The technology debate has entered the twentieth century loaded with questions that involved the very idea of a human being as redefined from the artificiality of its environment. While technology assumed an automatic and mechanistic connotation, technique remained associated with human beings and their phenomenological manifestations. Therefore, applying a particular technique could no longer mean the annihilation of the human dimension, but its most evident expression in the human being's relationship with the universe.

The technique is an offspring of the human dimension's construction project, which, in western culture, has politics as the basis of the intellectual separation between the natural and the social worlds. This historical legacy is the context in which the tax lawyers must understand their role in the face of the debate involving the digital revolution and international taxation. The point is not just to offer rhetorical arguments for non-lawyers to make purportedly political decisions based on a rationale foreign to the tax legal tradition. It is about understanding, from this very tradition, what were the new constraints brought by the digital revolution to the wealth generation process. Although challenging, the international plane leaves no alternative but to incorporate the political elements in the technical aspirations of the tax legal discourse. In this case, the first step consists of abandoning the dualisms constructed from domestic power clashes favouring building a pluralist universalism.

Allegedly technical attitudes that deliberately ignore the political dimension, relegating it to the limits of the state, have minimal practical utility. These positions do not harmonise with the interaction process described in the third chapter, besides allowing proposals with the potential to preserve values dear to the tax field to be summarily labelled as inadequate. It turns out that several supposedly technical positions reveal dominant and stylised political proposals within a discourse that arbitrarily assumes neutrality for itself. Subchapter 1.2 demonstrated that this happened when the liberal paradigm on wealth generation has transformed the bourgeois political project into an economic discourse with technical ambitions. Furthermore, tax actors express different political interests even when identified with the same clientele. The plurality of interests makes it impossible to speak of a single political objective for a specific coun-

try, undermining another traditional dichotomy opposing tax administration to taxpayers.

The inadequacy of the dichotomy between technique and politics reveals the misunderstanding in the historical contrast between taxpayers' and state's interests. As seen in the first chapter, such dichotomy does not explain the reality of international taxation, and the very idea of a necessary tension between public and private interests loses its original meaning. The vision of an autonomous, cohesive, and unified state is highly questionable at the domestic level and makes no sense internationally. Although it is common to affirm that countries have a particular international tax policy, this policy is not necessarily consistent internally, varying according to inner pluralisms and local culture. Likewise, the idea of taxpayers as a homogeneous and coordinated mass contrasts with the multiplicity of interests that this category encompasses. At the international level, the analysis of the taxpayers' manifestations in the mentioned public hearings demonstrates visions and interests that prevent the construction of a uniform image.

The recognition of distinct tax interests (even among deemed homogeneous actors) is a condition for incorporating the political dimension in the technical discourse. Nonetheless, recognising interests does not necessarily mean advocating them but identifying their objectives based on the presupposed premises and the adopted paradigm. The fact is that someone should take care of the cohesion of the international tax discourse in the face of a plural environment subordinated to constant conflicts of interest. Given their field's tradition in dealing with practical conflicts and intellectual uncertainties, the lawyers present themselves as the best candidates for this mission. There is no other way to solve the plurality problem in the international tax field than by identifying its particularities from a realistic perspective. For reaching this objective, it is essential to understand what types of interests are behind the proposals, counterproposals, and comments made by the various actors in the field.

A realistic attitude towards the different actors' interests requires understanding their claims not in their terms but from a discursive analysis of their arguments. In this sense, it is not a matter of analysing the interests in themselves but identifying their relationship with the context in which they arise. Interests result from subjective decisions based on a dominant paradigm that gives an epistemic meaning to the interaction among actors and between them and the field's objects. Nevertheless, the real possibility of satisfying such interests subordinates

itself to phenomenological constraints that do not depend on the mere will of the actors, opening up another perspective. In the present case, the material limits constraining the actors' subjective decision stem from the phenomenology associated with the wealth generation process. Therefore, a realistic construction of the current international tax legal discourse needs to consider these phenomenological implications before the emerging digital paradigm.

The digital revolution has highlighted the existence of an informational phenomenology associated with the wealth generation process. Although economic discourses on the division of labour have already sensed it from a technical perspective, digitalisation has inverted its relationship with other phenomenologies. Thus, labour's cognitive elements responsible for generating wealth, not confused with the physical effort to transform matter, have become the object of an independent intellectual project. This project submitted both nature and physical labour to a purely informational condition, given that this phenomenology is the basis of all the others. As a result, proposals for self-limiting the fiscal sovereignty's exercise based on a division between physical and informational production carry an inherent inequity. Besides gaining from their internal generation of technical or technological wealth, jurisdictions entitled to tax informational wealth also benefit from harnessing information encoded in other jurisdictions' physical wealth.

It is essential to highlight that the digital revolution's effects emerged in an international tax context that had already obliterated the role of the market jurisdiction in the wealth generation process. Traditional criteria for self-limiting the exercise of fiscal sovereignty ignored the fact that wealth generation depends on the meeting between supply and demand. The situation tends to worsen in a scenario where the main actors try to explain the new phenomenology from elements belonging exclusively to the supply side. Hence, a jurisdiction that consumes a digital product or service developed from information produced by its citizens may assume a misleading position. In discussing its participation in sharing the wealth produced under the argument that it contributed with the necessary information to the production process, this jurisdiction ignores its contribution as a market. Although, in theory, this situation is equally applicable in the case of natural or human phenomenologies, it becomes critical concerning technological wealth.

The physical wealth of a given jurisdiction is historically associated with its own identity as sovereign so that its exploitation by foreigners recalls colonialist or slave-like

aesthetic elements. Nonetheless, as the informational aspects gain prominence over the physical dimension, a new perspective emerges, affecting the very logic of sharing the wealth. The removal of natural and human elements justifies an equitable wealth division between the supply and demand jurisdictions. To the extent that it migrates to an informational dimension, whether technical or technological, the wealth generation process moves away from the need for depreciating the natural environment or deteriorating the human body. These findings are crucial in developing the international tax discourse, especially from a realistic legal perspective. Ignoring them based on alleged technical neutrality before a deemed politicisation of taxation collides with the human dimension's intellectual construction project, undermining the law's social role itself.

On the legal and digital discourse.

The international tax debate's concentration around business models and the way to divide its taxation is due to a vision centred on the impacts of the digital revolution on the objects but not on the actors. Nonetheless, as seen in the second chapter, the digital revolution impacts society as a whole, going much further than a mere change in the production process. The current post-industrial (or information) society, results from the same technological advances responsible for the digitalisation process. International tax law, as a field, would not be immune from this influence, being affected by the same technological transformations. Such society characterises itself by a technocratic tendency that adds to the already consolidated technicality of the tax field. However, a closer analysis of the possible implications of the prevalence of this technical propensity reveals two possible deleterious results for the field of international tax law, the first related to its actors' stances and the second to its dominant paradigm.

International tax law is an unfolding of tax law and, therefore, is the heir of the political debate that resulted in the modern state formation. Thus, it is clear that the existence of a political tradition in the field is not unknown, not being legitimate for a tax actor to exempt its discourse and accuse others of being contaminated with political elements. Such an exemption would protect a specific political vision in the tax field, closing the possibility of counterarguments in the same terms. Behind this attitude could be anything, from a mere inconsistency in behaviour to deliberate discursive disloyalty consisting of pretending a technical dis-

course even while knowing that a technicality in these terms does not exist. Therefore, this technocratic closure would be nothing more than adopting a rhetorical articulation from a specific political stance that divergent positions could not challenge. This situation is even more critical regarding an actor who uses academic means to disguise political choices in alleged technical arguments.

The second possibility arises regardless of a legitimate attitude that tax actors could assume, stemming from a structural problem in the field itself. This problem is related to the fact that the current dominant paradigm of international tax law does not allow the actors to handle other issues considered political or moral. It turns out that the very international tax legal practice, the process of training new tax actors, and the tools used do not allow international tax lawyers to articulate these categories. Such categories would be considered external to the legal field and should not affect international taxation's legal discourse's construction. However, the field is experiencing a moment of revision of its fundamentals, which implies rethinking this dominant paradigm's role in the face of the new digital economic reality. Therefore, the statement that the impacts of the digital revolution are more significant than those identified by the mainstream international tax debate means that they were not limited to the objects of the field, affecting the field as a whole.

The rise of legal positivism has strengthened the legal practice, answering questions that natural law could not do and creating tools and mechanisms that delimited the field around the idea of legitimate sources, legal norms, and the centrality of the state. All these factors, associated with the codification process, helped the lawyers to find their place in a moment of denial of the influence of moral, economic, and political aspects on the tax discourse. Among the three branches of jurisprudence, legal positivism has fewer existential problems since it turns the field to its internal concerns. Instead of justifying its role before other fields of knowledge, it is comfortable in its position, determining who the lawyers are and what they should do. The problem is that the cognitive closure cannot ignore the fact that there is still a surrounding world demanding material results from the law. The closing around formalisms and abstractions may isolate the legal discourse from the social phenomenology for which the law exists.

The same frontier that defined and strengthened the field may interrupt the contact between the legal discursive universe and the social phenomenology. The result would be the lawyers' insensitivity regarding the surrounding world, fostering an exclusive concern with the satisfaction of internal problems in the field. However, those on the other side may not see the legal field in the same way, not legitimising its attempt to carry on an independent life. Law's institutionalisation social efforts have historically occurred before some emerging expectation, and its absence in assuming its responsibility can cause reactions within society, the most common being the rise of extremisms. Such a rise implies the disbelief in the law as a set of intellectual and institutional tools capable of giving a technocratic response to political concerns and reducing the effects of passions in the social context. The closure of the law puts it to its own devices, observing extreme reactions that historically come from both the left and right wings.

The closure of international tax law throughout the twentieth century resulted in the social dissatisfaction that created the circumstances necessary for the emergence of the BEPS Project. In terms of preserving the legal field, social disbelief is an ecological issue since the law has no other habitat to survive except in the social context. Law is an animal that can only live in a social environment, that is, materialised from a phenomenology understood as social, in the light of the human dimension's intellectual construction project. This environment will only exist when there is a balance of the tensions inherent in the passions that occur in the field of social phenomenology. In its ascension process, the law left behind other once-dominant social organisation discourses, which does not mean that its position is free from threats. If the law ignores what happens on the social plane, the result will be the emergence of extremisms and the rise of alternative discourses of social organisation.

Since there is no power vacuum, the weakening of the law would lead to the emergence of an alternative discourse of social organisation. This emergency will not necessarily imply a return of the tradition or religion, given the pluralism and social complexity that followed the industrialisation process. The tradition is currently fragmented, while religion, although less fragmented, is much more an internal tension environment than a large-scale stabilising mechanism. Such a scenario makes it necessary a discourse with a more universalist appeal and less susceptible to ideological confrontations, and the best candidate on the horizon is the digital discourse. Specifically, this discourse could appropriate the role of international tax law

as the rational justification for globally sharing the wealth in the modern world. This process takes place through the rise and dominance of a technocratic discourse that appropriates different phenomena to respond to social concerns.

Traditionally, the law has been the mechanism for legitimising the technocratic attitude, demonstrating a preponderance of technique over technology in the strict sense. This frontier ceases to exist from the digitalisation since phenomena historically defined as human are being captured and exploited by autonomous mechanisms. In this case, artificial intelligence is the main responsible for the possibility of realising this hypothetical situation. The human being would stop acting as a necessary element in the process of idealising technological development. This situation could undermine the cognitive division between nature as responsible for basic rules and spontaneous events and a human being who would employ such rules to obtain results deemed artificial by definition. A technology interacting directly with the rules of nature and producing new possibilities without human intervention would, paradoxically, create a new natural spontaneity, affecting the phenomenological divisions between nature, the individual, and society.

Many authors of modernity have tried to justify the organisation of social life from an allegory that separates individuals living in a state of nature from individuals who would have signed a social contract. A fusion between natural and human phenomena would overturn this analogy, understanding the natural and artificial worlds subjected equally to an incomprehensible order. Such incomprehension may either result from unidentified natural events or situations induced by a non-human intelligence. This situation becomes even more complex if one considers that artificial intelligence is not neutral but resulting from an orientation given by an agent inserted in a context. The analysis of such context can reveal interests that digital technology results do not reveal, hiding from individuals their condition of submission to a deliberately constructed order. This dissimulation is particularly harmful to the tax debate, traditionally opposing arguments intended to preserve or intervene in sharing the wealth produced.

The situation mentioned above implies two results for international tax law, involving both states-citizens relationships as among jurisdictions. In the first case, digital technology can establish a new moral or rational justification for the social organisation, design-

ing a new wealth-sharing arrangement. In this sense, the prevalence of digital technology would usurp the human being's ability to make social choices in the field of taxation. In the second case, the prevalence of digital logic would remove the international division of labour from the political sphere, turning it into a consequence of the direct intervention in generating digital wealth. If there is no perception by the interested individuals that this is an induced process, the reality will remain unchanged indefinitely. On the other hand, the desire for change not supported by political mechanisms would inexorably trigger the first and more traditional alternative for solving social problems: the use of violence.

Methodological issues.

The importance of methodological aspects for the present work goes far beyond the merely formal concerns regarding the doctorate approval. As this work aims to offer an alternative to breaking with a consolidated social practice, methodological issues affect its very conclusions. These conclusions involve how knowledge is produced and disseminated in the field, which attributes double importance to the methodology as a formal analysis element. In addition to being an object to be analysed by the jury in this specific rite of passage, the methodological aspects reveal an analysis of this rite in a more general way, presenting a substantive character. Besides offering elements of analysis to the jury, the disclosure of methodological issues also opens space for a broader debate about what doctorate-level research in international tax law means. This opening is related to an indirect concern of the work to reach a secondary audience represented by all the interested actors within the tax field and even outside it.

This work aspires to present an approach moving away from the traditional Westphalian paradigm, which conceives international tax law as a particular feature of the domestic tax law. Hence, without starting from a specific legal order, this work aimed to explain the field from a perspective that could be considered genuinely international. This explanation has an enormous difficulty related to the need to articulate, in the same narrative, different legal cultures, sometimes more influenced by the Anglo-Saxon tradition, sometimes by the continental European. These cultural divergences become even more prominent given the different languages involved, making the articulation effort an enormous linguistic exercise. Furthermore, the

reading of this cultural melting pot could not be done from a neutral and distant position since the author belongs to the same universe here analysed. Likewise, the audience of this text comprises actors from these diverse cultures, traditions, and linguistic matrices.

The research's ambitions and the perspective adopted brought many limitations to this work, imposing the need to make choices that resulted in the prevalence of some aspects to the detriment of others. These specific limitations coexist with more general limitations related to research in international tax law resulting from a fragmentation caused by the hegemony of the Westphalian paradigm. However, despite these difficulties, this research managed to produce a result with the potential to cause changes in the field's social practice. These results constitute recommendations that contribute to the international tax law to deliver the expected social outcomes. The research also contributed by indicating paths that potential future work may follow, complementing the approach initiated here. Given the importance of these three elements, the limitations imposed, the recommendations raised, and the potential future work resulting from the methodological effort here initiated are presented below.

Limitations.

The most significant difficulty in presenting a perspective that breaks with the orthodoxy concerns the necessity to revisit categories generally taken for granted by the field's actors. Consequently, the problem that arises concerns selecting which elements are deemed central and which issues are peripheral in constructing a description of the international tax legal field. On the one hand, there was the desire to elaborate a direct and easy to understand narrative, which could turn it potentially superficial for a more sophisticated reader. The danger of this choice lies in a possible over-simplification that could overwhelm the leading argument even before its presentation. On the other hand, the production of a more profound and substantial argument permits forming a solid structure for erecting this thesis's central ideas. This alternative, by its turn, runs the risk of resulting in a tiring text to read and excessively open to themes that would be only instrumental for the work's main argument.

A second point concerning this work's readability relates to elaborating a linear and straightforward storyline of the highlighted events. The difficulty in this procedure

stems from the existing tangle of intertwined stories in which the field's categories, although influencing each other, offer a specific chronicle. This situation has implied an overlapping of themes both considered in their individuality as contextualised in a broader historical stream. Despite the feeling of a constant return to previously discussed topics, this strategy harmonises with a realistic attitude for avoiding sacrificing the object to make it fit in a conceptual model. Such an issue was particularly crucial in the third chapter, which reviewed different governmental documents and taxpayers' and academics' texts when the narrative should be closing. However, this review stems from this work's main methodological foundation since the discursive approach considers texts as the starting point of interpretation and the ending point of the actors' interaction.

The attempt to reach a global audience also imposes many difficulties, as some readers may complain that the approach restricted itself to a few countries and events. For the international character to harmonise with a completely realistic view, it is necessary to involve other legal experiences and cultures. Nonetheless, besides this work's inner limitations, its Eurocentric character also derives from adopting a paradigm considering power as the central element in the legal tax discourse's construction. The power concentration around specific international actors has caused this work and all mainstream international tax debate to gravitate around the relationship between western Europe and northern America. Despite this centrality, this work adopts a methodological construction that aims to produce a globalising narrative from necessarily local elements. This contrast reveals another difficulty related to both linguistic aspects involving the narrative structure as the choice of sources to support the presented description.

The most evident problem of a legal narrative that aspires to be global involves choosing the language in which this narrative develops. Language presupposes a range of experiences and events that, taken as a whole, constitute a given tradition relating to a specific group of actors. In this sense, in addition to the apparent formal aspects involving writing style and bibliographic reference, language affects the substance of the arguments presented. A Brazilian researcher citing French texts in a thesis written in English faces much more than translation problems since certain intellectual constructions only exist in specific legal traditions. In the present case, the solution was to adopt an "international" English, not corresponding to the vari-

ants related to specific Anglophone communities. This solution is not a particular feature of this work but a widespread social practice within several international organisations in which, spontaneously or induced, English has established itself as the lingua franca.

Without prejudice to several other potential examples, some semantic problems involving significant categories for this work are worth noting. The most visible issue concerns the existing difference between "politics" and "policy", which is essential in the English language but less relevant in Portuguese or French, mainly when the term "political" invokes its original sense: matters concerning the polis.[1109] Another example is related to the idea of "law", unifying concepts that in Portuguese refer to the expressions "lei" and "direito", or, in French, "loi" and "droit". This difference is fundamental to the argument that the law is a social practice that did not exist in particular historical moments, even when "laws" already appeared in philosophical works. On the other hand, the English language makes the fundamental difference between "law" and "right" clearer. This differentiation facilitates articulating the tension between the universal order and the individual prerogatives, which have no equivalent expressions in Portuguese or French.

The differences mentioned above directly impact the actors' interaction process in the current digital economy international tax debate. The inability to differentiate these nuances makes reactions contrary to purely partisan interests become an argument against the very political dimension of international taxation. Likewise, the uncritical use of the term "allocation of taxing rights" can reinforce the Anglophone tradition's elements related to the conflict between subjective rights and the universal order. In the international plane, the expression suggests that international tax treaties could "grant" rights to countries instead of reflecting a commitment to self-limit their tax sovereignty exercise, which precedes these treaties logically and chronologically. However, since many expressions have already enshrined in use, a departure aiming to make the argument clearer may have the opposite result. In this sense, the option

[1109] In presenting the basic sociological terms used in his work, Weber developed a lengthy explanation of the different meanings of the expression "political", ranging from aspects related to state agents' legitimate use of force to its employ for technical purposes. In a note, Talcott Parsons highlighted the difficulty of translating the expression "Devisenpolitik" since in German there is also no difference between "politics" and "policy", concluding that Weber would not need to have presented these explanations if he had written originally in English. See "Political and Hierocratic Organizations" in WEBER, M. **Economy and Society: an outline of interpretive sociology**. Berkeley: University of California Press, 1978, pp. 54-56 and 62.

adopted in this work was to repeat the expressions frequently observed in the primary vehicles of diffusion in the field.

Besides the form and substance issues connected to the narrative production, the linguistic limitations also encompass aspects associated with the sources of materials. Hence, the realistic and global ambitions face constraints related to the researcher's linguistic proficiency limits, affecting the research selection. Nonetheless, even within the researchable universe, developing a global narrative demands choosing which texts should be considered central and peripheral. Thus, specific aspects concerning certain legal cultures can result in an intellectual production mainly targeted at an internal audience, removing it from this work's scope for not belonging to the global debate. Finally, there are factors involving the asymmetry of access to information, which may have affected a more accurate reading of the international field. The physical constraints to consult all available materials associated with the access restriction imposed by some databases and journals create additional barriers to an interaction process more realistic description.

Identifying the actors' desire to participate in a global debate reveals another limitation associated with describing the interaction process. The public consultations manifestations analysis does not express the taxpayers' position as a whole, but only of those who have participated in the mentioned events. There is no reason to imagine that the "speaking" taxpayers' stance is necessarily the same as that of the silent ones, biasing the analysis favouring the firsts. Nevertheless, such bias in the taxpayers' attitude's investigation does not preclude its applicability in the present case, given this work's fundamental premise. The construction of the international tax legal discourse results from the power exercise, and the actors with speech power are more impacting than the silent majority. In other words, even though the description presented here does not reflect the actual behaviour of taxpayers in general, it remains useful since it portrays the taxpayers with influence power and who effectively exercised that power.

Lastly, a characteristic concerning this work's author simultaneously constitutes an advantage in the research and a limitation to its production. As part of the international bureaucracy, the author has directly participated in constructing several research objects, on

which there is an official duty of secrecy.[1110] In addition to this legal limitation, there is the problem of bringing to the academic field issues that were and will be the subject of discussion in the scope of professional life. These dilemmas pushed the analysis in a more abstract direction, articulating the narrative through archetypes that replaced specific citation of individuals, episodes, or institutions. The alternative found was to refer exclusively to public knowledge information, indicating the source that allows the verification of the mentioned content. This problem is related to a much larger issue, repeatedly alluded to in this work, involving the tax practitioners' and governmental representatives' participation in high-level academic production.

Recommendations.

If the present work has managed to achieve its objectives, it will destroy several epistemological barriers preventing tax actors from understanding their field's international character. This work has both attacked reductionist dualisms that, instead of exposing, conceal the particularities of the tax social practice, as revealed new complementary dualisms. The primary tax duality between tax authorities and taxpayers hides the diverse interests within these two categories and does not permit identifying the substance behind the academic attitude. Such an attitude, which is related to the defence of the consistency of the field's discourse, can degenerate in the use of the academy to defend a specific clientele. Besides, this work also showed that the opposition between conventionalist positivism and universalist naturalism does not rule out the realistic attitude. Recognising international taxation as a phenomenon contrasts with the excessive abstraction of the field, uncommitted with the delivery of social results.

The second contribution of this work concerns offering a new way of understanding the role of technique within the international tax law. Rather than being constructed as a concept in opposition to moral, political, and economic elements, the field's technical character stems from recognising its discursive historicity. Such recognition gives the field's tech-

[1110] Regardless of the duty of secrecy, Bourdieu explains the problems involving those who cross the borders between practical and academic knowledge. Affirming that "no groups love an 'informer', especially perhaps when the transgressor or traitor can claim to share in their own highest values", the author highlights the difficulty in reconciling everything known as an insider with everything that one cannot or not wish to know as long as remains an insider. See "A 'Book for Burning'?" in BOURDIEU, P. **Homo Academicus**. Stanford: Stanford University Press, 1988, pp. 1-5.

nique an inclusive character, making it receptive to eventual emerging interests. With this, the legal discourse becomes able to articulate elements of the economic tradition with political interests, maintaining its role of relieving tensions capable of disturbing the social organisation. In addition to guaranteeing the importance of international tax law as an autonomous field, this capacity for articulation contributes to constructing the international tax discourse. The discursive perspective presents a new viewpoint on the tax lawyers' social practice, identifying an international character that does not rely upon the Westphalian paradigm.

A new viewpoint about their social practice offers a novel menu of attitudes for international tax lawyers, allowing them to rethink their roles. In addition to their institutional commitments associated with the defence of their client's interests, the tax bureaucracy and the tax practitioners must be concerned with protecting the integrity of the legal discourse on international taxation. Such a role is even more critical for academics since this preservation is already a behaviour socially expected from these actors. The social expectations encompass the perception that what is said by the academy has an impact on the tax field, influencing the way other actors think. This influence reveals how the academy relates with the state bureaucracy and the taxpayers, treating them simultaneously as objects of study and peers in constructing the field's system of ideas. All these concerns are even more relevant when the academic comes from one of the other two categories, given the ethical implications of crossing this frontier.

The work's effort to identify and describe the international tax field has revealed three levels of relationships that help transform a dispersed group of actors into an epistemic community. The first level concerns the individual relationships between the subjects and the objects, a homogeneous social practice that allows the actors to recognise themselves as equals. The second refers to the relationships between the peers themselves since the social practice derives from both subject-object and inter-subjective interactions. This level is manifest in forming new actors in the field since nobody becomes an international tax lawyer from a direct relationship with the phenomenon of taxation, but from the emulation of other actors' behaviours. The third level corresponds to recognising belonging to the field and identifying collective values not necessarily confused with the individuals' interests. At this third level, the broader understanding of the impacts of the digital revolution on the discourse of the international tax legal field operates.

This effort to identify the diffused interests of the international tax field does not imply an attempt to create deontological rules for its actors. It results from identifying a defensive behaviour in the international tax legal field as an intellectual project materialised from an institutionalised social practice. For being legal, this field is traditionally linked to the power problem, being obliged to deal with the spectre of unjustified social violence as a way of organising society. This violence symbolised both the beginning and the end of the work of the League of Nations, representing not only an intellectual dilemma but a possibility of a material challenge to the tax actors. Therefore, in the new international scenario, the lawyer is the protagonist in conducting an open approach and capable of dialoguing with other actors. Although traditionally rivalling with economists, tax lawyers have the lowest cost of moving away from their orthodoxy to dialogue with actors not traditionally seen as specialists in taxation.

However, this work presents an apparent paradox since it aims to contribute to the orthodoxy by moving away from mainstream thinking. This departure is justified since the author already has a "place of speech" within the international bureaucracy and now may influence the tax debate academically. Except for those who only have this locus in the field, academics should be committed to the intellectual, not the institutional dimension of law. Those who have other institutional channels can already articulate the categories of orthodoxy, and there are no legitimate reasons to use the academic position to defend the same types of interest. Rather than giving prestige to the attempt to defend the clientele, submitting the academy to a merely instrumental condition would undermine the very substantive justification of its existence. Such an attitude would foster disbelief in the tax scholars' importance, increasing the gap between academic and practical knowledge.

The preoccupation with the potential increasing distance between academic and practical knowledge does not mean ignoring the fundamental differences in their production modes. This work recommends that the academic knowledge consider the happenings occurring outside the academy, not just satisfying the very scholars' intellectual demands. Nevertheless, the knowledge production forms are subject to the institutional environment in which they occur, revealing a distinction usually overlooked when addressing the legal discourse. A realistic and discursive perspective, opposed to the closing around legal abstractions, is better suited to academia than the tax practice. Hence, the conclusion that the academy should not be

just an instrument in defence of a clientele already protected by other actors implies that academics review their image as researchers. Besides the dialogue with other legal actors, tax scholars should not neglect the possible connections of the law with other areas of academic knowledge.

At the international level, the preoccupation with producing academic knowledge becomes even more peculiar due to the different processes of institutionalisation of the law. International tax law is institutionalised supranationally in international organisations and internationally in domestic institutions, especially the judiciary, administrative courts, and tax bureaucracy in general. The academy is the locus par excellence of jurisprudence as an intellectual project, corresponding to a social space institutionalising an academic practice with the legal phenomenon as its central object. In this sense, academic knowledge production offers inputs for the law's intellectual and not institutional dimension. This finding reflects the way of thinking about academic participation in the international tax debate involving the digital economy. Although the governmental discussion has restricted itself to analysing specific elements of the economy's digitalisation, academics should not forget that these are snapshots of a more extensive process.

As an expression of the academic attitude advocated here, this work's main contribution was to separate the digitalisation impacts on business activity from the socio-economic effects of the digital revolution. Despite its importance, the business models analysis is an undertaking that the author already developed within the professional activity. The government debate is not wrong to focus on what is visible now, but it must anticipate the subsequent movements of the digitalisation process. In this sense, the business models serve as an essential instrument for understanding the process, but they do not represent the process itself. Such confusion resulted in a notion of digitalisation as a synonym for virtualisation, emphasising only its aspects related to immateriality. However, the present work revealed that the digital revolution has repercussions in both the material and intellectual spheres of international tax law, affecting the very human dimension's intellectual construction project of which the law is a consequence.

Further research.

The initial effort of the present work inaugurates a perspective in the field with an enormous potential to connect with research agendas located in unlikely domains. Applying the discursive approach to the international tax law made in the present work can be understood as an invitation to make discourse analysts interested in this field. The work adopted a deliberately sceptical stance that had among its various objectives demystifying categories that were no longer viewed with strangeness since their use had consecrated them. The reification of several myths associated with a segregationist technical claim has traditionally been a barrier to approximating actors belonging to other fields of knowledge. Despite the difficulties, this work has adopted a generic language, presenting the tax categories so that an uninitiated reader could understand them. The expected result is that new research conducted by specialists other than lawyers, economists, and political scientists will also deal with the international tax field's objects.

The work also encourages other lawyers to analyse the international tax phenomenon from a genuinely international perspective, offering their different visions, experiences, and cultures. In this sense, actors belonging to distinct legal traditions can complement the Eurocentric perspective, collaborating to construct a more realistic sense of the field. The discursive legal approach allows these complementary viewpoints to dialogue, reacting to each other from their common denominator. Such a dialogue would solve a typical problem of international works made by actors from different countries that, in the end, result in a collection of domestic texts dealing with phenomena identified as correlated. The discursive perspective allows the actors to understand the reasons for this correlation and to be able to produce articulated analyses. The result of this articulation would be the possibility, from a set of texts of comparative tax law, to emerge an authentic international tax legal debate.

The several methodological alternatives found in comparative tax law may complement the discursive perspective adopted in this work. Unfortunately, some factors make it unattractive to develop research in this field in contrast with the prolific publications on "traditional" international tax law. However, the digital revolution offers the possibility of building a collective tax narrative based on a process that has not yet ended in any jurisdiction. In this case,

all countries affected by digitalisation are in some way “in transition”, none of them having a tax practice related to the digital economy that can be considered consolidated. This circumstance would minimise the ethnocentric factor as a limiter in constructing an international narrative on tax phenomenology involving digitalisation. Hence, possible further research in comparative tax law can contribute by articulating the field’s local historical experiences with the wealth generation digital phenomenology, which presents universalising aspects.

The present work touched only tangentially on the wealth phenomenology, with the sole objective of separating the natural from the human and the technological in the strict sense. A more detailed economic analysis could reveal internal phenomenological differences, indicating which processes are wealth creators or merely extractors. Informational phenomenology sheds light on expectations about producing a specific good, revealing that not all processes result in informational arrangements that contribute to raising the value amount within a given closed system. Other research could complement this initial intuition, verifying whether this first thought can lead to more profound conclusions. The central issue is to abandon the purely formalistic attitude towards the economic reality based on self-referenced formulas and premises. The cognitive challenge is to reconcile the economic assumptions with other areas of knowledge traditionally recognised for favouring substance aspects over merely formal models.

The more profound understanding of the role of informational phenomenology in the generation of wealth opens up the possibility of a research agenda on the relationship of its elements with normative aspects. This work has demonstrated that these aspects are related to the taxation’s political dimension, not going further into the phenomenological particularities of this relationship. Understanding these particularities helps both the bureaucracy rethink its role in articulating political and technical elements as the academia to preserve the integrity of the international tax legal discourse. Although it does not answer all the questions about social choices in the tax field, this research agenda would harmonise the means employed and the intended ends. The question is to observe whether the adopted attitudes drive to the objectives that have justified their implementation. From a legal perspective, such attitudes cannot go against the human dimension’s intellectual construction project.

Notwithstanding, the human dimension’s intellectual construction project

does not limit itself to international tax law, whilst this field's events cannot trigger violent social reactions on their own. On the other hand, history has demonstrated that taxation has been a constant among the elements that form the agenda of emerging interests, articulating itself with other factors of great commotion. Thus, the social perception of the role of the international tax legal discourse as an instrument for organising social life is especially relevant for the power problem. Attitudes contrary to preserving this discourse contribute to undermining the project, opening room for rival discourses, among which the technological stands out. This work has raised these possibilities without due consideration about their feasibility and how they could occur. In this sense, further research can explore the interactions between international tax discourse, digital discourse, and the emergence of violence within society.

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