Introduction. For a sociology of rationalization: From Max Weber to contemporary research

Philippe Bezes, Sebastian Billows, Patrice Duran, Michel Lallement

In L'Année sociologique 2021/1 Vol. 71 , pages 11 to 38
Publisher Presses Universitaires de France

ISSN 0066-2399
ISBN 9782130827696
DOI 10.3917/anso.211.0011
Uploaded: 03/22/2021

INTRODUCTION FOR A SOCIOLOGY OF RATIONALIZATION: FROM MAX WEBER TO CONTEMPORARY RESEARCH PROGRAMS

Philippe BEZES
Sebastian BILLOWS
Patrice DURAN
Michel LALLEMENT

Translated and edited by Cadenza Academic Translations

Translator: Isabelle Chaize,
Editor: Faye Winsor, Senior editor: Mark Mellor

The concept of rationalization occupies a central place in the works of Max Weber. In the German sociologist's writings, it is associated with a family of words built on a shared root: "ratio," or reason. The index of Weber's complete works (Baier et al. 1984–2020) lists six principal members of this family (rationality, irrationality, rational, rationalism, rationalization, and irrationalization), each of which come with numerous qualifications. The term "rationalization" accounts for fully a third of the occurrences of the words in this special set. A quick exploration of the corpus of keywords also reveals that Weber's use of the concept varied enormously over time. Completely absent from his first works, it made a timid appearance in his writings on the methodology of the social sciences. Its use then intensified, initially in works on music, law, and the economic ethics of major religions. Its trajectory is also connected to the subject that became, according to Marianne Weber (1984 [1926]), her husband's primary focus from the 1910s: the uniqueness of Western civilization when seen from the perspective of rationalization.

To aid in this investigation, Weber associated rationalization particularly, although not exclusively, with a model of historical development characterized by the precedence of rational action over means, where rational action itself is shaped by increasingly formalized and abstract norms and regulations. Three clarifications are immediately necessary to preempt various tenacious clichés associated with this subject. First, Weber understood rationalization more as an endless repetition that works to increase the compatibility of means with ends than as a path toward a rational state of the social world. One good example is the constant emergence of new forms of irrationality, which, in a Nietzschean vein, Weber considered to be consubstantial with rationalization processes. Second, rationalization is not exclusive to modern societies. The uniqueness of Western civilization is due less to the presence of rationalizing forces than to the role allotted to them and the wide variety of fields over which they hold sway. Weber examined the empirical manifestations of rationalization in a range of different fields and in numerous concrete objects. Finally, in Weber's eyes rationalization is not merely the hypertrophic development of rational action as an end in itself. It refers more generally to a process of ordering the world. That is why, although Weber described magic as a "stereotyping" attitude that prevents the rationalization of the world, he nevertheless saw it as the result of "subjectively rational behavior" (Weber 1992 [1904–1917], 414).[1]

Although Weber made these aspects clear in his work, the term "rationalization" has often been used to analyze the major developments of the twentieth century at a macrosociological level. The phrase "Entzaubering der Welt" ("de- magication of the world"), often incorrectly translated as "disenchantment of the world," has become a sort of analytical "open sesame" that supposedly summarizes the Weberian theory of rationalization. Scientific use of the concept has subsequently declined, no doubt because of the overly simplistic and teleological meaning it has ended up acquiring.

On that basis, we made three deliberate choices when compiling this issue. The first is related to the hypothesis that the processes of rationalization are still at work in contemporary Western societies. It is, therefore, worthwhile trying to identity them as such. The

1. Translator's note: Quotations our translation from the French. Unless otherwise stated, all translations of cited foreign language material in this article are our own.

second is theoretical: to reveal the heuristic nature of the concept of rationalization, we must revisit the multiple meanings and complex mechanisms to which it refers in Weber's works. To do so, we have chosen to pay particular attention to the "major tensions," to borrow Michel Lallement's phrase (2013), between formal and substantive rationalization. The third choice is methodological. We have focused on the operationalization of the concept and its uses as investigated in empirical articles on varied subjects: norms and bureaucracies established to protect the environment, large companies that have adopted "matrix" management, work in large farms, or the transformations of anti-discrimination law. The articles collected here all make use of the concept of rationalization, demonstrating both its continuing relevance and its productivity.

Our introduction to this issue is divided into two parts. The first concerns the sources of Weberian thought. We present an overview of the role played by questions of rationalism and rationalization within Max Weber's entire oeuvre. We also provide a detailed account of the opposition between the formal and the substantive. The second part is devoted to the contemporary uses of the concept of rationalization in the social sciences. It reveals the increasing interest in how the sociology of the tensions between formal and substantive rationalizations can offer an innovative way of explaining certain changes in the contemporary world.

Max Weber and the question of rationalization

For an enterprise such as ours to have meaning, we must first clarify the status of rationalism and rationalization within Weber's work, a topic to which numerous studies have been devoted (Boudon 2012; Brubaker 1984; Colliot- Thélène 1997, 2009; Gane 2002; Kalberg 1980, 2002; Müller 2014; Roth 1987; Schluchter 1985; Whimster and Lash 1987; etc.). Although Weber does not use the concept directly in his writing, the themes and questions associated with it are present throughout his oeuvre. The central question of the origin and implications of modern capitalism permeated his thinking very early on. It appears in 1889, in *Zur Geschichte des Handelsgesellschaften im Mittelalter (The History of Commercial Partnerships in the Middle Ages)*, where Weber raises the question of the historical genesis of that specific economic

form. Even more pertinently, his *Agrarverhältnisse im Altertum* (1897, translated as *The Agrarian Sociology of Ancient Civilizations*) was an attempt to identify the defining characteristics of the economy of antiquity and to describe the obstacles that prevented it developing into a capitalism comparable to that of the modern age. Also relevant is the academic mission of the *Archiv für Sozialwissenschaft und Sozialpolitik* as formulated by Werner Sombart, Edgar Jaffé, and Max Weber in 1904: the journal sought to "consider the historical and theoretical investigation into the general cultural significance of the development of capitalism as the scientific problem that it is dedicated to [dealing with]" (Sombart, Jaffé, and Weber 2012, 97). Weber clarified his focus again in the famous "Vorbemerkung" that opened his essays on the sociology of religion, published in 1920 (Weber 1992 [1910–1920], xxvii–xlii). It contains what is undoubtedly the unifying thread with which a body of work as prolific as Weber's can be understood. Weber's comparative approach is not indiscriminate in its targets; it is guided by a line of inquiry oriented exclusively toward the understanding of Western civilization.

The particularity of modern Western rationalism can be explained in two ways: either as primarily caused by economic conditions, or, conversely, as the effect of dispositions that induce people to adopt the specific forms of a life conduct characterized by practical rationalism. As Weber emphasized in the "Vorbemerkung," it was to this "side of the causal chain" (Weber 1992 [1910–1920], xxxix) that he was most drawn. It was in this context that he set himself the task of analyzing the development of an ethical "way of life" adequate to the nascent capitalism of the modern age, and "nothing else," as he stated firmly in the "Antikritiken" (Weber 1996 [1910–1920], 133–63). As there is, for Weber, no action without dispositions to act that structure a life conduct, he also needed to understand how certain elements of religious beliefs had conditioned the appearance of an "economic mentality." For that reason, he was interested in the rationalizing potential of religions of transcendence in the sense that salvation prophecies guide life conduct toward the pursuit of a salvation good, thus enabling the rational systematization of life conduct.

Without necessarily sharing the linear perspective of Jürgen Habermas in the chapter devoted to Weber's theory of rationalization

in *The Theory of Communicative Action* (1984 [1981]), we can accept that Western rationalism was preceded and prepared by a process of rationalization in which the great world religions played a major role. The central paradox of capitalism is that of the emergence, in a religious context, of a new type of human (driven by the search for instrumental or formal rationality) whose universalization threatened to make social relations meaningless, just at the time when rational control over nature and the social world was expanding.

This theoretical connection between rationalization and capitalism has been the subject of numerous controversies, interpretations, and manipulations (Müller and Sigmund 2014). One notable aspect has been, after Weber's death, the tendency among certain sociologists and philosophers to decline rationalization in the singular in order to criticize global developments. Weber, however, was careful to stress the plurality of meanings associated with the concept of rationalization, if only because rationalization itself, which for Weber is a mesosociological process, leads to the autonomization and differentiation of social spheres, of "life orders" (*Lebensordnungen*), by mechanisms of specialization that give each order its own inherent laws (*Eigengesetzlichkeit*). By the same token, the social space becomes a fragmented space, a space of tension (*Spannung*) and conflict (*Kampf*), as demonstrated both by the tensions between the social spaces of different activities, and the internal tensions within each social space. This is true of matters of the heart, the erotic sphere, economics, or politics. Weber is, in fact, the first to have really thought about the plurality of lived worlds and the resulting rifts that affect social actors. The polytheism of values and the plurality of axiological spheres, far from being quasi-ontological aspects of the human condition, are for him the effect of the diversification of practices within increasingly segmented and autonomous fields of action. It is important to remember that Weber's problematic is not one of integration. There is no functional interdependence between the different areas of social life that would a priori define an integration of the whole.

One group of thinkers has rejected this analysis and restricted the meaning of rationalization to that of a process that assembles the iron cage in every sphere of social action. Their readings have driven a dark, unambiguous, and teleological vision of the rationalization of Western societies. There are several explanations for these

one-dimensional usages of the concept. Some of Weber's pages do contain prophetic notes that could have fed a deterministic reading. In the context of a twentieth century marked by the will to destroy an entire part of humanity in a systematic and organized way, it was above all tempting to see the dynamic of Reason in a radically negative light, diametrically opposed to how it was understood during the Enlightenment (Horkheimer and Adorno 1982 [1947]). The postwar rearrangements of capitalism, and more precisely certain social absurdities of which it was the theater (the drive for productivity, endless consumerism, all sorts of alienation . . .) may, in parallel, have nourished a literature predisposed to the denunciation of a controlled society (Marcuse 1991 [1964]). Even more recently, the emergence of new forms of activity, cooperation, and communication have provided material for the much-debated thesis of the McDonaldization of society (Ritzer 2004 [1980]).

When we look closely, we must acknowledge a second notable aspect, namely the fact that the precise meaning given to the concept of rationalization varies widely in these studies as well as in those that take a more distanced, exclusively macrodeterministic view of social dynamics. A survey of contemporary scholars writing about Weber reveals at least five distinct dimensions. First, an instrumental dimension: rationalization is conditioned, in this case, by the explicit definition of goals and the increasing use of precise forms of calculation intended to mobilize the most efficient means for achieving those goals (Beetham 1974). The second, cognitive dimension concerns the systematic construction of knowledge in a given field (Brubaker 1984). The formal dimension, meanwhile, corresponds to the salience of abstract reasoning and "abstract interpretations of meaning" as opposed to forms of reasoning centered solely on facts and concrete details (Kalberg 1994, 128). The rational-legal mode of domination is part of this trend, as demonstrated by the form of bureaucratic administration (Duran 2009a). Fourth, the cultural dimension concerns the "increasingly clear separation of spaces of social action" (Lallement 2013, 34), whereby each space, as it acquires its own characteristic values, reinforces its own specialization and autonomy. Rationalization is, here, equivalent to a process of differentiation. Finally, the disciplinary dimension is connected to the question of control (Brubaker 1984; Marcuse 1991 [1964]). Increasing technical

rationalization calls for an extension of control over material objects, individuals, and oneself.

There is yet another way to revisit Weber, one that goes beyond the limits and aporias of these fixist and one- dimensional uses of rationalization. It starts from the observation that processes of rationalization are, for Weber, the object of a "dialectic" (Schluchter 1985) or a "major tension" (Lallement 2013) between formal and substantive rationalization. Formal rationalization corresponds to the "development of the internal law of a phenomenon" (Steiner 1998, 25). A field, by virtue of its own characteristic logic and thanks to an internal dynamic driven mainly by its experts and theorists, evolves toward ever greater coherence and abstraction. Substantive rationalization, on the other hand, is a process of rearrangement that takes into account interests and values external to the relevant space of social action in order to satisfy the demands of groups that are affected by it but are not part of it. Weber performed an in- depth elucidation of three fields with the help of this tension-based approach.

First, law. Weber, who understood this field particularly well, investigated it in a study (1960, 2007) the manuscript of which he entrusted to one of his pupils. It was then revised and altered for inclusion in *Economy and Society*. It provoked numerous commentaries, explanations, and discussions (Schluchter 1985; Coutu 1995; Sutton 2001; Chazel 2012; Duran 2009b). For our purposes, however, the essential fact is that Weber's reflection on legal rationalizations covered several different aspects of the phenomenon (Coutu 1995, 2018), starting with a consideration of the role of professional lawyers in the internal rationalization of law. Collectively, although in different ways and at different rates depending on national configurations, lawyers worked to make normative corpuses more consistent. This rationalization took shape with the help of practices (the formalization and refinement of legal categories and concepts, a gradual distancing from traditional ways of thinking, university education for legal professionals, the writing of code . . .) that contributed to the establishment of formal rights.

Weber is careful to point out that these rights were never able to escape the influence of substantive rationalization in the form of interference by extralegal interests in the production of laws. These extralegal stakeholders, who showed little concern for legal

consistency, prioritized "ethical imperatives, utilitarian and other expediential rules, and political maxims, all of which diverge from the formalism of the 'external characteristics' variety as well as from that which uses logical abstraction" (Weber 1978 [1922], 657).[2] Numerous other lessons can be drawn from Weber's writings on law, including the fact that the formal rationalization of the social world in general, and law in particular, is in the interest of dominant groups. Weber also demonstrated that no process of rationalization can ever hope to eliminate all forms of legal irrationality (such as cadi justice, the right to pardon, or class justice). Weber's proposed typology of legal systems, based on two intersecting pairs of criteria (rational/irrational and formal/substantive), shows how far removed he was from schemas that unfailingly associate control and the rationalization of the world with univocal and omnipotent reason.

Music is the second field to which Weber devoted particular interest (Weber 1958 [1921]), developing a schema comparable to the legal one mentioned above. In his study of the subject, Weber first considered the emergence in the West of a harmonically rationalized form of music, and then, in a second and much shorter section, the technical, economic, and social transformations of various stringed and keyboard instruments. At the beginning of the work, Weber associated rationalization with numbers and with calculation. Any harmonically rationalized music, he argued, is based on the octave, which it divides into fundamental intervals. As was the case with law, writing is another factor of formal rationalization. The advantages of modern musical notation are undeniable: scriptorial practice made it possible to compose, perform, and, even more important, preserve pieces of music for posterity.

Weber repeatedly stresses the limits and tensions between the types of rationalization at work in the musical world. For example, he comments that the manufacture of piano keyboards was subject to a double commercial and cultural imperative. The piano, typical of middle-class homes, needed to be able to fit inside the domestic spaces of the people of northern Europe, the principal drivers of piano culture. But the most interesting thing in this part of Weber's work is the revelation of the internal contradictions and inconsistencies

2. Rogers Brubaker (1984) demonstrates the connection between substantive rationalization and the substantive/material rationality (in value) of action.

that characterized the rationalization of musical techniques. Weber devotes multiple pages to the irrational properties of the dominant seventh chord, the opposition between harmony and melody, the contradictions between cycles of fifths and cycles of thirds . . .

Weber also applied the concept of rationalization to economics, although in a way that is less immediately obvious to the reader.[3] Readings of *Economy and Society* and Weber's course on economic history are both highly instructive in this context. They reveal the existence of two fundamental models of rationality: "first, logico-mathematical rationality, rationality par excellence; second, economic rationality, which is based on the relationship between means and ends" (Molino 2008, 232). Weber, himself caught in the tension between the Austrian marginalist school and the German historical school, investigated the economic concept of rationality in order to explain, in his own way, the theory of value; to sketch a sociological theory of money (Lallement 2019); and to revisit, following Karl Marx, theories of economic crisis in light of the divide between formal and substantive rationalizations. Finally, and still with no claim to exhaustivity, we may claim that it was while studying economics that Weber made probably the clearest and most concise statement of the irreducible opposition between formal and substantive rationality, which "are always in principle separate things, no matter that in many (and under certain very artificial assumptions even in all) cases they may coincide empirically" (Weber 1978 [1922], 108).

The uses of the concept: Typology and future research avenues

The Weberian grammar we have just outlined invites us to detect and empirically grasp the multiple mechanisms that sustain the phenomena of rationalization in the contemporary world. Paradoxically, this task of identification and description has not been carried out systematically in the academic literature. This is not to say that articles or books on rationalization do not exist. But, as Alan Sica (2004) observes, a considerable number of works on the subject primarily dissect the conceptual complexities of the notion of rationalization in

3. On Weber's relationship to economics, see the work of Hinnerk Bruhns (1996).

Weber's writings. There is a wide array of studies that treat rationalization and its declinations as a heuristic resource for thinking about contemporary transformations in the most diverse social fields. Such studies have been plentiful for several decades. But it is important to note that they are also heterogenous, that they suggest using the concept of rationalization in a variety of ways, and that they almost never engage in dialogue with each other. It is that fact that motivated this issue and prompted us to offer an overview of contemporary uses of the concept.

Far from aiming at exhaustivity, we have adopted an analytical perspective in order to reveal the variety of possible operationalizations of the concept, drawing both on the recent literature and on the six articles in this issue. We focus on research in four fields (organizations, bureaucracies and expertise, law, and the economy) as dealt with by the articles in this issue and by other studies that have previously made use of the concept of rationalization. We have made the decision to leave to one side various other fields in which studies have been conducted examining the influence of different forms of rationalization.[4]

How do the studies we have selected and those of the authors of this issue mobilize the "tensions" at the heart of rationalizations, particularly the formal/substantive dialectic, and what mechanisms do they bring to light? To answer this question, we must first of all accept that the concept of rationalization is all the more interesting today because of the way transformations of capitalism and work, changes affecting nation states (and the concomitant rise of neo- managerial technologies and new forms of expertise), developments in law and economic regulation, and changes within organizations have all paved the way for multiple and novel rationalizations of behavior, norms, and representations. To give an account of the concept through contemporary research programs, we must explain how it has been operationalized and identify its various uses. To do so, we have adopted a typological approach. Table 1 summarizes five uses that we have been able to identify. In the following section, we present several research programs corresponding to each of these uses in more detail.

4. Among the studies from a rationalization perspective of new religious movements and the relationship to science, see in particular those of Simon Locke (2011). See also Paolo Parigi (2012) on miracles, Bryan S. Turner (1982) on the body, Michel Lallement (2013) on erotism, and Kathi V. Friedman (1981) on the welfare state and social rights.

Table 1. Five contemporary operationalizations of the concept of rationalization

Use	Examples	Comments
Rationalization is defined as a macrosocial, cross-sectional, and all- encompassing dynamic	Meyer and Rowan (1977) Meyer, Boli, and Thomas (1987) Meyer (1994) Meyer, Drori, and Hwang (2006) Hibou (2012)	Rationalization is an all- encompassing process that extends endlessly to new social spaces. These studies focus on the role of institutional environments and cross-sectional and transnational actors (consultants, forums, international organizations, etc.). They also identify tensions between the practices of organizations and their agents and the institutional norms imposed upon them.
Studies reveal conflicts between multiple concurrent rationalization processes	Fourcade (2011) Simioni (2018) Barral (this issue) Coutant (this issue)	This perspective is often applied in fields or, more narrowly, organizational or commercial spaces where several rationalization processes develop in parallel, coexist, and/or compete (and so pose the problem of coordination)
The central assumption is the coexistence of formal and substantive dynamics within rationalization processes	Steiner (1998) Lallement (2003) Benamouzig (2005) Duran (2009a) Bidet (2010) Eyraud (2013) Bezes (2014) Coutu (this issue) Demortain (this issue)	Rationalizations are multidimensional and governed by interactions between two poles (formal and substantive) that are sometimes complementary and sometimes in tension

The central hypothesis is that formal rationalization overrides substantive rationalization	Le Velly (2006) Albrow (1987) Boucock (2000) Vauchez (2013) Billows (2017) Purseigle and Mazenc (this issue)	In this approach, formal rationalization is a trend that will sooner or later override the forces of substantive rationalization, even when the latter originally created the field of action in question
Rehabilitation of substantive rationalization	Coutant (this issue) Stryker (this issue) Demortain (this issue)	Even if it is dominant at a given moment, any formal rationalization may exhaust itself on its own, creating space for the return of substantive rationalization processes. A better definition of substantive rationalization would be useful, if only to better understand the characteristics of the formal rationalization processes that develop in reaction to it

The first use of the concept of rationalization, in sociological neo-institutionalism, treats it as a macrosociological and all-encompassing trend found in a large number of fields. As we have seen, the first generation of the Frankfurt School used the concept to denounce the dynamic of Reason and the forms of control associated with the development of a mass consumer culture (Horkheimer and Adorno 1982 [1947]), Marcuse 1991 [1964]). For sociologists of the Stanford School working in the field of organization theory, rationalization is still an all-encompassing dynamic but they see it in much less pessimistic terms, resisting the teleological temptation and identifying tensions between actors and the institutional norms imposed upon them. For these researchers, rationalization is equivalent, in all spheres of the social world, to the diffusion of "rationalized formal structures": rational myths that pervade the institutional environment of organizations, professions, and their actors (Meyer and Rowan 1977).

In the fields they analyze (mainly public bureaucracies, and especially universities, museums, and hospitals), the processes of rationalization are manifested principally in the growth, diffusion, and proliferation of "formal organizations" (Scott and Meyer 1994, 114–16; Meyer, Drori, and Hwang 2006), in other words organizations standardized by the institutional norms dominant in their environment, to which they conform as a result of mechanisms of "institutional isomorphism" (DiMaggio and Powell 1983). Hospitals, for example, adopt institutional norms in vogue in other sectors (strategic planning, specialization, cost centers) and market logics, with the result that they are increasingly integrated with other actors in the healthcare chain (Scott et al. 2000). In the non-profit sector, researchers have described the phenomenon of the "rationalization of charity" (Hwang and Powell 2009).

Although she does not see herself as part of this school of thought, Béatrice Hibou's work on the transformation of public bureaucracies (2012) contains a similar perspective on rationalization. She describes the development and expansion of a neoliberal rationality based on markets and business. The ascendancy of rationalization processes in bureaucracies is connected to the influence of a neoliberal form of governance involving the mass importation of market tools from private capitalist business (Hibou 2012). The result is the penetration of "capitalism into the state" (Eyraud 2013) and the transformation

of public bureaucracies into organizations that are indistinguishable from those in the private sector. This neoliberal bureaucratization seems inexorably marked by the dominance of quantification techniques, instruments for measuring costs and performance, and quasi-market mechanisms introduced into public administrations, and by the imposition of economic over governmental logics. Several other works also use Weber to discuss the rearticulation of state and market in the context of neoliberalism (for example Le Galès and Scott 2008; Gane 2012; Scott 2020).

Although the formal or substantive dimensions of rationalization are not explicitly mobilized in the sociological neo- institutionalist approach (Meyer, Boli, and Thomas [1987, 23] say they do not want to use the typologies and nuances found in Weber's account), this does not mean its results are not comparable. On one hand, the formal dynamic does not seem to play a large role. In contrast to Weber, who argued that rationalization processes were sustained by "carrier groups" (Kalberg 1994), these authors (Meyer, Boli, and Thomas 1987) insist that the formalization and standardization of fields are not driven by forces internal to the institutions in question, but rather by the adoption of rational, transnationally recognized norms, a process that is itself intended to increase institutional legitimacy through compliance. The decisive factor is implicitly "substantive" in nature because it is the "rationalized environments" of "world society" that are the principal agents of rationalization, with their dominant universalist rules and ideologies and various organizations and professions that structure the process of rationalization (Meyer 1994). Analogously, in Hibou's analysis (2012), the dominance of neoliberal market dynamics brings about the formal rationalization of public bureaucracies (improved computability, the dominance of numbers, and so on). Because these dynamics reflect interests external to public bureaucracies, they unravel their internal consistency and dissolve their specificity. Nevertheless, these processes are not exempt from tensions of their own. The concrete activities that constitute the core work of such organizations, which prioritize the efficiency of their practices, may come into conflict with formal structures inspired by rationalized myths that maximize legitimacy (Meyer and Rowan 1977, 355). These tensions produce inconsistencies that may lead to conflicts about rationality or cause a decoupling of actions and legitimate institutional norms.

The second use of the concept of rationalization reveals the existence, within a single field or, more narrowly, a single organizational or commercial space, of distinct dynamics of rationalization that develop in parallel, coexist, and/or compete, thereby creating problems of coordination. This use is informed by Weber's description, in his study of the sociology of religion (1996), of a plurality of religious understandings of the world that all give rise to different life ethics. In the religious sphere, as Stephen Kalberg notes, "substantively rational points of view may also differ" (for example Hinduism vs mystical Buddhism) so that "a plenitude of ultimate value-standpoints and world views confront one another, each proclaiming 'its' rationality" (Kalberg 1980, 1156). Taking this approach, multiple authors have highlighted the coexistence, and perhaps competition, between different forms of rationality within a single social space.

This hypothesis is at the heart of the research agenda of sociologies of valuation (Fourcade 2011) and contested markets (Steiner and Trespeuch 2015). Criticizing the one-dimensional modeling of the market as the encounter between aggregated supply and demand, this literature treats price as a compromise between different orders of value that are sometimes carried by different social groups. A recent example of this type of approach can be found in a study on how prisoners' wages are set (Simioni 2018). The history of the debates around this question reveals a conflict between a "penitentiary rationality" and an "economic rationality." The "penitentiary rationality," for example, aims to ensure equivalence between the seriousness of the prisoner's crime and the conditions of his or her life in prison. This rationality of punishment is counterbalanced by other principles, such as the fair remuneration of labor but also the act of educating prisoners by giving them control over a budget that they must manage on their own account. In short, the price of prison labor is no longer simply a reflection of the equilibrium between supply and demand, but a trade-off between these different rationalities.

Although she does not set out to give an account of price formation processes, the article by Stéphanie Barral in this issue continues the work of identifying the multiple rationalities that preside over the creation of a market. Barral shows that the concept of protecting biodiversity via the purchase and sale of rights to manage natural spaces is the result of the sedimentation of several different rationalizations

of environmental protection over more than a century. This market relies on the idea (dating from the nineteenth century) that human society must protect natural spaces with legal regulations. But it is also fed by another form of rationalization, scientific this time, which is oriented toward the evaluation and quantification of damages caused and services rendered to the environment. These two forms of rationalization coexist with a third principle inherent in the market logic of compensation policy: a principle that guides actors toward the most profitable conservation projects. Whether incarnated in the ends pursued by actors or in more instrumental initiatives, these different rationalities combine to produce a singular result, namely "a divide between profitable species, on which investments are concentrated, and less profitable and so less protected species."

Another article in this issue, by Hadrien Coutant, demonstrates that the market is not the only social space where several forms of rationalization coexist. Taking the example of a large aeronautics firm, he shows that far from being concerned with formal-legal rationality alone, modern industrial organizations must deal with multiple, contradictory logics of rationalization. These rationalizations vary according to the characteristics of the environment in which firms operate (such as the level of competitive pressure) but also the problems of legitimacy they may encounter. Avionix, the firm studied by Coutant, is simultaneously subject to rationalization by norms that aim to ensure air safety, rationalization by a project that responds in part to the "artistic critique" (Boltanski and Chiapello 2005) of capitalism, and rationalization by *métier*, which is designed to enable the company to retain rare technical skills.

The third use of the concept that interests us is based on the idea of "major tension" between the formal and substantive dimensions of rationalization: a tension that fuels transformations of all kinds of social phenomena and social fields. Several recent works, careful to distance themselves from a one-dimensional reading of rationalization, highlight the ambivalent nature—sometimes contradictory, sometimes internally consistent—of this tension. This approach has been applied to various fields. Discussing the production of knowledge, and more specifically the dynamics of economic knowledge between 1750 and 1850, Philippe Steiner (1998) describes two contradictory trends. The first, associated with formal rationalization, produces a view of

the economy modeled on the natural sciences. In this spirit, Jean-Baptiste Say, Jacques Turgot, or David Ricardo reduced economic behavior to clearly discernable laws, ignoring the extra-economic motivations (religious, ethical, and so on) of the actors they studied. During the same period, other works (some of which were published by the very same people who advocated the formal rationalization of the discipline) connected the operation of the economy to ethical principles or admitted exceptions to the laws inspired by the natural sciences. Far from holding back the development of economics as knowledge, this dialectic allowed it to feed into the political debates that shook Western Europe at the beginning of the industrial age. Daniel Benamouzig (2005) has used a similar schema to describe the emergence of health economics in France. When we move from the production of economic knowledge to the sphere of production, the formal/substantive dialectic remains relevant. Michel Lallement (2003) emphasized the same tension in his analysis of the transformation of work time. Taking the example of business strategies, he opposes the forces of formal rationalization (standardization of practices, increased consistency of rules, autonomy, and optimization of the articulation of social times) to those of substantive rationalization (individualization of social times, the powerful influence of economic but also gender interests). The coming together of the two forms of rationalization generates contradictions and explains, for example, the disorganization of work, the difficulties of coordination, conflicts between social regulations, the weakening of non-working time, the increased risk of discrimination, and so on.

Philippe Bezes (2020), meanwhile, is interested in government by objectives and indicators and suggests that the consideration of (substantive) political interests can strengthen, legitimize, and institutionalize the formal process of "bureaucratization squared" that is driven by performance-based management tools. This is true even if interactions with political actors alter the contents and uses of performance devices. Corinne Eyraud (2013) uses the French example to show that government accounting in nation states is also affected by both substantive and formal rationalizations. More precisely, she identifies a substantive dynamic characterized by the influence of norms from private business accounting at the heart of the new accounting system adopted by the French state in 2006. This neoliberal logic is

manifested in the market valuation of public goods (commercialization of state-owned real estate, reliance on private outsourcing, etc.) and in the loss of specificity in the public sector. Eyraud does not, however, conclude that "everything is simply substantive rationalization," because there are "different forms of monetary valuation" corresponding to "measures of economic results, each of which represents a particular perspective" (2013, 282).

In his article in this issue, Michel Coutu discusses the interlacing of the formal and substantive dimensions of rationalization in "work constitutions," which are the fundamental norms (whether state or not) that govern the social relations of work at a given moment. Work constitutions take shape at the intersection of the political, legal, and economic fields, each of which imposes its own logics, both formal and substantive. As illustration, Coutu describes the evolution of the work constitution in Germany during the Weimar Republic. Among other substantive tendencies that come to light, Coutu mentions the political aspirations to equality proclaimed by the Social Democratic Party (Sozialdemokratische Partei Deutschlands, SPD). In contrast, the elements that contribute to formal rationalization include the tendency toward (if not the achievement of) the codification of labor law. In his article, David Demortain identifies a twofold link between the two forms of rationalization, which he calls "cycles of formal and substantive rationalization." In the Environmental Protection Agency that is his subject, the use of science (quantitative risk assessment) is affected by formal rationalization. This process is, he argues, constantly fed by substantive logics, a situation that generates debates about the moral and political goals of environmental action as well as political challenges to the US agency.

The studies we have just outlined treat formal and substantive rationalization processes as forces that tend to be permanently in opposition, never able to merge but with neither able to assert itself fully to the detriment of the other. This interpretation is not universally accepted. For some researchers, formal rationalization always, sooner or later, ends up superseding its substantive counterpart. This is the fourth use identified. We see it in, for example, the research Ronan Le Velly (2006) has conducted on "fair trade." Advocates of fair trade, which is presented as an alternative to "conventional trade," aim principally to rectify the North–South imbalance and place more

power in the hands of "small producers" who are often marginalized in globalized value chains. Nevertheless, the rationales (substantive in origin) behind the activities of "fair trade" entrepreneurs are destined to crumble. Initially peripheral, these organizations are now major, far-reaching actors, fully integrated into the capitalist economy. Without completely renouncing their specificity, they cannot resist the forces of formal rationalization pushing them to professionalize or delegate more and more of their work to service providers. As a result, they start to exclude small producers who can no longer meet the demands of an increasingly high-volume and disembodied operation. Citing Weber's description of market order, Le Velly refers to an "obligation of formal rationality" from which no business can escape, even one whose foundation and early activity were the fruit of substantive rationalization. Similar mechanisms have been identified in the field of legal rationalizations.

Cary Boucock (2000) draws systematically on Weberian grammar to study the power of the substantive dynamic of transformation (in civil rights and fundamental rights movements), with a particular focus on the Canadian Charter of Rights and Freedoms, the fundamental text of the Constitution of April 17, 1982.[5] For Boucock, the charter crystallizes the ambiguities and tensions at the heart of contemporary law. On one side, because it introduces ethical and political goals, it pushes judges to make judgments that are substantive "in value," causing conflicts of interpretation between competing ends. On the other side, these practices and the protections afforded to individuals are enshrined in a legislation whose formalization the charter encourages and accentuates. Formal rationalization ultimately wins out, ushering in a new phase of depersonalization and the victory of a fragmented and primarily economic view of the rights adopted. In a parallel example, Antoine Vauchez (2013) shows how European lawyers propose various erudite rationalizations of Europe legislation which, while they contribute to the constitutionalization of a transnational political space, also supplant the substantive vision of European integration championed by the federalist political movement.

5. The charter claims to protect the rights of Canadian citizens against the actions, policies, and laws of the federal and provincial governments.

In the sphere of public action, Martin Albrow (1987) produces an equally pessimistic assessment of the increasing power of democratic control systems in bureaucracies, as manifested particularly in the creation of organizations that mediate between governments and citizens (the ombudsman, the *médiateur*) or in the strengthening of citizens' rights. Substantive collective mobilizations and the reforms they bring about (freedom of access to information and to administrative documents, reasons for administrative decisions, and so on) have the paradoxical effect of increasing the power of bureaucracies in two ways: first, by regulating and rationalizing administrative practices (which are then subject to further clarification); second, by giving rise to the rationalized creation of new regulatory bodies (ombudsman, data protection authority, and so on).

In the research we have just described, the defeat of substantive logics by formal rationalization is a process over which the actors involved seem to have little control. The role of "carriers of formal rationalization" (Bezes 2014, 196), which is highlighted in certain studies, enables us to qualify this statement. Sociologists have tried to identify the precise actors and social configurations that bring about the shift from substantive to formal rationalization. One recent study (Billows 2017) uses the analytical framework of Weberian rationalizations to study the French state's attempts to regulate commercial relations between large retailers and their suppliers. Tracing the iterative process of drawing up, implementing, and rewriting a set of laws (collected under heading IV of book IV of the Code du commerce), the author describes the evolutions in how the courts and the administration have interpreted the principles of substantive justice that were introduced at the end of the 1990s and the beginning of the 2000s. These principles, which emphasize notions of "balance" and "loyalty," were initially able to provide effective protection to the suppliers of large retailers. Little by little, however, the criteria by which the implementation of those principles could be verified became more and more formalized, to the extent that by the end of the period in question the mere presence of certain clauses in standard contracts was generally sufficient to prove the good conduct of the distributor toward its supplier. To explain this process of formal rationalization, Billows focuses on the activities of the large retailers' lawyers, who were at the forefront of the interpretation and implementation of the

legislation. Although employed in small numbers within each company, they were equipped with IT tools enabling them to standardize contracts. They were also, despite limited resources, able to impose formal legal logics on numerous commercial transactions. There is no doubt that without this prior stage, the formal rationalization of the law protecting suppliers would never have started. In effect, the spread of increasingly cumbersome standardized contracts shifted the task of control away from the authorities and judges of commercial practices and onto written documents.

In this issue, the article by François Purseigle and Loïc Mazenc also reveals the underlying drivers of the domination of formal over substantive rationalization. The agricultural firms they study operate in a market where consumers are more and more sensitive to the origin and environmental credentials of the products they buy. Paradoxically, this substantive requirement (to meet the needs of a clientele that increasingly demands locally produced and sustainable products) translates into the formal rationalization of the internal organization of these firms. This rationalization takes the form of increasing integration of different production units, IT-assisted crop growing, and stricter management of the workforce. Far from being the inevitable result of market forces, this formal rationalization is the result of business strategies and is dependent on the management staff, specifically the cultivation managers. These managers, who are responsible for coordinating production and the work of agricultural laborers, have a conflicted relationship with rationalization and must arbitrate between processes of formal rationalization that sometimes contradict one another.

We now come, finally, to the fifth family of uses of the concept of rationalization. Although most of the authors we have discussed so far deal with both facets of the formal/substantive tension, they tend to give precedence to formal rationalization. More often than not, however, the predominance of formal rationalization in a given field ultimately declines, giving way to the play of substantive forces. Weber demonstrated this in his study of the sociology of law, where he described the emergence of legal formalism in the nineteenth century and the counter-movements it provoked. Commercial law was one of them. The renaissance of commercial law in the middle of the nineteenth century is surprising. At a time when formal law,

based on legal codification, was aspiring to universality, commercial law established a set of rules and jurisdictions specific to a single section of the population. In fact, this "law of exception" was precisely the result of a reaction against the formal rationalization of law (Weber 2007). Formalized to the extreme, the modern legal system frustrated traders with its slowness and lack of appreciation for the subtleties of commercial activities.

A similar mechanism has been highlighted in several studies following in Weber's footsteps. We might think, for example, of Alexandra Bidet's (2010) study of the rationalization of telecommunications expertise in the 1970s and 1980s. Telecommunications economists gradually detached their expertise from the concrete aspects of production in favor of an academic and formalized network economics, where networks are integrated into markets dominated by the economic rationality of users. But they were never able to entirely disregard the substantive operation of networks or the substantive rationalization of tariffs, with the result that they ended up also considering cost-related data, such as the volume of traffic on the lines being used. The limits of a process of formal rationalization taken to its extreme also emerge clearly in the article by Coutant (this issue), where he describes a large aeronautics firm that is saturated by formal-legal rationalization. Whether their role is to ensure air safety, the appropriate allocation of resources, or technical excellence, the company's engineers must monitor and record their work using various management tools, but the prevalence of these management tools generates excess work and conflicts. The incoherencies of formal rationalization in this company force individuals to circumvent these tools or even to reintroduce elements of substantive rationalization, like political arbitrage or a loose form of professional collegiality.

As we can see, the forces of substantive rationalization are not restricted to the forces external to a field; on that basis, they merit just as much attention as those of formal rationalization. Nevertheless, in numerous studies they are not described with a sufficient level of detail or precision. Either they are used as the point of departure for an analysis focused primarily on formal rationalization, or they are treated as part of the ensemble of actors and rationales existing outside the social space in question. One of the ambitions of this issue is to rectify, at least in part, this limitation. In her article in this issue,

which synthesizes and complements her prior publications on US law,[6] Robin Stryker analyzes the "technocratization" of legal reasoning. She identifies a process that operates in reverse to that described above: rather than being the plaything of formal rationalization, law is becoming more substantive. Although it has not attained the same degree of formalism as civil law systems, the analogical reasoning that is widespread in US courts is associated with formal rationality. The precedents used as judgment criteria change slowly because their stability is essential to ensure the formal equality of all individuals before the courts and the legal security necessary for economic transactions. In contrast, technocratic legal reasoning takes a scientific approach and gives great weight to cause-and- effect arguments that are adapted to fit each situation. This type of substantive reasoning is the foundation for the effectiveness of laws that guarantee civil rights or prohibit discrimination. In effect, by introducing data derived from the social sciences, it authorizes both the ad hoc assessment of the situation of dominated groups and the prescription of solutions to address the underlying causes of inequalities. Far from bringing about the dominance of the arbitrary (like the cadi justice described by Weber), "technocratization" corresponds to a specific institutional framework and involves the participation of certain bureaucrats and social scientists in the process of judicial deliberation.

Because of the interdependence of the two poles of rationalization, taking the time to describe the workings of substantive rationalization enables us, in return, to grasp the variety of forms of formal rationalization that develop in reaction to the former. In his article, Demortain shows how formal rationalization processes, indigenous to a field of action, are dependent on the substantive demands, exterior to the field, that are addressed to it. Confronted by US members of Congress who are skeptical about robust environmental action and by economic interest groups that want to minimize its power to sanction, the Environmental Protection Agency continuously reorganizes itself according to the logic of formal rationalization. In particular, it increasingly relies on probabilistic scientific reasoning. Far from operating independently, this scientific rationalization is influenced by the conflicts surrounding the agency's goals. Even the most apparently technical debates feature a range of risk assessment methods

6. For example, see Robin Stryker (1989).

associated with different normative hypotheses and equally varied substantive issues.

Conclusion

Just like people, concepts have a social life. The concept of rationalization is no exception. This article has presented a broad outline of the conditions of its emergence and use in the work of Weber and then in the contemporary sociological literature. Because readers who attempt to perform a comparative analysis of the sociological uses of the concept of rationalization, including in Weber's work, are often struck by a sense of fragmentation, one of the aims of this introductory essay was, at the very least, to impose some order upon the meaning and implications of the uses of Weberian semantics. That was not, however, the most important objective. For us, it was a matter of re-empowering, following the example of others, the sociology of tensions between formal and substantive rationalizations—a sociology of whose richness and relevance we hope to have persuaded the reader. In any case, that perspective informs all the articles in this issue.

We must add, before we finally conclude, that the articles to follow share with the authors of this introduction a concern to avoid reifying Weberian thought. The latter was developed in specific historical conditions and with the aid of resources and shared knowledge that are barely comparable to those of today. Since the end of the nineteenth and beginning of the twentieth century, our understanding of the long-term transformations of the non-Western world has improved enormously, leading some researchers to cast serious doubt on the theory of Western exceptionalism (Goody 1996) or to reformulate Weber's research program in different terms (Molino 2008).

Nevertheless, Weber's work, for too long obscured by macrosociological approaches that restricted rationalization (in the singular) to a teleological process, opens the door for a much more productive understanding of rationalizations (in the plural). By putting this way of viewing the dynamics of social worlds to the test, the articles that follow are simply restoring the luster of Weberian theory. Thanks to the German sociologist's investigations and analytical methods, and fortified by results concerning, in particular, the new forms of

rationalization observable today, they demonstrate that the vast and ambitious program of research into capitalism that Weber began remains more relevant than ever. Once again, we may go with Weber beyond Weber!

Philippe Bezes
CEE, Sciences Po, CNRS
philippe.bezes@sciencespo.fr

Sebastian Billows
IRISSO (INRAE, CNRS, Paris Dauphine University)
sebastian.billows@inrae.fr

Patrice Duran
École normale supérieure Paris-Saclay
patrice.duran@ens-cachan.fr

Michel Lallement
Lise-Cnam-CNRS (Paris) and Wissenschaftskolleg zu Berlin
michel.lallement@lecnam.net

Philippe BEZES is research director at the CNRS, based at the Centre d'études européennes et de politique comparée at Sciences Po (CEE, UMR 8239) (Center for European Studies and Comparative Politics), and a teacher at Sciences Po. His research interests include the historical sociology of administrative reform policies and of the state, and the transformation of public bureaucracies in France and elsewhere. Since 2016, he has been working on a project to map and analyze organizational transformations in ministries in France, Germany, the Netherlands, and the United Kingdom. He is the author of *Réinventer l'État. Les réformes de l'administration française (1962–2008)* (Paris: Puf, 2009) and he has recently published "Le nouveau phénomène bureaucratique. Le gouvernement par la performance entre bureaucratisation, marché et politique," in *Revue française de science politique* (70, no. 1 [2020]: 21–47). He is the joint editor, with Florence Descamps and Sébastien Kott, of *Le Moment RCB ou le rêve d'un gouvernement rationnel (1962–1978)* (Paris: Comité pour l'histoire économique et financière de la France, 2021).

Sebastian BILLOWS is a sociologist, research fellow at the Institut national de recherche pour l'agriculture, l'alimentation et l'environnement (INRAE) (National Research Institute for Agriculture, Food, and Environment), and member of the Institut interdisciplinaire de recherche en sciences sociales (IRISSO) (Interdisciplinary Research Institute of Social Sciences, UMR INRAE-CNRS-Paris Dauphine University). His research focuses on the creation, interpretation, and reappropriation of different areas of economic law: competition law as applied to all large companies, the regulation of relations between large retailers and their suppliers, and more recently the organization of agri-food chains. He has recently published articles in *Sociologie du travail,* the *Revue française de socio-économie*, and the *Journal of Common Market Studies*.

Patrice DURAN is emeritus professor at the École normale supérieure Paris-Saclay and researcher at the Institut des sciences sociales du politique (ISP-CNRS, UMR 7220) (Institute for Social Sciences of Politics). He is currently president of the Conseil national de l'information statistique (CNIS) (National Council for Statistical Information). His teaching and research focuses particularly on sociological theory, political sociology, the sociology of public action. and the analysis of public policy, the sociology of organizations, and the sociology of law.

Michel LALLEMENT is professor, chair of the Sociological Analysis of Work, Employment, and Organizations at the Conservatoire national des arts et métiers (National Conservatory of Arts and Trades, Paris), and Fellow at the Wissenschaftskolleg zu Berlin (Institute for Advanced Study) (2020–2021). He is a member of the Laboratoire interdisciplinaire pour la sociologie économique (Lise, UMR 3320 CNRS-Cnam) (Interdisciplinary Laboratory for Economic Sociology). His research deals with work, professional relationships, communitarian utopias, and the history of sociology. His publications include *L'Âge du Faire. Hacking, travail, anarchie* (Paris: Le Seuil, 2015), *Logique de classe. Edmond Goblot, la bourgeoisie et la distinction sociale* (Paris: Les Belles Lettres, 2015), *Makers. Enquête sur les laboratoires du changement social* (with Isabelle Berrebi-Hoffmann and Marie-Christine Bureau, Paris: Le Seuil, 2018), and *Un désir d'égalité. Vivre et travailler dans des communautés utopiques* (Paris: Le Seuil, 2019).

REFERENCE LIST

Albrow, Martin. 1987. "The Application of the Weberian Concept of Rationalization to Contemporary Conditions." In *Max Weber, Rationality and Modernity*, edited by Scott Lash and Sam Whimster, 164–84. London: Allen & Unwin.

Baier, Horst, G. Hübinger, Rainer Lepsius, Wolfgang J. Mommsen, Wolfgang Schluchter, and Johannes Winckelmann, eds. 1984–2020. *Max Weber Gesamtausgabe (MWG)*. Tübingen: J. C. B. Mohr (Paul Siebeck), 54 vol.

Beetham, David. 1974. *Max Weber and the Theory of Modern Politics*. London: Allen & Unwin.

Benamouzig, Daniel. 2005. *La Santé au miroir de l'économie: une histoire de l'économie de la santé en France*. Paris: Puf.

Bezes, Philippe. 2014. "Les Rationalisations des bureaucraties. Perspectives wébériennes sur la nouvelle gestion publique." Dissertation for accreditation to supervise research, Institut d'études politiques de Paris, unpublished.

Bezes, Philippe. 2020, "Le nouveau phénomène bureaucratique." *Revue française de science politique* 70, no. 1: 21– 47. DOI: 10.3917/rfsp.701.0075.

Bidet, Alexandra. 2010. "Dessiner le marché, démultiplier le calcul. Les rationalisations matérielle et formelle dans la téléphonie au tournant des années 1980." *Revue française de socio-économie* 5, no. 1: 165–83. DOI: 10.3917/rfse.005.0165.

Billows, Sebastian. 2017. "Le marché et la règle. L'encadrement juridique des relations entre la grande distribution et ses fournisseurs." PhD thesis, Institut d'études politiques de Paris, unpublished.

Boltanski, Luc, and Eve Chiapello. 2005 [1999]. *The New Spirit of Capitalism*. Translated by Gregory Elliott. London: Verso.

Boucock, Cary. 2000. *In the Grip of Freedom: Law and Modernity in Max Weber*. Toronto: University of Toronto Press. Boudon, Raymond. 2012. *Croire et savoir, penser le politique, le moral et le religieux*. Paris: Puf.

Brubaker, Rogers. 1984. *The Limits of Rationality: An Essay on the Social and Moral Thought of Max Weber*. London: Allen & Unwin.

Bruhns, Hinnerk. 1996. "Max Weber, l'économie et l'histoire." *Annales, Histoire, Sciences sociales* 51, no. 6: 1259–87. DOI: 10.3406/ahess.1996.410920.

Chazel, François. 2012. "La 'sociologie du droit' de Max Weber à la lumière de l'édition critique de la *Max Weber Gesamtausgabe*." *Droit et société* 81, no. 2: 473–97. DOI: 10.3917/drs.081.0473.

Colliot-Thélène, Catherine. 1997. "Le concept de rationalisation: de Max Weber à Norbert Elias." In *Norbert Elias, la politique et l'histoire*, edited by Alain Garrigou and Bernard Lacroix, 52–74. Paris: La Découverte.

Colliot-Thélène, Catherine. 2009. "Les rationalités modernes du politique: de Foucault à Weber." In *Max Weber et le politique*, edited by Hinnerk Bruhns and Patrice Duran, 181–97. Paris: LGDJ.

Coutu, Michel. 1995. *Max Weber et les rationalités du droit*. Paris; Québec: LGDJ; Presses de l'université Laval.

Coutu, Michel. 2018. *Max Weber's Interpretive Sociology of Law*. Abingdon: Routledge.

DiMaggio, Paul J., and Walter W. Powell. 1983. "The Iron Cage Revisited: Institutionalized Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review* 48, no. 2: 147–60. DOI: 10.2307/2095101.

Duran, Patrice. 2009a. "Max Weber et la fabrique des hommes politiques, une sociologie de la responsabilité politique." In *Max Weber et le politique*, edited by Hinnerk Bruhns, and Patrice Duran, 73–105. Paris: LGDJ.

Duran, Patrice. 2009b. "Legitimacy, Law, and Public Action." *L'Année sociologique* 59, no. 2: 303–44. DOI: 10.3917/anso.092.0303.

Eyraud, Corinne. 2013. *Le Capitalisme au cœur de l'État: comptabilité privée et action publique*. Bellecombe-en- Bauges: Éditions du Croquant.

Fourcade, Marion. 2011. "Cents and Sensibility: Economic Valuation and the Nature of 'Nature.'" *American Journal of Sociology* 116, no. 6: 1721–77. DOI: 10.1086/659640.

Friedman, Kathy V. 1981. *Legitimation of Social Rights and the Western Welfare State: A Weberian Perspective*. Chapel Hill: The University of North Carolina Press.

Gane, Nicholas. 2002. *Max Weber and Postmodern Theory. Rationalization versus Re-enchantment*. Houndmills: Palgrave MacMillan.

Gane, Nicholas. 2012. *Max Weber and Contemporary Capitalism*. Houndmills: Palgrave MacMillan.

Goody, Jack. 1996. *The East in the West*. Cambridge: Cambridge University Press. DOI: 10.1017/CBO9781139171052.

Habermas, Jürgen. 1984 [1981]. *The Theory of Communicative Action*. Translated by Thomas McCarthy. Cambridge: Polity Press.

Hibou, Béatrice. 2012. *La Bureaucratisation du monde à l'ère néolibérale*. Paris: La Découverte.

Horkheimer, Max, and Theodor Adorno. 1982 [1947]. *Dialectic of Enlightenment*. Translated by John Cumming. New York: Continuum.

Hwang, Hokyu, and Walter W. Powell. 2009. "The Rationalization of Charity: The Influences of Professionalism in the Nonprofit Sector." *Administrative Science Quarterly* 54, no. 2: 268–98. DOI: 10.2189/asqu.2009.54.2.268.

Kalberg, Stephen. 1980. "Max Weber's Types of Rationality: Cornerstones for the Analysis of Rationalization Processes in History." *American Journal of Sociology* 85, no. 5: 1145–79. DOI: 10.1086/227128.

Kalberg, Stephen. 1994. *Max Weber's Comparative-Historical Sociology.* Chicago: University of Chicago Press.

Kalberg, Stephen. 1980. "Max Weber's Types of Rationality: Cornerstones for the Analysis of Rationalization Processes in History." *The American Journal of Sociology* 85, no. 5: 1145–79.

Lallement, Michel. 2003. *Temps, travail et modes de vie*. Paris: Puf.

Lallement, Michel. 2013. *Tensions majeures. Max Weber, l'économie, l'érotisme*. Paris: Gallimard.

Lallement, Michel. 2019. "Max Weber et la monnaie." *Revue européenne des sciences sociales/European Journal of Social Sciences* 57, no. 1: 127–48. DOI: 10.4000/ress.5099.

Le Galès, Patrick, and Allen J. Scott. 2008. "A British Bureaucratic Revolution? Autonomy without Control, or 'Freer

Markets, More Rules.'" *Revue française de sociologie* 49, no. 2: 301–30. DOI: 10.3917/rfs.492.0301.

Le Velly, Ronan. 2006. "Le commerce équitable: des échanges marchands contre et dans le marché." *Revue française de sociologie* 47, no. 2: 319–40. DOI: 10.3917/rfs.472.0319.

Locke, Simon. 2011. *Re-crafting Rationalization: Enchanted Science and Mundane Mysteries*. Farnham: Ashgate. Marcuse, Herbert. 1991 [1964]. *One-Dimensional Man*. Boston: Beacon Press.

Meyer, John W. 1994. "Rationalized Environments." In *Institutional Environments and Organizations: Structural Complexity and Individualism*, edited by W. Richard Scott, and John W. Meyer, 28–54. Thousand Oaks: Sage.

Meyer, John W., John Boli, and George M. Thomas. 1987. "Ontology and Rationalization in the Western Cultural Account." In *Institutional Structure: Constituting State, Society, and the Individual*, edited by George M. Thomas, John

W. Meyer, Francisco. O. Ramirez, and John Boli, 12–37. Newbury Park: Sage.

Meyer, John W., Gill S. Drori, and Hokyu Hwang. 2006. "World Society and the Proliferation of Formal Organizations." In *Globalization and Organization. World Society and Organizational Change*, edited by Gill

S. Drori, John W. Meyer, and Hokyu Hwang, 25–49. Oxford: Oxford University Press.

Meyer, John W., and Brian Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *American Journal of Sociology* 83, no. 2: 340–63.

Molino, Jean. 2008. "La sociologie de la musique de Max Weber après un siècle." *Revue de synthèse* 129, no. 2: 215– 39. DOI: 10.1007/s11873-008-0039-2.

Müller, Hans-Peter. 2014. "Rationalität, Rationalisierung, Rationalismus." In *Max Weber Handbuch. Leben – Werk – Wirkung*, edited by H.-P. Müller and Steffen Sigmund, 108–11. Stuttgart: J. B. Metzler.

Müller, Hans-Peter, Steffen Sigmund, eds. 2014. *Max Weber Handbuch. Leben – Werk – Wirkung*, Stuttgart, J. B. Metzler.

Parigi, Paolo. 2012. *The Rationalization of Miracles*. Cambridge, UK: Cambridge University Press. DOI: 10.1017/CBO9781139005128.

Ritzer, George. 2004 [1980]. *The McDonaldization of Society*. Thousand Oaks: Pine Forge Press.

Roth, Guenther. 1987. "Rationalization in Max Weber's Developmental History." In *Max Weber, Rationality and Modernity*, edited by Sam Whimster and Scott Lash, 75–91. London: Routledge.

Schluchter, Wolfgang. 1985. *The Rise of Western Rationalism. Max Weber's Developmental History*. Berkeley: University of California Press.

Scott, John. 2020. "Contemporary Capitalism and the Distribution of Power in Society." In *The Oxford Handbook of Max Weber*, edited by Edith Hanke, Lawrence Scaff, and Sam Whimster. Oxford: Oxford University Press. DOI: 10.1093/oxfordhb/9780190679545.013.5.

Scott, W. Richard, and John W. Meyer, eds. 1994. *Institutional Environments and Organizations: Structural Complexity and Individualism*. Thousand Oaks: Sage.

Scott, W. Richard, Martin Ruef, Peter J. Mendel, and Carol A. Caronna. 2000. *Institutional Change and Healthcare Organizations: From Professional Dominance to Managed Care*. Chicago: University of Chicago Press.

Sica, Alan. 2004. "Weber and the Meaning of Rationalization." In *Max Weber and the New Century*, edited by Alan Sica, 105–29. New Brunswick: Transactions Publishers.

Simioni, Melchior. 2018. "Le prix du travail pénitentiaire: construire un compromis entre économie et correction morale." *Revue française de sociologie* 59, no. 2: 191–217. DOI: 10.3917/rfs.592.0191.

Sombart, Werner, Edgar Jaffé, and Max Weber. 2012. "Accompanying Remarks." In Max Weber, *Collected Methodological Writing*s, edited by

Hans Henrick Bruun and Sam Whimster, 95–99. London and New York: Routledge.

Steiner, Philippe. 1998. *Sociologie de la connaissance économique. Essai sur les rationalisations de la connaissance économique* (1750–1850). Paris: Puf.

Steiner, Philippe, and Marie Trespeuch. 2015. *Marchés contestés. Quand le marché rencontre la morale*. Toulouse: Presses universitaires du Midi.

Stryker, Robin. 1989. "Limits on Technocratization of the Law: The Elimination of the National Labor Relations Board's Division of Economic Research." *American Sociological Review* 54, no. 3: 341–58. DOI: 10.2307/2095610.

Sutton, John R. 2001. *Law/Society: Origins, Interactions, and Change*. Thousand Oaks: Pine Forge Press. DOI: 10.4135/9781452233956.

Turner, Bryan S. 1982. "The Government of the Body: Medical Regimens and the Rationalization of Diet." *The British Journal of Sociology* 33, no. 2: 254–69.

Vauchez, Antoine. 2013. *L'Union par le droit. L'invention d'un programme institutionnel pour l'Europe*. Paris: Presses de Sciences Po.

Weber, Marianne. 1984 [1926]. *Max Weber. Ein Lebensbild, 3: Auflage*. Tübingen: J. C. B. Mohr (Paul Siebeck).

Weber, Max. 1958 [1921]. *The Rational and Social Foundations of Music.* Translated and edited by Don Martindale, Gertrud Neuwirth, and Johannes Riede. Carbondale: Southern Illinois University Press.

Weber, Max. 1960. "Rechtssoziologie." Edited and with an introduction by Johannes Winckelmann drawing on the manuscript published in Heinz Maus and Friedrich Fürstenberg, eds. *Soziologische Texte, 2*. Neuwied: Luchterhand.

Weber, Max. 1978 [1922]. *Economy and Society.* Edited by Guenther Roth and Claus Wittich. Translated by various. Berkeley: University of California Press.

Weber, Max. 1992 [1904–1917]. *Essais sur la théorie de la science*. Paris: Plon.

Weber, Max. 1992 [1910–1920]. "Author's Introduction." In *The Protestant Ethic and the Spirit of Capitalism*. Translated by Talcott Parsons. London and New York: Routledge.

Weber, Max. 1995 [1922]. *Économie et société, vol. 1: Les catégories de la sociologie*. Paris: Plon.

Weber, Max. 1995 [1922]. *Économie et société, vol. 2: L'organisation et les puissances de la société dans leur rapport avec l'économie*. Paris: Plon.

Weber, Max. 1996 [1910–1920]. *Sociologie des religions*. Translated by Jean-Pierre Grossein, with an introduction by Jean Claude Passeron. Paris: Gallimard.

Weber, Max. 2007. *Sociologie du droit*. Translated and with an introduction by Jacques Grosclaude. Paris: Puf. Whimster, Sam, and Scott Lash, eds. 1987. *Max Weber, Rationality and Modernity*. London: Routledge.