Vanishing Normativity? Legal Theory in the Digital Age*

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Abstract: Legal theory confronts profound challenges in the digital age, where emerging technologies redefine traditional notions of normativity. This paper explores the intersection of jurisprudence and digital society, contending that the rise of algorithms and artificial intelligence disrupts the conventional understanding of normativity.

The digital landscape blurs distinctions between online and offline realms, requiring a reevaluation of legal normativity. While some view algorithmic regulation as eroding normativity by supplanting traditional legal norms, this paper proposes a nuanced understanding rooted in Wittgenstein's language philosophy.

Drawing on Wittgenstein's concept of rule-following, this paper reconceptualizes normativity as a continuum, encompassing algorithms, models/standards, and laws/norms. It argues that legal normativity can be better understood through implicit normativity, as articulated in discussions surrounding Wittgenstein's later writings.

Moreover, this paper advocates for a methodological shift in legal theory, emphasizing the role of socialization in normativity acquisition. Insights from Norbert Elias and Bruno Latour underscore the social processes

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underpinning normativity, transcending traditional philosophical frameworks.

In conclusion, this paper highlights the imperative for legal theory to adapt to the challenges of the digital era, reimagining normativity in the context of algorithmic behavior regulation. By embracing interdisciplinary perspectives and reconceptualizing normativity, legal theory can navigate the complexities of the digital age and elucidate the evolving nature of legal frameworks.

A. Vanishing Normativity? Challenges for Legal Theory in the Digital Society

It has been frequently said that legal theory has reached a "dead end": arguably, it may have lost the capability to make progress and overcome the so-called "post-positivism", and this in such an extent, that jurisprudence seems to have become an insulated academic discourse.[1] Nonetheless, the contemporary digital society poses new challenges for legal theory, and it may even put into question the key elements of traditional jurisprudence. As a matter of fact, the main schools of thought still dwell on the same issues that gave birth to modern legal theory with Hobbes and Bentham – morality, coercion, and the source of the binding force of law, the source of normativity. These old problems are now added to new questions presented by the so-called onlife world, a world that cannot be anymore understood by the binary distinction between online and offline, for it constitutes a new hybrid space that merges the digital, the factual-empirical, the social, the discursive, and the psychological dimensions of our lives.[2]

Legal theory has not even managed to overcome its old discussions, and it must already deal with the unraveling questions posed by the increasingly spread of algorithms and artificial intelligence applications for legal purposes, including legal decision-making. The new digital technologies are profoundly and unprecedentedly changing the legal landscape: smart cities, predictive policing, smart contracts, crypto assets, gig workers, and judicial mass decisions (even in criminal law) are now reality, not science fiction imagination. Almost all areas are touched by new disruptive technologies that promise to deliver personalized, unbreachable legal settings. At the cutting edge of legal theory, enthusiasts of this new 'personalized law' cheer

1 Auer, 'What is Legal Theory?', in *Rechtsgeschichte – Legal History*, vol. 29, 2021, 30.
2 Floridi, *The Onlife Manifesto – Being Human in a Hyperconnected Era*, 2015.

granular regulation enabled by the new digital technologies, for it may help us overcome the flaws and biases of human adjudication: "*the use of big data analytics and artificial intelligence could recalibrate the relationship between law and individuality and change the foundational structures of our legal system*".[3] On the other hand, critical voices claim ethical guidance for technological applications, some level of coercive regulation, or protection by default provided by technology itself.[4]

When you replace the traditional legal system with technological behavior guidance, that is, when '*code becomes the law*'[5], you may miss all 'the rest' usually attached to the traditional rule of law within a constitutional framework – individual rights, liberal democracy, adjudication, due process guaranties, checks and balances, and so on. Just like the printing press once eroded the possibility of religious censorship, enabled the systematization of all pre-modern law (from Justinian *Corpus Juris Civilis* to ancient English Common Law), and became the technical means of positive law as adjudication, we may be experiencing an equivalent earthquake with big data analytics and artificial intelligence, but in a much faster pace – for better or worse. For we watch the new possibilities of blockchain and artificial intelligence systems as well as the rise of new far-right populism, surfing the wave of fake news and disinformation, threatening the institutional framework of liberal democracy.

When legal philosophers discuss new technologies, it usual to find the diagnosis that the algorithmic society precludes the normative character of legal institutions. Christoph Möllers for instance, a contemporary leading German scholar, sees the core of normativity in the possibility of breaking a rule: no rule can be said to be normative if you cannot choose whether to break it or not. This tight connection between rules, rule-following and normativity will be fully discussed in this paper; for now, let's just assume that normativity (in this traditional sense) presupposes: (*i*) a previous rule and (*ii*) agency from the part of the subject to choose whether to comply and follow the rule or to breach and act against the given rule. When discussing new thresholds for normativity in the digital age, Möllers argues

3 Busch & De Franceschi, 'Introduction', in *Algorithmic Regulation and Personalized Law: A Handbook*, 2021, 1. See Sunstein, *Choosing Not to Choose*, 2015, 157 ff., for an optimistic approach, but Auer, 'Granular Norms and the Concept of Law: A Critique', in *Algorithmic Regulation and Personalized Law: A Handbook*, 2021, 137-154, for a convincing counter point.

4 Hildebrandt, *Smart Technologies and the End(s) of Law,* 2015.

5 Lessig, *Code and Other Laws of Cyberspace*, 2000.

that algorithmic regulation forecloses normativity: "An algorithm excludes normativity. A community whose behavior is programmed has no room for norms".[6]

This diagnosis echoes the famous slogan "the code is the law", meaning that new digital technologies regulate behavior in such a granular and empirical way, that it becomes apart from the general standards that characterized modern law. As we know it, modern law – the positive law issued in by the political system to be applied in future cases – works articulating universals (i.e., general abstract rules) to individual cases. But does it make sense to state that algorithms exclude normativity? Mireille Hildebrandt, one of the leading scholars that deal with technological issues from the perspective of legal theory, advocates for "legal protection by design", and this solution also implies the diagnosis that algorithms overcome legal normativity – only because the normativity of general rules is insufficient, we could claim legal protection by design, that is, legal protection that is inscribed in the technology itself.[7]

But are we comparing similar phenomena? The affordances of the new digital technologies make us behave in specific ways and, in a weak sense, they can be seen as 'normative', to some extent. When we agree to cookies to visit a website, we are not consenting in a proper way, we are just doing what it takes to visit the website. When you scroll your news feed on Twitter, TikTok or Instagram, you are not consciously consenting to the profiling that is being made of you – you just cannot avoid it if you want to check up your social media. So, new technologies make us behave in certain ways, and law also makes us behave in certain ways. The question for legal theory is then the following: are algorithms and rules equally normative? Moreover: are algorithms taking the place of legal normativity, the cornerstone of jurisprudence?

This paper offers an initial answer to this question. At the heart of the problem is the question of rule-following: is it a habit or a rule-driven action? Once we understand what it means to follow a rule, we can distinguish the rule of algorithms and the rule of law. This paper will offer an alternative explanation for legal normativity inspired by the rule-following issue in Wittgenstein's *Philosophical Investigations*. As we shall see,

6 Möllers, *Die Möglichkeit von Normen*, 2015, 455: "Ein Algorithmus schließt Normativität aus. Eine Gemeinschaft, deren Verhalten programmiert wird, hat keinen Raum für Normen".

7 Hildebrandt, *Smart Technologies and the End(s) of Law*, 2015.

there is not solely one mode of normativity. The problem of traditional jurisprudence is that it absorbed only *one* normativity regime, namely the one inherited from moral philosophy. So, it is not a coincidence that the first generation of studies on the problems created by big data analytics and artificial intelligence decision-making systems usually ended in ethical claims towards tech developers within the framework of self-regulation – a naïve solution, as we now see. Section B catches up with the problem of normativity in traditional jurisprudence. Once we start with a strict bifurcation between facts and norms, normativity is given and attached to a preexistent norm. If normativity is not given from the sky, legal theory should explain its social emergence.

Section C advances the hypothesis that normativity (in general, not only legal normativity) is better understood as a *continuum*, not in a dichotomic relation to facts. I suggest to replace the 'is'/'ought' (*Sein/Sollen*) dichotomy by a *spectrum of normativity*, one that is structured by a matrix that connects normativity regimes with different types of rules. The connection between norm and legal normativity is neither the only possible nor the best way to understand how the law works. As I see it, there is a historical connection between different meanings for the concept of '*rule*', to which correspond three different normativity regimes: *algorithms*, *models/standards*, and *laws/norms* correspond each to three different modes of normativity, namely: *pseudo normativity*, *implicit*, and *explicit* normativity. We aim to show that the so-called *implicit* normativity, as it is currently understood in discussions around Wittgenstein's later writings, helps explaining legal normativity. The model for legal normativity will no longer be the moral philosophy of practical reason, but ordinary language. We will see that normativity demands *learning* and *acquiring skilled competencies*, which forces us to leave philosophy and enters the realm of socialization, an interdisciplinary mixture of sociology, psychology, and anthropology. Section D will then make this methodological shift with the help of Norbert Elias and Bruno Latour. We will show how normativity is acquired and learned in the process of socialization, at first only intuitively, guided by feelings of appropriateness and inappropriateness, allowing, with age and time, the possibility of explicit problematization of conduct in binary terms, such as right/wrong, legal/illegal. This would grant us the possibility of a bottom-up legal theory that does not start with state authority. Finally, section E will conclude, resuming the challenges presented by the digital society, for they call into question the traditional understanding of normativity considering the overwhelming presence of algorithmic behavior regulation.

B. The Problem of Legal Normativity

David Lewis opens his classic book *Convention* by stating: "It is the profession of philosophers to question platitudes that others accept without thinking twice".[8] He goes on and says that philosophy is a dangerous profession because the platitude often defeats the philosopher. Even though the platitude survives, the philosopher will have done her job by making others think twice. In this section, I will risk challenging some grounding axioms of modern legal theory: the assumption that legal normativity has nothing to do with habits and requires a previous norm to take place. It has been indeed a platitude to state that law is normative. But as we do so, we only presuppose what we should explain. And we should think twice on this matter.

The mainstream legal theory takes the normativity of law for granted. In this paper, I will use '*traditional*' or '*mainstream legal theory*' as well as '*legal positivism*' and '*analytical jurisprudence*' in a relatively interchangeable way, despite all scholastic internal divisions between legal positivism schools, for they share a common point of departure, namely, that law is already normative from the outset. As Hart puts it:

> My main objection to this reduction of propositions of law which suppresses their normative aspect [*i.e., to Ross*] is that if fails to mark and explain the crucial distinction that there is between mere regularities of human behaviour and rule-governed behaviour. It thus jettisons something vital to the understanding not only of law, but of any form of normative social structure.[9]

Even when we acknowledge the difference between Hart's take on habits and rules, including the complex discussion of his practice theory of norms and the problem of the internal point of view of rules (which I will not address in this paper), and Kelsen's *Pure Theory of Law*, which takes the cleavage between the '*is*' and the '*ought*' ('*Sein*' and '*Sollen*') realms to a categorical level, we can still trace a link between the continental and the analytical traditions: both comprehend law exclusively within the framework of a rigid difference between facts and norms.

And, of course, you may doubt that law could one day be imagined beyond this difference (as I do myself). I do not argue that practicians should

8 Lewis, *Convention*, 1969, 1.
9 Hart, *Essays in Jurisprudence and Philosophy*, 1983, 13.

or could dismiss this difference. That is hardly imaginable, of course. The problem is not the difference in itself, for the 'law in action' may never need to overcome the operational distinction between facts and norms. It is precisely this distinction that enables modern law in contemporary industrial societies, including adjudication – namely, matching claims and contentions to a previously given set of categories and rules, no matter if these rules are laid down by previous case law or state-issued legislation. In this respect, the different facts/norms remain indispensable. But jurisprudence faces serious trouble when it embraces the fact/norm distinction as deployed by barristers, judges, courts, and legal officials on an *operational* level and elevates it, on a *methodological* level, to an epistemic axiom, expressing with it an unbridgeable gap between two incommunicable worlds.[10]

The unbridgeable gap between the world of facts and the world of norms is an entirely different thing. There is indeed a massive difference between a distinction and a dichotomy: "ordinary distinctions have ranges of application, and we are not surprised if they do not always apply".[11] The distinction fact/norm grounds the routine and daily tasks of anyone who works with law, and it can never be surmounted at this operational level. Professionals have problems to solve, and the fact/norm distinction provides an excellent strategy to make social complexity operational, enabling us to classify human and non-human (i.e., corporate, institutional or technological) behavior as conform or deviant: using Luhmann's terminology, the fact/norm distinction works pretty well within legal dogmatics and doctrinal law, but jurisprudence runs on a higher, more abstract level of reflection within the legal system.[12]

Along the evolution from natural to positive law, from contract theories of the 18th century to Hegel and the codification dispute in the 19th century, reaching Kelsen and Hart, the fact/norm distinction became a methodological dichotomy that, claiming Hume's philosophical authority, became a kind of *episteme* for jurisprudence. It has been a matter of dispute whether Hume meant what legal positivists ascribe him without further questioning, but we do not need to engage in this discussion right

10 Blackburn, 'Normativity à La Mode', in *The Journal of Ethics*, vol. 5, n. 2, 2001, 140.
11 Putnam, *The Collapse of the Fact/Value Dichotomy and Other Essays*, 2002, 11.
12 Luhmann, *Das Recht der Gesellschaft*, 1993, 12, and Luhmann, *Rechtssystem und Rechtsdogmatik*, 1974, 13 ff.

now.[13] It seems hardly disputable that jurisprudence made the fact/norm distinction epistemic, meaning that this distinction has become a discursive precondition to the legal theory itself. An episteme is the set of parameters that make knowledge possible in a given culture for a given branch in the human sciences.[14] The episteme is an infrastructural foundation for conceptual thought, knowledge, and discourse. For this reason, it can be defined as a historical *a priori* internally developed in some disciplines in the human sciences. It is often described with the metaphor of a space or a region between the practical level of culture and the elaborated level of science, the hiatus that make the internal criteria of a scientific system corresponds to the intuitive knowledge of culture. Someone could do, for legal theory, what Foucault has done regarding other human sciences: in his classic book *Words and Things* (usually translated as *The Order of Things*), Foucault describes a rationalist or intellectualist turn in the human sciences from the 17th century onwards, one that transformed general grammar into linguistics, the study of the causes of wealth into political economy, and natural history into biology. These taxonomic endeavors originated scientific systems. One could redo the path from medieval commenting on Roman texts, especially the Justinian codifications, to the systematization of ancient Common Law and the conceptualization of the German Historical School, culminating in the Constitutional revolutions of the 18th century, and civil law codifications throughout the 19th century, to argue for an epistemic transition in law. From a heuristic perspective, the taxonomy of custom, case law, and Roman formulae appear to have given way to the intellectualist conception of law as a system of norms.[15]

13 Bix, 'The Normativity of Law', in *The Cambridge Companion to Legal Positivism*, 2021, 591. Definitely against the fact/value dichotomy, see once again Putnam, *The Collapse of the Fact/Value Dichotomy and Other Essays*, 2002, 14: "What Hume meant was that when an 'is' judgment describes a 'matter of fact', then no 'ought' judgment can be derived from it", "there is a distinction to be drawn (one that is useful in some contexts) between ethical judgments and other sorts of judgments. (…) But nothing metaphysical follows from the existence of a fact/value distinction in this (modest) sense" (19), and finally: "This has led a number of commentators to misread Hume (…)" (20).

14 Foucault, *Les mots et les choses*, 1966, 11 ff.

15 To my knowledge, this Foucauldian study remains to be done. For pieces of this puzzle, see Pirie, *The Anthropology of Law*, 2013, 81 ff. and 135 ff.; Haferkamp, *Die historische Rechtsschule*, 2018; and Berman, *Law and Revolution*, v. 1 (*The Formation of the Western Legal Tradition*), 1983.

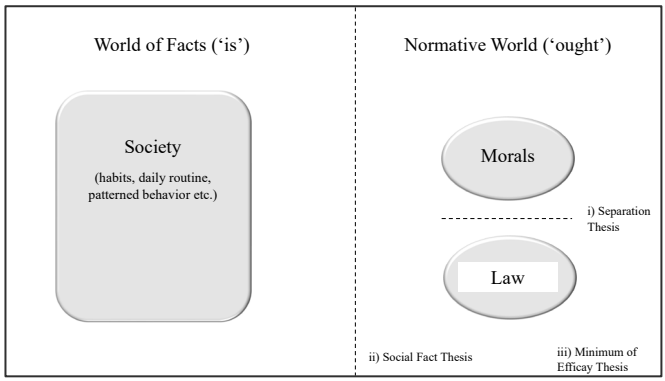
From that point onwards, law became *positive* law and should be able to ground itself without resorting to divine or natural laws. And this quest for self-foundation could be done only in a paradoxical manner, by stating that law is normative in itself, overlooking at the same time the factual, conjunctural, and political production of law (both in legislation and adjudication, i.e., as starting and end point of judicial decisions). This is indeed the point of departure for almost every mainstream legal theory: the unproblematic assumption that law is already normative from the start.[16] It may not sound as troubling as it is, but the paradox becomes unavoidable if you closely read the famous theses that make up mainstream legal positivism. Legal positivism is commonly described as a theoretical commitment to three central tenets:

i) the *separation* thesis has it that there is no necessary connection between law and morality;
ii) the *social thesis* asserts that what counts as the law is defined by social facts (or, without euphemisms, that law is the byproduct of contingent decision-making of politicians, judges, and courts), and
iii) the *minimum efficacy* thesis holds that the validity or existence of law depends on a minimum level of social compliance, for no law can be said to exist if everyone massively ignores it.[17]

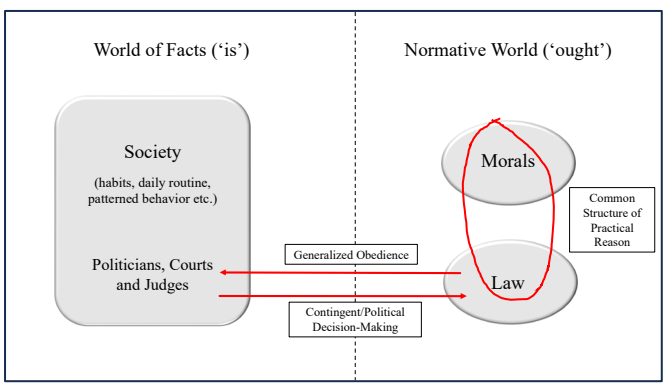
These tenets are formulated in a reasonable and almost irretrievable manner, concealing the harsh distinction between a world of facts and a world of values and norms underneath it. The following figure illustrates how these tenets should provide a clean legal system, which relies on a minimum level of social efficacy, remaining nonetheless isolated from society and separated from morality:

16 For instance, Bertea, 'Social-Practice Legal Positivism and the Normativity Thesis', in *Cambridge Companion to Legal Positivism*, 2021, 406: "From the premise that law is shaped by a collective pattern of behaviour, social-practice legal positivism derives the conclusion that, as a *social* fact, law is also a *normative* institution. The social practice on which the law fundamentally rests, in other words, includes a normative component. (…) Importantly, this normativity thesis is a thesis not about the *language* of law but about the law *itself*: It is pointing out a *property* of law (…)" – original highlights.

17 Spaak & Mindus, 'Introduction', in *The Cambridge Companion to Legal Positivism*, 2021, 7.



But we should not take these three tenets of legal positivism at their face value. In that case, we must recognize that there must be a connection between law as a social fact and law as a normative order: politicians, judges, and courts do indeed produce law, and law depends constitutively on generalized compliance. So, the law cannot be genuinely and originally normative. On the other hand, if law must be genuinely and originally normative, it will share the common ground of practical reason with morality, a feature that mitigates the separability thesis. To be separated from morality, law must rely on its social character (habitual compliance and contingent decision-making); to be completely isolated from the factual world, law must self-validate itself, just like morals. The following figure illustrates the reciprocal contamination of facts, law, and morals:



To sum up: you cannot have it both ways: law must be equivalent to morality if it is not to be derived from facts, or it must derive from facts if it is not to share the same structural features of morality. For this reason, "*[o]ne recurring objection has been that one cannot account for the normativity of law within the framework of legal positivism*".[18] The law cannot be utterly loose from morality and completely loose from society, and that is why the premises of mainstream legal positivism do not hold: "One of the key challenges for legal theory (…) is to account for law's normative dimension. As a social artefact, whence does law draw its power to bind us?".[19] If you relax the social-artefact requirement, positive law gets closer to morality. If you do not relax this requirement, it gets closer to the daily routine of legal officials and general compliance by ordinary citizens (and, therefore, closer to habits). We are left with a mystery yet to be solved, for we still have no explanation of how habits and the daily routine of those professionally in charge of making laws, filing lawsuits, and deciding cases "can ground normative conclusions about what citizens should and should not do".[20]

C. The Spectrum of Normativity and the Matrix of Rules

What does it mean to say that law is normative? How is it different from other normative orders? Why and how does it bind us in a specific manner? Legal theory has collected a series of competing answers to these questions. For instance, Kelsen's canonic *Pure Theory of Law* carries the neo-Kantian split between is/ought to its limits, and he is perhaps the most radical version of the so-called Hume's guillotine.[21] On the other hand, Hart's masterpiece, *The Concept of Law*, offers a more nuanced landscape, questioning explicitly the borders between habits and rules. But even Hart rejects the possibility of any normativity arising out of habits, placing the center of the legal system in the union of primary and secondary rules, as well as in the '*internal aspect of rules*.[22] In his turn, Shapiro states, "*Because the*

18 Spaak & Mindus, 'Introduction', in *The Cambridge Companion to Legal Positivism*, 2021, 14.

19 Delacroix, *Habitual Ethics*, 2022, 92.

20 Bix, 'The Normativity of Law', in *The Cambridge Companion to Legal Positivism*, 2021, 591.

21 Kelsen, *Reine Rechtslehre*, 2nd ed., 1960.

22 Hart, *The Concept of Law*, 1961, 56/57. We will not discuss the '*internal aspect of rules*' in this paper.

planning model replaces habits with plans, it has no problem explaining the normative nature of legal activity".[23] Brian Bix, in contrast, suggests that law has a "*sui generis form of normativity*" that prevents law from resorting to morality without dissolving law into facticity – although this suggestion is not completely convincing.[24]

All mainstream positivism begins with a given normative dimension in different variations: *Sollen* in Kelsen, rules in Hart, and plans in Shapiro. In all these cases, we can only rely on the critical reflective attitude of the individual, who access the normative character of law, evaluates the available possible courses of action, and decides how to act. In all cases, the structure of practical reasoning is presupposed, and the discussion of *legal* normativity seems to be rooted in the underlying assumption of *moral* normativity as a paradigm:

> The usual concept of morality refers to norms of a particular kind, which in one way or another will be distinguished from legal norms, for example, according to the distinction between internal and external behavioral controls. Thus, however, the concept of morality remains so closely related to that of law *on the everyday basis of norm*, that this alone creates difficulties for the imagination of a separation of law and morality.[25]

On the one hand, legal theory resists the idea that legal normativity be comprehended empirically; at the same time, it is difficult not to take moral normativity as a model: "*We can understand the concept of legal normativity only by appealing to other normative concepts*"[26] – and they are most likely to be moral. The discussion on normativity gravitates around the fact/value (is/ought) dichotomy. If we remain trapped inside this dichotomy, we must decide if normativity should be placed on the 'value' side or the 'fact' side, whether it is a given 'ought' or plain facticity. For this reason, it may be safer to reject the fact/value dichotomy in favor of a *naturalist* account, rejecting the ontologically unbridgeable gap between *is* and *ought* or between *facts*

23 Shapiro, *Legality*, 2011, 189.
24 Bix, 'Kelsen, Hart, and Legal Normativity', in *Revus: Journal for Constitutional Theory and Philosophy of Law* 34, 2018.
25 Luhmann, *Kontingenz und Recht*, 2013, 141 – my highlights.
26 Redondo, 'Legal Normativity as a Moral Property', in *Revus: Journal for Constitutional Theory and Philosophy of Law* 34, 2018.

and *norms*.[27] But, if we do so, we will claim that legal normativity has its source in *non-normative* realms, in facts (!), including daily practices and habits. That is precisely the idea.

One way to define the naturalist approach can be found in recent research on 4E cognition.[28] The so-called 4E cognition can be qualified as an interdisciplinary research area that merges pragmatism, philosophy of mind, phenomenology, and cognitive sciences, to understand cognition as the result of radically *embedded*, *embodied*, *extended,* and *enactive* processes. In a way, it is a radical rejection of the disengaged mind that has been bequeathed to us by Descartes' *cogito* and Kant's transcendental conditions as a model for knowledge and perception.[29] 17th-century rationalism elaborated what we can call a '*discontinuity thesis*' – mind, or, in the old terms, reason and nature belong to different worlds, and the only certainty that the mind can have of anything relies on its rational self-reflection. 4E cognition theories reject this discontinuity thesis in favor of a "*life and mind continuity*", according to which there can be no arbitrary disruptions between nature, mind, and (why not?) morals. That is why cognition is better understood as an *embodied* process, for the body cannot be deemed irrelevant. Cognition is also an *extended* process, for it is *embedded* in society, nature, culture, and any other extra-bodily instances, as it is also *enacted* once it cannot be reduced to the passive assimilation of the outside world but depends on some level of agency.[30]

The continuity thesis excludes the possibility of an outside force that appears in a *deus ex machina* manner, fallen from the sky:

> To this we would add not so much an emphasis on 'forces' outside the naturalistic framework but the rejection of the sudden appearance of fully independent novel levels of description – for instance, the realm of *human normativity* – without an account of *how their emergence and relative autonomy is grounded on* (understandable in terms of and

27 Delacroix, 'Understanding Normativity', in *Revus: Journal for Constitutional Theory and Philosophy of Law* 34, 2018.

28 See the collected essays in Newen, De Bruin & Gallagher (eds.), *The Oxford Handbook on 4E Cognition*, 2018. On naturalism, see also Delacroix, *Habitual Ethics*, 2022; Ginsborg, *The Normativity of Nature*, 2014; and Blackburn, 'Normativity à La Mode', in *The Journal of Ethics*, vol. 5, n. 2, 2001.

29 Damasio, *Descartes' Error*, 1994.

30 Newen, De Bruin & Gallagher, '4E Cognition: Historical Roots, Key Concepts, and Central Issues', in *The Oxford Handbook on 4E Cognition*, 2018, 6.

> interaction with) *phenomena at other levels*. This is as much a causal/historical point as it is ontological. The continuity thesis therefore proposes the need for a theoretical path that links living, mental, and social phenomena.[31]

This point of departure for jurisprudence may make the hair of an orthodox legal positivist's stand on end. According to the continuity thesis, legal normativity should derive from facts, from society, given that there is no chance to postulate a great divide between the normativity of the legal system and the non-normative existence of society. In a way, legal normativity should be rooted in practices and habits. But how is that possible?

Jurisprudence has traditionally chosen a reductive account of normativity within the fact/value dichotomy. Joseph Raz, for instance, states that the key concept for explaining norms is a reason for action, and he grounds jurisprudence in practical philosophy: "Legal philosophy is nothing but practical philosophy applied to one social institution".[32] Within this framework, law is just a specification of practical philosophy, an institutional projection of moral reasons, for morals and law share the same essential feature – they are normative in as much as they provide reasons for action: "All normative phenomena are normative in as much as, and because, they provide reasons or are partly constituted by reasons".[33]

Even though this conception is a pervasive feature of analytical jurisprudence, we can contend that his connection between legal theory and practical reasoning is contingent, not necessary. It is derived from moral philosophy, but in any case, it is not the only possible explanation for human action and its constraints – normative and otherwise. But mainstream jurisprudence sells it as the only sound explanation for the normativity of law. If positive law must validate itself without resorting to natural law, god, ancient tradition, or morality, it can only rely on the self-validation of reason. But the only kind of self-validation that the disengaged reason can provide is the one that isolates itself from the world. I want to make the point that accessing and evaluating *reasons* is by far not the only or exclusive way to act.

31 Di Paolo, 'The Enactive Conception of Life', in *The Oxford Handbook on 4E Cognition*, 2018, 74 – my highlights.
32 Raz, *Practical Reasons and Norms* [1975], 1990, 149.
33 Raz, 'Reasons, Reasons, and Normativity', in *Oxford Studies in Metaethics*, 2010, 5.

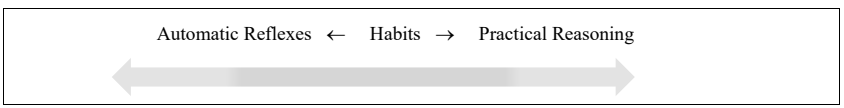
Usually, we follow the law in a semi-intuitive way, "*doing what comes naturally*", to use a famous expression.[34] Hart himself acknowledged that: "When we move a piece in chess in accordance with the rules, or stop at a traffic light when it is red, our rule-complying behaviour is often a direct response to the situation, unmediated by calculation in terms of the rules".[35] When we stop our car at a red light, we are not necessarily weighing the chances of being stopped by the police and fined. When we pay our taxes on time, we are not always calculating whether it is worth trying to evade taxes. When we sign a contract with a gym, the clauses are relatively indifferent in their details because we know how the relationship between a client and a gym works. The fact that legal theory has chosen solely and exclusively the model of practical reason to ground legal normativity becomes an artificial requirement, considering the reality of people's daily lives. On the other hand, normativity, in general, does not need that we presuppose a previously given norm, from which a command emanates and pervades the reasoning subject while she thinks and evaluates available courses of action, as well as the corresponding risks and consequences. We need to undo this strict association between *norm* and *normativity* and reframe it on a more abstract conceptual level.

We need a fresh start. If we give up, I mean, if we *really* give up the fact/value dichotomy, we cannot think of normativity in a binary relation to facts anymore. This 'either-or' scheme provided by the fact/norm difference must be replaced by a continuum, a spectrum of normativity. And you may reply, of course, that with a continuum, we will give up the possibility of clear-cut distinctions within the normativity realm. Sure. But "*Isn't the blurred sometimes exactly what we need*"?[36]

Giving up sharp artificial distinctions may help us achieve a clearer glimpse of the phenomenon we are trying to observe. The philosophy of practical reasoning had always presupposed a rational chain linking '*norm* → *reasons* → *action*'. I suggest we move to a continuum of normativity regimes, in which practical reasoning is nothing but an extreme case. Law as a whole cannot be backed by it anymore. On the other extreme point, we find automatism and reflexes: mere reactions to get along with daily affordances. They may explain some of our reactions (like when we stop at a red light), but they also cannot account for law as a whole. The middle

34 Fish, *Doing What Comes Naturally*, 1989.
35 Hart, *The Concept of Law*, 1961, 140.
36 Wittgenstein, *Philosophische Untersuchungen* [1953], 11th ed. 2022, § 71, 60.

is occupied by habits: clusters of repeated patterned behavior, including unconscious, pre-reflective, and goal-driven ones.[37] Habits lie at the heart of the normativity spectrum, and they can evolve to extremes– solidify into automatic reflexes, or detach from context into practical reasoning. So, it is not an evolution from automatism to practical reason. On the contrary, it is a continuum with a *radial* logic that spreads from the center to both ends: habits can evolve in either direction but remain at the center. None of these frontiers are positivistic ones. Automatism can dissolve, and practical reasoning can be softened back. So, we would have a continuum like this:



Each of these points corresponds to one type of rule. There is no sense in saying that habits are completely rule-free, and at the same time, even automatism does 'follow' some rules. But they are rule-driven in entirely different senses. In *Rules: A Short History of What We Live By*, Lorraine Daston offers an erudite and nonetheless synthetic, truly worth reading, history of nothing less than – *rules*.[38] Throughout human history, she has identified three ideal types of rules: tools of measurement and calculation (algorithms), models or paradigms, and regulations (laws or norms in the traditional sense). Albeit the first and the latter are well-known, she discloses the lost history of rules as standards, the most ancient rule type. She goes back to the ancient Greek word for the giant cane plant (*Arundo donax*) – '*kanon*', derived from the Semitic word '*qaneh*', that became '*regula*' in ancient Latin – and that was used as a pattern for all kinds of construction works, a standard measure for buildings. This kind of rule pervaded almost all realms of human skilled tasks. In the arts, sciences, and most different handicrafts, many manuscripts and books were written to guide navy and civil construction, rhetoric, sculpture, poetry, the routine in medieval monasteries, music composition, cooking, and science experimentation. These rules were meant to serve as ideal examples, models to

37 Habits do not equate only to automatic responses to outside stimuli, in behaviorism fashion – see Delacroix, *Habitual Ethics*, 2022, 4 ff.

38 Daston, *Rules: A Short History of What We Live By*, 2022. See also Oppel, *ΚΑΝΩΝ: Zur Bedeutungsgeschichte des Wortes und seiner lateinischen Entsprechungen (Regula-Norma)*, 1937.

be followed, which always presupposed some implicit or tacit knowledge of the skilled practice.

Algorithms, on the other hand, became to mean "*any step-by-step procedure used in calculation or problem-solving*".[39] The English word 'algorithm' is the Latinized version of the name of a Persian mathematician, Muhammad ibn Musa al-Kharizmi (c. 780 – c. 850 CE), whose treatise on calculation was translated into Latin in the 12th century. "The modern meaning of algorithm is quite similar to that of recipe, process, technique, procedure, routine, rigmarole, except that the word 'algorithm' connotes something just a little different. Besides merely being a finite set of rules which gives a sequence of operations for solving a specific type of problem, an algorithm has five important features [finiteness, definiteness, input, output, effectiveness]".[40]

Finally, laws and norms are close to the legal positivistic understanding of rule as explicit regulation formulated in general terms. Deriving from natural laws and directly inspired by the success of natural sciences led by Newtonian physics, "Regulations are rules at their nitty-grittiest".[41]

This landscape breaks with the monolithic image of legal positivism, which only considers rules as norms, in the third sense, as commands or reasons to act. Rules as regulations express an evolutionary acquisition of modernity and the Enlightenment, and there is no sense in taking this kind of rules as the only possible, ontological 'mode of existence' of rules. Indeed, there is much discussion within legal positivism as to whether the concept of rules does justice to a vast array of officially written directives.[42] The historical account of Lorraine Daston offers a much richer picture of the development of rules and seems to offer a broader frame to grasp legal phenomena as well. If the modern state-issued codified law relates more closely to rules as norms, the late Roman civil law and modern collateral agreements in financial markets and administrative legislation issued for policy implementation relate instead to rules as standards.[43] Finally, and resuming the opening questions of this paper, new digital technologies pro-

39 Ibid., 85.

40 Knuth, *The Art of Computer Programming*, vol. 1 *Fundamental Algorithms*, 1997, 4-6 – apud ibid. 85.

41 Daston, *Rules: A Short History of What We Live By*, 2022, 207.

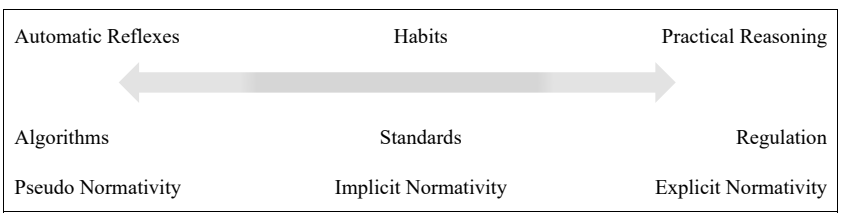
42 And the dispute on rules and principles is but the tip of the iceberg.

43 Riles, *Collateral Knowledge*, 2011, 49; Rubin, 'Law and Legislation in the Administrative State', in: *Columbia Law Review*, vol. 89, n. 3, 1989, 371/372.

vide some behavior regulation that is closer to rules as algorithms. These three rule types vary in whether they are:

i) *thick* or *thin* in their formulation, that is, if they are granular or expressed in broad terms,
ii) *flexible* or *rigid* in the application,
iii) *general* or *specific* in the domain of application, but also in
iv) how the *core* or the essential features of the rule relate to *accidents* and *exceptions*, and
v) how they bridge the gap between *universals* and *particular* 'cases'.

Of course, these three categories may overlap and relate to each other, and they may be at the same time present, working together in a given situation. I do not mean to immobilize them in a given place; they have blurred borders. The point I would like to make is that they seem to fit the normative spectrum to explain different regimes of normativity. So, instead of sharply contrasting habits and the legal system with the help of the fact/norm dichotomy, we would have different normativity regimes relating to different types of rules. If we connect each kind of rule to the spectrum of normativity, it will look more or less like the following:



Now we begin to see why Möllers' statement that "*an algorithm excludes normativity*" is not precise. The force of algorithms expresses one kind of normativity, which is different from the normativity of general rules. But one cannot simply replace the other. There is not only one possible understanding of normativity, and no explicit norm must be presupposed for normativity to occur. These new kinds of normativity, implicit and pseudo normativity, occupy the rest of my paper. So, we move next to implicit normativity and close our reflections with the new challenges posed by the new information and communication technologies, for they may incarnates a kind of 'pseudo' normativity when the 'code becomes the law'.

D. Implicit Normativity and the Building of Expectations

The formulation of *implicit normativity* may sound like a contradiction in terms. After all, being explicitly formulated as a *recognizable command or directive* is part of the definition of a norm, at least in its traditional meaning. An implicit normativity must mean that it is not explicitly articulated – and if so, how do we recognize something like that? How can someone acknowledge this kind of normativity?

First, it is crucial to refrain from thinking of normativity again according to the model of practical reason. In our continuum, it is only the most extreme derivation from habits, not the sole mode for normative behavior guidance. Indeed, if the law is made up of society and language, legal normativity must display features equivalent to *meaning* and *social bonds*. As we saw previously in this paper, law just imported the model of practical reason from moral philosophy. In a way, legal positivism reaches beyond and falls short of natural law: it aims to provide a self-validation for law in as much as it aspires to lose itself from morality, but it has only the model of moral philosophy at hand, so it embraces *the form* of it, not the content. If we take language and society (and not morals anymore!) as paradigms for law, new modes of normativity may become visible. In this section, we will deal with two forms of implicit normativity. One is the normativity of *meaning*, and the other, the normativity of the *social*. And this kind of implicit normativity can provide us with a fresh start, for it relates to rules as standards and patterns, not to rules as norms or regulations, and it is responsible for building expectations.

Implicit normativity refers originally to a philosophical discussion around one of the most important books of the 20th century – Wittgenstein's *Philosophical Investigations*. Published a little after his death, this text is intensively debated until today, for it is placed in a tense relationship, to say the least, with Wittgenstein's *Tractatus Logico-Philosophicus*: while the latter connects to the logical positivism of the Vienna Circle, the former may be read as an anti-positivistic language philosophy. We cannot address all the complex issues involved in making sense of the *Philosophical Investigations* here, but we can derive some productive insights for a renewed jurisprudence. The book is difficult for many reasons, one being that it was written as a sequence of short aphorisms, recurring to a series of examples.

Another reason is that Wittgenstein already achieved the status of a classic, so he is much more quoted than closely read.[44]

Three key issues should be addressed: the concept of '*family resemblances*' (*Familienähnlichkeiten*), the notion of language games (*Sprachspiele*), and the trouble around 'following a rule'. Although Wittgenstein was not writing on law, and his concepts should not be automatically transplanted to jurisprudence, his take on rule-following is essential for legal scholars, for it offers a new solution to the main problem of legal theory, namely – how to avoid the infinite regress. This problem lies at the heart of modern legal thought, for Kelsen and Jellinek, as much as for Hart and Shapiro (who translate this canonic problem in the jocular formulation of a 'chicken-egg' paradox). His solution to infinite regress resorts to an implicit normativity and, at the same time, exhausts the conceptual resources of philosophy, imposing a methodological shift towards socialization, so it becomes visible how expectations and anticipation can be learned and acquired. And this may be the core of a new legal theory, one that does not start from within the framework of practical reasoning and moral philosophy but from *practices* or *habits*, because they are the locus where the building of expectations occurs.

First, it is essential to grasp that language games are a concept developed by Wittgenstein to express the impossible distinction between the linguistic and the non-linguistic realms. That was precisely what John L. Austin, in *How To Do Things With Words*, attempted to do: to isolate the speech act and the appropriate circumstances from another, so you could qualify a speech act as 'happy' or 'unhappy', and establish a catalog of verbs that could express the different functions of language (what he called 'illocutionary forces').[45] That is why the language game is not only a way of speaking but speech routines embedded in life forms, which do not make sense once they are disembedded, and that is why they are prone to infinite. There is no way to establish, once and for all, every possible language games in a closed codex.[46] Language games express the constitutive *embeddedness* of language and the impossibility of accessing meaning through the subjective intention of the speaker alone.

44 In what follows, I based my reading of Wittgenstein in Bertram, *Sprachphilosophie zur Einführung* 2011; and Staten, *Wittgenstein and Derrida*, 1985. Wittgenstein is much closer to Derrida then normally accounted for, but this remains a topic for another paper.

45 Austin, *How To Do Things With Words*, 1962.

46 Wittgenstein, *Philosophische Untersuchungen* [1953], 11th ed. 2022, § 23, 26.

Second, the concept of family resemblances expresses the impossibility of freezing the essence of language in one singled-out feature: Wittgenstein is not just saying that some phenomena resemble or overlap each other; he is saying – in a much more radical way – that there is not THE LANGUAGE in itself, and for this reason, there are also no clear boundaries for linguistic phenomena, but *only the overlapping of related phenomena*, so we cannot isolate the essence of a language without resorting to metaphysics.[47] This is the first takeaway for jurisprudence: law may not have an essence, one last particle – be it a rule, a plan, or a norm. Law can be seen as a network of overlapping legal phenomena – contracts, reflexes triggered by legal signs, adjudication, international treatises, constitutions, etc. And if so, we should not search for the essence of law but try to grasp its embeddedness in life forms instead.

Third, the rule-following issue. Wittgenstein begins by questioning why we read a signpost (*Wegweiser*) in a definite direction (for instance, reading the arrow '→' from left to right, that is, as pointing to the right).[48] The way to read this sign is not to be found in the subjective intention, nor in the sign itself, for we could imagine the possibility of someone skilled to read this same arrow '→' in the opposite direction, from right to left: "suppose what seemed the natural way of following the arrow to him [*an outsider*] was to go in the direction of the feathers and not of the point [*of the arrow*]? (We can imagine a scenario: there are no arrows in his culture, but a kind of ray gun whose discharge fans out like the feathers on our arrows)".[49] Wittgenstein holds that we cannot follow a rule just once, the same way we cannot speak any word or sentence for the very first time, for if you think of a specific rule, you will always need previous rules that establish how to follow or interpret the first rule, getting trapped in the infinite regress: "That is why 'to follow a rule' is a practice".[50] It does not convert into an infinite regress, and it is not impossible to follow rules – rule-following is but a practice.

This matter is very similar to what, in the context of Derrida's sign and language theory, has been called the 'minimal idealization' of meaning. As Wittgenstein, Derrida also criticizes traditional theories that purported to explain meaning and language as the transfer of something from one con-

47 Ibid., §§ 65-67.
48 Ibid., § 85.
49 Taylor, 'To Follow a Rule', in *Philosophical Arguments*, 1995, 165.
50 Wittgenstein, *Philosophische Untersuchungen* [1953], 11th ed. 2022, §§ 201, 202.

sciousness to another, as if meaning were a thing. As in Wittgenstein, meaning, cognition, and perception are only possible in a repetition chain (Derrida calls it '*iterability*'). And, as Wittgenstein says, the only way to make sense of a sentence, word, or sign is to contrast it with a repeated model, a pattern.[51] Both Derrida and Wittgenstein were often misread at this point. Commentators assigned to Wittgenstein a deterministic communitarian view, annihilating agency, and to Derrida, a nihilist perspective according to which no meaning is ever possible, exaggerating agency. One plausible solution to the puzzle of following rules is what Hannah Ginsborg called '*primitive normativity*': a "*normativity that does not depend on conformity to an antecedently recognized rule*".[52] Here, she is using 'rule' as norm or regulation. In the rule matrix and normativity continuum I outlined in the previous section, it gets clearer that this *primitive* normativity refers to the *implicit normativity of models, standards, and patterns*. And indeed, they do not need any prior regulation to be normative. So, implicit normativity expresses the normativity of meaning and social practices that enable us to adjust our behavior to expectations: "Profiles, patterns, expectations, and predictions all fit the same 'mechanism'; they afford anticipation".[53]

The problem here is to find the middle ground between the collective and the individual aspects, since taking part in a social practice requires both adjustment to collective requirements as well as some level of agency. It is neither deterministic nor completely free. That is the only way to escape from the teleology of social dispositions and the teleology of sovereign subjectivity. In doing so, we handle what can be called pre-reflective convictions of appropriateness and inappropriateness. When we face these collective requirements, we open up a frame for agency, and we can choose. And all this happens without returning to the reified rationality of the "*disengaged firs-person-singular self*".[54]

How does this happen? When reading Wittgenstein, one cannot help noticing two things: first, the variety of examples. Some of them are pretty intuitive, but some of them are quite unexpected. On the other hand, one notices the recurrent image of the *child*, as connected with some of these examples. And the image of the child is essential to grasp what seems to

51 Derrida, 'signature événement contexte', in *Marges*, 1972, 365-393.
52 Ginsborg, 'Primitive Normativity and Skepticism about Rules', in *The Journal of Philosophy*, vol. 108, n. 5, 2011, 233.
53 Hildebrandt, *Smart Technologies and the End(s) of Law*, 2015, 57. See also Luhmann, 'Normen in soziologischer Perspektive', in *Soziale Welt*, vol. 20, n. 1, 1969, 28-48.
54 Taylor, 'To Follow a Rule', in *Philosophical Arguments*, 1995, 169.

be the main idea of the *Philosophical Investigations*. If following a rule is a practice, that is to say, something embedded in a life form, to follow a rule requires us to master life contexts. And that is something that we can only learn through socialization:

> But whereas a dog's acquisition of a habit does not involve it in any understanding of what is meant by 'doing the same thing on the same kind of occasion', this is precisely what a human being has to understand before he can be said to have *acquired a rule*.[55]

This formulation of '*acquiring a rule*' is really insightful, for it expresses how we deal with behavior patterns, learn to deal with implicit normativity, and build expectations. At this point, we may proceed to the methodological shift we have mentioned earlier and move from philosophy to the social sciences, I mean, to sociology, anthropology, and psychology, for it is *socialization* that explains how we: i) incorporate implicit standards and behavior patterns, ii) build expectations, and iii) handle these patterns in specific situations, 'reading' the context and getting an intuitive feeling of the balance between duties, obligations, desires, and personal will, considering the available courses of action and the expectations triggered in a given situation.

Here, we must *unpack the internalization processes that cope with* "*normatively significant habits*".[56] To do so, we need to place the primary locus of the agent's understanding not in her subjective disengaged rationality, but in the practices themselves. That is precisely the turn to practices that we get from Wittgenstein's *Philosophical Investigations*. Following Charles Taylor, once we situate our understanding in the practices itself, we see how much of this understanding flows in a largely inarticulate way:

> Rather than representations being the primary locus of understanding, they are only islands in the sea of our unformulated practical grasp on the world. (...) This understanding is not, or only imperfectly, captured in our representations. It is carried in *patterns of appropriate action*, which conform to a sense of what is fitting and right. Agents with this kind of understanding recognize when they or others have put a foot wrong.[57]

55 Winch, *The Idea of a Social Science and its Relation to Philosophy*, 1958, 5.
56 Delacroix, *Habitual Ethics*, 2022, 24.
57 Taylor, 'To Follow a Rule', in *Philosophical Arguments*, 1995, 170/171 – my highlight.

Here, we exit philosophy, strictly speaking, and move to the social sciences, for "philosophy is concerned with eliminating linguistic confusions,"[58] which means, philosophy strives for clear boundaries between concepts (routine and rule, habit and agency and so on) – but we are dealing precisely with an inarticulate phenomenon whose key feature is not to have such precise contours. At this point, Charles Taylor moves to Bourdieu's notion of '*habitus*', which aims to capture this level of inarticulate social understanding. Nonetheless, Bourdieu's notion of habitus may not be the best option, for it became, through the years, closer and closer to rigid concepts like social fields and classes, becoming more dispositional and structural than before. Eventually, Bourdieu defined *habitus* this way:

> The constraints associated with a particular class of *conditions of existence* produce sets of habitus, systems of durable and transposable dispositions, structured structures predisposed to function as structuring structures, i.e., as the generating and organizing principles of practices and representations that can be objectively adapted to their purpose without presupposing the conscious aiming of ends and the express mastery of the operations necessary to achieve them.[59]

We see that Bourdieu derives the habitus from the '*conditions of existence*', impregnating this concept with deterministic assumptions. Habitus should mean the set of inculcated, pre-reflective dispositions that contextual affordances trigger for the subject, so she or he can act. In this definition, it should erase the boundaries of context and agent, and works according to 4E cognition. But as '*a system of dispositions derived from the existence conditions*' (knowing what the 'existence conditions' mean in Marxist terminology), Bourdieu's definition becomes the expression of an exogenous principle and reinstantiates causality and teleology.

The implicit normativity of practices never has this deterministic overload; it always leaves room for evaluation, so the agent can indeed choose to deviate and break expectations. As Sylvie Delacroix puts it: "This internalisation process not only entails that the performance becomes effortless; it also means we become prone to criticising deviation from those expectations. But is it also compatible with a capacity to change or deviate from that practice ourselves?" She goes on to develop that the internalization of behavior patterns takes place by providing us with senses of primitive

58 Winch, *The Idea of a Social Science and its Relation to Philosophy*, 1958, 5.
59 Bourdieu, *Le sens pratique*, 1980, 88 – my highlight.

appropriateness as well as with primitive *inappropriateness* when agents can evaluate the context without resorting back to the model of practical reasoning, that is, without becoming a '*disengaged firs-person-singular self*'. This is what she designates as a '*pre-reflective ethical intelligence*'.[60]

Many approaches have been addressing the issue of making pre-reflective decisions, such as the naturalistic decision-making studies or the heuristic and bias stance. Perhaps the most encompassing alternative would be to enlarge the habitus concept, eliminating the deterministic overload. As a matter of fact, the concept of *habitus*, as used by Norbert Elias, Marcel Mauss, and Bruno Latour, offers a promising perspective because these authors allow us to grasp how the *habitus* places itself between nature and culture, education and imitation, reflex and free will, technology and context, agent and society. At this point, we can only give general hints on this matter.[61]

Marcel Mauss, for instance, noticed what he called body techniques – the inculcation of body gestures and routines that could be learned but also voluntarily acquired, even by watching movies.[62] The technological aspect of habitus is paramount. Latour builds on Mauss' concept of habitus and goes on to advance the tech-inspired concept of *plug-in*: plug-ins are a kind of software that we 'have' in ourselves thanks to socialization, and that help us make sense of situations, almost as an 'app' for identifying affordances.[63] Plug-ins are skilled competencies that you activate in specific circumstances to render the context readable and to orient yourself. It is nothing like the disengaged rationality of practical reasoning because they are part of an *extended* cognition:

> The crucial point is that you are sustaining this mental and cognitive competence as long as you subscribe to this equipment. You don't carry it with you; it is not your own property. (…) Cognitive abilities do not reside in 'you' but are distributed throughout the formatted setting, which is not only made of localizers but also of many competence-building

60 Delacroix, *Habitual Ethics*, 2022, 29.

61 As already mentioned, this paper is a *work in progress*, and a broader concept of *habitus* still demand further development.

62 Mauss, *Sociologie et anthropologie*, 1950. This concept of 'body techniques' would be of great value to analyze digital sociability in short videos platforms, for instance.

63 Latour, *Reassembling the Social*, 2005, 209 ff.

> propositions, of many small intellectual technologies. This propagation is key to the field of distributed cognition.[64]

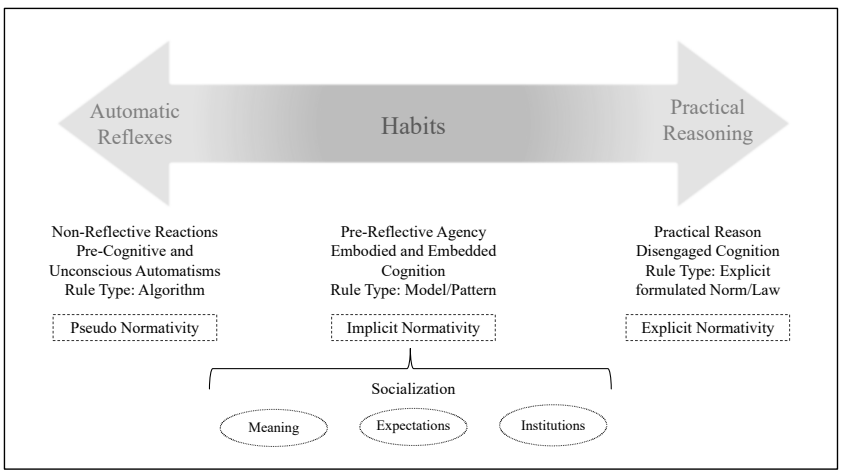
This way of observing skilled competencies requires us to rethink the boundaries of sociology and psychology. People develop mechanisms to read context affordances and behave accordingly, not only to comply (when they have a sense of appropriateness) but also to break with expectations (when they have a feeling of inappropriateness). For this reason, we can never take the individual/society dichotomy as legal positivists took the fact/value dichotomy. Following Elias, perhaps the only classic sociologist that included the *child* in his theoretical considerations, we need to erase these boundaries and see the individual as an open process, one that does not have a finish line to cross, and moreover, as a collective one, for the habitus depends not only on you and the context but also on everyone else that shares the context with you. Elias sees clearly that there is a continuity between the personality layers of the individual and the social institutions that surround the individual, and prompts us to think of society as a set of figurative formations: society is not built out of given entities like 'state' or 'social class', but out of mobile parts that, depending on the articulation, shape the meaning of each other.[65] And the key concept that links personality and society, psychology and sociology, normativity and affordances, is *anticipation* (however general it may remain):

> When we, human being, navigate our *Welt*, we are aware that others are profiling us, while we are profiling them. We develop mechanisms, institutions, norms and cultural patterns that enable us to anticipate what is expected from us.[66]

As we see, there is a kind of 'division of labor' between sociology and psychology, for they both address how people recognize *implicit normative patterns* and *inarticulate expectations* in order to know how to act (complying or deviant, meeting or frustrating expectations) – and all this without presupposing a 'basic norm' or a 'rule of recognition', not even calculating the chances to be somehow reprehended or punished by any authority. This implicit normativity takes place alongside the normativity of meaning and social figurations – it is a pulse, not a metaphysical entity inhabiting rules, norms, or 'the legal system'. That is why this normativity

64 Ibid., 210/211.
65 Elias, *Was ist Soziologie?* 1970.
66 Hildebrandt, *Smart Technologies and the End(s) of Law*, 2015, 58.

must be learned and acquired, and that is why rule-following is a practice. And that is also why we cannot isolate law completely from language and society. The 'impure' character of law must be reflected in an 'impure' – or multidisciplinary – jurisprudence. Legal theory should start with habits and implicit normativity to get a fresh look at its past achievements and troubles. The question is not to pass from habits to norms in the traditional sense but to understand that the strict entanglement of norms and practical reason is not enough anymore, especially if we consider the new challenges posed by the technological age. Before we close this paper, the last step in our normativity spectrum can be expressed in the following figure:



As we can see, the spectrum of normativity allows us to distinguish three normativity regimes: automatic reflexes, habits, and practical reasoning. The diffusion of algorithmic tools in the absence of legal regulation allowed the diagnosis that code became law. But code is never going to replace law:

> In short, law is regulation. But the reverse is not equally true: Not all regulation is law. Nor should it be. Law is the normative ultima ratio used by a society to govern conflicts or to allocate goods according to general rules. Thus, a vital part of the liberal concept of law in the philosophical

> tradition of Western Enlightenment is its design in the form of general rules.[67]

When Möllers says that algorithms exclude normativity, he is comparing two different phenomena: the pseudo normativity of algorithms and the explicit normativity of general rules. The challenged posed by new technologies to legal philosophy is that this pseudo normativity is much more efficient than the explicit normativity, because it gets inculcated in our behavior. It is not a question of compliance, but a question of affordance – people do not 'comply' with an algorithm; people use it. Jurisprudence has developed its conceptual framework exclusively for the explicit normativity. Grasping new modes of normativity may be the first step to renew legal theory.

E. Concluding Remarks

Möllers does not differentiate levels of normativity, as I did in the continuum proposed in this paper, and he has only the normativity of practical reason in mind. As we haveve already argued, not all normative phenomena are alike.[68] And that is perhaps why he comes to the awkward conclusion that digital technology should program casualty, and "Interventions in programming would have to be made practically possible for all parties involved".[69] It is not imaginable, however, how such a Habermasian requirement should ever be met in artificial intelligence industry. Can we imagine a democratic forum where '*all parties involved*' discuss the algorithms used in the recommendation systems of Twitter, Instagram or TikTok? But Möllers has a point, he expresses a familiar feeling: a technology-driven society will eventually lead us to a Black-Mirror dystopia with no room for individual agency.

This diagnosis mixes two different kinds of normativity, the two extremes of our spectrum, as we saw. It is important to make a distinction between '*regulatory power*' and '*regulation*': regulatory power (or 'code-driven normativity') relates to the kind of *pseudo normativity* we find in algorithmic

67 Auer, 'Granular Norms and the Concept of Law: A Critique', in *Algorithmic Regulation and Personalized Law: A Handbook*, 2021, 149.

68 Schmidt & Rakoczy, 'Developing an Understanding of Normativity', in *The Oxford Handbook of 4E Cognition*, 686.

69 Ibid., 455/456.

environments when we react by unconscious automatisms to get to use technology; regulation, on the other hand, express what we designated by *explicit normativity*.[70] The former relates to 'code-driven law', and the latter to 'text-driven law'.[71] Algorithms constrain our conduct, but do not regulate it properly, for they prompt us to act like someone that uses a bridge to cross a river. Regulation, on the other hand, may have algorithms as its target. In a way, the code will never be the law: the pseudo normativity of unavoidable algorithms perceived as affordances by users of digital technologies will never replace the explicit normativity of practical reason, because they run on different tracks. They are different phenomena. So, normativity is not simply vanishing, as Möllers supposes.

On the other hand, we can never deny that big data analytics and artificial intelligence are increasingly pervasive and that we can indeed be affected by invisible classifications and automated inferences that we can hardly contest and challenge. When it comes to automated legal decision-making, we have 'automated inferences'[72] that are built upon types and classifications. The risks can be analyzed in three dimensions: temporal, social, and material.

i) *Temporal* dimension: Big data analytics and artificial intelligence systems resemble legislation and adjudication in a specific way: they generate classifications and typify people according to these pre-determined categories, attaching consequences for this classification (bigger recidivism risks, higher interests or prices and so on). But there is no gap between the modeling of systems of automated inferences and they being put to use. If parliaments in liberal democracies must first approve a bill (normally after rounds and rounds of discussion), and only then this bill becomes effective, coded categories and types are developed and put into use. So, if big data says that immigrants in poor neighborhoods run higher risks of recidivism (because big data learns from the past and the past may not be the best key to interpret the future), code will reinforce inequalities. The parliamentary process allows society to discuss effects of a bill draft,

70 Delacroix, 'Beware of Algorithmic Regulation', in: *SSRN Papers*, 2019; Hildebrandt, 'Code-Driven Law: Freezing the Future and Scaling the Past', in *Is Law Computable? Critical Perspectives on Law and Artificial Intelligence*, 2020.

71 Hildebrandt, 'Code-Driven Law: Freezing the Future and Scaling the Past', in *Is Law Computable? Critical Perspectives on Law and Artificial Intelligence*, 2020.

72 Hildebrandt, 'The Artificial Intelligence of European Union Law', in: *German Law Journal*, vol. 21, 2020, 74.

and even if we cannot anticipate all possible effects, it is much better than having no clue at all.

ii) *Social* dimension: If the decision takes no time, we have not the opportunity to build expectations. While institutional decisions depend on a legal procedure, and the procedure enables all participants to re-structure their expectations and adjust them to a decision yet unknown (you may win or lose a lawsuit, but the intermediary decisions of the procedure will give you hints to what you can expect)[73], this temporal distention is not available in automated decision-making, so we cannot expect certain decisions. In institutional processes, we can observe how the other parts are behaving, and adjust our own behavior. This cannot happen in automated decisions. We may be subject to a decision (for instance, cuts in welfare benefits due to fraud suspicions) that we simply could not anticipate at all.

iii) *Material* dimension: There is no established due process to contest and challenge the merit and motives of automated decisions. Democratic decisions are discussed in their aims, costs, causes and effects. Automated decisions may be put in motion for reasons of efficiency and reducing costs, without providing a due process for contestation.

These differences express the change from a text-driven to a code-driven law: in the former, the building of general categories, the interpretation of concrete situations in which these categories apply, and the decision-making itself take time, require motivation, and can be publicly contested. In the latter, all these operations are condensed in time and invisible to society. The question, then, is how to lay down explicit regulation for digital platforms when they provide services that run 'under the radar' on the level of pseudo normativity.

New regulation strategies have been trying new mechanisms and tools to reverse the information asymmetry and better understand the new digital platforms. And the main obstacle may be in our thinking of regulation again according to the model of explicit normativity. At the heart of explicit normativity is the paradigm of criminal law when you punish deviant conduct with a sanction. Bentham inaugurated legal positivism discussing criminal policy and incarceration. This paradigm is not enough anymore for new regulation challenges, because big data analytics and artificial intelligence run with *inferences* – outputs of a process whose inputs are

73 Luhmann, *Legitimation durch Verfahren*, 1969.

unknown and indeterminable. Let us take, for instance, the NetzDG in Germany or the new regulation package in the European Union (the Digital Services Act and the Digital Markets Act). These initiatives focus on collective patterns (not on individual conduct) to establish disclosure and negotiation procedures, moving from discrete harms to systemic threats and measures.[74] But they move away from attaching a sanction to a previously given behavior. These new strategies are still under development, and a clear glance at the different normativity modes can help us in this challenging task.

74 See Eifert et al., 'Taming the Giants: The DMA/DSA Package', in *Common Market Law Review*, vol. 58, 2021, 987-1028, and Cohen, *Between Truth and Power*, 2019, 182; Auer, 'Granular Norms and the Concept of Law: A Critique', in *Algorithmic Regulation and Personalized Law: A Handbook*, 2021.