

# False Conscience: Sustainability and Smart Evolution—Between Law and Power

Ugo Mattei<sup>1</sup>

Accepted: 28 January 2024 © The Author(s) 2024

#### Abstract

The contribution describes the legal phenomenon as a playing field characterized by a progressive regression of the law, understood as a sovereign will from top to bottom, both in the vision of formalist legal positivisms in continental Europe and in realist terms, in the United States. Soft law represents the main strategy to subordinate the law to the interests of the economy, elasticizing environmental law, making it favorable to the market, reducing ecology to the simplistic metric of CO2 emissions. The consequence is a retreat of the statist vertical normativity of law which is not replaced by a de facto power granted to those who control the technology, built by design to close spaces for pluralism and democratic action, in the interest of surveillance and concentrated power in private and government oligopolies. The author concludes by advocating the urgency for genuinely innovative categories, particularly in the legal education, such as the commons, capable of including sustainability into a "new ecological jurisprudence committed to inclusion and solidarity rather than exclusion and struggle".

Keywords Environmental law  $\cdot$  Sustainability  $\cdot$  Global normativity  $\cdot$  Social processes  $\cdot$  Technological transformation

## 1 Premise

This essay is dedicated to the memory of Professor Emeritus Rodolfo Sacco (1923–2022), whose studies on the relationship between fact and law, from a macrohistorical, anthropological, and trans-species perspective, are without peer. Crito types, silent law, and "special games of glands and hormones" are inquiries that delve into the same boundary between law and non-law explored below. It was Professor Sacco, knowing of my environmental passion, who directed me to my mentor Antonio Gambaro; the latter entrusted me with a thesis on the civil protection of the

Ugo Mattei ugo.mattei@unito.it

<sup>&</sup>lt;sup>1</sup> Department of Law, University of Turin, Turin, Italy

environment, which I defended forty years ago. Rodolfo was sixty back then, and he seemed to me to be ancient; now, I am sixty-two.

## 2 Early Institutional Response to the Social Demand for Ecological Sustainability

In the principal countries of the Western legal tradition, the environment became a social issue attracting institutional response in the late sixties [1]. In the United States, in 1970, Richard Nixon (whom we can consider the first neoliberal US President) signed into law the Environmental Protection Agency. The same year witnessed the first version of the Clean Air Act; in 1972, the Clean Water Act was enacted. In France, the Ministry of the Environment was created in 1971 under the Pompidou presidency.<sup>1</sup> In 1972, the Club of Rome published a celebrated report on the limits of development [3, 4]. Italy, however, lagged behind. The Merli Law on water protection, considered the first official cognizance of the environmental crisis, arrived in 1976, while the Ministry of the Environment had to wait another ten years to be established thanks to socialist Prime Minister Bettino Craxi. Those initial attempts to address environmental degradation acknowledged, beyond some jurisprudential developments in nuisance (common law) and troubles de voisinage (civil law), that private law [5]—structurally oriented towards enhancing profits and rents—was inadequate as a decentralized system for controlling negative externalities such as pollution [6, 7].

Hence, even in common law jurisdictions, *public* law, in full consistency with administrative models of command-and-control that, starting with the New Deal, laid foundations for the welfare state, tried to limit the excesses of exploitation of the environment. Independent agencies in the United States and environmental ministries in civil law jurisdictions envisioned a proactive public apparatus, capable not only of establishing the rules of the game (typically the need to stay below certain pollution standards or not to engage in certain behaviors such as dumping plastic or effluents into rivers) but also of implementing these rules through enforcement mechanisms [8, 9]. A command-and-control system of this sort reiterated and applied to its most incisive consequences on the sphere of property and business freedom, the idea that the legal/administrative system, *i.e.*, the public sector, must be placed in a position of superiority to private industrial activity, prohibiting certain behaviors deemed antisocial, such as the indiscriminate exploitation of the environment for profit and rent extraction. In Italy, this idea was articulated in Article 41 of the Constitution.<sup>2</sup> The concept, in the early days of environmental legal protection

<sup>&</sup>lt;sup>1</sup> I devoted my first publication to a comparison between command-and-control regulation and private law solutions: [2] Ugo Mattei, *I modelli nella tutela dell'ambiente*, RIVISTA DI DIRITTO CIVILE, II 389 (1985).

 $<sup>^2</sup>$  Art. 41 Italian Constitution states, "Private economic enterprise is free. It cannot be carried out against the common good or in such a manner that could damage safety, liberty and human dignity. The law shall provide the appropriate programs and controls so that public and private sector economic activity may be oriented and coordinated for social purposes." A 2022 amendment introduced *health* and the *environment* before "safety, liberty and human dignity" as values to be respected by free enterprise.

(not until later did we begin to consider the environment a *common* to be managed in the interest of future generations), was that of an imperative, hard law, often criminal, capable of effecting a political vision endowed with democratic legitimacy. To ensure sustainability, as we would say today, the law must directly and effectively prevent the present generation from exploiting its freedom of enterprise (ownership or control of means of production) by shifting the costs onto non-owners or future generations, thereby jeopardizing their access to a healthy environment and the commons [10, 11, p. 459, 12].

#### **3** Neoliberal Reaction

In the United States, the backlash against a system of technically expert public agencies capable of strengthening an increasingly widespread environmentalist vision did not take long to surface [13]. The political triumph of this reaction would arrive with the presidency of Ronald Reagan, but the academic groundwork for this process was well underway in the early seventies. Even then, it was evident how neoliberal thought, through the gradual conquest of cultural spaces, coupled with a veritable market for reforms, had infiltrated international political agendas [14]. This infiltration was causing an alteration in the balance between democracy and capitalism, favoring the latter.

I have discussed elsewhere [15] how, through a sly investment process in the ideological apparatuses of the state—particularly elite universities—the relationship between private and public powers progressively subverted to corporate gigantism. Within law schools, the reaction to legal realism and its faith in expert administrative agencies (which employed some of the most prestigious academic lawyers, especially from Yale University and University of Chicago [16]) took the form of Law & Economics (or, adopting Guido Calabresi's nuance, the Economic Analysis of Law) [17, pp. 1–24]. Meanwhile, rational choice theory, honored with a Nobel Prize (awarded to James Buchanan in 1986), tagged as ideological and irrational any politician who resisted substantial corporate funding (which was largely bipartisan) aimed at maximizing chances of reelection, targeting the median voter according to Duncan Black's model [18].

Thus, efficiency—the lodestar of capitalist accumulation here and now (for a classical description of capital accumulation, *see* [19])—replaced effectiveness as the metric for evaluating environmental policies and dangerously became the sole hermeneutic key for interpreting all social phenomena [20]. The legal system, a product of increasingly "captured" legislators, kneeled to the needs of capitalist accumulation. The market dictated the rules of the game to politics and to law, now assessed in terms of efficiency. Instead of a law regulating the market, a massive investment in academic ideology was promoting a law friendly to the market capable of attracting investments based on assurances it offered to corporations [21].

The most celebrated American administrative law experts, including Richard B. Stewart [22], elevated innovation as the criterion for evaluating environmental policies pursued by agencies such as the EPA. Such agencies, like any bureaucracy, did not shine in terms of *flexibility*, the new neoliberal value that was gaining ground,

especially to limit the strength of protective labor and environmental regulation. The inevitable consequence of this convergence of interests between academia and capital (better described as systemic corruption) [23, 24] was the defunding of agencies, while discussions about soft law—namely, the main strategy of subordinating law to economic interests—raged on [25].

This culturally captured (*i.e.*, co-opted or *corru*pted) evolution brought to the forefront concepts such as social norms or nudges, primarily associated with another celebrated American administrative law scholar, Cass Sunstein [26]. It unfolded in parallel with discussions such as trade emissions within the protocols of Kyoto (from 2003, the main European instrument) as part of a colossal operation known as greenwashing, referred to as the green economy [27]. This operation deftly took control, with champions in high places like Al Gore and Barack Obama, of the global discourse on sustainability, tainting it and revealing its nature as false consciousness. Particularly in the United States, the political debate unfolded on a decidedly partisan front, with Democrats supporting the green economy and Republicans favoring Main Street (the traditional fossil fuel-based model). This occurred amidst accusations of denialism (complete with testimonials from figures like Greta Thunberg), without either side distancing itself from supporting the interests of corporations and donors.

Regrettably, the bankruptcy of representative democracy captured by capital has resulted in a complete commodification of the discussion on ecology in the face of the complex issue of global warming, reducing it in an entirely reductionist manner [28]. It is as if, in a world with all ecosystems in crisis (plastics, fishery systems, electromagnetic pollution, plundering of rare minerals, devastating wars, depleted uranium, and so on and so on), ecology could be reduced to the simplistic metric of  $CO_2$  emissions. Indeed, in my own home-away-from home of Berkeley and in other strongholds of liberal intelligentsia, steering a Tesla while wearing a mask and waving a Ukrainian flag constitutes a progressive political gesture, broadcasting woke concern for future generations and sustainability.

#### 4 The Anti-Law Movement

As early as 1978, Laura Nader, one of the few critical minds in elite US academia, denounced the anti-law movement launched by neoliberal power [29, 30, p. 52]. This struggle, conducted with a myriad of tactics (Alternative Dispute Resolution, ADR, was her main example), aimed to weaken hard legality (limits on punitive damages, difficulties in certifying class actions, emphasis on self-discipline with soft conduct tools). Unfortunately, Laura Nader's denunciation fell upon deaf ears, and the academic crusade for flexibility (and the consequent reduction of law to impotence) continued its juggernaut not only in the United States but also in the European periphery [31].

In the Italian context, matters unfolded in a similar manner. Command-andcontrol administrative apparatuses (such as ARPA) designed to protect the environment were underfunded and captured. The judiciary, after golden years of so-called assault magistrates, is now trapped in a bureaucratic and resigned view of its role, readily abdicating to bureaucracies (for example, regarding electromagnetism it is rare to see the precautionary principle, despite its constitutional status—Article 191 TFUE—being used to repress behaviors that endanger public health and ecosystems). Public law doctrine, often parochial or itself captured, has for years been entangled in wholly ideological discussions about the so-called "regulatory state" and its alleged efficiency [32, p. 36, 33]. Meanwhile, civil law doctrine mimics with "regulatory private law" (a concept now in vogue in Europe), extolling the efficiency of regulatory competition, an idea that certifies the submission of law to the logic of capital and the false consciousness of sustainability discourses [34, 35].

These contextual insights, presented trenchantly given my earlier work, aim to illustrate how, by elasticizing environmental law, making it market-friendly, exploiting its ability to prevail in an imaginary competition supporting the green economy, and celebrating any alternative to traditional *force de loi* as more efficient and desirable, we have arrived at a juncture where the jurisdiction in environmental matters has been delegitimized and marginalized, making it, if not anti-law, at least non-law. And since the opposing notion to law is that of "fact" in various senses, I would like to discuss an impressive parallel transformation morphing new forms of de facto power.

## 5 Sustainability, Legal and Natural

What happens when law, understood as top-down sovereign will, both in the vision of formalist legal positivisms in continental Europe and in realist terms in the United States, regresses? One possibility is that law is produced by bottom-up facticity as in the case of customs and usages.<sup>3</sup> Some scholars have saluted such emergence of customary law overcoming "legolatry" and narrow legal positivism [37]. Unfortunately, in the current global conditions of new middle ages, when capital is concentrated in few global corporations, it is more likely that law is substituted by the brute force of a different top-down power. This has happened due to the most impressive technological transformation ever to occur: the internet massively accessed via smartphones [38].

In the technological conditions that have arisen, the retreat of vertical normativity with a statist matrix of law has not been replaced by a bottom-up factuality, producing a customary and genuinely pluralistic law, as observed (and somewhat hoped for) by masters like Rodolfo Sacco [39] or Paolo Grossi. On the contrary, the new global normativity, hegemonic in current conditions, remains vertical [40, 41]. However, it is not legal but factual: it is based on a de facto power guaranteed to those who control technology. This technological power allows exclusion without motivation and is indifferent to any form, even ideological, of legitimation. Far from leaving the mere power of the state's law in favor of a more varied and complex legal

<sup>&</sup>lt;sup>3</sup> In Italy, one late Master of Legal History and former Chief Justice of the Constitutional Court devoted his career to rescuing the bottom-up production of law through facts in society denouncing the mythology of modernity. *See*, among many writings [36].

system from below, it confirms the "iron fist" of power. However, it is no longer the power of the *state* but the one exercised by the private oligopoly that controls the technological devices of cognitive capitalism.<sup>4</sup> These are the new "facts" producing normativity [42, 43].

Elsewhere, I have hypothesized that since the opening of the internet for private use humanity has been progressively trained in the logic of the Web and its platforms, becoming landlords of the new virtual frontier where our lives and businesses have migrated [44, 45]. I have observed how the logic of "take-it-or-leave-it" (contractual mandates to click on "I agree") has been legitimized by the behavior of billions of humans who spend more time in front of a screen than sleeping and who click as a reflex, often arguing that they have "nothing to hide or to fear". I delved into the phenomena of dependence and uncritical compliance that this generates, and I arrived at the hypothesis, expressed in my emeritus farewell address in San Francisco, that the logic of conditionality was destined to extend beyond the internet frontier, returning to the homeland and determining the death of law (*ius*) as an alternative to concentrated power.

Better to understand, in recent years, with a progressively impressive acceleration, that this mass phenomenon, without truly comparable historical precedents, has assumed even more impactful proportions than indicated in those venues. Over four billion people (more than half of the Earth's population) currently use smartphones (which do not merely constitute a new generation of cell phones, despite retaining the term "phone" in their nomenclature) for a daily average of about five hours. By 2025, 72% of internet users will employ these microcomputers, which have become true extensions of our bodies. Juan Carlos de Martin, an engineer attentive to the transformations of social processes, provides data to identify a double impact of this mass phenomenon for the theme of this essay [38].

On one hand, "the smartphone has become, in fact, if not yet by law, necessary," and here, so to speak, the sustainability of the phenomenon for legal culture is impacted. In these conditions, a question arises: will we be able to transmit our millennial jurisprudence (*civilis sapientia*) to future generations, if exclusion from political and social life, as well as economic activity online, can occur, outside of any principle, operated by a machine or private algorithm? *Legal* sustainability, *i.e.*, the possibility to convey to future generations a legal environment not less civilized than today's, is impaired when the law must face, with modest yet exquisitely cultural and civilizing tools, an unprecedented technological lawless acceleration. The smartphone (symbolic machine of our century) that has constituted a qualitative leap in this uneven confrontation is just a prelude to another impressive qualitative leap that threatens us, as citizens and jurists, in the form of the popularization of artificial intelligence (already upon us) and quantic computing (soon to arrive).<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> I will not discuss here the capacity of the private/public law distinction to survive phenomena such as public/private sector revolving doors and participation by secret services on boards of directors of corporations that control global surveillance based on the capture of data.

<sup>&</sup>lt;sup>5</sup> A European Directive proposal is tackling the issue of planned obsolescence.

On the other hand, and here the concept of sustainability remains in its more traditional tracks such as negative long-term externalities, the present generation currently unloads onto the future generation fifteen billion microcomputers (with about half already discarded), whose average life is limited by design to a couple of years. Not only that, but like drug addicts birthing children already doomed, our generation leaves to the future physical and psychological dependence on this technological prosthesis, effectively transforming humans into cyborgs outside of any serious political debate. This renders almost certain that the pace of abandonment of the poisonous prosthesis (containing dozens of highly non-recyclable toxic metals) programmed for obsolescence will progressively impact the regenerative capacities of Gaia, our planet.

The first problem of sustainability—the legal one—deserves deeper insights but has to do with the very capacity of law, as a principle capable of opposing mere power, to guarantee spaces of freedom and autonomy in front of the technology symbolized by the smartphone. Here it is permissible to doubt, with Pashukanis among jurists and Heidegger among philosophers, law's ability to emancipate itself—and therefore to emancipate us—from the deep structure of technological exploitation [46].

Communication and information technology is built by design to close spaces of pluralism and democratic agency in the interest of surveillance and power. It is the last act of that struggle against the law discussed above. The power on such technology is concentrated in private and governmental oligopolies. In the case of smartphones, Google and Apple for operating systems; the Chinese government for physical production of the object; the US government as the main (albeit declining) geopolitical puppeteer of this turbulent historical phase. It has no interest in changing a status quo that delivers the minds, wallets, and data of billions of people, transported by a dazzling technological machine, into a world of blackmail (take-it-orleave-it), from which it is practically impossible to escape. A world that is nothing more than the product of imperatives of capital accumulation [47, 48] that attacks environmental and social commons with increasingly sophisticated tools, indifferent to any principle different from the logic of capital accumulation.

As discussed elsewhere, while for centuries the *civilis sapientia* of jurisprudence (*ius*) had managed to limit the most abhorrent abuses, because conveyed by a professional class (jurists) then indispensable for the accumulation of capital, today accumulation is possible online based on mere facts, like technology control that allows exclusion much more rapidly and comprehensively than proprietary legal rules, which jurists have historically made available to power. Moreover, an increasingly globalized and standardized law, in the hands of increasingly technocratic if not bureaucratic jurists [49] not only reduces itself to a mere instrument of capital extraction but also lends itself to replacement by the "intelligent" machine. It is natural, therefore, that the reasoning and sermons of jurists on user privacy; limits to surveillance; programmed obsolescence; the right truly to disconnect (remove the battery from the smartphone); and the rights (especially of children) not to be manipulated in mind and to develop one's personality in one's own interest and not that of the corporate owner of the technology have the same concrete effectiveness

as the almost four dozen United Nations resolutions calling on Israel to respect the rights of Palestinians and international law.

#### 6 Captured

In a scenario of this sort, the law officially produced (think of that of the European Union, such as the GDPR, or more recently, the Digital Service Act, which came into effect in August 2023), completely captured by concentrated private power, can only be false consciousness. At most, it can have some impact on individual players (consider Huawei excluded from the Western market by the policies of both Trump and Biden), but for the rest, it is capable, at most, of marginally affecting the obscene profits of the Web's feudalistic oligopolists via some fines against unfair practices that seem hefty to everyone except the recipients. Moreover, in a world captured by corporations, the heterogeneity of declared ends (which I prefer to call false consciousness) is just around the corner because the Digital Service Act, for example, presented as a bulwark for the right to be informed free from the cacophony of fake news, has actually added a new level of public censorship (*see, e.g.*, the letters sent by the EU to Elon Musk) to the private censorship that already arbitrarily excludes inconvenient social media content.

In a framework of this kind, *ius*, [50] understood as the right of present and future generations to be governed by democratic and acceptable ordering principles, a contribution of Western tradition to the orderly coexistence among peoples and a potential common good of humanity, evaporates. It morphs under the distracted gaze of jurists, who insist on business as usual, into pure false consciousness or, at most, into cacophony in service of brute force of power.

What legal principles can we, as teachers in law schools, transmit with a straight face to future generations? That when we buy a smartphone, we acquire ownership, just like in the case of a bicycle or a book? Not: the truth is that, unknowingly, billions of people (kept artificially in ignorance) are buying at a dear price a machine "opaque and unfaithful, creating dependence and physical and psychological problems, capable of being an instrument of intrusive and pervasive surveillance" [38]. The related sales contract does not transfer ownership in any of the senses elaborated in centuries of jurisprudence because the buyer has "limited control ... over a personal computer that silently controls, surveils, spies, manipulates its owner." We are not the owners of the machine we use; rather, we are its property, ourselves transmogrified into the commodity on which dominium insists, owned not owners, as Joshua Fairfield wrote some years ago [51]. In a chilling way, not only does the feudal relationship of a new global medievalism re-emerge (there are few tenantsin-chief of the internet frontier, bound together in a secret, opaque, and unknowable way), but also the domination over the person as a commodity returns, subtly and sophisticatedly but hidden in plain sight in its brutality [52]. We should at least notice the riders (mostly from the Global South) pedaling at the directions of their smartphones while delivering pizzas we comfortably ordered via the same instrument.

If we move from legal sustainability to physical sustainability, scant comments are needed. To give us convenient and, in fact, obligatory access to the internet, keeping us glued in the interest of its feudal lords, wars are unleashed for metals and rare earths, open-pit mining occurs, young children are enslaved in mines, female workers are induced to suicide in Foxconn factories and elsewhere, landfills are filled with toxic waste, destroying aquifers and other ecosystems.

The law does not control all this because it is progressively rendered impotent by the betrayal of its own neoliberal priests, who have been celebrating the virtues of soft law for years and evangelize us of the corporation's concern for our health, our planet, and our children. Plunder masked by law is an old, old story [15]. The qualitative leap today lies in the right to plunder, guaranteed to global powers, public and private, by a techno-optimism that obscures minds, rendering them *prisoners* [53].

Sustainability thus becomes a strategy for green economy, a reductionist notion (*e.g.*, the fight against  $CO_2$ ) captured and functionalized by a power that makes cultural co-optation its hallmark.

If the law wants to return to being a shield against a power that no longer even needs it as a sword—"Abundance needs no law" [54], p. 50]—the cultural leap must be radical. Law and rights must be interrogated within concrete material relationships. Genuinely innovative categories, such as the commons, capable of grasping the inevitably dialectical dimension of law [55, pp. 59–61; 56, pp. 219–220] must be strengthened and made aware of the risks of co-optation [57]. Sustainability, whether legal or physical, needs above all the full development of a new ecological jurisprudence committed to inclusion and solidarity rather than exclusion and struggle. Such jurisprudence can emerge only if it evidences at its core the commons: the only ordering category available today that is both ecological (*i.e.*, holistic and political) and structurally linked to future generations.

Funding Open access funding provided by Università degli Studi di Torino within the CRUI-CARE Agreement.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/ licenses/by/4.0/.

#### References

- 1. Richard J Lazarus 2022 The making of environmental law The University of Chicago Press Chicago.
- 2. Mattei, Ugo. 1985. I modelli nella tutela dell'ambiente Rivista di diritto civile II 389.
- 3. Meadows, Donella H., et al. 1972. *The limits to growth: A report for the club of Rome's project on the predicament of mankind*. New York: Universe Books. Available at https://bit.ly/4a6lTGc.
- 4. Peccei, Aurelio. 1981. Cento pagine per l'avvenire. Bra (Italy): Slow Food Editore.

- 5. Patti, Salvatore. 1979. La tutela civile dell'ambiente. Padova: Cedam.
- 6. Gambaro, Antonio. 1957. Jus aedificandi e nozione civilistica della proprietà. Milano: Giuffrè.
- 7. Mattei, Ugo. 2015. La proprietà. In Trattato di diritto civile, ed. Rodolfo Sacco. Torino: Utet.
- Landis, James M. 1966. The administrative process. New Haven: Yale University Press. Available at https://bit.ly/47WhDY8.
- 9. Horwitz, Morton J. 1994. *The transformation of American law, 1870–1960: The crisis of legal orthodoxy.* New York: Oxford University Press. Available at https://bit.ly/3xhvd9b.
- 10. Mattei, Ugo. 2012. Beni comuni: un manifesto. In *Oltre il pubblico e il privato. Per un diritto dei beni comuni*, ed. Maria Rosaria Marella and Stefano Rodotà. Verona: Ombre corte.
- 11. Rodotà, Stefano. 2013. Il terrible diritto. Studi sulla proprietà privata e i beni comuni. Bologna: il Mulino.
- 12. Mattei, Ugo, and Mancall Mark. 2019. Communology: The emergence of a social theory of the commons South Atl Q https://doi.org/10.1215/00382876-7825576.
- 13. Nader, Ralph, and John, Abbotts. 1979. *The menace of atomic energy*. New York: Norton. Available at https://bit.ly/485NDJm.
- 14. Somma, Alessandro. 2018. Il mercato delle riforme. Appunti per una storia critica dell'Unione europea. Bologna: Il Mulino. Available at https://bit.ly/3TbiDTO.
- Mattei, Ugo, and Laura Nader. 2008. Plunder: When the rule of law is illegal. Malden: Wiley. Available at https://bit.ly/30yXxDD.
- Gilmore, Grant. 2015. *The ages of American Law*. New Haven: Yale University Press. Available at https://bit.ly/435kTOy.
- 17. Calabresi, Guido. 2016. The future of law & economics: Essays in reform and recollection Yale University Press New Heaven.
- Black, Duncan. 1959. The theory of committees and elections. Cambridge: Cambridge University Press. Available at https://bit.ly/3GB55KE.
- Marx, Karl. 1990 (reprint). Capital: A critique of political economy, vol. 1, 741–742. Moscow: Progress Publishers, USSR.
- Mattei, Ugo. 1998. Fatto e valore. Il paradosso ermeneutico dell'analisi economica del diritto. In Annuario filosofico europeo. Diritto, giustizia e Interpretazione, ed. Jacques Derrida, Gianni Vattimo, and Mauro Bussani, 165–188. Bari, Roma: Editori Laterza.
- Mattei, Ugo. 2005. The rise and fall of law and economics: An essay for Judge Guido Calabresi. Maryl Law Rev 64: 220–249. Available at https://bit.ly/3BliKQU.
- 22. Stewart, Richard B. 1918. Regulation, innovation, and administrative law: A conceptual framework. *California Law Review* 69: 1256–1377. Available at https://bit.ly/3NeyUnc.
- 23. David F Noble 1979 America by design: Science, technology, and the rise of corporate capitalism Oxford University Press Oxford.
- 24. Vergara, Camila. 2020. *Systemic corruption: Constitutional ideas for an anti-oligarchic republic.* Princeton, NJ: Princeton University Press. Available at https://bit.ly/39Lm7El.
- Jansen, Nils. 2023. Soft law: An historical introduction Mariolina Eliantonio Emilia Korkea-aho Ulrika Mörth Eds Research handbook on soft law Edward Elgar Publishing Cheltenham Glos, UK 30 41.
- 26. Richard Thaler Cass R Sunstein 2008 Nudge: Improving Decisions About Health, Wealth, and Happiness Penguin Books London.
- Kenis, Anneleen, and Matthias Lievens. 2015. The Limits of the Green Economy: From Re-Inventing Capitalism to Re-Politicising the Present. London: Routledge. Available at https://bit.ly/4abNS Ez.
- 28. Capra, Fritjof, and Ugo Mattei, 2017. *Ecologia del diritto. Scienza, politica, beni comuni*, Milano: Aboca edizioni.
- Nader, Laura. 1978. The direction of law and the development of extra-judicial processes in nation state societies. In *Cross-examinations: Essays in memory of Max Gluckman*, ed. P. H. Gulliver, 78–95. Leiden: E. J. Brill.
- Nader, Laura. 2022. The life of the law: Anthropological projects. Oakland: University of California Press. Available at https://bit.ly/487XzlB.
- Mattei, Ugo. 2002. Miraggi transatlantici. Fonti e modelli nel diritto privato dell'Europa colonizzata. In Quaderni fiorentini per la storia del pensiero giuridico moderno. L'ordine giuridico europeo: radici e prospettive, Tomo I, 401–423. Milano: Giuffré. Available at https://bit.ly/419c5qI.
- 32. Cassese, Sabino. 2000. La crisi dello Stato Laterza Bologna.
- 33. La Spina, Antonio, and Giandomenico Majone. 2000. Lo stato regolatore. Bologna: Il Mulino.

- 34. Sirena, Pietro, and Andrea Zoppini, eds. 2018. I poteri privati e il diritto della regolazione. A quarant'anni da «Le autorità private» di C.M. Bianca. Roma: Roma Tre Press. Available at https://bit.ly/3R9wqYE.
- 35. Fabriziot, Cafaggi. 2006. Reframing self-regulation in European private law Kluwer Dordrecht, London.
- 36. Grossi, Paolo. 2015. Ritorno al diritto. Bari: Ed. Laterza.
- 37. Grossi, Paolo. 2007. Mitologie giuridiche della modernità. Milano: Giuffrè.
- 38. De Martin, Juan Carlos. 2023. *Contro lo smartphone. Per una tecnologia più democratica*. Torino: Add editore.
- Sacco, Rodolfo. 2015. Il diritto muto. Neuroscienze, conoscenza tacita, valori condivisi. Bologna: Il Mulino.
- 40. Grossi, Paolo. 2012. Introduzione al Novecento giuridico. Bari: Laterza.
- 41. Grossi, Paolo. 2020. Oltre la legalità. Bari: Laterza.
- 42. Quarta, Alessandra. 2020. Mercati senza scambi. Le metamorfosi del contratto nel capitalismo della sorveglianza. Napoli: Edizioni Scientifiche Italiane.
- 43. Mattei, Ugo, and Alessandra Quarta. 2018. The turning point in private law: Ecology, technology and the commons Edward Elgar Publishing Cheltenham Glos, UK.
- 44. Mattei, Ugo. 2020. Do smart things make us dumb? Reflections on the addiction crisis of cyborg consumerism. *Revue européenne de droit de la consommation/European Journal of Consumer Law*, 613–628.
- 45. Mattei, Ugo. 2023. The death of law Glob Jurist https://doi.org/10.1515/gj-2022-0064.
- 46. Pashukanis, Bronislavovich Evgeny. 2023. *The general theory of law & marxism* [Obshchaia teoriia prava i marksizm]. London: Routledge. Available at https://bit.ly/35TcsdM.
- 47. Zuboff, Shoshana. 2019. The age of surveillance capitalism. The fight for the future at the new frontier of power. New York: Public Affairs.
- 48. Greenfield, Adam. 2017. *Radical technologies: The design of everyday life*. London, New York: Verso editor.
- 49. Pistor, Katharina. 2019. *The code of capital: How the law creates wealth and inequality*. Princeton: Princeton University Press. Available at https://bit.ly/35WGgWZ.
- 50. Schiavone, Aldo. 2012. The invention of law in the West Harvard University Press Boston.
- 51. Joshua A T Fairfield 2017 Owned: Property, privacy, and the new digital serfdom Cambridge University Press Cambridge.
- Denozza, Francesco. 2017. Introduzione: Regole e Mercato nel Diritto Neoliberale. In Regole e Mercato, ed. Rispoli Farina Marilena, Sciarrone Alibrandi Antonella, and Tonelli Enrico, XV–XLV. Torino: Giappichelli. Available at https://bit.ly/47INMm8.
- Berger, John. 2009 One message leading to another Critical Quarterly https://doi.org/10.1111/j. 1467-8705.2009.01891.x.
- Horkheimer, Max, and Theodor W. Adorno. 2022. Dialectic of enlightenment: Philosophical fragments [Gesammelte Schriften Band V: Dialektik der Aufklärung und Schriften 1940–1950] (Gunzelin Schmid Noerr ed., Edmund Jephcott tran.). Stanford: Stanford University Press. Available at https://bit.ly/2UjMPwN.
- 55. Engels, Frederick. 2010. Engels to Conrad Schmidt [27 October 1890]. In Marx & Engels Collected Works Volume 49 Letters 1890–92, Boris Tartakovsky et al. ed. Peter and Betty Ross et al. trans., 2010, 57–65. Digital Edition Copyright © Lawrence & Wishart. https://bit.ly/3ptD3bK.
- Engels, Frederick. 1977. Juridical socialism [Juristen-Socialismus, 1887]. Politics & Society 7(2): 203–220. Available at https://bit.ly/3IrWtV3.
- Borghi, Maurizio. 2023 Commodification of intangibles in post-ip capitalism: Rethinking the counter-hegemonic discourse. *European Law Open*. https://doi.org/10.1017/elo.2023.25.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.