Rhizome bundles, multiple agencies, and ascription – a critical appraisal of rhizomatic imagery

Edmundo Balsemão-Pires

Univ Coimbra, Faculdade de Letras da Universidade de Coimbra
ORCID: 0000-0002-7958-4410

ABSTRACT

Starting with a review of G. Deleuze's and F. Guattari's metaphysical and methodo-logical assumptions in *Mille-Plateaux*, this paper aims to critically appraise Bruno Latour's rhizomatic Epistemology, particularly in agency and network formation, and its Leibnizian inspiration, as mediated by G. de Tarde and G. Deleuze. It also seeks to evaluate the soundness of some of ANT's metaphysical assumptions, such as the metaphysical primacy of forces and forces irreducibility, in light of the increasing participation of artificial agents in communication and social interaction and the growing technological transformation of the 'natural attitude.' The meaning of artificial agency is the empirical perspective through which I will evaluate ANT's epistemological and metaphysical claims. The paper will define artificial agents and artificial agency and describe the social context of the 'pool of agents' that includes humans and machines in digital networks of human-machine interactions.

The normative themes of causality, accountability, and responsibility of artificial agents, central to the Ethics of artificial intelligence, will also be explored within the critical appraisal of ANT's description of networks.

1. Imagining the Underground – Self-division of the One or Rhizomatic Proliferation

Mille-Plateaux is a haunted book that can be read as an exorcise guide to keep off its ghost.

The specter is Plato acting through the witchcraft of the *Sophist*, the parricide dialog, and the founder of Logic as Metaphysics. From the *Sophist,* Western Philosophy received dialectics as the method of thinking according to the Ideas' objective distribution and connection, divided into *diairesis* and *synagogé*. The dichotomic method provided a clarifying description, in degrees, of "what is" and a tool for a political royal ruling

by giving faultless accounts of the classes of entities considered subordinated in the face of others that should have supremacy.

In *Mille-Plateaux,* Gilles Deleuze and Félix Guattari developed a new approach to the metaphysics of knowledge. They proposed a new, powerful image of the metaphysical support of knowledge organization using the contrasting metaphor of the rhizome and rhizomatic anarchic proliferation. A rhizome is not a tree and does not obey an ordered ramification from a central root or bough. In the history of science's classification, the image of the tree whose growth spreads from a central pillar has had such a formidable impact that it became a commonplace, the standard image of the nature of science's organization. Science's branching across the tree of knowledge continued the dialectical division of the One. What would then justify a revolution in the metaphysical imagination of science's branching?

The answer is easy to give but hard to substantiate: the need for a metaphysical vindication of the rights of diversity contrasting with the multi-secular prestige of the One and the Platonic dichotomic methods of the *diairesis* and *synagogé* as self-division movements of the Idea. Along *Mille-Plateaux,* there is no other explanation for the change of the metaphysical imagery.

Unlike G. Deleuze's *Différence et Répétition* (Deleuze, 1968), in the 1980 work, G. Deleuze and F. Guattari did not endeavor to work in the History of Philosophy or any other meta-theory of the History of Philosophy. They offered a book with new metaphysical, vegetal, earthy, underground, non-hierarchical images that would be advantageous in pursuing the vindication of the rights of diversity, contingency, and occasionalism with new terminology that frequently assumed a baroque variety and detail. Their views are not reducible to new diagrams of "knowledge representation" since they focused on the metaphysical depth of the earthy, vegetal resonances of the rhizome imagery. Interpreting their method in that book, I would summarize their mosaic of problems into the question of what makes and keeps diversity and non-planned variation in systems.

The absence of an operative constructivist approach to this central question marks their metaphysical style, described as a view of the earth's dynamics before "God's judgments." (Deleuze and Guattari, 1980, pp. 70-71 and p. 76).

Both authors delve into a rich literature that spans from Literary sources to Linguistics and Semiotics, Psychoanalysis, Biology, Anthropology, and classical Philosophy to rescue the images and descriptions appropriate to vindicate the rights of the multiple, contingency, and non-hierarchical

meaning formations. The imagery of a living Earth as the setting of a proliferation of entities and relations self-organizing outside the One, an economy without hierarchy, where territory displacements, deterritorialization, and reterritorializations take place, is a means to achieve the representation of the ideal of perfect communication, a non-delimitation of entities, absolute deterritorialization or the "body without organs."

They tell the metaphysical story of the shaping of separate entities as a stratification genesis from the point of absolute indifference. A diagram of the stratification process goes from geological strata to the formation of crystals, physicochemical, and organic strata (Deleuze, Guattari, p. 75). The internal relations between the different entities of the distinct strata look like mechanical, organic, and expressive linkages, where each level prepares the others as molecular sources merge to form a molar structure, as virtual potentialities convert into actual configurations. The final organization obtained from the molecular and molar levels relations is equivalent to the "judgments of God" (Deleuze and Guattari, 1980, p. 76).

At the molar organization level, as in complete functional organisms, higher structures responsible for referencing and transforming environments emerge, such as technical manipulation, which explains deterritorialization phenomena and the detachment of units from the homogenous continuum.

The rhizomatic proliferation across deterritorialization and reterritorialization events belongs to a metaphysical series and refers to metaphysical events. Even when the authors seem close to real processes, it is impossible to follow the empirical expressions of such a superb history of systems.

One of the underlying purposes of their metaphysical geo-genesis is to critique Noam Chomsky's Linguistics and its theory of meaning.

Across his work, N. Chomsky's avoidance of contextual and pragmatic explanations of meaning formation and the proximity to the platonic *diairesis* and cartesian innate ideas assist as the epitome of the philosophical model that better embodied the tree metaphor and the hierarchic view of knowledge and language contested by the new rhizomatic view.

Rhizomes are images of meaning formation contrasting with N. Chomsky's platonic-cartesian Linguistics since the rhizome conveys a contingent, fuzzy, occasionalist, and inferential perspective of the local-global relations and association nodes in meaning formation that cannot avoid the uses and pragmatic contexts better expressed through the image of the network. The concept of context in Pragmatics refers to an extensive series of

associative nodes belonging to meaning and action constellations prolonged in inferential semantical chains used in the definition of words or concepts that are not outcomes of phonological-syntactical-semantical innate articulations reconstructed in the syntactic-semantic trees of the deep grammar. Equipped to include the large field of language connectivity and contextual meaning configurations and focused on performative linguistic actions (speech-acts), entailing theoretical consequences not reducible to the philosophy of language, pragmatics is the label of a theoretical global shift confronting the nativistic linguistic tradition.

Agencement, a French word that is challenging to render in English, which I translate as layout, represents the global structure that includes political and social contexts of the language uses that cause the emergence, stabilization, and change of meanings. The focus on language use explains why contexts, purposes, and inferences that contingently surface and disappear are crucial in contesting the platonic, cartesian views persistent in Chomskian Linguistics. The allure of referring to contexts and practical uses in characterizing meanings is not only a consequence of G. Deleuze's proximity to C. S. Peirce's Semiotics (see: Deleuze, 1983, 1985) as an alternative sign theory but an opportunity to disavow the hierarchical flavor of Chomsky's appropriation of *diairesis* or Louis Hjelmslev's Glossematic dualism of the signified and signifier, content and expression.

Mille-Plateaux's metaphysics favored the metaphysical story of hybrids, mixtures, parasites, viruses, and sponges that feed themselves from extensive connective grids, forming contingent layouts, instead of the story of the hierarchical disposition of encapsulated, clear, and distinct ideas.

They did not suspect other alternatives to the dialectical procession from the One and the hierarchical disposition of meaning elements beyond the contingent, occasionalist hybridization of meaning formations. The invention of the hybrids is the price they paid to avoid hierarchy.

Contesting the heritage of the platonic *diairesis*, G. Deleuze and F. Guattari's metaphysical invention of the rhizome resorts to networks and non-linear connectivity as if the new entities to follow were the hybrids at the crossroads of non-planned interactions.

However, networks and connectivity are expressions of highly articulated grids of operations and selections across systems and sub-systems, some of them autonomous and other symbiotic structures that explain why meanings produced in languages also correspond to performative mechanisms.

Jean Piaget's operative constructivism would have helped contest N. Chomsky's nativism and make the gulf from the metaphysical to the empirical crossable. Still, he played no palpable role in the new metaphysic plot.

Calling the global structure *agencement* and defining its emergence as a rhizome by contrast with the tree metaphor is helpful as an image. However, images are not yet concepts.

Performing linguistic utterances can be approached as a pile of many first-order imageries or pre-scientific descriptions. One could proceed similarly in law by viewing legal pluralism in comparative or international law as a pile of many normative sources not reducible to one sovereign source. However, this only poorly accounts for the concrete mechanisms underlying normative import-export flows or cross-feedings across differentiated legal systems. When the authors of *Mille-Plateaux* claim that language as an "abstract machine" is never "pure" language, they are undoubtedly correct, not because one has followed the hints entailed in the metaphor of a particular vegetal root but due to the concrete connective grids of operations that pertain to a single utterance.

The hyper-linear system (Deleuze and Guattari's 1980, p. 121 – "système surlinéaire"), identified with the rhizome, a pile-like, inter-strata layout, and extensive connections across different territories, is not a bad image. The trouble is that it is precisely an image.

As mentioned, some *Mille-Plateaux* theses and systems theory conspire against traditional hierarchical thought. Nonetheless, there are also significant differences. According to systems theory, concepts are not suggestive tools like metaphysical images.

Concepts have other functions in shaping distinctions and describing selection patterns occurring from operations. Take the example of the other impactful image of the "virtual cosmic continuum" ("continuum cosmique virtuel" Deleuze, Guattari, 1980, p. 121) as the inner vocation of rhizomatic communication. It does not describe; it does not establish any distinction. The purpose is to give a total view of a manifold and its occasionalist dynamics. Envisioning such a continuum would correspond to a universal fusion, genuine immanence in the body of the earth, and the absolute limit of hybridizations incompatible with the notion of forms, distinctions, selections, and systems.

The universal fusion explains why the "body without organs", the perfect participation in all, is not a concept but an image. Images are helpful in

first-order observations, literature, myths, metaphysical world views, action ruling, and control or in creating a "seeing as" effect to guide perception. However, with images, one cannot access the functioning of operations or the distinctions and selections they materialize, even if their contrasting rhetorical power is undeniable.

Evoking the importance of gathering all the contextual variables to understand linguistic meanings or the use of a norm in a system of norms, comparing language with music or with "pure time", "pure" continuity of all with all, the "virtual cosmic continuum" loses any potential in converting an image in concepts. If, by paradox, the continuum turns out to be a concept, it stands for the dissolution of any conceptual activity. Thus, they seem not to hesitate to risk the rhizome as a form to save the rhizome as an image of the total immanence of the continuum. However, as they also acknowledged, the rhizome does not have the same meaning in the two uses.

The authors' accounts of linguistic variation entail remarks on linguistic minorities and transformation as an effect of minoritarian influence in linguistic patterns. Language evolution would consist of a series of torsions in linguistic elements that introduce minority patterns into standard uses until the deformations convert into mainstream tendencies. For example, musical variations applied to a central musical recurrent theme produce deterritorialization and reterritorialization effects in sound sequences.

The field where the standard and the minoritarian patterns meet is a field of forces and torsions responsible for deviations in the long duration if minorities ensure sufficient cohesion across a series of deformations in the nodes of their horizontal connections that impact the standard uses, even if they don't have enough force to become legislators – torsions, deterritorializations are not insurgencies to get a global control.

The musical metaphor and the dynamics of de-(re)territorialization aim to show how continuity is interrupted according to defined layouts (*agencements*), which are synthetic productions of power relations, meaning interpretations, social formations, and agency. From the previous continuity, another kind of continuum emerges.

Quoting Michel Foucault, the authors regarded the systems of signs (*régimes de signes*), including the message, the subject of enunciation, syntactical structures, and semantic-pragmatic presuppositions, as functions of language production embedded in social situations where power relations also occur. The subject of enunciation emerges from this enunciation layout

as a process they call subjectivization (Deleuze and Guattari, 1980, p. 162). The point of subjectivization is an exterior position, a "thou", from which one receives the capacity and entitlement to become a subject (Deleuze and Guattari, 1980, p. 163).

The point of subjectivization is a compound of diverse factors, a manifold that triggers agency, knowledge formations, or discourse where there is nothing but the empty name of the subject in becoming an addresser.

An impressive account of war, violence, nomadism, and political sovereignty crosses essential pages of chapter 12 of *Mille-Plateaux*. Here, the central images have evident socio-political and legal connotations.

Defining war and understanding whether violence is a primitive notion are complex endeavors that require premises from prehistory, archeology, and anthropology and what one can get from political theories. The authors' central purpose is not an academic presentation of that definition but a demarcation towards traditional views, relying mainly on Georges Dumézil and Pierre Clastres's works on Indo-European institutions and primitive social organizations, respectively.

From G. Dumézil, the central ideas to remind are the distinction between the three classes of the Indo-European archaic social institutions, the priestly class, the warriors, and the producers, and the clear differentiation of the warriors from a previous, politically defined, central sovereign power.

From P. Clastres's ideas on the forms of primitive political governance, G. Deleuze and F. Guattari retained the thesis, stating that war is a means to prevent the formation of the state instead of being (initially) a tool of political ruling and domination.

These are the mutually consistent sources from whom *Mille-Plateaux* inferred a series of images. One of them, the pivotal, is the image of "the war machine."

Philosophy of History is here unavoidable, and it is again from an imagistic reconstruction of the past that they concluded the close connection of the war machine with nomadic primitive groups, Gengis Kahn and not the actual migrants, designing at the earth's surface the same loose constellations formed from rhizomatic growths and opportunistic connectivity in the underground. In contrast, systematically confused with the nation-state as a modern idea, the *Polis* epitomizes the consolidated, reterritorialized space, obeying the principle of gravity, a solid, secluded, and delimited grid of enveloped places, hierarchically organized.

Excluding a political genesis and the hunting genealogy, war and the war machine are independent genera, though permeable to political appropriation. Correcting P. Clastres, who allegedly completely secluded the war machine from the centralized power of the state, what is now essential are the episodes of appropriation of the warriors' violence that contributed to the consolidation of political sovereignty and the transformation of the lawless violence of primitive communities. The dynamic approach again focuses on forming hybrids, such as the War-State hybrid, following appropriations and parasitical combinations of diverse types.

Mille-Plateaux resorts to a Philosophy of History inspired by G. Dumézil's partition of archaic Indo-European political ruling in the characters of the emperor, the king-legislator-priest and the warrior related to the three types of violence of the lawgiver, magic and sorcery, and the war machine. In such a genealogy of authority and sovereignty, the war machine kept a relative distance from the other types of violence, particularly from the lawlike administrative mechanisms invented by the king as a lawgiver.

By mapping the configurations across this long duration, *Mille-Plateaux* reclaimed a more extensive reconstruction that would explain the political appropriation of the war machine as a territorial move of de-(re)territorialization, as a passage from the interior to the exterior, from the center to the periphery as a political means to achieve violence's enclosure in the territory.

Three autonomous forms merge in this story of displacements and enclosures across the territory and indeed as territorial events, from tribes to states and empires – the war machine, political sovereignty, and law. Hence, a new character comes to the foreground – the gangs (Deleuze and Guattari, 1980, pp. 445-6 – "les bandes").

The first thing to note is that gangs have a structure completely different from that of states. A trait that differentiates gangs from states is the presence of the war machine in its primitive form in the former type (ISIS is a contemporary regurgitation) and its relation to the territory and population displacements. The gangs are associations of people not exclusive of militia or para-military organizations – churches or commercial businesses may have gang-like structures and similar procedures. The war machine is among them not only as a set of mechanisms made to oppose movements to other movements, as entailed in the mechanical sense of "machine", but owes its whole meaning to a form of knowledge consisting of problem-

solving from problem-projecting. In dealing with exteriority, nomadic thinking is similar in procedure.

One outlines two kinds of science. One is the royal science, "platonic", *more geometrico demonstrata,* going from axioms and theorems to conclusions or general rules to cases. The other is problem-based, problem-solving science, nomadic, gradually emerging from experience, exemplified in Archimedes' hypothetical-deductive or abductive-mechanical knowledge. The difference between the two sciences, the royal arts and techniques and the nomadic problem-solving, also applies to contrasting metaphysical pairs of opposites, such as solids and fluids, rhythms with measures, and non-measurable rhythms.

Gangs are liminal associations that navigate through the pores of institutions, smuggling various tools from the two types of sciences.

The thesis according to which the nomadic sciences have traits that can never become fully integrated into the royal sciences is difficult to sustain (see the explicit statement of their independence in Deleuze and Guattari, 1980, p. 462) without detailing the set of operations performed on their typical layouts. Due to their assimilation of the same dichotomic thinking they have criticized, the royal science and the state are models of thinking one could abandon to enter a new sort of nomadic displacement (Deleuze and Guattari, 1980, p. 464). One may wonder whether royal, sedentary, tree-like science cannot assimilate the nomadic layout or whether, more radically, the territorial imagination is sufficient to depict modern society, the political system, and the law.

Recognizing the rights of nomadic science regarding the royal disciplines in coping with complexity explains the call for a new "thought of the outside" (*une pensée du dehors*) that would perform like the war machine as a tribal layout instead of resorting to an exclusive nation-state centralized source of norms. Yet, conceptually, this is much more difficult to determine than to imagine. By recognizing the extensive and movable contexts of the semantics of law, one has only identified the field of the complex problems related to defining political ascription and legal jurisdiction.

There can indeed be sources of law that do not rely on the nation-state as the first addresser. However, can one say that such sources belong to noninterpretable meanings according to the grammar of the political and legal sovereignty of a political system?

2. From Rhizomes to ANT's Holobionts

Approaching B. Latour's last writings, one can draw a remarkable parallel to *Mille-Plateaux*, regarding a new mythology of the earth.

In the aftermath of the COVID-19 pandemic, B. Latour wrote a book, *Où suis-je? Leçons du confinement à l'usage des terrestres*, described by himself as a "philosophical novel" (*un conte philosophique*, see Latour, 2021, p. 98), where he vindicated the "Nomos of the Earth" as an original kind of law, not avoiding quoting his source – Carl Schmitt and his homonymous work.

As is well-acknowledged, the concepts of forces, actors in the broader sense, which includes non-human sources of the agency, actors' strategical negotiations, actors' networks, translation mechanisms between forces, "creodes" and black boxes play a decisive role in the formation of ANT as a meta-theoretical project in philosophy of science and the social sciences. A good illustration of the shared principles of the research team around B. Latour is Michel Callon and B. Latour's 1981 essay "Le grand Léviathan s' apprivoise-t-il?" – an essay on the formation of political representation, to introduce the notion of translation, inspired by Thomas Hobbes's concepts of actor, author, and authorization (Latour, 2006, pp. 11-32).

For a moment, let's turn to *Où sui-je?* Here, we find ourselves on the same Earth as B. Latour and G. Deleuze-F. Guattari, who called it a place of flows, mixtures, configurations of different temporal strata, and displacements – a metaphysical-mythological land.

In the context of the pandemic, B. Latour added James Lovelock and Lee Marguli's *Gaia hypothesis* to this fund to introduce the composite, perplexing figure of the Holobiont.

A holobiont is any living creature with a central system and peripheral functions operating as a host of symbiotic or parasitic organisms that assemble a network of mutually dependent performances with the larger organism. The internal circuits of such an assemblage are networks representing micro-ecologies.

The holobiont reminds us of a symbiotic continuum, using the earth as a connective substratum. Like the virus in the pandemic, it encouraged a crisis in conventional views of territories or national borders, which have helped characterize the frames, and especially the limits, of the state's legal jurisdiction.

A definition of the holobiont's identity would face the paradox of containing a constellation of mutually dependent, communicating elements in the notion of an essence already transgressed by the flow of the interconnected parts. Moreover, one of the common characteristics of holobiont organizations is their superpositions (Latour, 2021, p. 87), configuring strata of interdependent organisms sustained across the nodes of their connective tissue.

The need for a new local-global approach (the network image) after the pandemic explains a new valuation of the distinction between the place where I live as a citizen, a delimited location under a well-defined legal jurisdiction, and the vast regions on which I depend to live, which has become a large field of extraction and exploitation, with which I have indeterminate ties, that may become infectious places, not obeying the same regulations. B. Latour did not employ the notions of deterritorialization or reterritorialization typical of *Mille-Plateaux.* Still, recognizing these flows as unruled transactions between two worlds, he thought of a similar transgressive, non-planned local and global dynamic: *Les droits du premier monde ne s'* étendent *pas dans le second* (Latour, 2021, p. 86).

The holobiont is a splendid imagistic resource for B. Latour's purposes, offering an example of his networks and actors.

It is a reminder of three crucial claims in his work since the essay on T. Hobbes, the book on Pasteur and *Irréductions: i*) that a description of agency cannot avoid integrating humans, other complex animals, micro-organisms, artifacts, and social institutions, intentional and non-intentional agents; *ii*) that the relations between actors are evolving, contingent configurations made of forces distributed in networks; *iii*) the actors enter in alliances and confrontations, maintaining asymmetric, power relations among them due to translation mechanisms responsible for reproducing hegemonic positions, modifying contingent links in "creodes" and black-boxes.

3. ANT at work in a Law Laboratory – the French State Council

B. Latour's application of ethnomethodology to science dates from his 1979 collaborative book with Steve Woolgar *Laboratory Life.* It was the first

successful endeavor in the philosophy of science to use ethnological observation and description tools in approaching the strategies of scientific actors in the production and written dissemination of scientific outputs.

The second essay on applied ethnomethodology examined the central institution of the French administrative law system, the Napoleonic *Conseil d' État*, first published in 2002 as *La Fabrique du Droit* (translated into English in 2010, which I follow).

The book offers a general approach to current themes of the philosophy of law, especially a criticism of legal formalism, a sociological analysis of bureaucracy, a detailed ethnomethodological guide to the French *Conseil d' État* procedures, and an illustration of ANT's theoretical assumptions.

Regarding the interpretation of the law and the hermeneutical nexuses between the abstract statements of the legal rules and the singular cases, B. Latour continues the well-known postpositivist and post-kelsenian theses that have rejected the image of the quasi-automatic logical subsumption of the instances under general imperative rules. Still, he added ethnological observation to the well-known conclusions of the criticism of formalism, showing that the Ethnologist's assessment of the law practices in the French State Council cannot confirm the formalist description of the law application.

Law application isn't an "automatic reflex" (Latour, 2010, p. 160) that applies abstract rules to cases. He believed faithfully engaging with vivid examples should culminate in anti-formalist conclusions. If deductive inference doesn't suit legal interpretation, a broader understanding of the legal text must address these limits.

Although the treatment and critique of law focuses more on sociological and institutional aspects rather than purely logical argumentation, the author seeks to integrate dimensions such as types of arguments, legal procedures for lawsuits, written legal codes, the use of "Recueil Lebon" for Council decisions, the law's written and oral memory, actors' roles based on Council categories, and interests' weighting according to their power and representation. These dimensions do not always align with a deductive, argumentative structure. So, concludes the philosopher, they must be *forced* to align with reasons corresponding to the juridical decision's argumentation, rejoining the claimants' precise demands in lawsuits. This *forced* alignment of various dimensions in making a juridical decision on administrative law in the *Conseil d' État* explains using textuality as a weaving of many sources,

not a fixed textual *corpus*. Texts, agents, interests, forces, and resistances are conceptual tools that converge to clarify what the Philosopher-Ethnologist considers the intertextuality of administrative law at the State Council (Latour, 2010, p. 184). The continuous reference to forces distinguishes the ethnomethodological approach to the law from the Hermeneutics of legal texts. This one is mainly concerned with the techniques and practices of correlating written legal texts, actions, and the world of the texts through understanding and interpretation.

Across the Ethnologist's annotations, irony is a constant revealing that the State Council actors' public conceptions about administrative law and their function as guardians of the Constitution and custodians of legal security, juridical continuity, and predictability are surface phenomena of tensions of forces that occur on larger contexts resorting to another bundle of actors weaving their networks and texts.

Thus, force and text, as the two main categories of the ethnomethodological view of law, are put in a dynamic correlation that explains the legal actors' hesitations, lengthy deliberations, and the pluralism of legal opinions revealed through the records of the system's memory. In defined networks, such as administrative law, forces, and texts capture the contingent nodes—the singular lawsuit cases—to produce inflections of the network, as in the case of decisions that may promote a new correlation of forces even when covering the underlying conflicts.

Referring to the politically delicate cases the State Council must address, the Ethnologist discusses the example of a decision on how to apply a prohibitive norm of the French Penal Code (art. 432-13) regarding conflict of interest to the nomination of a public servant ceasing his functions in public administration to an essential private bank, appointed by the President of the Republic (Latour, 2010, pp. 160 ff.).

The arguments' weights do not go to the rules, subsumption, or analogical discovery of cases' similitudes in jurisprudence texts and precedents alone but to the nature of the claims produced in the lawsuit and the predictive gains and losses estimated for the stability, predictability, and safety of the system from the outcomes of a decision favorable or not to the groups of interests to be pondered.

The parties' claims in the lawsuit triggered a movement known as the "passage of the law" (Latour, 2010, 160). This passage means organizing the legal dimensions associated with the case to prepare the legal discussion

leading to the final decision, which becomes a valid legal obligation for the parties involved.

In France, the transference of public servants to the private sector was common, notwithstanding the rules of art. 432-13 of the Penal Code explicitly prohibited this situation. *Contra legem* practices prove that the law is not always the sort of sociological obedience people usually attach to it. This apparent paradox motivates assessing what makes a legal obligation an actual obligation, where it begins, and where it ends.

Let's start by stating that the obligation presumed in law is a "mixture." What makes an imperative statement law is the mixture that has translated its sources from non-legal elements to a complete legal rule and from this to new instances through textual *unpure* understanding, forming law as an actual image of a holobiont.

How can this happen? The author reminds us that he is aware of the circularity of law – to define any law statement, one must presuppose the law. It seems impossible to leave the circle of self-presupposition in the law system. This self-presupposition is why the law system is one of the best examples of a self-referential system. Self-reference could be a complex problem for the Ethnologist, who confesses his embarrassment when inferring theoretical conclusions from his field notes facing the problem of self-referentiality.

According to the Ethnologist's notes, the formation of a lawsuit through litigation is evidence of the mixture – systemic elements on one side and "exterior" elements on the other, a territorialization flow, and a deterritorialization counterflow or what, in a condensed formula, he calls "mixture of climate and law." In the aspects of the counterflow, one would mention the self-endowed discretionary power of the President of the Republic when recommending the civil servant for the bank position as a non-legal *voluntas*. Yet, a non-legal *voluntas* is what it is – it has no existence in the law system as a source of legal obligations; it is lawless and powerless in the same sense. Moreover, from the lawless-powerless exteriority of *voluntas,* nothing legal follows. This strict self-referential cycle should prove an interruption in the flows, not their continuity.

The recorded discussions of the counselors of the State Council evolve across many themes that do not necessarily have any legal content. From this first-order observation, the Ethnologist concludes that legal reasoning and legal procedures, legal obligations, and decisions are "mixtures" that emerge

not only from the cognitive alertness of the law system but from its constitutive reliance on relations of forces inside and outside the courts, across the procedures, during the deliberation and litigation.

This expected conclusion on the metaphysics of forces develops theses of *Irréductions*. Its direct application to law is very disputable. That the Ethnologist is aware of this is easy to conclude from his remarkable ability to quote the counselors' argumentation in conjunction with his comments on the relations of forces underlying the bureaucratic hierarchy of the State Council. Ironically, he states that "it is essential for the quality of law that there is nothing but law in law" (Latour, 2010, p. 166.) Despite the irony of the affirmation in the middle of the argumentation on recognizing the extra-legal themes in legal deliberation, the phrase is a rigorous description of law as an autonomous functional system.

Through the lenses of a first-person view, the Ethnologist missed the point. The point is not the admission of *extra-legal* contents in deliberations on lawsuits across the juridical conversations of counselors and legal experts leading to legal outcomes but recognizing that legal procedures about lawsuit instances' entries and exits determine what must or must not be addressed with legal means in (legal) cases. That this entails a virtuous circularity is not arguable. What should be evident from a second-order observation, and it is not available from the first-person notes of the Ethnologist, is that it is due to this self-referential presupposition that legal communication is possible.

Because of the law's circle, nothing exterior to the law *forces* the law to become law or the State Council to endorse this and not that decision. Unlike Ethnologist's statements, the system's closure is not a phenomenon concealing a deeper essence made of (extra-legal) forces and power.

By introducing a State Council character, the chronicler B. Latour addresses the central themes of law's time and memory, but again, only to emphasize his primary theoretical generalization: that the law in court decisions, chronicles, and other archives is a special kind of bundle, aggregation, or grouping of an assortment that generates or maintains a particular direction in a field of forces.

Regarding metaphysical images, we have seen what G. Deleuze and F. Guattari made with their heterogeneous underground bundles, the rhizomes. With B. Latour, the image of the bundle remains, stressing the local tensions producing aggregation of energy, matter, and actors with

agency involvement and meaning production. The Ethnologist is interested in the formation processes of constellations of actors and materials they can assemble to pursue their goals coming into existence due to extraordinary "coups de force" also in the "saying of the law" as a performative speech-act. Some outcomes of these generations are extensive hybrids or colonized organisms like the holobionts.

Like *Mille-Plateaux's* rescue of the performative dimension of discourses, the Ethnologist at the law lab also stressed the highly ritualized *milieu* of the felicitous conditions of the saying of the law, where the sequences of the legal actors' deeds should pertain to a set of diagrammed rules. Thus, it ensures combining a hierarchic style with a networked layout of social interests with the respective forces.

One hybrid within the State Council involved in producing legal norms is the judge-legislator. B. Latour criticizes formalist legal theories and examines judges as producers of legislation. He discusses the State Council's role in clarifying interpretative options and choosing solutions to achieve normative coherence. Using a geological analogy, he argues that jurisprudence requires filling omissions, removing semantic imprecision, and aligning precedents with new interpretations, similar to crushing organic life into the earth (Latour, 2010, p. 183).

Administrative jurisprudence in "Recueil Lebon" illustrates the judge-legislator's role in addressing the system's weaknesses through hermeneutic methods and analogy. The concept of "the will of a body of judges" (Latour, 2010, p. 189) and their recorded opinions reveal a gradual law evolution through minor adaptations, contrasting with revolutionary changes in legal history.

More agents attending or looking for the State Council's decisions join this hybrid figure, such as claimants, lawyers, reporters, revisers, commissioners, chroniclers, and academia experts (Latour, 2010, p. 192). They form the human actors to which other material substances adhere, such as documents and files in classified archives, the AN in ANT.

What ensures these actors belong to law is the translation they fulfill of a set of ten "value objects", carefully diagrammed (Latour, 2010, pp. 194--195): the authority of the agents, the progress of the claim, the organization of the cases, the relative interest of the cases, the weight of the texts, the quality control of law's felicitous conditions, hesitation and freedom to ponder, means and arguments mobilized, the coherence of the law system, the limits of law as entry and exit rules in lawsuits.

Translation is a fundamental notion in ANT's vocabulary. It means creating layouts of networked actors that define each actor according to a particular relation of forces. The dominance among these relations and participants conveys the interests of the actors who achieve victory in consolidating and reproducing the network and its assembled objects.

The State Council exemplifies a batch of translations from its actors' connections regarding the ten value objects.

Since the networks evolve and mobilize very heterogeneous materials corresponding to the material multiplicities of the lawsuits, the notions of plasticity and heterogeneous multiplicities are appropriate to stress such moving ground and the slippery of the objects and actors.

> (…) this material has a very particular plasticity because each agent modifies the form taken by arguments, the salience of texts, and traces on this ectoplasm of the administrative law a set of divergent paths, mobilizing clans who confront each other with facts, precedents, understandings, opportunities or public morality, all of which are used to stoke the fire of the debate. And when this process comes to an end, it is never because pure law has triumphed, but because of the internal properties of these relations of force or these conflicts between heterogeneous multiplicities. (Latour, 2010, p. 192)

This passage is significant. I'll divide the quotation into two parts and draw a few criticisms.

1. The author claims that law is grounded in a field and through connections that do not belong to pure law. This thesis represents his anti-formalist creed. However, the Ethnologist infers from the need to banish logical formalism more than this banishment alone allows. The implicit rejection of logical formalism justifies the creed. However, logical formalism in law has been rejected in various ways that do not necessarily lead to affirming forces as the springs of law. As I emphasized, invoking forces and the "internal properties" of the relation of forces cannot exclude the self-reference of law, which is neither an outcome of logical formalism nor a "force" and represents a symbolic condition of law's reproduction. Still, the law's self-reference remains under Latour's attack. The "internal properties" of forces is an ill-defined notion, particularly if one applies the non-reductionism of *Irréductions* to forces.

2. Law as an ectoplasm arising from translation is undoubtedly a very impactful image. An ectoplasm is a viscous excretion where materials of heterogeneous proveniences are assembled but in such a manner that it is difficult to establish the limits of the original forms. The ectoplasmic figures are medium-transfigured phantasmagoria aggregated by the density of the viscous substance that is neither real nor purely imaginary. In its suggestive power, the image may be evocative of the impression caused by the "saying of the law" in an onlooker. Nonetheless, it is unable to explain how the engine of law operates. The difference between an image and a concept relies on the suggestive function of the first and the explanation power of the second.

4. Artificial intelligent agents and ascription in a population of plural agency

The description of the French State Council is perfect for providing an example of the attempt to combine empirical research and the use of images in generalizations of the metaphysics of forces typical of ANT. However, as concluded in 1 and 2, these do not always lead to coherent outcomes.

As introduced by B. Latour, himself, Michel Callon, John Law, Madeleine Akrich (Akrich, Callon, and Latour, 2006), or in Graham Harman's neo-Heideggerian version (Harman, 2009, 2011) ANT's concept of actor represents an essay to emphasize some non-trivial properties of agents and agency, such as the relational character of agency (*i*), its networked assemblage resulting from force and relation of forces (*ii*), the inclusion in the "actor" category of non-human agents, such as animals or micro-organisms, material objects and artifacts (*iii*), the bunch resulting from actors' aggregations (*iv*) the actors' subjection to translation mechanisms that explain the difference between micro- and macro-actors (*v*).

Beyond many stylistic similarities with the rhizome and the use of the metaphors of the soil and earth, ANT and the rhizome are decentralized, non-formalists, reject the processive dichotomic path from the One, and are occasionalists (see Graham Harman's reading of ANT in Harman, 2011). They also shape new views on local-global connectivity that may be attractive for various disciplines.

Outside the French State Council law laboratory, as we approach the conceptual demands of situations where multiple agents act, accountability and unequivocally identifying the accountable agents from the sequential layouts of causation become proof tests of some of the ANT's claims using images of bundles.

At the crossroads of *quaestio facti*, *quaestio juris*, and moral judgments, ascriptive judgments and assignments are among the primary functions of legal systems and reasoning. They entail discrimination of action courses, an unequivocal definition of causal sources of events from the "facts", categorization of agents, and a gradation of the levels of agents' responsibility according to the law's determinations and moral accountability.

The recent dissemination of digital platforms in digital networks using artificial intelligence software expanded the daily life presence of expert systems in extracting information and generating new forms of cognitive expression, communication, and decision-making. AI experts stated that the future of these technologies will be in the creation of intelligent agents with enlarged cognitive and communicative capacities. The outlook seems like a giant ANT creature made of many holobiont structures and connections. However, this impression is again the outcome of taking the image for the concept; it is an imagistic suggestion. Like all images, it projects ways of looking at things. Still, it is poor in enlightening how things work. Determining accountability in an agency involving artificial agents is impossible with images as descriptive tools.

One should address ascriptive determination under an analytical orientation in adopting the values of AI ethics, such as "do not harm" and human rights, inclusiveness, flourishing, autonomy, explainability, transparency, awareness and literacy, responsibility, accountability, democracy, good governance, sustainability, safety and security, gender equality, age non-discrimination and age awareness, privacy, solidarity principle, the value of justice, holistic approach, trust, freedom, dignity, remediation, addressing bias, ethics in engineering education, enshrined in legal documents of international organizations (UNESCO) and the European Union.

Central tasks in scrutinizing ascription include discriminating between courses and sources of action and separating overlapped sequences from different sources. Such discrimination work is particularly decisive in networks and networked action sequences with multiple agents, independently of the recognition of the capitalizing effect of the global network over its

isolated elements. These tasks are causal, ethical, and juridical endeavors to identify accountability categories for the described action courses.

On October 22, 2024, two societies of attorneys representing Megan Garcia, mother of Sewell Setzer III, a suicidal 14-year-old boy, filed a lawsuit in a civil action against the AI Company "Character Technologies Inc." ("Character.AI"), its owners and founders Noam Shazeer and Daniel de Frietas Adiwarsana, "Google LLC" and "Alphabet Inc." in a Florida court (US District Court, Florida, Orlando, case 6:24-cv-01903).

Their complaint was about "wrongful death and survivorship, negligence, filial loss of consortium, violations of Florida's Deceptive and Unfair Trade Practices Act", also demanding injunctive relief. Widely divulged through the mass media across the US and Europe, the case of the young boy who committed suicide after engaging in communication with the fictional LLM AI-generated characters of "Character AI" (associated with Google) represents an example of a cybersecurity lawsuit.

For the first time in human history, the question of a machine's responsibility for praeter-intentional consequences, as an ascription problem, is raised with social urgency. The mother claimed that her son committed suicide under the influence of his dialogues with the chatbot character "Dany" (inspired by the "Game of Thrones" character Daenerys Targaryen), who engaged with him during a long period through an AI digital LLM application provided by "Character.AI", the firm of the defendants.

The plaintiff claimed that thanks to the obfuscation between fiction and reality, the 14-year-old boy, Sewell, couldn't realize he was communicating not with natural persons but with an artificial entity due to the defective or dangerous AI LLM dialogue with highly realistic, anthropomorphic, sexualized prompts and after a prolonged exposure to the abuses of such vitiated communication he committed suicide. During his last months of digitally addicted communication and addiction to cell phone use, Sewell degraded his familiar and scholarly situations to the point of desiring to be kicked out of school until the tragic outcome.

The circumstances evoked in the plaintiff's text remind us of an assortment of networked actors with very different responsibility weights in the case: natural persons, "Character AI" acting as an artificial agent, and a matrix of other agents that have the communicational status of fictional automated persons, people of the school network, people of the family network, the cellphone, Google LLC / Alphabet, and Sewell. Clarifying each actor's role

and accountability are critical in deciding the lawsuit. Knowing that Sewell was associated with fictional AI characters in communication and became so inherently part of a network of fictional characters that he lost the sense of reality is the image one could infer from an ANT-like depiction. However, it is unfruitful to distinguish accountable from non-accountable actors. One can evaluate accountability in a population of multiple agents concurring to producing a consequence if one analyzes the distinct operations the actors perform and separates them so that the differentiated action paths are manifest from causal and intentional points of view. Conceptual discrimination is the product of conceptualization, an operation very different from creating images, which is essential in juridical proofs and moral judgments.

Additionally, but no less critical, agency is a traditional psychological notion connected with experience as psychological inner cognition. It is not impenetrable to communication, but its connective nodes differ from communicative connections. Communication and psychological action are autonomous yet entangled in various ways. Due to their autonomy, which the new artificial agents magnify, their entanglement is unstable and unpredictable. The autonomy may generate consequences such as those revealed in Sewell's suicide – communication derailed the psychic elaboration.

Artificial agents are not a uniform category. The life cycles of data and artificial systems based on Machine Learning are diagrams sequentially structured into stages of technological design, combining data and programming. Before considering the system in real-world performance, several types of agents may intervene at each design stage. Some human agents are natural persons performing operations on the system as designers. Formal organizations with legal personalities may have the financial and institutional means to support the system's inception. Each of them can be a source of decisions that affect courses of action in an AI system's development phases and can negatively interfere with the functional capacity of the unit in real-world conditions. Such a constellation of actors reflects what some authors called a "pool of agents" like ANT's hybrids. However, this notion could also be misleading. Different types of responsibility come across the "pool" of agents throughout the design stages. No single source of decisions for the group exists, even before the system goes into operation. After the operation and considering any injury to third parties, the agents also differ in what concerns civil and penal liabilities.

On the other hand, in a strict sense, automated artificial agents, with or without Machine Learning algorithms, are autonomous agents if their decisions rely on the internal sequences of their algorithms independently from external guidance. They also produce effects that causally depend on them. But are they intentional agents like humans?

Regarding data processing systems based on AI and Machine Learning, including LLMs, I distinguish between three types of agents with some further subdivisions: system designers, digital service providers (public and private), and artificial agents with intelligent programming.

In the context of a discussion of machine ethics, J. Moor distinguished between artificial agents provided with implicit ethical capabilities, explicit artificial ethical agents, and full artificial ethical agents. The first category includes machines that achieve previously defined goals precisely, do not perform more than planned, and avoid detours. They are implicitly ethical since they aim at valuable social ends. The explicit machines have a program that includes a representation of practical duties and a map of forbidden and authorized ways, and they may be engaged in ethical decisions, such as saving lives or avoiding harmful situations. The full artificial ethical agents can offer justifications for the ethical choices they make. Full agents act like responsible human persons in justifying action courses. It is a controversial issue whether machines can become full ethical agents (Moor, 2011; Floridi, 2013, pp. 34 ff.; Holst, 2021, p. 71).

In my book *The Automated Self* (Balsemão-Pires, 2024), I extensively addressed the status of artificial ethical agency and concluded that agents' full intentionality applies to humans. Consequently, penal liability applies only to human agents, whether individual or collective.

In Sewell's lawsuit, the "Character.AI" chatbot excels in conversational skills and is an implicit ethical agent, according to J. Moor's categories, but not a full ethical one. The plaintiff claims the designers were negligent by failing to create ethically explicit algorithms, especially regarding conversations with children and inappropriate content. Sewell's mother and attorneys criticize the chatbot for exploiting children like her son, who became addicted due to its unethical design. Their claims highlight the chatbot's ethical limitations, its incapacity to address court complaints adequately, and its creators' accountability, including two engineers, "Character.AI" and Google. The service providers and the designers were summoned not as the direct causal sources of the injury but as the responsible

agents. This differential treatment highlights the difference between causal accountability and ethical or legal responsibility in civil liabilities, emphasizing the need for clear distinctions in legal systems. Such conceptual processes were ineffective under a first-order approach, influenced by the imagistic appeal of a pool of agents.

5. Metaphysics of Society – for which purpose?

Action guidance influenced by images is one use of mythical and meta-physical thought in premodern societies and their modern inheritors. *Vis-à-vis* Mille-Plateaux and ANT's social theory, I claim that contemporary proposals of metaphysical accounts of reality are not exceptions.

The underlying thesis of a rhizomatic metaphysics of knowledge and action, its praise of contingency, and the non-hierarchical distribution of knowledge's seeds are premonitions of modern society's unpredictability, its acentric structure, and the coming of non-classical models of cognitive organization, which today include cognitive artificial systems as sources of scientific knowledge and tools for decision-making. Rhizomatic, non-hierarchical thinking is not wrong or a problem. What is displaced is the metaphysical grammar associated with its configuration within a textual style that did not consistently overcome the metaphysical use of images.

In modern society, contingency and unpredictability are not images' contents but values embodying operational complexity.

Niklas Luhmann described systemic autonomy and operational closures at the core of modern acentric society, which resulted from the basal differentiation of communication and consciousness or the operational autonomy of social and psychic systems (cf., for example, Luhmann, 1997, 1; pp. 120-128; Balsemão-Pires, 2011, pp.13-43).

Modern society (and the modern law system) relies on evolutionary-acquired operational closures, which demand a focus on the type of operations and functions systems reproduce. This operational complex field could explain the couplings and entanglements with other systems in joint sequences that only last if there is cooperation for specified functions. The complexity that results from an acentric reproduction of operationally closed forms is only accessible if refined concepts are used instead of images to serve the art of drawing and following distinctions.

The two historical knowledge scaffoldings portrayed here, the model of image and the conceptual model, are less opposed in their textual conclusions than in their conditions of possibility and method. The difference in method is straightforward, attending to B. Latour's overt and misleading criticism of systems theory in his book on the State Council (Latour, 2010, pp. 263--264; cf. Luhmann, 1993).

Regarding the conditions of possibility, let me add that there could be no possible images of contingency or unpredictability. G. Deleuze, F. Guattari, and B. Latour should have envisaged the paradoxical intent of using images to describe what is only accessible through the patient conceptual discrimination of entangled connections across self-organizing systems. There is no possible system of images of complexity.

Besides supporting introductory views on conceptual roles in theories and despite the importance of imagination in theory design, scientific descriptions do not rely on images because they scrutinize systems' functioning and internal operations. Thus, it is understandable that between image uses and conceptual roles, there is a dividing line between science and metaphysics, the spirit of the Enlightenment, and classical metaphysics. An overt problem comes from knowing whether philosophy, philosophy of science, and philosophy of law still need images and for what purpose.

The purpose of using images instead of concepts is political, not scientific or juridical. Images of the totality guide the action of defined actors or the masses. According to a counter-cultural strategy, such use is palpable across *Mille-Plateaux* or in B. Latour's use of soil and organic metaphors demanding a new earth as a post-scientific myth. Instead of offering a map of distinctions for conceptual elaboration and beyond the limited rhetorical value of a stylistic tool, the purpose is to foster a political attitude.

My question is whether the use of images for political ruling emerged from the democratic tradition of modern society. Here, where we are presently *de*-situated, the political ruling does not occupy the center, its territorial unequivocal position becomes questionable, and it can no longer be the royal foundation of society. Our modern, unpredictable condition no longer belongs to the political-metaphysical layout of a royal knowledge of society or its communitarian imagination.

Due to their roles in transforming the cognitive structure of networks, artificial agents are not pure accretions of existing cognitive types as material forms aggregated to the strategic maneuvering of humans and other actors,

as in many ANT hybridizations. Indeed, artificial agents as cognitive forms raise challenges in clarifying moral and legal accountability and responsibility because their operations do not correspond to the classical psychological cognition, intentionality, and agency type. Neither material forms nor psychic contents, artificial cognition, and artificial agency seriously defy the ancient privilege conceded to consciousness as the universal and exclusive source of knowledge and to conscious will as the source of action. Also, no appropriate images can exist for the complex connections emerging from the new networks across the transactional spaces combining information and meaning. The Holobiont is no exception.

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