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**About our a priori : prolegomena for a legal analysis  
The case of phenomena of movement**

**By Jean-Sylvestre Bergé<sup>2</sup>, Law professor**

**Summary**

*It is not easy to question the a priori approach to the law. Generally speaking, an a priori can be described as a presupposition underpinning our disciplinary constructs and one of whose characteristics is that it is the subject of little if any deliberation. This article aims to question this lack of analysis. It reconsiders as a whole the path followed by the law in tackling the a priori to phenomena of movement. Then, two successive paths can be followed: one on the antecedents of movement and the other on its different modalities.*

One ambition of addressing the notion of “a priori” is to engage in critical thinking and deconstruct/reconstruct central notions from various disciplines, in this case law.

Generally speaking, an a priori approach can be described as a presupposition underpinning our disciplinary constructs and one of whose characteristics is that it is the subject of little if any deliberation.

To put this differently, a priori approaches are the ordinary, vernacular (non-scientific) representations of the things (in the broadest sense) to which we apply our constructs. Then, when focusing our analysis on these constructs, we pay little if any attention to that earlier approach which involved making explicit our conception, perception and ordinary understanding of the things we claim to work on through different branches of knowledge, in this case legal knowledge.

There are many ways to reflect on the relationship between “a priori” and the law. Here, we will try to identify two approaches.

Adopting what could be referred to as the technician’s approach, law can be seen primarily as an applied discipline built on a specific technical apparatus, equipped with its own vocabulary and methods of reasoning. If one wishes to be heard in the legal domain, one must be technically irreproachable, i.e. rigorous and respectful of the discipline’s canons. This technical point of view is so important that most legal scholars make it the alpha and omega of their knowledge. From this perspective, a priori approaches are not generally considered to exist. Legal scholars begin their analysis with the rule of law, only rarely reflecting on the existence of any ordinary conception, perception or understanding of the objects to which they apply their constructs.

The second is a theoretical approach. As in any discipline, in law we need abstract constructs to model legal practices. Indeed, the primary function of researchers is to abstract models from the real world and, where applicable, propose super models. From this theoretical perspective,

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it may be that legal scholars construct an a priori approach that cannot be deliberated or verified by legal techniques or practices. If we were to draw a parallel with theory in the world of science, this approach would be described as Kantian. It is clearly metaphysical and transcendental.

These two approaches may result in legal scholars adopting very different attitudes from one another. They may try to build a link between the a priori approach and the law. Or they may keep them separate and perhaps agree to study them in parallel with other disciplines. Finally, they may challenge the very existence or utility of the a priori approach in law.

If we stick to an essentially theoretical approach and take up an endeavour of reconstruction, the most interesting avenue is without a doubt the search for a link between an a priori approach and the law.

Two successive paths can be followed: one on the antecedents of movement and the other on its different modalities.

### ***First theoretical path: working on the antecedents of movement***

As we have just seen, the term “a priori” has a Kantian dimension. Without wishing to exclude this dimension in relation to movement, we need to adopt a broader perspective. And so the term “antecedent”, albeit not in common usage, is to be preferred.

Without claiming to be exhaustive, to begin with let’s try to formulate a few working hypotheses by drawing on established works.<sup>3</sup>

First, like HANS KELSEN<sup>4</sup>, we can try to postulate that in law there are certain fundamental hypothetical norms (*Gundnorm*), which are essentially absent from discussions and which legitimise other norms. Here, an antecedent takes the form of a postulate or theoretical a priori approach that consolidates the normative edifice which, to put it simply, is built on the validation of each norm in reference to another. But this means that to validate the highest – constitutional – norm, one must refer to another norm. This is where the fundamental a priori approach imagined by the renowned Austrian theorist comes into play.

Next, we can borrow from SANTI ROMANO<sup>5</sup> and see any social organization as an antecedent that gives rise to a legal order (*ordinamento giuridico*). This author’s major contribution was to introduce in law the notion of social order generally seen as an “antecedent” (he uses the term *antecedente* several times) of the law. This could of course be the social order of the State, but, rejecting any form of legal exclusivity, he agreed to open up this perspective to other types of social organization: international society, church, business, family, mafia, etc.

Finally, and perhaps this is a more audacious choice, we can draw on work better known in Germany and Italy than in France and which endeavoured to theorise an a priori, like ADOLF

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<sup>3</sup> While the works cited below by H. KELSEN, S. ROMANO, A. REINACH and F. CARNELUTTI have exerted an influence, sometimes considerable, on contemporary legal thought, there are few instances where they are considered together. Nevertheless, there is one remarkable exception: N. BOBBIO (*Old Age and other essays* (Polity, 2001), p. 45 et seq.), who mentions the importance of his early legal reading.

<sup>4</sup> H. KELSEN, *Reine Rechtslehre* (1934-1960). For an English version of the second edition: *Pure Theory of Law* (Lawbook Exchange, 2009).

<sup>5</sup> S. ROMANO, *L'ordinamento giuridico* (1918-1945). For an English version of the second edition: *The legal order* (Routledge, 2017).

REINARCH<sup>6</sup> in civil law and FRANCESCO CARNELUTTI<sup>7</sup> in commercial law. The concepts of “possession, promise, claim and obligation”, so dear to the former, and the iconic concept of “circulation” studied by the latter offer avenues that can contribute to a renewed approach to the antecedents of the law. We will return to their work later on.

All of these antecedent-based approaches have potential appeal as part of efforts to reconstruct the legal discourse on movement. Without needing to establish a hierarchy or systematise these different approaches for the purposes of this essay, it is nonetheless essential to question the existence of different types of antecedents in relation to situations in movement.

### ***Second theoretical path: working on the modalities of movement***

What is a modal approach?

It is clearly an extension of the approaches based on antecedents we have just seen.

Generally speaking, the modal approach is the study of the different modalities of the law.

One can conduct an *a posteriori* analysis of these modalities based on the statements of positive law, studying the way a legal rule uses a particular process to govern a given issue. This is what most legal analysts do.

Or one can opt for a more restrictive analysis limited to an antecedent understanding of these modalities. Before the intervention of positive law, what are the modalities of the thing in question that are likely to play a role in developing its legal regime?

Only the second approach is considered here. Insofar as we are trying to reconstruct the legal discourse on movement, we must position ourselves as far upstream as possible of the constructs of positive law.

Legal theory offers two major resources for the modal approach: logic and phenomenology.

Modal logic is a formal logic in the mathematical sense used to verify the accuracy of a proposition by varying its modalities. This can be used to distinguish between a hypothesis for which a proposition is considered necessary from one in which it is merely considered possible.<sup>8</sup>

This type of approach is difficult to access for a legal scholar not accustomed to handling axioms. The task is made all the more arduous by the fact that there is a great variety of modal logics depending on the essence of the modality being considered.

But it is nonetheless an appealing approach. It can be used to account for the possibility of a legal statement, which can be particularly useful as part of our endeavour to reconstruct the legal discourse on movement.

Another option in the modal approach is to rely on phenomenology.

The phenomenological a priori approach was developed in particular by ADOLF REINACH (whose work is cited above<sup>9</sup>), who studied under the father of phenomenology, EDMUND HUSSERL.

In his work, this author developed an ontological vision of the a priori approach. He addressed the essence of the realities of civil law, which he re-sketched based on four a priori concepts

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<sup>6</sup> A. REINACH, *Die apriorischen Grundlagen des bürgerlichen Rechts* (1913). For an English version: *The Apriori Foundations of the Civil Law* (De Gruyter, 2012).

<sup>7</sup> F. CARNELUTTI, *Teoria giuridica della circolazione* (Cedam, 1933).

<sup>8</sup> See for an introduction to this method, B. F. CHELLAS, *Modal Logic - An introduction* (Cambridge University Press, 1980).

<sup>9</sup> A. REINACH, *Die apriorischen Grundlagen des bürgerlichen Rechts*, *op. cit.*

(possession, promise, claim and obligation), which do not depend directly on the statements of positive law. In a word, ADOLF REINARCH sought to offer a theoretical and immanent characterisation of a model of facts or phenomena typical of the intervention of civil law.

Often criticized for its ontological dimension, the analysis of ADOLF REINARCH is very suited to an analysis of modalities upstream of the law's intervention.

In terms of movement, we must try to retain the method while avoiding the essentialist pitfall that all too easily exposes an analysis to criticism.

## **1. The different antecedents of movement**

What are the antecedent perceptions, understandings or conceptions of movement that can be developed here? Is it possible to establish a typology? To what extent do they borrow from disciplines other than the law? To what extent are they destined to be integrated into the constructs of the law?

Each of these questions potentially has many answers that can of course vary depending on the period or environment being considered. Without claiming to be exhaustive, five antecedents will be studied here.

### ***The non-exhaustive choice of five different types***

The research journey that led to this text explored many different discourses on situations in movement, some more specific to legal experts while others came from different branches of knowledge. But all of these discourses reveal a certain number of antecedents of movement that could potentially be of interest to legal scholars.

By definition, antecedents retain some of their secrecy. And so one cannot aim to unveil them completely, but it is worth trying to name them explicitly with a view to discussing them.

Here are the five we will be looking at:

- the magical antecedent of movement;
- the liberal antecedent of movement;
- the social antecedent of movement;
- the ontological antecedent of movement;
- and the fundamental antecedent of movement.

These different antecedents are not necessarily compartmentalised. The examples chosen can sometimes fall under several different categories. Some examples are ever-present in the minds of legal scholars, while others are considered only of marginal importance.

### ***The magical antecedent of movement***

It is not unusual for the law to adopt a metaphorical discourse on movement.

The imaginary, in the broadest sense, i.e. everything that generally stems from the imagination (and not strictly speaking from images), holds an important place in the unconscious thinking of the law.<sup>10</sup>

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<sup>10</sup> See for example: S. STERN "The Legal Imagination in Historical Perspective", in A. AMAYA, M. DEL MAR (eds.), *Virtue, Emotion, and Imagination in Law and Legal Reasoning* (Hart, 2020), 217; M. DOAT, G. DARCY (eds), *L'imaginaire en droit* (Bruylant, 2011).

This imagination can take the form of metaphors, used somewhat like magical thinking (in the non-pathological sense of the term!) to refer to exalted potentialities.

One encounters this type of metaphor in all areas of the law, including the law on movement.

Movement may be invoked in legal discourse in reference to salutary virtues, used to justify a particular orientation, sometimes deep-rooted, of legal analyses.

Metaphors can be used somewhat mechanically and repetitively by legal scholars without any real discussion. And when they are discussed, it is generally to identify their metaphorical – not strictly legal – nature.

In any case, metaphors are present and continue to occupy a position that could hardly be said to be marginal in legal constructs.

We will now look at three examples in different legal environments:

- the emphatic discourse on “mobility” in domestic or European legal mechanisms to explain, for example, the changes at work in the law’s approach to urban and inter-urban transport or the creation of new spaces (internal market, freedom, security, justice) within the European Union;

- the discourse on the “imperatives of international trade” in international legal mechanisms to justify, for example, the principle of autonomy and validity of arbitration clauses in international arbitration;

- references to a “bridge” to explain how the law can establish connections between one legal system and another, for example the relationship between the international order and domestic legal orders, or when a domestic court applies foreign legislation.

### ***The liberal antecedent of movement***

This antecedent plays an important part in the peripheral constructs outside the law. Movement, understood in its broadest sense, is presented as a truly liberal project with political, philosophical and economic dimensions.

This multifaceted liberal thinking has a very ancient dimension that has penetrated a considerable number of thought systems and has been passed down through very different epochs.

Understood in its economic – commercial – sense, movement is that which allows territories to link up and create new political and social spaces.

In legal terms, this extension beyond the territorial framework (national or local, for example) results in a kind of release from the public territorial order in place. It is a *laissez-faire* approach involving more or less free movement depending on the political, philosophical and economic inspiration underpinning the context in which the movement unfolds.

And so it would be difficult to argue that liberal thinking, as an antecedent, has not played a key role in the legal constructs on movement.

This raises the question of the extent to which these theories have managed to imbue movement with real substance, real content.

One of two things is true. When the law draws on a liberal antecedent, either we can argue that, in terms of movement, it is leaning on a particularly robust structure, or on the contrary, that the dominant impression is one of a void, a kind of leap into the unknown.

This is a central question, and to answer it we have no option but to question the liberal antecedent.

This is done in many disciplines (in particular political philosophy, economics and sociology).<sup>11</sup>

It is also done in law.

### ***The social antecedent of movement***

Under this third example, the link is established between society in movement as an established fact and the law. This is the hypothesis that society in movement – meaning society as an agent of the movement it provokes and organizes – fabricates its own law.

There are several examples, but we will look at two key ones here.

The first is that of trading companies, of which it has been said that they could constitute their own legal order, producing legal rules (the term often used is *lex mercatoria*<sup>12</sup>). Of the different rules to have emerged from the practices of stakeholders, some are closely linked to movement. This is true for example of the modelling of contractual terms forged through the practice of the international sale of merchandise and international transport contracts. This modelling was codified in the 1930s by the International Chamber of Commerce (Paris) under the name “Incoterms”, and these have been regularly revised, with the latest change made in 2020.

The second case is that of the mafia. To engage in trafficking, different rules are put in place by organised crime networks, and these may lead to a specific legal order. These rules include the “road law”, which plays a key role in the smooth running of operations. It establishes the routes in the different territories, settling the question of any rights of way and resolving conflicts within a trafficking space where several routes coexist.<sup>13</sup>

In both of these very different situations, establishing a link between the social antecedent – the trading company or organised crime network, understood as agents of movement – and the normative constructs specific to the law is particularly relevant.

### ***The ontological antecedent of movement***

Under this fourth approach, movement is considered as the legal essence of a certain number of objects of the law.

To appreciate this legal essence of movement, it is worth drawing on the theory developed by the Italian legal scholar FRANCESCO CARNELUTTI whose work is cited above.<sup>14</sup>

FRANCESCO CARNELUTTI was a prolific and renowned author (it is still common in Italy to say “not everyone can be a Carnelutti!”) who looked at questions of both legal theory and practice.

His *Teoria giuridica della circolazione* looked at debt securities, and in particular at the bearer instruments in circulation by endorsement back then. The point of departure for his analysis is none other than movement, or circulation, which the author describes as an economic notion that raises a certain number of legal questions. This implies it is an antecedent, although the

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<sup>11</sup> For a critical questioning of the non-contribution of liberal thought to the construction of content on the freedom of movement: H. KOTEF, *Movement and the Ordering of Freedom - On Liberal Governances of Mobility* (Duke U. Press, 2015).

<sup>12</sup> For a recent overview, see O. TOTH, *Lex Mercatoria in Theory and Practice* (Oxford University Press, 2017).

<sup>13</sup> On the road law defined by mafia orders, see D. VILLEGAS, *L'ordre juridique mafieux - Etude à partir du cas de l'organisation criminelle colombienne des années 1980 et 1990* (Daloz, 2018).

<sup>14</sup> F. CARNELUTTI, *Teoria giuridica della circolazione*, *op. cit.*

author himself preferred the term presupposition (*presupposto*). Carnelutti goes on to offer a legal analysis of circulation in reference to three major subjects: contracts (section 1), appearance (section 2) and legal security (section 3). The core of his analysis is to be found in the section on appearance. He explains that there are different indices of circulation: the material handover of a security, its materialisation in document format, its communication and its publication. Considering the legal relevance (*rilevanza giuridica*) of these indices, the primary – and totally original – point of his analysis is the view that, for debt securities, the appearance of circulation is a way to circumvent the traditional split between consensual, literal and real contracts. It is the appearance of circulation that creates rights over the security, especially in cases where such rights cannot be established using other means (essentially consent or the legal tradition of materially handing over the security). In other words, a security's potentiality of circulation is the primary and essential presupposition for any transfer of ownership, in whatever form.

CARNELUTTI'S analysis is clearly antecedent and ontological. By identifying circulation as the primary legal hold over securities, he establishes an essential legal link between this antecedent of movement and the multiple legal processes for claiming such securities.

### ***The fundamental antecedent of movement***

The fifth approach adopts a perspective of movement as the foundation of a legal system.

The right to come and go as one pleases, free trade and the freedom to conduct business can be approached as antecedents with a fundamental dimension that contribute to the birth of liberal legal systems, State systems in particular. The presupposition of a national legal system can be built on the assertion of a certain number of fundamental freedoms, which may reflect a logic of free movement (including the dissemination of ideas, expressions and information, as well as the movement of persons and goods, etc.).

To illustrate how movement can be the foundation of the legal system, let's look at an example other than that of the liberal State: the quite remarkable experience of the European communities that went on to form the European Union. Looking at what used to be the EEC (European Economic Community) or the ECSC (European Coal and Steel Community), one notes that these new legal spaces were almost exclusively built on the freedom of movement. The arsenal of fundamental freedoms (such as that proclaimed in France in 1789) did not herald the construction of these different European communities; for that we had to wait until the 1970s, when the market-based Europe began to acquire the legal tools guaranteeing fundamental rights, which were only completed in 2000 with the European Union Charter of Fundamental Rights. And so it is essentially the economic freedom of movement that lies at the origin of the European communities.

This freedom constituted a fundamental antecedent of the construction of this new European legal system.

According to the neofunctionalist theories in force at the time, it was essential to open up economic borders between founding States to create forms of solidarity between them that would feed a shared political project of ascending and descending integration: from member States towards the common structure and vice versa.<sup>15</sup>

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<sup>15</sup> For a presentation of the political and economic presuppositions of European integration, see in particular E. HAAS, *The Uniting of Europe: Political, Social and Economic Forces, 1950-1957* (Stanford University Press, 1958).

The four freedoms of movement – persons, goods, services and capital – are clearly of fundamental value. This fundamental dimension of movement has been extensively studied by specialists of European law. And it has rattled quite a few non-specialists. One of the reasons for their incomprehension is clearly that the reach of the fundamental antecedent of movement has not always been understood. Too polarized and too different to the other models at work in domestic and international law, it was often underestimated in terms of its potential to transform the existing rules. Things have moved on, although at times there has been debatable over-emphasis on European movement, portrayed as a blessing.

At any rate, it is important to understand the fundamental antecedent of movement in all of its complexity and try to appreciate its full ontological reach.

## **2. The different modalities of movement**

What are the modalities of movement that can drive legal constructs? Is it possible to establish a typology of these modalities? To what extent can we try to refresh the existing analyses?

Extending what we have already seen on the subject of antecedents, each of the questions addressed above potentially has multiple answers, which will of course vary depending on the period or environment concerned. Once again without wishing to be exhaustive, we will look at three main modalities which can be broken down into the movement of persons, data, capital, and waste.

### **2.1. The non-exhaustive choice of three different modalities of movement**

There are three antecedent modalities that merit our attention as we try to reconstruct the law on movement:

- modality of movement in and of itself;
- transformative modality of movement;
- modality of movement as a space of flows.

#### ***Movement in and of itself***

The first modal approach to movement is to distinguish between cases in which the law tackles situations in movement from a consequential perspective, i.e. looking at its causes and effects, or in and of itself, i.e. from end to end.

When the law adopts a consequential perspective of movement, it focuses on managing its causes and effects. This is what the vast majority of legal rules do, focusing solely on the cause (origin) of movement or its consequences (usually when it has already taken place). Under this approach, movement as a phenomenon includes a series of successive events which the law tackles partially or separately.

In terms of causes, the law looks at everything prior to the movement of the person or goods (*lato sensu*): securing an identity document granting the right to travel or the authorisation to leave one territory or enter another. The internal, international or European dimension of the travel, as well as the reason for it (professional, personal, involuntary or forced, etc.), play a very important role in identifying the rules that are applicable and those that apply in a fragmented manner to the movement in question, depending on the person or thing concerned.

As for the effects, the law traditionally looks at whether or not the crossing of a border (*lato sensu*) between two territories by a person or thing (*idem*) changes the way it is to be dealt with legally, with all of the advantages and disadvantages that implies in terms of movement. The goal behind the movement may be to establish a legal scenario in the long term or, on the contrary, change it profoundly.

Under a whole other approach – seeing movement in and of itself –, the law endeavours to consider movement from end to end. In situations involving several territories and/or spaces, this means developing a truly comprehensive approach. Such a scenario is more demanding than the previous one. To understand a situation in movement in its entirety, one needs a legal construct of a level generally more elaborate than if addressing it from a consequential perspective.

Think of all the legal mechanisms that enable the end-to-end organization of the movement of a person or thing (in the broad sense) from one territory to another or within a shared space of movement. Such mechanisms can exist on all levels (local, national, international, regional or global). And as soon as they relate to situations across several different territories and/or areas, they are necessarily based on rules that have been coordinated and harmonised, perhaps even unified.

There is no shortage of illustrations of these two major categories of rules.

What counts is to be able to determine precisely whether the law is endeavouring to adopt an approach based on a consequential perspective or dealing with a situation in movement in and of itself.

### ***The transformative effect of movement***

This modality, generally speaking, is about the potential of movement to have a transformative effect on the legal nature of the thing moving.

When an object of the law – broadly speaking (person or thing) – is in a state of movement, is it possible to distinguish between two of the main modalities of movement, that which does not affect its legal nature and that which, on the contrary, transforms it?

The first approach is to consider that the object in question remains intangible in terms of its principal legal characteristics, whether or not it is in a state of movement.

The second is to advocate for the recognition of a transformative effect on the legal nature of the object in movement.

Both can of course be adopted depending on the object in question.

Although this transformative modality is not a criterion of distinction commonly used by legal scholars, it is worth exploring through three different avenues.

The first is to point out that certain legal regimes have been established specifically in relation to objects in a state of movement. This is true of transport regulations found at all levels (local, national, international, regional and global). It is also true of the rules governing the movement of persons (refugees or nomads), which are also underpinned by specific schemas. In these situations, we need to ask whether, in relation to the movement, there is a veritable antecedent that can justify approaches that potentially derogate from the generally applicable rules.

If such a modal antecedent does exist, then the analysis must be extended further to explore a second avenue. One can ask whether movement might be a factor of unification between legal rules. For example, the law has distinguished between different modes of transport (road, maritime, railways, air, waterways) to develop several distinct legal regimes. If the modal

antecedent of movement is placed at a very high level of legal construction, then one can test the hypothesis that there are rules common to all forms of movement.

The third avenue is to question the ways in which movement can have a transformative legal effect. If an object of the law sees its legal nature modified under the effect of movement, it implies that movement is an essential characteristic of that object. Let's return to the distinction, referred to several times already, between individual and mass movement. One can ask whether there is a different legal regime for these two types of movement. If so, that raises the question of whether movement has a transformative effect on an individual object which, while moving, combines with others thereby forming a new – mass – object.

### ***Movement as a space of flows***

To say that one modality of movement is to form a space of flows is to try and reunite space and time under a single antecedent approach.

Movement has an undeniable spatio-temporal dimension. In essence, persons and goods (*lato sensu*) move through time in territories and spaces.

And so it is interesting to try to reunite space and time as part of a single antecedent notion. This brings us to the term “space of flows”<sup>16</sup>, presented in more factual terms earlier.

Under this type of theoretical approach, movement is seen in unit terms rather than, as is traditionally the case, in the plural, by distinguishing between the different times and places of movement.

But this is not always possible. There are certain prerequisites for such a unit-based approach.

These may be of a phenomenological nature. The phenomenon of movement, its homogeneity and stability can allow us to observe the advent of new spaces of movement which the law can try to address as such. In this first scenario, it is fact, or reality, that creates the abstract model from which we will try to imagine the law's constructs. For example, it may be interesting to develop the notion of a border zone in order to think in legal terms what life might be like around the border in terms of units.

These prerequisites may also have an essentially logical dimension. Movement can be the product of a legal rule which, pushed to a certain degree of perfection, can create conditions of homogeneity and stability that are conducive to the advent of a new normative space. In this second scenario, it is the law that creates the model of realities to which it is intended to apply. For example, Europe gave rise to spaces of movement: the internal market and its area of freedom, security and justice. Within these spaces, through a number of highly diversified rules, the law postulates the emergence of a legal space of movement.

These two approaches run up against a multitude of potential obstacles. The unit for a space of flows is not always a given.

Reality on the ground experiences upheavals, crises and fissures that can cause one to doubt the existence of a sufficiently homogenous and stable space.

The law also faces situations of crisis, extreme cases that can cause one to doubt its capacity to prescribe the emergence of a legal space.

A space of flows must not therefore be seen as a purely postulated and disembodied model. It is a modality that can serve as a matrix for legal constructs. And if these constructs become

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<sup>16</sup> For a conceptualization of the “space of flows” as opposed to the “space of places”, see the work of sociologist Z. BAUMAN, *Liquid Modernity* (Polity, 2000).

tangible in ordinary or more extraordinary situations, the space of flows can become a truly normative space.

## 2.2. Applying the modal approach to the movement of persons

When it comes to persons, the most appropriate vocabulary to speak of movement is that of mobility, even though such mobility can coincide with the movement of legal acts or facts.

The modal approach to the mobility of natural persons can potentially feed into three forms of analysis: the identification of mobile persons, mobility as a factor in the transformation of persons, and personal mobility understood as taking place in a space of flows.

### *Identifying mobile natural persons*

The approach in itself to the movement of natural persons involves the legal work of identifying mobile persons.

In liberal societies, the law postulates the mobility of natural persons. The right to come and go as one pleases has been laid down in a certain number of domestic legal orders, and mobility serves as a vector for many public policies, particularly in transport. International law has proclaimed the right to move freely, to leave one's country and return. EU law has laid down a fundamental freedom of movement, it is sometimes held that the law of the European Convention for the Protection of Human Rights and Fundamental Freedoms encourages circulation. The law also defines a multitude of technical mechanisms designed to organise the movement of persons, particularly in its international or European dimensions.

Yet all of these mechanisms are far from giving the mobility of natural persons its full amplitude.

The right to come and go as one pleases is not of central importance in the various national legal systems.

The reference by Italian legal scholar MANCINI to “[...] one of the primary faculties of man, the faculty to settle where he desires, without being constrained [...]”<sup>17</sup>, which he made prior to the adoption of the 1948 Universal Declaration of Human Rights (Article 13<sup>18</sup>), does not have any legal value with a general and universal scope.

The EU's free movement of persons is conditional, not absolute and, when it comes to the most debated (i.e. most interesting) points, subject to a case-by-case appreciation that is incompatible with the *ex-ante* assertion of a moving status. One cannot (as is sometimes done) refer to it generally to justify its aggregation with the attributes of persons, without considering the strict conditions for its implementation.

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<sup>17</sup> P.-S. MANCINI “De l'utilité de rendre obligatoires pour tous les Etats, sous la forme d'un ou de plusieurs traités internationaux, un certain nombre de règles générales du Droit international privé pour assurer la décision uniforme des conflits entre les différentes législations civiles et criminelles”, *Journal du droit international* (1874/2), p. 294.

<sup>18</sup> “Everyone has the right to freedom of movement and residence within the borders of each state. Everyone has the right to leave any country, including his own, and to return to his country.”

The European Convention for the Protection of Human Rights and Fundamental Freedoms does not lay down a veritable right to move within a transnational space and, at best, sketches out a form of protection for the legitimate expectations of petitioners.<sup>19</sup>

In light of these various observations, which are a bit reductive of the mobility of natural persons, it may be interesting to try and imagine scenarios in which the introduction of a modal approach could be used to place the identification of mobile persons at the heart of legal questions.

Let's return to a significant example: overseas surrogacy.

Acting as a surrogate mother in a foreign country is a process marked by the incapacity of institutional or private stakeholders to make any claim of being able to prevent the reality of practices abroad. The desire to have a child is such, and the concrete processes involved in achieving it are so numerous and organised, that it is impossible to subject this reality to the interplay of effective legal rules designed to contain it. This raises the question of what such a state of affairs produces. Of all the explanations one might put forward (insufficient effectiveness of legal rules, increasing commercialisation of the human body, weakening of domestic choices in the face of the European bloc, movements favourable towards the progress of "globalisation"), there is one that is of central importance: the movement of the child born from overseas surrogacy. Everyone is in agreement that outsourcing the surrogacy process to another country takes a particularly dramatic turn due to the presence of the child born through surrogacy in a territory other than that of her new parents and her travel to a territory other than that of her surrogate mother. The child's geographic situation becomes a key question in the way the law addresses overseas surrogacy. For if the parents can successfully make the child's movement the foundation of a viable legal claim, each day that passes in which emotional bonds between them are created makes the return of the child less and less conceivable (especially if there is a biological link between the child and one of the new parents). Similarly, if the child does not travel after her birth or is moved for only a short duration, the overseas surrogacy process undertaken can more easily be brought to a halt. To address this reality, we need to consider the possibility for the law of making the movement of the child born from surrogacy overseas its central concern. But such a consideration would involve a more elaborate level of legal construction than that suggested by a doctrine which pushes the act of movement outside the scope of the law. Such a requirement presupposes, first of all, an in-depth process of reflection on all the ramifications of the right to movement. What are the legal underpinnings of such a right? How can the law effectively be constructed to address this movement? To answer these questions, the modal approach is useful. As indicated earlier, it is about distinguishing between the relevant and less relevant modalities of movement as the law seeks to accompany (or not) the practices of overseas surrogacy.<sup>20</sup>

### ***The transformation of persons through mobility***

Under a modal approach, saying that mobility transforms a natural person is to place that mobility at the heart of the definition of the very legal status of a person.

What does positive law tell us?

The answers vary from one domain to the next.

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<sup>19</sup> See: P. KINSCH, "Les fondements de l'autonomie de la volonté en droit national et en droit européen", in A. PANET, H. FULCHIRON, P. WAUTELET (dir.), *L'autonomie de la volonté dans les relations familiales internationales* (Bruylant, 2017), p. 23 et seq.

<sup>20</sup> See: "Contextualisation et circulation des situations : approche modale des phénomènes de gestation pour autrui à l'étranger", *Journal du droit international* (2018/1), 3.

For example, if we consider, in all forms of the law (domestic, international or European), the question of the legal status of intrinsically mobile persons, we can quite easily observe that in such situations, mobility has a modal function. Whether we are talking about mariners, hauliers, flight personnel, barge crew, carnival organisers, nomads, travellers, etc., for all of them, mobility is the foundation of their particular status.

But in other cases the analysis can be different. For example, when it comes to the political, civil and economic rights granted to individuals, the law quite often endeavours, to varying degrees, to preserve the existence of a status acquired in one's home country so that the individual is not entirely dispossessed of that status as soon as they cross the border. This is especially true of human rights. Fundamental rights and freedoms have been broadly defined from a universalist perspective, whatever the context in which mobile persons find themselves.

In these situations, mobility is not questioned systematically as a modality that can transform persons.

Is it possible to open up such a view?

To assess the potential transformative effect of mobility, we can look at an example taken from European law.

This example builds on the hypothesis that the law seeks to multiply its constructs depending whether it is addressing personal mobility as a unitary or mass phenomenon. We are talking about the range of discourses that have been heard, especially in Europe, since the 2015 migrant crisis linked to the war in Syria. To try to cope with the crisis, various mechanisms were imagined that could deal with the "mass" of persons in circulation.<sup>21</sup> This type of discourse breaks from the legal tradition centred on a strictly individual approach to persons, particularly in terms of the status of refugees and asylum seekers. To explain this departure, one might wonder whether the nature of mass movement is such as to give rise to a new legal object – the mass of persons in a state of movement – which, without replacing the individuals of which it is made up, could be made distinct with its own unique approach.

This analysis may shock some, who see it as a means to regulate mass migration and annihilate individual rights. But it can also be analysed as a way to enrich legal approaches while respecting the principles already in place. The law is willing to make mobility a factor in the transformation of someone in movement. As an individual, this person retains their rights as a mobile agent. As a unit that belongs to a moving mass, they see new rules applied to them, specific to the way the law addresses mass phenomena.

### ***Persons in the space of flows***

Can the mobility of natural persons belong to a space of flows?

Of all the modalities explored above, the space of flows is the most elaborately constructed.

It should be remembered that it refers to situations in which a potentially large number of rules or decisions, sometimes highly heterogeneous (public, private, national, international, European, binding or non-binding, etc.), come together to enable movement to take place.

In the context of the movement of natural persons, it is an expression that is not used.

But is it possible to tweak the existing analyses?

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<sup>21</sup> Council Decision (EU) 2015/1601 of 22 September 2015 establishing interim measures of international protection for the benefit of Italy and Greece, which has repeatedly referred to the 'mass influx of third-country nationals'.

When a modality of mobility is a space of flows, this implies, from a legal perspective, a more central role for the notion of space and the relegation to the background of equally important notions like territories (in the broad sense) and the crossing of borders (*idem*).

In such cases, one can speak of a normative space of flows. It is the flow that determines the contours of a legal order, and this is only possible if movement is made central to the legal mechanisms put in place.

Such a situation does not exist (or is difficult to imagine) at macro-legal levels.

On a global scale, it has been shown that the very idea of movement in the context of migration is being eschewed.<sup>22</sup>

In the European (EU) and national contexts, we have already seen that the notion of space is understudied from a theoretical point of view and that the correlation between space and movement is far from systematically established.

We must therefore instead look at micro-legal levels and ask, for each type of movement and each type of situation, whether or not the notion of a normative space of flows is a characteristic modality that can help explain the processes at work.

Journey completed, refuge or asylum granted, return organised, extradition effective ... in all of these cases, it is possible to link up the different legal mechanisms at work in terms of the normative space of flows accomplished. The fragmentation of territories and the crossing of internal and external borders continue to exist. But they have been defeated by the convergence of different legal methods and solutions to address a single phenomenon: movement. And this only works if one of the modalities of that movement is the formation of a normative space of flows.

Referring to a normative space of flows is also relevant whenever it is undermined by the logic underpinning the fragmentation of territories and the crossing of borders. It shows how the situation has failed to construct itself based on a characteristic modality of the completed situations in movement.

Other more specific types of normative spaces of flows can also exist. One example is border zones, which have sometimes been seen as legal orders in their own right and within which absolutely polarized practices have developed in relation to the movement of persons.<sup>23</sup>

As we can see, reliance on the notion of a normative space of flows can be extended.

### **2.3. Applying the modal approach to the movement of data**

As in the case of persons, the modal approach to data circulation can potentially feed into three forms of analysis: the identification of data in circulation, its transformation as a result of that circulation, and approaching it in terms of a space of flows.

#### ***Identifying data in circulation***

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<sup>22</sup> On contemporary forms of this denial of movement, see J.-Y. CARLIER and F. CREPEAU, "De la 'crise' migratoire européenne au pacte mondial sur les migrations : exemple d'un mouvement sans droit", *Association française de droit international*, vol. LXIII (2017), 461.

<sup>23</sup> For a transnational approach to police practices in particular around the border and the emergence of the space of flows, see B. BOWLING, J. SHEPTYCKI, *Global Policing* (Sage, 2012).

To what extent can the context of movement, or circulation, be used to revisit the law's key constructs in the domain of data?

The law on data has been largely structured around the way data is organised. Data is broken down into different categories and a specific legal regime associated with each one.

Among other examples already referred to above, the following distinctions can be made in the European context:

- data covered under the protection of privacy, a domain which itself is made up of different regimes depending on the level of data sensitivity (e.g. medical data);
- data not protected by any rights, which are not covered by a protection regime;
- data collected and used for policing or judicial purposes;
- data intended to be used in the fight against terrorism, collected in air transport (PNR).

Many different readings can be proposed to analyse – and especially compare – these different legal regimes, which can of course vary significantly from one regulatory context to another, although here we will focus on EU law, which has a crucial influence on French law.

The question is whether approaching this from the perspective of movement sheds any light on the reading of these regimes generally proposed.

There are two main points to be made in this respect.

The first applies to all regimes. Through these various mechanisms, the law seeks to organise the conditions for the “legal” circulation of data. And circulation is truly a common denominator for all these mechanisms, even though they are very different from one another.

This general a priori approach to movement, common to all regimes, has been understudied by legal doctrine, despite its abundance on this issue. Most interesting is to study the different regimes and the question of how they interact, which is of course crucial. But the fact remains that the circulation of data is not a central or anchor point for them.

This could change, however, and this is the second point to be made. An approach based on movement offers a very interesting reading of the paradox underpinning the most important of these regimes: the much celebrated GDPR, designed to protect personal data. Although this regulation has a framework dimension – it is the common law regime applicable by default to special regimes – and although it essentially is based on the consent given by individuals for the collection and use of their data, it actually organises the circulation of data on a greater scale than that organised by derogation for policing or judicial reasons or to combat terrorism. The parties authorised to collect and use data by derogation are much fewer in number than when it comes to the processing of personal data. The mass of data in circulation affected by the special mechanisms cannot be compared to that produced under the framework of the general common law regime.

These observations should make us think about the place given to data circulation in these respective mechanisms. This is what justifies the modal approach, asking *a priori* about the effects of freeing up data caused by these common law and exceptional regimes.

### ***The transformation of data through movement***

The modal approach can sometimes involve observing the transformation of data through movement.

Most of the legal regimes addressing the question of data focus on the legal treatment of each unit of data, with as many legal regimes as there are different types of data: personal, sensitive, secret, public, royalty-free data, etc.

The formation of large databases is an essential characteristic of our digital society. The most frequent occurrence of the word “mass” in this context relates to big data.

It is possible to imagine a specific legal regime for big data.

But such a regime does not really exist.

One of the explanations for this is the “non-rivalrous” nature of data as understood by economists. It is generally believed that the use of data does not alter its substance, which can be reused indefinitely, without ever losing its essential properties. This non-rivalrous quality gives data a form of stability. This is probably why one does not generally look for any factor of potential transformation of data in its circulation.

But is it possible to bring about a change?

To answer this question, we will once again focus on the legal regime applicable to data in Europe.

The qualifiers “massive”, “mass” and “large-scale” are recurring in the discourse on personal data: one hears about masses of data, mass data collection, large-scale processing or mass surveillance. In fact, the new difficulties we face in this area are largely linked to the high volumes of personal data at stake. Yet this notion of mass or quantity does not seem to have been theorised in the law on data.

In an effort to counter this, it may be interesting to establish a link between the formation of masses of data and the phenomena of their circulation.

The formation of a “mass of data” is intrinsically linked to its circulation. These masses are formed because the data circulates and their formation in turn facilitates the circulation of data.

The a priori approach to movement could herald the possibility of rolling out legal regimes specific to these masses of data. This would imply no more and no less than considering the circulation of data as having a transformative effect on data.

This perspective can be used to re-read the constructs of positive law in relation to personal data.

Two mechanisms of the General Data Protection Regulation (GDPR) come to mind in particular. The first addresses impact analysis, conducted prior to personal data processing. Criteria are identified in the relevant texts to guide data processors on how to evaluate the risks inherent in their activity. These include emphasis on “large-scale processing”, determined by the number of persons involved, the volume of the data being processed, the duration or permanence of the data-processing activity and its geographic scope. The second mechanism relates to the principles that govern data collection, such as proportionality, purpose and data minimisation. If interpreted to the letter, these principles are binding and the promoters of big data have denounced them as an encroachment on innovation and as a penalty against the European data industry. The spirit of big data is to accumulate as much data as possible so it can subsequently be used for various purposes, not foreseen at the time of collection; in short, it is about “data maximisation”. These mechanisms to ensure data processors evaluate their own impact and limit their activities are not specific to mass data, but they are particularly applicable in this area. *De lege lata*, we can see the early shoots of a law to govern masses of data. By

transformation, these masses display a specificity in relation to the traditional unit-based approach to data and justify the implementation of additional mechanisms.<sup>24</sup>

### ***The space of data flows (datasphere)***

Can data circulation be said to fall under the space of flows?

When it comes to data circulation, the law sometimes specifically addresses the flow of data.

This is the case of the mechanisms outlined above in relation to transatlantic flows of personal data between Europe (EU), the United States and Canada.

More indirectly, the flow of data can be tackled through the question of the territorial scope of legal mechanisms like the GDPR, which generates effects far beyond the external borders of the EU.

These various subjects are generally examined through the traditional prism of territories and the crossing of borders. And so there are lengthy discussions about the ever-present (but frankly not very new) question of the extra-territorial scope of legal mechanisms and the capacity of a model (in this case European) to influence others around the world (the “Brussels effect”<sup>25</sup>).

This raises the question of whether there would not be greater clarity by moving beyond these analyses and introducing in law the concept of the space of flows, in relation to data, which could be referred to as the “datasphere”. This in turn would raise the question of whether such a space could be seen as a veritable normative space.

The development of information and communication technologies, smartphones, the many different sensors now found in public and private spaces, etc. has contributed to the digitalisation of considerable quantities of data about human activities, and more generally about the world around us. It is now believed that the volume of data is growing exponentially, following a pattern similar to Moore’s law, which in 1965 predicted a twofold increase in the capacity of computers every 18 months. Data, closely linked to the algorithms that bring it to life, forms a new space, the “datasphere”, a kind of reflection of the physical world in which we find a trace of our physical activities, such as our geographical position at a particular instant, our exchanges, the temperature in our homes, financial movements, the displacement of goods, road traffic, etc.

This digital sphere allows us to create activities that did not previously exist. This is the case of search engines, for example, which allow us to access knowledge. But it also allows us to transfer into the digital sphere activities that were previously managed by stakeholders in the physical world. This is the case of mediation (Uber) in transport activities, for example.

To be seen as a new space, the datasphere must be considered from a holistic perspective, as an order made up of all of the digital data in circulation.

The prospect of a new space offers the chance to address a looming concept but which is so far absent from the literature, despite having the potential to help us better understand the relationships likely to form in this sphere of data.

These relationships come in two forms. One can envisage a scenario in which the datasphere leads to the emergence of new relationships with the traditional institutional territories (States,

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<sup>24</sup> See also our explanation in J.-S. BERGE, D. Le METAYER, “Phénomènes de masse et droit des données”, *Communication Commerce Electronique*, Issue 12/2018, Study n° 20.

<sup>25</sup> On this concept, see A. BRADORD, “The Brussels Effect”, *North-western University Law Review*, vol. 107 (2012), 1.

cities, international and regional organizations, etc.). One can also imagine the datasphere giving rise to a new normative space of flows.

The new relationships with the traditional institutional territories brought about by the datasphere emerge from a phenomenon of detachment from these territories. Realities are captured by data. The collection, processing and circulation of that data in electronic form then create situations that are detached from the traditional territories. Data generates value that is separate from that of the physical resource itself. Once that data circulates within its own sphere, it generates a new relationship with the traditional institutional territories.

This peeling away from the traditional institutional territories in particular raises the question of maintaining the existing legal mechanisms that allow a link to be established between the situations that the law claims to govern and the territories that produced the law. In order to locate a situation within a global space made up of several different territories, the law defines rules of spatial applicability that lay down a link of attachment between the rule of law as produced by a given normative power (State, city, international or regional organization) and tangible situations. This link is based on highly diverse location criteria: these criteria can be factual (location of a thing or person within a given territory at a given time) or the result of a legal construct (nationality, domicile, registration).

But they are altered from the perspective of the datasphere. If there is no longer any attachment to the traditional institutional territories, one must re-hash the criteria or come up with new criteria for the attachment between the situation in question and the rule of law to apply.

In reality, we need a concept with which to address – *a priori* – the relationship between the space of data in circulation (what we are calling the datasphere) and territories in the traditional sense of the term. Without such a concept, we will continue to approach data circulation solely through the prism of territories, State territories in particular. And there comes a time when that simply no longer works.<sup>26</sup>

## **2.4. Applying the modal approach to the movement of capital**

As with persons and data, the modal approach to the movement of capital can potentially feed into three types of analysis: the identification of capital in circulation, its transformation through movement, and approaching it as a space of flows.

### ***Identifying capital in circulation***

There can be no doubt that circulation has an ontological dimension when it comes to capital. Movement can be said to be an intrinsic part of it, and we have already seen its use in the powerful theory of one Italian author in the first half of the 20<sup>th</sup> century in relation to securities.<sup>27</sup>

And so there should be no difficulty arguing that movement is an essential modality of the law's treatment of capital. One can even say that it is the archetype of the modal *a priori* approach. Without movement, capital loses one of its essential characteristics.

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<sup>26</sup> For more developments on this topic, J.-S. BERGÉ, S. GRUMBACH, "The Datasphere and the Law: New Space, New Territories", in M. MARINHO and G. RIBEIRO (eds), *Direito e mundo digital, Revista Brasileira de Políticas Públicas (online edition)*, vol 7-3 (2017), 3.

<sup>27</sup> F. CARNELUTTI, *Teoria giuridica della circolazione*, *op. cit.*

But beyond the work of F. CARNELUTTI and another more recent study<sup>28</sup>, it is noteworthy that movement is an understudied area in theoretical terms, particularly in the doctrine specialising in banking and financial law.

This state of affairs can no doubt be explained by the self-evident nature of movement when it comes to capital. What is the point of discussing or reflecting on this movement since in our liberal environment it is an inherent quality of the very notion of capital?

Without wishing to contest the state of the art, it is possible to explore the potentialities of the notion of movement as a modal a priori approach.

There are two major working hypotheses for which it is interesting to consider movement as an indispensable a priori approach for any reading of the law's constructs in relation to capital.

The first relates to the scenario in which there is a shift from restricted and limited movement of capital to a situation in which it is allowed to circulate freely. Europe (EU) went through such a shift in the late 1980s with the adoption of the Union's fourth key freedom: the movement of capital in the internal market. In such a scenario, it is clear that the modal a priori of movement literally serves as a guide for all constructs of the law put in place to enable capital from all around the globe to circulate from or to the European Union.

The second hypothesis relates to the different situations in which the established movement of capital is potentially called into question. Every time a public or private restriction affects capital flows, it opens up a process of reflection about the justification or regime for such movement. The prospect of the closure or suspension of a market (e.g. stock market), of checks on currency movements or the freezing of assets by a public body necessarily triggers far-reaching analyses of the merits of measures considered antithetical to a natural state of movement. The same is true of the strictly private sphere. Any process involving the allocation of wealth, whether as an investment or guarantee, also fuels much reflection on the possibility of constructing legal mechanisms to regulate the circulation of capital.

In any case, the movement of capital is an *a priori* modality that justifies questions about the possibility of restricting or regulating it excessively.<sup>29</sup>

### ***The transformation of capital through movement***

Does the a priori of movement have a transformative effect on capital?

The flow of capital owes much to the dematerialisation of items of value (for example in financial law: securities, financial contracts) and value exchange structures (via multilateral negotiations systems).

Let's look at just a few examples:

- when a security is fungible, transferable or negotiable, it can be easily dissociated from its root structure;
- we are able to transform short-term deposits into long-term credits;

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<sup>28</sup> See M. TELLER "Le droit financier appréhendé comme 'des flux en circulation' : quelles dynamiques et quels enjeux ?" in J.-S. BERGE and G.-C. GIORGINI (eds), *Le sens des libertés économiques de circulation - The Sense of Economic Freedoms of Movement* (Bruylant, 2020), 91.

<sup>29</sup> For an illustration of restrictions on foreign direct investment in times of crisis, see the Communication from the European Commission (EU): *Guidance to the Member States concerning foreign direct investment and free movement of capital from third countries, and the protection of Europe's strategic assets, ahead of the application of Regulation (EU) 2019/452 (FDI Screening Regulation)*, C(2020)1981 final.

- through securitisation, simple bookkeeping entries can be put into circulation;
- financial agreements make it possible to transform actions and obligations usually subject to market regulations;
- the legal regime for cash bonds and vouchers has significantly evolved due to a new surge in these instruments through network technologies like blockchains, etc.

This raises the question of the extent to which it is possible to correlate this transformative effect to a modal a priori approach to movement.

The transformative effect brought about by movement can be a useful way to measure the scale and nature of the phenomena at work in the domain of capital flows. There are two primary categories of examples.

The first relates to the traceability of monetary and financial flows. The transformations at work in the circulation of capital make it difficult and sometimes even impossible to follow them, whether in the fight against money-laundering or tax evasion. Tackling the source of the problem – transformative circulation – means tackling the a priori approach to movement which underpins the system as a whole. In other words, market players (e.g. financial institutes) must learn to live with the risks inherent in this permanent transformation of capital. It is impossible to win the battle against the laundering of dirty money or tax evasion. Those involved do their best to show that they are complying with the regulatory provisions, and when their actions are nonetheless compromised, they try not to get caught, and if they are caught they seek a plea bargain!

The second category is linked to the relationships between units and masses of capital. The obvious porousness between them is because of movement. It is moving units that create masses and moving masses that free up units. These two-directional transformations are so shape-shifting and involve such a high number of stakeholders that it is impossible to eliminate one of the two. For example, it is not as if there were central bankers on the one hand administering the masses of capital, and investment or retail bankers on the other distributing units. This porousness between masses and units makes it clear that the respective roles of the different stakeholders have become largely decompartmentalised. It is not rare for central bankers to be required to distribute liquidity beyond their traditional circle or for commercial bankers to distribute credit without value-added guaranteed by the State. There is no longer a guardian of the masses (central bank) on one side and distributors of units on the other (investment or retail banks). The two coexist and are subjected to the same preponderant phenomena of movement.

### ***Space of capital flows***

The circulation of capital is clearly suited to an analysis in terms of a space of flows.

This form of movement follows circuits and loops that are the subject of specialist regulations.

Whether we are talking about the circuits for processing hard currency or the organization of the different chains for handling securities on the markets, all of these movements can be analysed as spaces of flows.

Although this vocabulary does not appear to be used by specialists, it is immediately operational. The journey of a security on a financial market sees convergence between a highly heterogeneous set of rules and practices (public, private, local, national, regional, international) which only have one objective: to enable the transactions involving that security to accompany it through every movement of its journey.

The question is: how can we try to broaden the perspective of a normative space of flows to new working hypotheses specific to banking or finance?

As one specialist admitted, “In finance, you might say that we have shifted from the pyramid to the network, but now the shift is from the network to the neural network. The financial economy has established a model for transactions in which the digital and technological interface can replace the traditional intermediaries and trusted third parties. Blockchains, cryptocurrencies and RegTechs have clearly shown us the revolution is underway, one that will almost certainly upset the belief system of legal analysts”.<sup>30</sup>

In the face of such upheaval, we need conceptual tools that allow us to put a name on the phenomena at work. Referring to the notion of a space of flows may be very useful in this regard.

We will now look at the example of blockchain technology, with two distinct analytical approaches.

First of all, the notion of a space can be said to supplant the traditional (State) notion of territory. This is the perspective developed in readings of transnational law which see space as a feature of normativity, i.e. as a normative space. This means seeing the circulation of information in a blockchain as essentially obeying rules defined by the very stakeholders driving the technological process itself. This is the notion that “code is law”, in competition with the place given to the State, its institutions and its laws. This feeds into a debate about the aptitude of these non-State normative spaces to govern situations with autonomy and also about the necessary (or not) role which State law nonetheless intends to play. The most topical example of the moment is that of virtual currency, including of course Bitcoin but also the Diem project developed by Facebook.

There is another possible approach that endeavours to create resonance between territories, in the terrestrial sense of the term and therefore associated with the State, and the circulation within the datasphere. Within digital space, blockchains create circulation that is largely detached from terrestrial territories. One can see this as a veritable digital layer enveloping the planet as a whole. Rather than reading these data flows through the necessarily fragmented prism of territories or considering this space as being entirely free of any dependence on territories, it is more apposite to consider the notion of flow as such and to establish a dialogue between it and territories. Each time a flow is attached to a given territory based on a particular criterion (e.g. location of one stakeholder or marketplace), it is the flow in its entirety that is potentially affected. For example, if a debt security is processed using blockchain technology with the intervention of multiple stakeholders and territories, the best approach is to see the blockchain as a moving whole (a space of flows) bringing together a set of rules (a normative space of flows), albeit heterogeneous ones. This perspective allows us to move beyond the often fragmented reading, territory by territory, traditionally adopted in legal approaches as well as the competing reading of transnational law, whereby such movement is said to be entirely free of any territorial attachment. Here, the flow of information is placed at the heart of the situation in question. Whatever the type of rules one applies to it, whether private or public, whether of a local, national, regional or international dimension, it is the flow itself that constitutes the core of the legal approach.

Addressing a normative space of flows in this way can generate stimulating dialectical games with a temporal factor. The question can be put as follows: in our efforts to delimit the circulation of information in blockchains, how is time taken into consideration?

One response is to say that the question of time is not central and that the issue at hand is essentially tackled through the spatial considerations outlined earlier.

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<sup>30</sup> M. TELLER “Le droit financier appréhendé comme ‘des flux en circulation’ : quelles dynamiques et quels enjeux ?”, *op. cit.*, p. 91.

The other response – the one that interests us – is more audacious. It begins with the observation that in certain situations time is of cardinal importance, such that it brings together the different spatial approaches.

In an effort to develop this hypothesis, we must consider situations in which time is a key element of the technical process underpinning blockchains. For example, the time involved in “mining” operations (performing each block and stringing them together) or the time dedicated to the management of certain situations (such as a “fork”, when the chain splits into two branches) are regulated by the blockchain stakeholders.

In such situations, the time needed for these operations is literally standardised.

Should a dispute arise (challenge against a mining operation or the handling of a fork) and one wishes to identify the applicable rule, the tools outlined above to delimit space would not be the most useful. What is crucial here is to identify the time (and also the speed) of the situation to which a set of rules applies.

This means delimiting time becomes the primary tool of the legal approach. The approach based on a normative space of flows does not disappear, but it is rather absorbed by the time-based approach whenever time plays a determining role in how the law addresses the situation.<sup>31</sup>

## **2.5. Applying the modal approach to the movement of waste**

As with persons, data and capital, the modal approach to the movement of waste can potentially feed into three types of analysis: the identification of waste in movement, its transformation through movement, and approaching it in terms of a space of flows.

### ***Identifying waste in movement***

The modal a priori approach to movement is of central importance when it comes to waste.

Waste and movement go hand-in-hand. Waste implies an act of abandonment or defection, whereby the person getting rid of it distances himself from it, whether displacing it to abandon it or simply leaving it where it is and continuing on his way.

The law can intervene as early as the abandonment or defection of waste to prevent it from generating an effect of movement. For example, there are a great number of particularly restrictive legal policies designed to prevent the risks of pollution. There are also mechanisms with a more limited application but which can have a significant impact, as in the case of prohibiting industry from practising planned obsolescence to prevent them from speeding up their transition to waste status.

But where there is waste, one faces the question of its movement.

We are not accustomed to presenting the movement of waste as a modal a priori approach.

Let's consider how this can be done.

Significant legal mechanisms regulating waste can be read or re-read in the light of the modal a priori approach to movement.

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<sup>31</sup> See also on this theme: J.-S. BERGE, "Libre propos en trois temps sur la délimitation juridique de la circulation de l'information dans la blockchain" in *Actes du cycle de conférences du Master de Droit international privé et du commerce international* (IRJS Editions, forthcoming).

Without going into the detail of the many regulations adopted at all levels (local, national, regional and international), we can consider the scenario in which the law focuses on closely regulating the possibility of waste moving.

For example, principles of self-sufficiency and proximity guide the processing of waste intended to be eliminated (e.g. household waste). Under the principle of self-sufficiency, each territory must develop its own tools to process waste so it does not need to be displaced to another territory. Under the principle of proximity, the waste processing location must be located as close as possible to that in which it is collected. These principles justify a strong legal framework for the movement of waste, seen as a risk, i.e. something to be avoided.

The way these principles are applied can lead to contradictory solutions in terms of movement. Self-sufficiency may require the long-distance transport of waste within a single territory, whereas the principle of proximity may require the export of waste to another territory located geographically closer but on the other side of a border.

In such situations, the analysis of which can vary significantly depending on how dangerous the waste is and its final usage, elimination or storage, it is clear that the modal a priori approach to movement is of central importance.

This a priori approach can be seen differently, either in terms of the freedom of movement (free trade or free movement of goods) or of environmental protection.

There is significant gradation via mechanisms with an international dimension which classify waste according to whether it can or cannot be exported/imported and according to a particular condition.

But whatever the scenario, it is clear that the modal a priori approach to movement occupies an important place and that its content or gradation can serve to guide our analysis.<sup>32</sup>

### ***The transformation of waste through movement***

Does the a priori approach to movement have a transformative effect on waste?

There used to be a time when waste was waste and had no intended purpose other than to be simply stored or destroyed.

Then things changed with policies to recycle and reuse waste, giving rise to various mechanisms designed to accompany a careful waste transformation process.

Waste can also be transformed outside of a constructed and controlled process.

In any case, the question is to what extent the modal a priori approach to movement can be read or re-read as a factor in the transformation of waste.

To determine how movement can be part of such a transformative effect, we can distinguish between scenarios in which the transformation is the result of a controlled or uncontrolled process.

In the former scenario, legal mechanisms come to mind which are intended to put waste back into circulation having altered the characteristics that made it waste. Here, waste is transformed to be once again put into a state of movement, where previously it would have been stored or destroyed. Such transformation may involve a physical alteration of the waste, which, once treated, is recycled. This is a process through which waste is given new value. For example, some plastic waste can be heated to enable the production of new plastic objects, ready to be

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<sup>32</sup> For a discussion of the legal movement of waste in the European and international context, see N. DE SADELEER, *Droit des déchets de l'UE - De l'élimination à l'économie circulaire* (Bruylant 2016).

used again. But in other cases, the transformation is purely legal. The law is used to disqualify waste as a “sub-product” that can be reused in a chain of production or usage. For example, sawdust was long considered as a form of waste made up of fine dust or small particles of a material that had been sawn (wood for example). Nowadays it can be considered under certain conditions as a sub-product of the sawn material (in this example wood), and one that can therefore be reused without first falling into the category of waste. In these different situations, the modal a priori approach to movement is at one with the waste transformation process. One could even argue that movement plays a role in both directions of the transformation: it is movement that enables the transformation and, vice versa, the transformation that triggers the subsequent movement. This is therefore a phenomenon that is part of the circular economy.

In the second scenario, the transformation of the waste does not come about due to a controlled process but nonetheless remains closely linked to movement. The most significant example involves cases in which movement causes units of waste to transform into a mass of waste. This brings us back to the same phenomenon observed in the case of persons, data and capital. The circulation of units of waste gives rise to the formation of masses of waste. In law, the question is whether this movement/transformation is such as to justify duplicating the law with one way to deal with “units” and another “masses”. Let’s look again at the example of plastic. Regulations can prohibit the use of certain plastics which cannot be recycled or are considered dangerous for the environment. It can also tackle masses of plastic, as in the case of broader initiatives to protect our oceans. This twofold approach is only possible if we accept that two legal objects coexist and that they do not necessarily invoke the same legal constructs. To establish this as reality, upstream of the law’s constructs one must adopt the a priori approach that the nature of circulation is such that it can transform objects – in this case plastic waste – in a state of movement.

### ***Space of waste flows***

Can flows of waste be said to form their own normative space? Chains and circuits for the processing of waste have always existed. The law increasingly intervenes to structure the movements of waste. The practices of private stakeholders have long determined the favoured modus operandi. From the rag-and-bone man to mafia operations, there are many waste flows organised by humans.

The question is whether it is useful to examine them in terms of a normative space of flows.

Approaching the movement of waste in terms of a normative space of flows carries the same advantages as those described above in the case of persons, data and capital: attributing to movement a conceptual unit that allows it to become an object – in and of itself – of the law without suffering from the fragmentation effect produced by the sequenced analysis of the territories crisscrossed by moving waste.

This fragmentation makes it very difficult to adopt an overall approach to waste flows, which in most cases play off the differences between territories to escape the particularly restrictive regulations in this domain.

To avoid this disadvantage, we must question the utility of relying on the overarching notion of a normative space, considering that flows, whether in essence legal or illegal, bring together a certain number of legal rules with diverse origins (public, private, local, national, regional and international) that all contribute to the realisation of the same objective: ensuring that waste can move from its point of departure to its ultimate destination.

Taken in its entirety, such a flow becomes the object dealt with by the law. It is no longer fragmented. It is addressed as a whole, from end to end.

This way of seeing things offers a refreshing reading of real-life cases.

Consider the example of the shipwrecked Erika, where a relationship was established between a fossil fuel producer and the final form of the waste in question, clumps containing a mix of oil and sediment. This extension of liability to the company entirely rests on the law's capacity to attribute responsibility for the entire flow to one stakeholder who only intervenes at certain stages of the chain. To do so, the entire space of flows must be subjected to a norm that lays down a principle of liability, in this case one of extended liability.

There are other possible applications of the notion of a normative space of flows. Chains of liability (this applies to all other areas, as when liability is extended to the control of subcontractors) are always difficult to establish when the objects in question have a holistic dimension and involve intervention by a considerable number of stakeholders, spread out over many different territories. Think of the earlier example of plastic islands which now form the planet's latest continent. It is conceivable that these moving islands, the product of a considerable number of plastic microparticles, themselves in a state of movement, could become the focus of intervention for heterogeneous legal rules all of which would share the same objective: to regulate the plastic island in itself.

This overall approach is really the only way legally to address the object in question. And to achieve this, it is useful to consider a flow as forming in itself its own normative space.