Chapter 10
Do Historians Study the Mechanisms of History? A Sketch

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Abstract In this exploratory sketch, I move across the boundaries of philosophy of historiography to social science and its philosophy. If we want to answer the central question of this chapter, we need to know what types of scientific problems historians are interested in, what history is, and what mechanisms are. I sketch the most prominent theories of social mechanisms in the context of wider ontological approaches. I investigate Mario Bunge's "Emergentist Systemism," "Critical Realism" in the tradition of Roy Bhaskar's influential philosophy, and Daniel Little's "Methodological Localism." Since it turns out that mechanisms are taken to be rather different entities, the question is only answered trivially, but some problems are suggested that need to be separated if the debate shall not end up in "mechanism talk." It is also suggested that philosophers of historiography can find in these debates what they are normally not interested in, that is, science-oriented philosophy of history.

10.1 The Question: Historians, Mechanisms, and Histories

If we want to approach an answer to the central question raised in the title of this chapter we need to deliver a lot that we are currently incapable of providing. Our question presupposes answers to some of the little but pertinent and notoriously unsolved problems of philosophy of so-called history.

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First, we need to know what so-called historians do, that is, what types of problems they claim to solve, try to solve, or even solve in their research before they produce reports on former research, the products of scientific "history" (Topolski 1976). Second, it would be of interest to answer the strange or in these days even seemingly ridiculous question "What is history?" before it perhaps finally makes sense to have a look at whether at least some of the people that are called historians study the mechanisms of history. At this point, some account of what (social) mechanisms are would be of interest.

Unfortunately, the bigger part of philosophy of historiography can help us neither in solving the puzzle of what historians do nor of what it is that they perhaps study beyond the so-called historical sources, if we still dare to commit ourselves to realist assumptions at all. Fortunately, there is much and growing literature on social mechanisms in historico-social science discourses and the realist part of its philosophy that might help us in advancing towards an answer.[1]

What I will try to do in the following is to present some of the independent theories regarding the ontology of (social) mechanisms proposed by philosophers of social science over the past 40 years and to sketch some implications these philosophies have with regard to answering the unpopular question "What is history?" or the rediscovery of that question. Since all these philosophies claim that hinting at some mechanism is central to (scientific) explanation of societal change or stasis, we get to the kernel of these issues as well, since one objection to realist models of mechanismic explanation in the sciences of history/historiography might be that there are no such "things."

We start, in a rough chronological order, with "Emergentist Systemism" (ES), established by Mario Bunge,[2] and the role of mechanisms therein (Sect. 10.2) before

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[1]Since the above is as much to be taken literally as it is polemic and, as I have been told, easily misunderstood, I should make explicit the following claims about the academic game around philosophy of historiography. First, philosophy of historiography cannot help us in answering the first part of the question because it is not interested in what historians do, that is, it does not care at all about research conducted by historians. Most philosophy of historiography is about "narratives." Although there are more concepts of narrative around than there are narrativist philosophers, from the view taken here, these approaches are mostly irrelevant to a philosophy of *Geschichtswissenschaft*. (If you have no qualms about doing so, call it "historiography.") Scientific historians simply do not get degrees for writing pleasant narratives but for solving scientific problems, although they might gain a Nobel Prize and the attention of philosophers of historiography by painting such "narratives." Second, philosophers of historiography cannot tell us anything about history because the ontology of history was famously buried as speculative already in the 1950s and the concept was completely moved to methodology or exchanged with "the past." See as a paradigm Marrou (1975 [1954], p. 29): "L'histoire est la connaissance du passé humain (. . .)." As anybody knows, this is no accident but the result of speculative metaphysics of the one history and its course. Put in a memorable yet unclear slogan, we can thus say that official philosophy of history is not about history. A presupposition of this paper is, to the contrary of the tradition in philosophy of *historiography*, that the concept of history belongs to ontology anyhow. If this presupposition is wrong, the question of this chapter does not make any sense. As we will see, it is doubtful that it does.

[2]I use the label coined by Wan (2011a) to refer to Bunge's system.

we have a look at some aspects of "Critical Realism" (CR), initiated by Roy Bhaskar (Sect. 10.3). Then we approach the ontology called "Methodological Localism" (ML) by Daniel Little (Sect. 10.4). This selection is justified by the observation that these philosophers are prominently discussed in social scientific journals and their contributions are thus believed to be relevant to social scientific practice. Furthermore, they are all realists about mechanisms.

Since the common use of the term "mechanism" in philosophical and sociological literature in recent times suggests a degree of convergence in the discourse that might turn out to be misleading, I will situate the respective theories of mechanisms in the context of wider ontological systems, that is, some exegesis is unavoidable and necessary. At this point, however, I will deliberately ignore theories that derive more directly from within the social sciences.[3] The resulting and admittedly wordy exegesis is necessary because due to conceptual ambiguities in the wide discourse around the notion of a "social mechanism," it is quite unclear (i) what such a social mechanism might be, (ii) which problems are to be solved in these debates, (iii) what their solution is, and whether (iv) this solution is necessary. I am going to sketch issues around (i) and (ii). The biggest problem lurking in the background is, of course, that sociologists and historians are in no agreement about the objects of research for social science, about what is to be explained if anything, and how such explanations can and should be approached (see, e.g., Blaikie 1993). Because this seems to be so, my strategy in this sketch is basically to take nothing for granted, not even a single concept such as "history" that appears to be innocent. My faint hope is that thereby possible problems become clearer that are perhaps even worth solving and that scholars who share the experience of fearing to drown in these debates might find some rescue in the following lines.

The primary result will be meager. Given the following reconstruction, there is no obvious reason to believe that historians are not interested in mechanisms. The secondary result is exactly that it is by now unclear what a social mechanism is, and the differences in theories of social mechanisms are made explicit. The tertiary result is that if there is a problem about social mechanisms, this problem comes in a bundle with others fairly familiar from social theory. The question "What is a history?" might express one of those problems. This result is achieved by attending in detail to the differences in theories of social mechanisms.

Anyway, a word of caution seems to be in order at this point. I do not claim to be an expert on any of these philosophical systems. The apology I offer for discussing them nevertheless is that this literature has hardly ever been discussed together in a comparative fashion, although people rather frequently quote from each of these positions and others, as if it were unquestionable that those positions

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[3]For further recent literature and different traditions of thinking about social mechanisms that I will not discuss directly on this occasion although they have in part intersections with the theories that I sketch and are equally relevant, see, for example, Lawson (1997), Hedström and Swedberg (1998), Tilly et al. (2001), Barberi (2004), Bennett and George (2005), Cherkaoui (2005), Manicas (2006), Pickel (2006), Schmid (2006), Wight (2006), Elster (2007), Glynos and Howarth (2007), Kurki (2008), Moessinger (2008), Elder-Vass (2010), Demeulenaere (2011), Wan (2011a).

treat the same stuff behind the veil of the term "social mechanism" and, furthermore, as if it were unproblematic if they were not. My hunch is that this is questionable and problematic. This chapter might therefore be of interest to social theorists and researchers, including historians, who do not believe that this all just amounts to "mechanism talk."[4]

10.2   Mechanisms and Emergentist Systemism (Mario Bunge)

What does history consist of? According to Bunge, the world is a world of concrete, that is, material things and consists of nothing else. Thus, the so-called social world is equally supposed to be a world of things. At its heart, the project of scientific historians, once called historiologists (1985, p. 193), and sociologists consists in the study of such "things" or "social matter" (1974, p. 445, 1981, p. 5).[5]

As it is well known or at least claimed quite often, many contemporary historians and perhaps all sociologists seem to be hardly interested in individual persons and their actions but rather in so-called social facts. But what is such a social fact? According to Bunge, a fact is the being in a state or a change in the state of any material thing, so that all facts are moreover singular and positive (1996, p. 17, 2006, p. 17). A nonsocial, for example, a mental fact, then, is the being in a state of a brain or a change in the state of a brain of a higher-order animal, given Bunge's psycho-neuronal emergentist monism (1984). But what are social facts or the analogue to brains?

The basic pillars of the "systemic approach" (2006, p. 128) are the concepts of a system and of emergence (2001a, 2003a). According to Bunge, the world is a world of systems (1979a). Everything that is not a system is at least a part of one, or if it is not yet, or merely not for the moment, such a part, it will become a component of a larger whole.[6] Whereas some physicists might study elementary particles that are things but not systems, the rest of the scientific community, including historiologists, studies complex concrete systems (1979b, 1992b, 1993b).

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[4]This chapter might not be without interest to historians because these philosophies have hardly received attention in philosophy of historiography, which is my point of departure here, and they have not been discussed among historians themselves, although they deal with questions permanently discussed in their circles. Exceptions are to be found in (McLennan 1981; Gibbon 1989; Lloyd 1986) in the case of Roy Bhaskar's work. Bunge's work has been ignored so far, perhaps because of his claim that historiology is the most rigorous of all the social sciences and due to his robust ontological and epistemological realism; see, for example, Bunge (1985, 1988, 1998a).

[5]On Bunge's materialism, see Bunge (1977, 1981, 2002), Mahner (2001), Bunge and Mahner (2004). If not indicated otherwise, references in the text concern the work of the author mainly discussed in the respective section.

[6]The basic slogan of this ontology is therefore (Bunge 2004a, p. 191): "*everything in the universe is, was, or will be a system or a component of one*."

> A concrete system is a bundle of real things held together by some bonds or forces, behaving as a unit in some respects and (except for the universe as a whole) embedded in some environment. (Bunge 1997, p. 415)

Human social systems are obviously composed of persons and the artifacts they have built (1996, p. 21). And they are constructed, maintained, altered, and primarily destructed by persons. Thus, to qualify as such, human social systems have to be composed of at least two persons engaging in some social relation or interaction, but they can be as big as is compatible with the laws of social systems, that is, laws that are assumed to exist by Bunge in contrast to many contemporary sociologists (2007). Such social systems can be short living as well as long lasting, either rather local or spread all over the globe. To give some examples, "families, afternoon coffee parties, football teams, school classes, working groups in organizations (Institutsarbeitsgruppen)" (Bunge and Mahner 2004, p. 86; any translation D.P.) or even the world economic system, if it qualifies as such, are social systems on Bunge's account.

The traditional and controversial question concerning the existence of social wholes is therefore affirmed in ES. It seems to be equally important that there are two types of wholes according to Bunge. A system is not a mere aggregate or heap because it has emergent properties: most importantly the system structure that determines that the parts of the system are at least minimally integrated or cohesive, so that the system "behaves" as a whole in some respect.[7] Due to this real or ontic integration or connection, for example, "a labor union is a social system and therefore just as concrete and real as its members" (1998a, p. 69). Mere aggregates or heaps as, for instance, a bunch of people accidentally attending a football (soccer) match "together" or a selection of people sharing some more or less relevant property (e.g., bourgeoisie) do not constitute systems, although they might qualify as wholes.[8]

Disentangling the short definition quoted above and thereby summarizing the former, every (social) system at any point in time is supposed to be minimally characterized by a definite composition, a definite structure, and a definite environment. This yields in scientific reconstruction what Bunge formerly called the minimal CESM-Model of a system (e.g., 1995, 14f.). Whereas the *composition* of a system is the set of its components that are as concrete and as real as the system as a whole, the *structure* (sometimes also called "organization" or "architecture"; 2004a, p. 188) of the system is the set of all the relations holding among the system components. The *environment* is said to be the set of relations the system components hold with things (systems) that are not part of the system. For example, in an army relations of command are part of the endostructure of the system, and relations of combat or supply belong to its exostructure (2003c, p. 277).

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[7]Cf. (Bunge 1996, p. 21): "The structure of a system is its key emergent property." See also (Bunge 2010, p. 379).

[8]Mere heaps are sometimes called "statistical wholes," for example crowds, classes and institutions. Systems like gangs or firms are called "ontic wholes." For this distinction and the examples, see (Bunge 2004b, p. 372). For Bunge's concepts of group and class, see (Bunge 1995, Chap. 3).

Skipping some interesting problems concerning systems ontology relevant to historico-social scientific practice,[9] subsets of the overall structure of the system are what Bunge once called the "system structure (or bondage)" and the "spatial structure (or configuration)" of any system (1979a, p. 11). Whereas spatial and temporal relations are often of minor interest to historians and social scientists because they presumably make not much of a difference to the whole or its parts, social relations make, by definition, a difference to the relata because they are bonds, ties, couplings, or links.[10]

At this point we only have to mention that these relations are in part dynamic and causal. They are interactions if they are "root (or basic) social relations" (1979a, p. 222). But they might also consist merely in being a part of a whole, as in being a citizen or being married to someone, the latter being perhaps the prime example of a social relation that does not necessarily imply interaction. Other psychosocial bonds as affection and interest (1979b, p. 20), loyalty (2003a, p. 20), love (2004a, p. 189), or the rules inherent in or constitutive of social relationships (1979a, p. 196) hardly count as causal as such in Bunge's system, in contrast to CR and ML.

Furthermore, different social systems might be related among themselves as wholes to constitute higher-level systems. If one system acts on another system, this is said to be one case of "social power." Whole social systems might also be dynamically related to persons; this is the second type of social power in ES (2009b, p. 189). But barring miracles, every relation between social systems, that is every non-basic social relation, is executed by a person-to-person or basic social relation, that is, if it happens to be causal. A further reason to call interactions the basic social relations in ES is that social systems and the more permanent bonds that hold them together diachronically emerge from personal interaction (2001b, p. 134).[11]

Thus, structures of systems in general and social structures specifically are not quite easy to grasp in social science or philosophy. According to ES, the latter are mediated ultimately by the brains of actors because social relations depend on them. In Bunge's view, this is the truth of ontological individualism (1997, p. 453, 2008, p. 61). However, social relations are claimed to be emergent from interaction of people that are embedded in a social and natural environment, not on free floating ideas. Moreover according to ES, rather obvious but often ignored in traditional philosophy of historiography, social "systems have no brains, hence they have no intentions" (2004b, p. 376), although all their social properties and most of their changes are due to people acting and interacting.

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[9]On the problem concerning the boundaries of social systems, see (Bunge 1992a).

[10]For the concept of a bond or link and similar notions, see Bunge (1977, p. 261, 1979a, p. 225, 1992a, b, 1993b); Bunge and Mahner (2004, p. 73).

[11]We should note here that there is a family of concepts around the notion of emergence in ES that should be distinguished at this point. Emergent properties are, of course, properties (see below). Emergence is a process in which an emergent property comes into existence. An emergent is a thing possessing some emergent property.

Another important point for our purpose in addition to the reality of (social) wholes or "totalities" (1999, p. 8) as such is that they are claimed to possess properties of their own, that is, as wholes, some of which we did already encounter above, that is, societal or systemic properties, which are the reason to grant these totalities an ontological status of their own in the first place. In Bungean ontology, there are again two types of holistic properties, namely, emergent and resultant properties. What is an emergent property according to ES?

> P is an *emergent* property of a thing *b* if and only if *b* is a complex thing (system) no component of which possesses P, or *b* is an individual that possesses P by virtue of being a component of a system (i.e., *b* would not possess P if it were independent or isolated). (Bunge 1996, p. 20, cf. 2003a, p. 14; Mahner 2001, p. 79)

Thus, there are two types of emergent properties. The former are called global or intrinsic emergent properties, the latter relational or structural emergent properties (Bunge and Mahner 2004, p. 79). If the property P is a property of a whole, but not emergent, it is called resultant. It is already possessed by the system components and merely aggregates to an unstructured whole.

Let us furnish a bunch of arbitrarily selected examples for these types of social properties. Global emergent properties are supposed to be social stratification, cohesion, mobility, stability, economic growth, form of government, political stability, mode of production, undergoing a social revolution, size of territory, or population. Examples of structural emergent properties are role, civil right, scarcity, price,[12] and every form of being coupled to other system components at all, so that every time a social system is built, at least two people are supposed to acquire structurally emergent properties (2003a, p. 78). In contrast to resultant properties (e.g., the total consumption of bubble gum in a society), emergent properties are ontologically irreducible to (though explainable by) properties of the system components, as is the total production of the economy of a society or being the goalkeeper in a football (soccer) team (1979b, p. 22; Mahner 2001, pp. 170–294).

Framed in a few fancy slogans reminiscent of the philosophical tradition, we perhaps get near the core of systemic ontology: There are not just capitalists but capitalist economies. There are not just protestants but people organized in churches. There are not only soldiers, but soldiers organized in nested military organizations with military subunits allegedly characterized by an emergent firing power manifesting in the field.

This is the static view of the world in Bungean ontology. Since we started out this paragraph with an utterly vague question about the constituents of history, we should not finish it without saying something about changes occurring in the world, since once upon a time the "historically minded" thought "history" in the potentially ontic and epistemic meaning to have something to do with change (Topolski 1976).

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[12]These examples are all taken from Bunge's work; see Bunge (1977, p. 97; 1979b, p. 20; 1996, 19f.; 1999, p. 8; 2003a, p. 13), Mahner (2001, p. 298).

The static CES-Model of a system presupposes, of course, a version of ontological realism, the thesis that the (social) world does not care about it being studied – a thesis rather uncommon in contemporary sociohistorical academia (1993a). Given this theory, every concrete (social) system at every point in time possesses a definite number of properties. This is the *state* of the system at a given moment.

The dynamics of the system consist then, according to Bunge, in the changes of state of the system in the epoch of its existence. In ES a change of state of a thing is an *event*. A *process* is a sequence of changes of state or events. And last but not least, the *history* of the thing or system is supposed to be nothing but the total sequence of its states during its journey through the "course of history," the totality of its changes in properties, including the acquisition (or processual emergence) of relatively or absolutely new properties (2003a, p. 13):

> Whereas a process (or partial history) of a thing is any (ordered) sequence of states of (or, alternatively, events in) a thing, the (total) *history* of a thing is the ordered set of *all* its successive states (or events). (Bunge and Mahner 1997, p. 19, cf. 2004, p. 58; Bunge 2003c, p. 128)

At least some interesting implications of ES for any philosophy of history are noteworthy, although they are inconspicuous. Although there are quite many, we will list only three of them. First, every history is the history of a thing and every event occurs in some thing. In contrast to what can frequently be found in philosophy of historiography, social theory, and historiology, there are no processes in themselves, properties of events, histories of events, or evolving histories, and society is not a process.[13] Furthermore, history is not "a tale told by an idiot" (Sewell 2005, p. 102), but strictly speaking nonexistent for being a summative concept representing all histories of concrete things (1996, p. 26), which are on their part as real as anything could possibly be. For not being things, histories of things do not have properties and therefore do not change or do anything at all (Bunge and Mahner 2004, p. 68). Second, according to this explicit ontology, most of the talk about history implicit in philosophy of historiography is either nonsensical or false. The latter holds for "history was in the past" (Tucker 2012, p. 277) or "All history is the history of thought" (Collingwood 1994, p. 215), the former for common slogans as "the end of history," "the return of history," or "the course of history."[14] Third, since societies are considered to be real in ES and to have genuine properties that might change or even be newly acquired, there is a real history of every society or of any social system of whatever scale that can in principle become an object of study. This might seem trivial but it is not given that this is impossible in ontological

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[13] On this account, expressions such as "historical events," "historical processes," "historical facts," or "historical societies" are pleonasms and talk of "historicity" is trivial; cf., Bunge and Mahner (1997, p. 20).

[14] Of course, in ES everything whatsoever has a history, whether it happens to be a boot maker or a coffee maker; cf., Bunge (1977, p. 255).

individualism or "historical individualism" (2000b) because on that account there is no fall of any empire since there are no empires in the first place.[15]

Accordingly, we can finally say what social facts are in Bunge's philosophy. They are states of social systems or their changes. Social change is simply defined as change in societal properties (1979a, p. 235). And although social states and their changes occur outside any individual's mind, they depend on social interaction and so finally on the activation of the furniture of the minding brains, to put it in Bungean terms, of concrete persons (2008, 60f.) or the "individual-in-society" (1979b, p. 17). This individual is on its part characterized by structural emergent properties and reacts furthermore to social facts as she perceives them, although these are not reducible to her interpretations of reality (1997, p. 453).

In order to provide us with further material to contrast ES with the other ontologies involving mechanisms, two further implications should be noted. Since societies do, according to Bunge, not hover above individuals that compose them and, moreover, social relations are constituted by interacting persons, whereas the set of all relations among the system components represents its structure, all of these are no candidates for being causes. Especially, "[t]here is no action of the whole on its parts (. . .)" (1979a, p. 39). More concisely, because in ES events (changes) are the relata in causal relations, neither properties nor states or conditions are considered as causes. The expression "a causes b" is therefore a short version of "a change in the state of thing *a* produces a change in the state of thing *b*" (Bunge and Mahner 2004, p. 95). Since Bunge conceptualizes the productive or generative aspect of causation in terms of different forms of energy transfer (1996, p. 31, 1999, p. 27), it seems to follow that only concrete persons as they are working with, talking to, or shooting each other cause something in the so-called social world, alongside changes in technological and natural systems, of course. The former quote thus continues: "rather, there are actions of some components on others" (1979a, p. 39). In a nutshell, social properties are real, given ES, but do not cause social or psychic events.[16]

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[15]See Veyne (1996, 153f.), who happens to be a historian: "La France ne fait pas la guerre, car elle n'existe pas réellement; seul existent des Français (. . .). Pour un historien comme pour tout homme, ce qui est proprement réel, ce sont les individus." Sztompka (1991, 188), who is a sociologist, does not nod: "[T]he army is more than soldiers, a corporation more than all those employed, and Poland more than all Poles."

[16]For reasons of space and complexity we cannot here discuss the whole story and this should remind us of the circumstance that my reading of Bunge is far from infallible. But first of all, Bunge has suggested for a long time that not every determinant of change is a causal determinant (Bunge 1982, 2009 [1959]). The structure of a social system (macro property) and even its subset of spatial relations, for instance, in a production line as a sub-system of a factory, might determine the output of the system (macro property). But in ES this is far from stating that these relations cause actions or changes in the properties of social systems, though they determine the possible state of the system before and while causation is going on through people's hands. In some examples Bunge (1996, p. 280; 2000a) talks of macro-causation in terms which might turn out to be problematic, for example, when it is suggested that actions are causally stimulated or constrained by the place the individual holds in a system. Of course, this is not problematic if one remembers that such

After all these seemingly just preliminary remarks, what is a social mechanism according to ES? Is it a more or less stable complex thing (e.g., a family, the German economy, a state, a university, a mafia family) or a process (e.g., child rearing, production, growth, innovation, social control, academic tenure, dealing drugs) or a property (e.g., cohesion, productivity, structure)?[17] Though we have to shorten the story considerably, in this ontology the concept of a mechanism as a structured object is unnecessary due to the concept of a concrete complex system, its components, and its structure.[18] Consequently, "mechanisms are not things but processes in systems" (2009, p. 19). Moreover, "[e]very mechanism is a process, but the converse is false" (1999, p. 24), since not every systemic change is a mechanismic process, for example, economic growth, the spread of brilliant ideas among social systems or dancing. Therefore, mechanisms are not identical to the history of a system, the boundary concept of change (of a thing) in Bunge's system. Mechanisms are ultimately supposed to be a subset of the totality of processes occurring in a concrete complex system, namely those that involve the properties that are essential to the kind of system we are concerned with, their specific processes or functions that keep the system alive or "running", "make it work" the way it "normally" does or "what it is" (e.g., 2003b, p. 146).[19] Accordingly, further basic assumptions of this ontology are that every (social) system is endowed with at least one specific function, mechanismic or essential process (1995, p. 43; 2010, p. 376), that there are mechanisms of change and mechanisms that prevent or control change or keep the system in a state. That is to say, there are mechanisms for "either the emergence of a property or another process" (2003a, 20f.; 2010, p. 379). A social mechanism is, of course, just a mechanism in a social system, that is "a process involving at least two agents engaged in forming, maintaining, transforming or dismantling a social system" (1999, p. 57).[20]

Where are mechanisms when it comes to analyze the so-called social world? Are they to be found on the side of agency or structure? In ES they are neither to be found in the heads of people, that is why they cannot be *reenacted* or *verstanden*,

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descriptions are most often short for complex interactions and their patterns, though the place or role an individual holds in a system is in ES emergent and systemic.

[17] The examples are taken from Bunge's work.

[18] A quick look at the development of Bunge's thinking on mechanisms and mechanismic explanation suggests that he started off with a theory that tended tacitly to conflate these categories, whereas his long-lived project of systems ontology lead to their strict separation yet systematization. See Bunge (2009a [1959], 1965, 1967, 1968, 1983, 1998b). If one is to believe Wan (2011a), it seems that the current literature on mechanisms moves in the opposite direction.

[19] On Bunge's concept of function, see Bunge and Mahner (2001).

[20] Or more formally (Bunge 2006, p. 131; cf. 2004a; 2010): "Definition 1: If σ denotes a system of kind Σ, then (1) the *totality of processes* (or *functions*) in σ over the period T is $\pi(\sigma) =$ The ordered sequence of states of σ over T; (2) the *essential mechanism* (or *specific function*) in σ over the period T, that is, $M(\sigma) = \pi_s(s) \subseteq \pi(s)$, is the totality of processes that occur exclusively in σ and its conspecifics during T. Definition 2: A *social mechanism* is a mechanism of a social system or part of it."

nor in a mysterious whole above people or social structure, but "in or among" social systems and a part of the systemic processes unfolding therein (1999, p. 57). But social interaction is not only said to be the "source of system," that is, of their diachronic emergence under the condition that one essential process gets running, but also the "fuel of mechanism" (2001b, p. 134). More interesting and explanatory accounts of social systems or their histories thus also have to include mechanisms in CESM-models (1998a; 2002).[21]

Let us finally deliver some suggestive examples that might help us in answering the main question. The specific function or part of the mechanism of the postal system is to distribute the mail (1995, p. 43). The finance authorities collect taxes or fail therein, and in schools, pupils are taught and teachers managed (Bunge and Mahner 2004, p. 75). And as any enthusiast for movies believes to know, blackmail, drug dealing, and intimidation of judges are specialties of mafia families and, according to Bunge, mechanisms or part of the total mechanism that keeps these systems running (2008, p. 53).

10.3 Mechanisms and Critical Realism (Roy Bhaskar)

What does history consist of in CR, that is, the philosophy that gained wide influence in social theoretical discourses and philosophy of social science over the past decades?[22] At first glance, there seem to be some similarities to what we found in Bungean ES. The world is said to consist of "things" or "mechanisms."[23] The overall conception of this ontology is also materialist but not reductionist, because psychological and social levels or the properties of its members are supposed to be genuinely real, that is, "emergent" (1986, p. 104, 1989, p. 91) from the preceding levels.[24] As in the case of Bunge, emergence is an ontological, not an epistemological, concept (1978, p. 113). The resulting ontology is therefore called "synchronic emergent powers materialism" (SEPM).[25] Moreover, Bhaskar at times equally distinguishes between mere aggregates (heaps) and what he calls

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[21] Perfect knowledge of a system would also include its history and its laws; see Bunge (1979a, p. 8). The reader will have noticed that mechanisms have been included in the ideal model of a system in Bunge's philosophy fairly recently, although he is thinking about mechanisms since the 1950s.

[22] See, for example, Benton (1977), Outhwaite (1987a), Archer (1995), Danermark et al. (2002), Groff (2004), Manicas (2006), Frauley and Pearce (2007), Elder-Vass (2010), Sayer (2010a), Wan (2011a). In order to keep track of history, Bhaskar's work is cited by the date of the original publication.

[23] See Bhaskar (1978, p. 51): "The world consists of things, not events." See also Bhaskar (1978, 47): "The world consists of mechanisms not events."

[24] See Bhaskar (1994, p. 74): "The human world is an irreducible and causally efficacious dependent mode of matter."

[25] On Bhaskar's emergentism in comparison to that of Bunge, see Kaidesoja (2009).

"totalities," which are said to be "characterized by an emergent principle of structure" (1994, p. 80). Although this suggests that structures are properties of totalities, on the same occasion totalities are said to be structures.[26]

In SEPM "people and society" are accordingly supposed to be "radically different kinds of thing" (1979, p. 42), or put in slightly different terms, "while the properties and powers of individuals and societies are *necessary* for one another, they are *irreducible* to one another" (1989, p. 63). However, whether ES and CR are compatible is yet an open question, given the first tendentious quotes that seemingly equate things with, in Bungean parlance, "their" mechanisms, while the second equate totalities with structures, whereas the concept of a power is furthermore absent from ES.[27]

The things that are supposed to constitute the world according to Bhaskarian CR are "causal agents." Causal agents are those entities endowed with causal powers.

> To say that x has the power to do φ is to say that it will do φ in the appropriate circumstances in virtue of its nature (e.g. structure or constitution); that is to say it will do it in virtue of its being the kind of thing that it is. (Bhaskar 1978, p. 237)

These natures are on other occasions also called "essences" or straightforwardly "structure." Thus, to ascribe a power (to some thing) amounts to distinguishing accidental from essential properties of the thing. Only if the "intrinsic structure or essential nature of a thing" changes that the powers and tendencies of the thing change. This would not be the case if only some conditions for its manifestation or relations to other things changed (1978, p. 97).

A causal agent is then nothing more, but also nothing less, than "anything which is capable of bringing about a change in something (including itself)" (Bhaskar 1978, p. 109). These things or agents are the bearers of at least two types of causal power, namely, (i) powers and (ii) liabilities. The former are held to be capacities to produce changes actively, whereas the latter are conceived to be capacities to suffer or passive powers (1978, p. 87). To use a common example, a fire is supposed to have the power to burn people that are liable to be burned.[28]

Causal powers, in turn, are the foundation of tendencies. There were supposed to be two types of tendencies in the 1970s (1978, p. 230); later on Bhaskar distinguished seven types (1994, p. 83). Tendencies, if exercised, are said to ground the normic behavior of things (1978, p. 106) and are among others the referents of normic law statements. As it seems, Bhaskar shares Bunge's belief that there are "causal laws, generalities, at work in social life" (1979, p. 27). But what are

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[26]See also Bhaskar (1978, p. 85): "Societies, people and machines are not collectivities, wholes or aggregates of simpler or smaller constituents."

[27]Sometimes similarities between both ontologies are noted though the differences are seldom made explicit. For comparisons see Kaidesoja (2007, 2009), Wan (2011a, 2011b).

[28]Harré and Madden (1975, p. 47). I will here not address the problem of the relationship of Harré's work to that of Bhaskar. But it is worth reminding that the concept of mechanism as used in CR has its basis in Harré's work of the 1960s and early 1970s. See Harré (1961, 1970, 1972).

tendencies more exactly? We find that tendencies "are roughly powers which may be exercised unfulfilled" (1978, p. 98).

> Tendencies may be possessed unexercised, exercised unrealized, and realized unperceived (or) undetected by men; they may also be transformed. (Bhaskar 1978, p. 18)

If tendencies are possessed unexercised, they seem to be mere powers. The thing is said to possess the tendency even though it is not yet tending to do anything. Tendencies are "dynamized" powers or powers "set in motion," although exercised powers (tendencies) need not manifest themselves in open systems (1978, p. 50), given that other tendencies might counteract. If a power is triggered, it (or the thing bearing it) is claimed to tend towards its manifestation. It acts "transfactually" and would actualize if it is not counteracted by other actualized powers. In other words and terminology that is hardly used by critical realists, powers seem to be dispositions and tendencies are dispositions that are triggered or released and manifest themselves only ceteris paribus.[29]

In summary, we can say that whereas the basis or foundation of tendencies seem to be powers or that tendencies are thought to be a mode of being of powers, these on their part seem to have a basis from which they are supposed to emerge synchronically. The bases of powers are the "natures" of things (1978, p. 178) or their "real essences" that are supposed to be their "intrinsic structures" (1978, p. 174).

If our reading is not structurally beside the point, we can preliminarily picture the basic outline of this ontology in the following way:

Structures (or natures or essences) → powers → tendencies (normic behavior or laws)

that is, roughly, structures ground powers which are the foundation of tendencies.[30]

Even at this point, before we even got near the social ontology of CR, we can sketch some hypotheses of CR's philosophy of history. First, history is not just a sequence of some such events, but something in "the course of" which something real persists or even radically changes or is transformed as far as to eventually produce qualitative novelty.[31] Secondly, given that Bhaskar believes that something persisting is the basis for a "genuine concept of *change*, and hence *history*" (1979,

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[29]For a discussion of problems around these central notions in CR, see Fleetwood (2009, 2011).

[30]The background of this ontology is of course an anti-positivist stance in form of the hypothesis that "the real" is not exhausted by perceptions of events or events, especially "[s]ociety is not a mass of separable events and sequences" (1979, p. 68). These assumptions are at the heart of the three ontological domains of CR (1978): "the real" (structures, powers, totalities etc.), "the actual" (events), and "the empirical" (observed events).

[31]See Bhaskar (1989, p. 10) reminiscent of Marx: "In the constant conjunction form history grinds to a halt in the eternalized present. History is what there has been or is elsewhere but is no longer here now."

p. 47), the question arises what this something is that endures, changes, or is transformed. In his later work, causal powers are said to be "processes-entified-in-products" (1993, p. 52) and Bhaskar even goes as far as to write about the "presence of the past," its causal efficacy and of the "presence of the future" (1993, 140ff.). Accordingly, one answer to the question which stuff is transformed during the "course of history" and even determines in some sense "the future" that we can extract from CR is that this stuff is causal powers. A "historical event," then, is not any event whatsoever as in ES, but an event that significantly changes or transforms historical things and their powers (1979, p. 24).

Where do mechanisms enter the ontological picture? A "generative mechanism is nothing other than a way of acting of a thing. It endures and under appropriate circumstances is exercised as long as the properties that account for it persist" (1978, 51f.), that is, as long as the natures, essences, or intrinsic structures do not change significantly. "Mechanisms are enduring; they are nothing but the powers of things. Things, unlike events (which are changes in them), persist" (1978, p. 221).[32]

On this reading we can substitute the former summary of basic CR ontology by the following schema so that mechanisms take the place of powers:

> Structures (or natures or essences) → mechanisms → tendencies (normic behavior or laws)

that is, roughly, structures are the foundations of mechanisms which ground tendencies.[33]

Whereas in Bungean systemism mechanisms are actual or manifest and furthermore processes, in Bhaskarian realism they are, or seem to be, dispositional properties or powers. Yet on another reading, they might be something in between. In *Plato* Etc. we find the statement that structures possess causal powers, "which, when triggered or released, act, as generative mechanisms" (1994, p. 23). Given this reading, mechanisms are powers triggered or dynamized, the role taken above by tendencies. Accordingly, the concepts of power and tendency are said to "come together in the concept of *generative mechanism,* which may be either or both" in standard CR literature (Hartwig 2007, p. 57).

> When stimulated, released or enabled, then, powers and generative mechanisms are tendencies (. . .). Where a thing just is its powers and tendencies (mechanisms), these are the same as structure. (. . .) Otherwise mechanisms and structures are distinct, i.e., mechanisms (powers and tendencies) are *of* (instantiated in) structured things. (Hartwig 2007, p. 57)

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[32] See also another classic formulation by Bhaskar (1978, p. 50): "[T]he generative mechanisms of nature exist as the causal powers of things."

[33] In Sayer (2010a, p. 15; 2010b, p. 117) we find a slightly shorter schema: structures → mechanisms → events.

On the second reading, then, we get something like this schema:

Structures (or natures or essences) → powers → mechanisms

that is, roughly, that structures ground powers, which, when triggered, transfactually act as mechanisms or are mechanisms if triggered.[34] In the case of people, who, in the later work (1993, p. 165), are said to be an example of things that just are powers, we get:

Structure (thing) = mechanism

that is, some structures are mechanisms (or ensembles of powers). With a little slip of the pen, we might summarize the forgoing in the following schema:

Mechanism (thing, structured thing, structure) → mechanism (power) → mechanism (tendency).[35]

Given the foregoing, what are mechanisms in CR? Are they complex things, properties, or processes? As far as I can see, this happens to be rather unclear. They sometimes appear to be complex "things," sometimes events, whereas the primary referents are non-manifest properties capable of "doing" something or "bringing about" changes in things. Given this multiplicity of meanings of the mechanism concept in CR, it is not surprising that one gets the impression that much of the literature interprets these CR mechanisms implicitly as complex objects (mechanisms as systems)[36] characterized by recurrent processes (mechanisms as processes)[37] due to the properties of the component things (mechanisms as powers) and their relation, organization (mechanisms as structures or structural powers), or interaction.

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[34]If we read "act as generative mechanisms" as "resulting in actual processes," then we might already here get the hypothesis that mechanisms are processes, though this seems to be against the spirit of the letter. We get that result in the next footnote.

[35]To round up the story, we have to add here that according to Bhaskar (1994, 257f.), processes or rhythms also have powers, and according to Hartwig (2007, p. 189), events might also "function as mechanisms," which seems to amount to the claim that events possess powers of their own beyond the powers that are grounded in or emergent from the structure or essence of the thing that undergoes a change in the event. For short, events and processes might also be powerful dispositional mechanisms.

[36]For example, Wight (2006, p. 31), affiliated to the tradition of CR, writes of "the causal power of mechanisms."

[37]Cf. Kurki (2008, p. 233).

But this reading seems to be slightly beside the point, because given the former interpretation and the strict distinction between the domains of "the real" and "the actual," the former including mechanisms (powers), the latter encompassing events as changes in things, hardly anything is happening in our world yet, given that even triggered powers (mechanisms or tendencies), though pinched towards moving, might, by definition, not end up in actual changes in the world, even when they are said to be acting in some sense (transfactually), since they might remain unrealized though exercised, if they happen to be exercised at all. Bungean history is, as it seems, still dormant in the story told until now.

Given that social mechanisms were in ES said to be neither social things nor persons but systemic processes, where are mechanisms to be found in CR? Since they are (primarily) powers, mechanisms are where powers are to be found. And according to CR's *social ontology*, there are social structures or societies and persons, which are both claimed to be ensembles of powers. These types of powers finally meet each other in "processes" or "rhythms."[38] In the social sphere

> *process* [is] where structure meets events; that is, in the study of the mode of becoming, bestaying and begoing of a structure or thing, i.e. of its genesis in, distantiation over and transformation across space-time. Process is not an ontological category apart from structure and event; it just is a structure (or thing), considered under the aspect of its story (sic!) – or formation, reformation and transformation – in time. (Bhaskar 1986, p. 215)

In ways similar to Little's ML framework, in the social sphere "social structures" or "social forms" (1983, p. 85) fuse in actions with agential causal powers (mechanisms) and natural causal mechanisms (powers) to lead to changes in the maintenance or transformation of "social structures" (mechanisms). Societal change is thus a change in or a transformation of societal powers. A society, a causally inert system of systems in ES, is said to be "a complex and causally efficacious whole – a totality (. . .) which is being continually transformed in practice" (1989, 87f.). Although:

> Society (. . .) is an articulated ensemble of tendencies and powers which, unlike natural ones, exist only as long as they (or at least some of them) are being exercised; are exercised in the last instance via the intentional activity of human beings; and are not necessarily space-time invariant. (Bhaskar 1989, p. 79, cf. 1978, p. 196)[39]

It is noteworthy that the powers in the social case are dispositions that are always actual or at least acting transfactually as tendencies or exercised powers, but are never purely dispositional, given the former quote.[40]

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[38] On "rhythms" see Bhaskar (1993, 1994).

[39] On the more narrow CR conception of society, it does not consist of individuals or groups or some such circumstances but of internal relations: "A relation aRb is internal if and only if a would not be what it is *essentially* unless it were related to b in the way that it is." See Bhaskar (1993, 10); see, also Bhaskar (1994, 75; 1979, 32, 54). This theory has implications for the philosophy of social change (Bhaskar 1979, 52): "In social life only relations endure."

[40] Here we also have to admit that the story is far more complex. There has been a discussion about this point in CR that resulted in the acceptance of social powers or dispositions that do not just exist as exercised or actualized powers. Cf., Porpora 2007.

In the famous "Transformational Model of Social Activity" (TMSA) or the later "Social Cube," social life is conceptualized as work on a preexisting social world, that is, as work on "social structure." This move yields the hypothesis that "in every process of productive activity a material as well as an efficient cause is necessary" (1979, p. 43, 1986, p. 119). Accordingly, in classical CR "social structures" are supposed to sponsor the world with "social material causes" (1993, p. 155) that "govern, enable and constrain" (1986, p. 130) individual action. Accordingly, these powers are, first of all, believed to be predating these actions, whereas persons change, reproduce, and transform "social structures" that enable and constrain their actions. The truth of social individualism according to Bhaskarian CR is that "people are the only moving forces in history" (1989, p. 81).

Since nothing makes things clearer than examples, let us have a look at some arbitrarily selected instances of social structures that carry powers or simply are powers. Examples for "social entities" are "institutions, traditions, networks of relations and the like" (1989, p. 175); the former two are also on occasion called "emergent social things" (1993, p. 54). Structures are, furthermore, said to be "religious rites established by the practices of the long dead" (1994, p. 95); "the economy, the state, the family" (1989, p. 4); "Nazism, bureaucracy and (. . .) capitalism"; and "buildings we have, the stock-market, the whole financial economic system"; they are claimed to be "everything that is there before any given voluntaristic act" (2001, 28f.), as are "languages," "systems of belief, cultural and ethical norms" (1978, p. 196). Anything that constrains or enables individual actions is structural and powerful: even "stories are social structures" (2001, p. 36) as well as "the age structure of a population, or the occupational structure of a population, or the academic status of a population or perhaps the class structure of a population" (ibid. p. 37). Furthermore, "social structures and their generative mechanisms" are said to be exemplified by "ways of cooking, making micro-chips or production generally" (1993, p. 155).

The heterogeneity of these examples of social structures would not be problematic if these structures were not believed to be mechanisms or powers, which are what distinguishes causal agents, namely, "anything that is capable of bringing about a change in something" (1978, p. 109), from non-agents. If our story above is correct, in order to get powers in CR, we need "the key concept of a causal agent" (1978, p. 77). The question is whether we find those agents with essences and emergent powers in these allegedly social examples, for example, traditions, stories, norms, and social relations.

The problem seems rather obvious. First, if there are no such complex objects to be found whereof those powers are properties, CR faces the problem that nothing seems to justify the assumption of "social causal powers" any more.[41] If we do not need agents as structured objects or systems in Bungean terms to get powers, then we seem to face in social ontology a different concept of powers than in the

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[41] See Bhaskar (1978, p. 51): "Most things are complex objects, in virtue of which they possess an ensemble of tendencies, liabilities and powers."

materialist ontology for the natural sciences.[42] Second, it seems to be controversial to frame "social material causality" in terms of the original causal powers account, since this seems to be in slight conflict with the productive or generative account of causation.[43] Anyway, it might be worth believing that a fistful of dynamite has the power to blow one's brains out and actually does so if it is triggered and, finally, acts undisturbed. But, as any realist knows, this seems to be something different from the case in which a fistful of dollars results in my buying a cuckoo clock if it is handed over the counter. One of the powers of a fistful of dollars might be to be liable to be burned, but that one of its powers is to buy a clock might be controversial, though everybody seems to understand what is going on in this social episode in common sense terms.[44] Third, if we stick to the belief that powers have to confront triggers or releasers or what have you, we might ask whether people are the conditions for the manifestation of a social causal power (mechanism), for example, of a norm. Or we can ask whether social causal powers (mechanisms) are merely the conditions for the manifestation of individual powers. Since a condition for the manifestation of a disposition of a thing is another powerful thing that is disposed to trigger the disposition of the former if they happen to join one another in an event, we might say that personal and social powers have somehow been made for one another. But however we twist and turn, in most examples of social causal powers, we lack the second and furthermore social "agent" and a property that might be considered as a candidate for a disposition. What is, say, the disposition of, or dispositional about, "the age structure of a population"? Of course, if it would turn out that there are no plausible candidates for social powers, there would be no social mechanisms, given CR ontology. But, of course, this is an open question.

10.4   Mechanisms and Methodological Localism (Daniel Little)

Daniel Little is another outstanding philosopher who has worked on the problem of sociohistorical explanation, mechanisms, and social ontology fairly independently of the authors discussed so far since the 1980s.[45] Methodological Localism revolves

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[42]To grant "unobservables – such as ideas, rules and discourses," a causal role, which seem to be "non-agent-like factors," Kurki (2008, pp. 170–174) frames the concept of an "ontological object" that is not supposed to be a "'thing'" (ibid. p. 169). Contrary to this, Kaidesoja (2007) argues that something like a Bungean complex thing is necessary to ascribe something a power and wants to correct CR in this direction.

[43]See the criticism by Harré (2002), Harré and Varela (1996). Famously Lloyd (1993, p. 46) already distinguished two types of powers: "Persons have agential power, structures have conditioning power."

[44]For the claim that money has an essence, see Bhaskar (1978, p. 88).

[45]He seems to have been influenced by the work of Rom Harré; see Little (1989; 1991). For the precursor of mechanisms, see Little (1986) and the "logic of an institution."

around three ontological hypotheses: (i) the social causation thesis, (ii) the micro-foundations thesis, and (iii) the agency-structure thesis. The basic methodological thesis is that sociohistorical scientific explanations do actually invoke "mechanisms" and also have to do so in order to be appropriate. This is the epistemic counterpart to the ontological hypothesis that "social causation" works somehow but only and solely through individual agency or action. A microfoundational explanatory account then basically provides an answer to the question how macro-powers get to manifest their dispositional natures in micro-action. The main assumptions are the following:

> Social structures and institutions have causal properties and effects that play an important role within historical change (the social causation thesis). They exercise their causal powers through their influence on individual actions, beliefs, values and choices (the microfoundations thesis). Structures are themselves influenced by individuals, so social causation and agency represent an ongoing iterative process (the agency-structure thesis). (Little 2010, p. 97; cf. 2007, p. 358; 2009, p. 169)

Methodological Localism is in somewhat more detail the hybrid out of the theses that "[s]ocial entities supervene upon individuals" (2007, p. 367) or "upon individuals and institutions" (2010, p. 56). Those social entities are "the sum of the constellation of socially situated individuals and institutions" (2007, p. 354) so "that all social facts are carried by socially constructed individuals in action" (2009, p. 159), which leads to "the idea that the causal nexus of the social world is the behaviours of socially situated and socially constructed individuals" (2011, p. 293).

Obviously, at least at first glance, this is rather uncontroversial. And equally salient, this ontological model is almost a reinvention of Bhaskar's TMSA. Accordingly, "influence" should here strictly be read in terms of causation.[46] We should consequently emphasize again the hypothesis that there is social stuff and that this stuff is furthermore supposed to be a bearer of "causal powers" and a producer or generator of individual action and derivative social facts.[47] Given the problems inherent in CR ontology, much depends on the ML theory of social structures and their powers, the mechanisms of CR.

In accordance with Bhaskar, who claimed that "social mechanisms and structures generating social phenomena" (1986, p. 122) are only relatively enduring, Little claims in accordance with most historians that "all social structures are historically rooted; so there is no fixed 'essential' nature of a state or economy" (2010, p. 75). That is, "historical individuals" (2010, p. 42) or "historical entities" (ibid. p. 47) always "'morph' over time" (ibid. p. 62). The central problem that guides the search for a theory of social mechanisms and mechanismic explanation is therefore the

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[46] As far as I can see, Little quotes only Bhaskar's "Realist Theory of Science," in which the TMSA was not developed; cf. Little (2011, p. 278).

[47] To avoid misunderstanding, one should distinguish two claims under the heading social causation. The first is the claim that social macro stuff causes individual action. The second is that there is social macro-macro-causation whether through action or not; cf., already Sztompka (1991, p. 58). Of course, one could deny both claims. The easiest way to deny CR and ML styled social causation is to claim that "there are no structures" (Harré 2009, p. 138).

same as in Bhaskar's TMSA framework, "Agents constitute structures; and agents are in turn constituted by structures," which is then interpreted as some form of "ongoing mutual influence" or causation "within and across generations" (2007, p. 356).[48] The three main assumptions quoted above say in a nutshell that "[m]acro entities exercise causal properties through the individuals who constitute them at a given time" (2007, p. 366). Given that Little shares with Bhaskar and Bunge the aim of finding a middle way between ontological and methodological individualism and holism (2007, p. 346), we stick to the tradition established above by asking what does the so-called social world and perhaps history consist of and what are mechanisms? More to the point, what are social facts, macro-entities, or social structures in ML? What is it for such a "social thing" (2010, p. 72) to possess a causal property? And how do they cause individual actions and derivative social effects?

First of all, according to ML, there are "social things," for example, "relations, institutions, practices, organizations" (2010, p. 72), "historical individuals" or the "concrete social formation" (2010, p. 47), and furthermore "things as revolutions or capitalist economies" (2010, p. 42). At times, Little seems to suggest that "things" are that type of entity that bears "causal powers".

Second, in ML society, that is, a system of systems in ES and an ensemble of powers and internally related social positions in CR is thought to "consist of specific social, economic, and political institutions, mentalities and systems of beliefs and values, and higher-level structures that are composed of these institutions, practices, and mentalities." Agents are moreover claimed to "constitute" or "populate" these "social factors" and to act "within the context of these structures." Thus they "affect the future states of the system while being prompted or constrained by existing structures and mentalities" (2007, p. 353). This, then, amounts to the hypothesis that individuals are always "socially situated" in the sense that their "domain of choice" is restricted by existing "social institutions," that is, these decisions are caused by the given circumstances and their powers; in contrast to ES and in accordance with CR. Agents are furthermore said to possess "social properties," that is, they "exist in social relations and social institutions."[49] They are, moreover, "socially constructed" in the sense that their furniture of mind is acquired through interaction (2007, 353f., 2009, p. 174). Thus, agents are sometimes claimed to be in "social states" exemplified by "beliefs, intentions, reasoning, dispositions and histories" (2010, p. 59; 2007, p. 352).[50]

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[48] As is well known in CR, the sociologist Margaret Archer (1995) formulated a similar theory.

[49] Although, as far as I can see, there is no concept analogous to structurally emergent properties in ES that accounts theoretically for this claim in ML. But this concept would not fit in here anyway because ML institutions or structures are, as it seems, not Bungean things or systems.

[50] A difference to Bunge's ontology is remarkable at this point, given that social states can be found neither in individuals' brains nor in individual actions according to ES (Bunge 1996, p. 45). Whereas in ES poking one's nose is not a social fact but an individual one, though poking another's nose or each other's noses are social facts, in ML the former is a social fact and a social action,

In summary, "the social" consists, according to ML, of individual agents that constitute, compose, or "embody" institutions. "Social institutions and organizations come together to constitute complexes of institutions" (2007, 354f.). Such complexes of institutions are called structures, which are the constituents of social formations, which are said to be the "comprehensive social entity at the macro-level" or "large systems" (2010, pp. 56–58).

What is a social structure, given its centrality as a causal agent and patient in "the agency-structure" thesis? In his early work, Little (1989, p. 24) believed a social structure to be "a set of constraints and incentives imposed on individual conduct and embodied in patterns of individual behavior." Examples of social or historical structures in his recent work are human organizations as, for example, a "rail system" (2011, p. 286) and "the fiscal system of the *ancient regime*" (2010, p. 3). A "fascist movement" and a "market" (2010, p. 88) are also called structures as are "the revolution of 1848" (2010, p. 81) and "large complexes of rules and practices" (2010, p. 75). Although it might seem that structures in ML sometimes are complex concrete things (formal organizations or systems in Bungean systemism), they sometimes resemble events or processes or even sets of rules or patterns of rule-governed individual actions. The last paradigm comes near the theory advanced in the earlier writing:

> a social structure is a system of geographically dispersed rules and practices that influence the actions and outcomes of large numbers of social actors. (Little 2010, p. 73)

Because anything else would probably amount to a harsh form of holistic idealism, it is claimed that each social entity is "constituted by the socially constructed individuals who make it up, through their beliefs, values, interests, actions, prohibitions, and powers" (2010, p. 56). As it seems, on the one hand, social entities are not necessarily concrete systems as in Bunge's systemism, in which systems are straightforwardly composed of men and women of flesh and blood. They are not composed of or constituted by actors' beliefs or values.

On the other hand, Little claims that agents "populate" "social factors," "institutions," and "higher-level structures"; what seems to make some sense if these are concrete objects. But those structures then are said to consist of "institutions, practices, and mentalities" (2007, p. 353), which can hardly be said to be populated or to be constituted by people. In any case, it remains unclear what this could mean. In order to clarify this and since formations are also said to be constituted by structures and these by institutions, it is worth to get a clearer picture of what institutions are according to ML:

> An institution (. . .) is an embodied set of rules, incentives, and opportunities that have the potential of influencing agents' choices and behavior. An institution is a complex of socially embodied powers, limitations, and opportunities within which individuals pursue their lives and goals. A property system, a legal system, and a professional baseball league

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as is eating breakfast cereals or smoking for oneself in private, since we have somehow acquired every taste or preference by someone; cf. Little (2007, p. 351f.).

all represent examples of institutions. Institutions have effects that are in varying degrees independent from the individual and "larger" than the individual. (Little 2007, p. 352)

Institutions, then, seem to be almost the same as what Little once called social structures, which was in part to be expected given that above structures were said to be "complexes" of such smaller institutions.

Although individuals in the end "embody" the whole social world, his position is intended not to be the same as ontological individualism, since (i) the individual is by itself social or socially constructed (2010, p. 58) and (ii) "social arrangements and circumstances affect individual action," that is, through the social situation (2007, p. 360). Because of this allegedly causal influence, social stuff is believed to exist in the first place.[51] Even more, large social stuff such as villages are supposed to be "lodged with a larger political, economic, and natural environment" that "influence and constrain" what is going on in the village. Thus, Little does not subscribe to what he calls "ultra-localism," the theory that the social world is exhausted by face-to-face-interaction (2007, p. 349), which, we should add, would considerably limit our possible thoughts about real histories.[52]

But how do such social facts or powers cause individual action and social facts? Little subscribes to the view he terms "causal realism":

a thesis about the reality of causal mechanisms or causal powers. (2010, p. 101; 2011, p. 275)

Given the former section, the question arises how causal powers and mechanisms are related, given that in CR they are roughly the same and such passages in Little's work suggest a similar reading. Little is not very explicit about his theory of causal powers, though it is remarkably different from Bhaskar's due to an absence:

What is it to attribute a causal power to an entity? It is to assert that the entity has a dispositional capacity to bring about specific types of outcomes in a range of causal fields. To have a causal power is to have a capacity to produce a certain kind of outcome in the presence of appropriate antecedent conditions. (Little 1998, p. 205)

What are the "entities" endowed with such causal powers, given that these, in early CR, were supposed to be complex objects or concrete particulars: "Only things and materials and people have 'powers'" (Bhaskar 1978, p. 78).

On Little's account "events, conditions, structures"; "institutions, ideologies, technological revolutions, communications, and transportation systems"; "properties, conditions, and events" (1998, 198f.); and "various social forces" (2011,

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[51]To be more exact, Little writes (2007, p. 360, emphasis added): ML "is not equivalent to methodological individualism or reductionism because it admits that social arrangements and circumstances affect individual action. For it is entirely likely that a microfoundational *account* of the determinants of individual action will include reference to social relations, norms, structures, cognitive frameworks, etc."

[52]In ES this would be expressed by the claim that social systems (e.g., families) are as real as their members, face a social environment and might be the components of higher-level systems (e.g., villages), whereas it is apparently unclear what a village is in ML, given that it seems to be rather odd to say that it is a set of opportunities or a system of rules.

p. 275) as "social classes" (2010, p. 83) are supposed to be, as well as incentives and opportunities (1998, p. 206), and "rumors" (1991, p. 19) are possessors of causal powers. In short, every necessary condition is in accordance with early CR in the end a cause (1998, p. 200) and, by definition, a bearer of dispositional capacities.

This account and many examples given lack something which resembles a concrete social thing or system that bears the powers and produces something, so that there must be another trick than from some emergence basis in a complex thing to endow "social factors" with causal powers that somehow produce actions of individuals. How do such "things" as rules, opportunities, incentives, or mentalities come to possess powers to cause changes in concrete things according to ML?

The first theory embodied in ML might be named the theory of instantaneous power acquisition:

> Institutions and other aspects of social organization acquire their causal powers through their effects on the actions and intentions of the individuals involved in them – and *only* from those effects. (Little 1991, p. 19)

A rather strange but perhaps suggestive analogy might help here. For example, when the sun, although perhaps no social thing, causes modern people to go "sunbathing" by actually shining, because people decide to do so, it acquires the dispositional capacity to cause people to go sunbathing in the right and a variety of circumstances and instantaneously exercises it. This seems to be incoherent if causal powers are supposed to be intrinsic, dispositional, and therefore possessed even if not actualized and possessed before the thing causes anything or is triggered by some event. If this is not to be presupposed, we face a somewhat different concept of a power.

The second theory about the way the ascription of social causal powers can be justified might be termed the explanatory account of social dispositions. On this reading, "the causal capacities of social entities are to be explained in terms of the structuring of preferences, world views, information, incentives, and opportunities for agents" (2009, p. 170; 2007, p. 361; 2010, p. 106). If we can somehow explain microfoundationally how the shining sun provides modern people with an opportunity for sunbathing, that is, if we can sketch the "pathway" of how it manages to do that through people's heads, we are justified to claim that it simply possesses the causal capacity to bring about sunbathing people. But, at least originally, the "powers" of "things" were to be explained by their composition, structural organization, or their intrinsic natures, not by cultural accidents. Again, here we do not seem to face the concept of a causal power that grounded the realist tradition in philosophy of social science, but something else.

In a third reading we find what might be termed the relational or plausibility account of social causal powers or the theory of their rational calculation dependence. In this theory, that is similar to the former and perhaps explicates what "structuration" means, it is maintained that the causal powers of social stuff "derive from the incentives, powers and knowledge that these institutions provide for

participants" (2010, p. 106), that is, they "derive from the structured circumstances of the individuals who make up those entities, and from nothing else" (2007, p. 358). The result of the plausibility account is that social things "possess causal powers in a derivative sense: they possess characteristics that affect individuals' behavior in simple, widespread ways" (2007, p. 362; 2010, p. 106). According to this account, for example, the protestant ethic as a supposedly supervenient social entity, or perhaps an embodied mentality, causes a whole bunch of actions in or through individuals who happen to believe in protestant doctrines and are therefore incited by these. Furthermore, this has "historical changes" as unintended effects, if these people actually happen to act on those doctrines and thus instantiate the powers of Protestantism.

The problem with this account is that it is somehow plausible but quite fluffy, if we stick to the idea that also in the historico-social sciences or their ontology something explicit and perhaps exciting is associated with social causal powers or properties of some "thing."[53] But such social powers reside somewhere between the circumstances of acting people; the incentives, constraints, or opportunities; and their relation to the agents themselves, that is, their perception or interpretation of "social things." Virtually lost is what was thought to be in need of justification, given the realist tradition in philosophy of social science, namely, social things, their powers, and thereby productive social causation.

Put in different words, we might get the impression that the social powers metaphysics in philosophy of social science is grounded in theories about how "the social" constrains and enables actions. Though this might be perfectly alright in explanatory contexts, it seems to be questionable if this is enough to populate the world with social powers and causes.[54] Given that Little states that social causal capacities "are entirely defined by the current states of psychology, norm, and action of the individuals who currently exist" (Little 2007, p. 347; 2009, p. 166; 2010, p. 61), critics of realist social ontologies might simply want to expel the powerful ghost without a machine altogether or assign him a powerless status. Reification

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[53]Let us take the risk to pose some naïve questions: Which is the disposition or power of, say, a mentality? Is a mentality, or a norm (or what have you), a property? If yes, of what? If it is not a property of something, where is it floating? In a different context, Sztompka (1991, p. 23) has seen clearly the problem we seem to face: "In modern sociology one may find such fashionable and influential notions as 'habitus' (Bourdieu), 'historicity' (Touraine), 'figurations' (Elias), 'mobilization' (Etzioni), 'anomie' (Merton), 'duality of structure' (Giddens), 'agency' (Archer) – and many others. It is not easy to say what exactly the referents of these concepts are, what kinds of objects are described, because clearly they are neither people nor systems."

[54]See the quote in note 51. Causation might be one thing, explanation quite another. To say the same more carefully, one should be careful not to slide into an ontological misinterpretation of the famous "Thomas Theorem," which says "If men define situations as real they are real in *their* consequences" (quoted in Sztompka 1991, 83, emphasis added). Of course, there might be nothing social beyond or behind the heads of people that has "powers" or the former consequences, that is, that causes actions or social changes. Because of such worries Boudon (2010, 23) calls powers or causes such as mentalities or social structures "forces fantomatiques." Again, this is only supposed to indicate that there is something problematic about social causation or social powers.

of "the social" might not be "the attribution of causal powers to entities without an understanding of the mechanisms through which those powers are expressed" (2007, p. 350), but the attribution of causal powers to entities that are not concrete systems or what was formerly called a powerful particular.[55]

After all these preliminaries, what are mechanisms and what is their function in ML? Are mechanisms complex things, processes, properties, or do they embody the whole spectrum? The question suggests itself, given that in the quotation above it seemed as if powers were roughly mechanisms, whereas in the ending of the last paragraph, mechanisms are said to be something where powers are "expressed," which suggests that mechanisms are events or processes, that is, they are supposed to be exactly what they are explicitly not supposed to be in CR.

The role for mechanisms in ML is first of all to "mediate" social causation (1998, p. 203), that is, to be the medium of the "expression" of macro-powers and to be the connection between macro-cause and macro-effect (2011, 278f.). Although it is slightly misleading, we can picture this the following way:

Macro → Mechanism → Macro.

Accordingly, the first theory of mechanisms in ML was straightforwardly that of a causal chain.[56] This line of thought seems to persist in Little's recent writing: "A causal mechanism is a series of events or processes that lead from the explanans to the explanandum" (2007, p. 357). In the case of social causal mechanisms, it is "a set of social conditions, constraints, or circumstances combined to bring about a given outcome" (2009, p. 168).

Given the ontological microfoundations thesis and causal realism, "individual actors embody this causal process" (2007, p. 347; 2010, p. 61), that is, the process that is central to the agency-structure thesis.

Social structure → Individual actions → Social structure.

Personal and social powers are also said to be part of the metaphysical "substrate" of the mechanism that brings about social processes. They provide those processes with fuel that is burnt only and solely in actions. The story can be abridged insofar as in the social world "causal mechanisms are constituted by the purposive actions of

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[55]For such criticisms see again (Lewis 2000; Harré 2002; Manicas 2006; Kaidesoja 2007).

[56]Little (1991, p. 15): "A causal mechanism (...) is a series of events governed by lawlike regularities that lead from the explanans to the explanandum." That mechanisms are chains of events is still suggested in his recent work when he writes that mechanisms have two ends; cf. Little (2011, 278).

agents within constraints" (2011, p. 273). But finally, we get Little's recent account of causal mechanisms:

> A causal mechanism is (i) a particular configuration of conditions and processes that (ii) always or normally leads from one set of conditions to an outcome (iii) through the properties and powers of the events and entities in the domain of concern. (Little 2010, p. 102; 2011, p. 277)

Accordingly, a mechanisms is in ML roughly what is called a process or an event in CR, the place where in CR individual and social mechanisms (powers) get actualized, which are here mainly to be found under clause (iii). At the same time they resemble slightly what in ES is called a concrete system, because what is there called a component of a system (and perhaps also what figures as the environment of a system and as its structure in ES) is in ML a part of a mechanism. But a clear notion of a social thing seems to be absent from ML as it is from CR, although examples for mechanism such as "the feudal manor, the collective farm, the Wall Street law firm" (2011, p. 284) are straightforwardly systems in Bunge's rather clear sense, not ES mechanisms. Therefore, the little process schemas above are slightly misleading because in the end social structures and social institutions are as well part of a social causal mechanism in ML as are persons that constitute structures, institutions, and formations, which together bring about the "behavior" of the social mechanism (ii). Yet, similar to Bunge, ML social mechanisms happen neither to be running in persons nor in "structures" but are somehow the resultant of both, that is, of actions within "constraints." The difference is that ML mechanisms might also be said to be constituted by or composed of persons and social structures, which is, of course, impossible in ES.

And, finally, what is history? Little clothes his philosophy of history into the metaphor of a pathway: "history is an accumulation of pathways and roadways that embed human action over time" (2010, p. 9). But isn't that, roughly, a social structure or a social mechanism?

10.5   Do They or Do They Not?

At the workshop that anteceded the publication of this volume, the question arose how central mechanisms are to the historian or history. If we want to refrain from answering this question by the traditional stories of philosophy of historiography that tell us that historians are by their essence, that is, by definition, interested in individual actions, singular or unique "big events," the aesthetics of narratives, or what have you, we would need to know what people that are sometimes called historians do, what mechanisms are, and what history is.

Since I do not claim to know what so-called typical historians do, we have to speculate about this aspect of our question. If we follow Bunge's materialism, we even have to discard the whole question. Why? Simply because it does not make any sense to ask about the mechanisms of history because the latter is conceptual

according to ES. No single overarching history exists, although it is perfectly plausible to investigate the history of any thing or system or to hypothesize about the mechanism for an aspect of a history of such a thing.[57] We also saw that the leading philosophers of social mechanisms disagree remarkably on what mechanisms are and on further basic ontological assumptions, so that it is not by any means clear what a social mechanism is supposed to be.

Social mechanisms turn out to be process*s* occurring essentially in a kind of social system (ES), social dispositional properties or powers (CR), or configurations of processes and events, conditions, powerful people, and powerful social entities that regularly bring about social processes (ML) (Problem I: What is a social mechanism?). We furthermore witnessed notorious differences about the place of causation and determination in ontologies of the so-called social world, which looks rather different through these philosophies. For instance, "social entities" (Problem II: What is the furniture of the "social world"?) turn out to be causal agents or factors for some, not for others (Problem III: What is causation?). Thereby we also should have seen that the merits of philosophical theories of social mechanisms, causation, and social explanation are in the end only assessable if they are analyzed in their respective philosophical or social theoretical environments.[58] In any case and in any of these philosophies, central notions such as "constraint" and "enablement" or the thought that the "environment does not act *on* a person, but rather *through* a person" (Bunge 2009a [1959], p. 181), what Marx famously called *Zwang der Verhältnisse,* remain worth disputing, although these are classic questions of social theory and philosophy (Problem IV: What is determining or causing change or stasis in "the social world"?).

It is hardly worth mentioning that the "structure vs. agency" issue is the most central problem in social theory and social research, and it figures prominently in mechanism discourses. More basically, this amounts also to the question what does change in "the social world," if anything (Problem V: What is a history?). If there are no "social entities" or "social structures," there is no social change, if change presupposes something that changes. Of course, different configurations of responses to these problems lead also to different opinions about the possible explananda of social or historiographical (*geschichtswissenschaftlich*) research or

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[57]Nota bene, philosophers of historiography, many historians and sociologists constantly talk about such an overarching history or they never make explicit what they believe they are talking about while writing about history in a realist or ontic sense.

[58]This also holds for formerly notorious questions about the role of "laws" in historico-social science. Whereas for Bunge "mechanisms without conceivable laws are called 'miracles'" (2006, p. 135), Little's ML claims to be something like a counterprogram to the usefulness of social "laws," whereas critical realists seem to accept restricted ("historical") tendencies as such "laws." For problems critical realist have with the notion of a law, see Outhwaite (1987b). Recently, there has emerged a powerful tendency towards an affirmative consensus in twenty-first century philosophy of historiography concerning the claim that the people that are called historians constantly invoke "laws"; see, for example, Klinger (1997), Di Nuoscio (2004), Antiseri (2005), Frings (2007), Berry (2008), Leuridan and Froeyman (2012).

about the stuff merely to be described and, finally, to different norms of how sociological or historiographical explanations have to be framed, for example, whether those explanations are causal explanations, and if the answer is yes, in which way. (Problems VI: What is to be understood and how is it accordingly to be explained? See also Blaikie 1993). In a nutshell, given the former sketch of a comparison of some of the main positions on social mechanisms, it seems to be so that the problem of social mechanisms comes with a whole bunch of others, and the sketch suggests that they should perhaps be more clearly separated or related in future debates. Otherwise, it might be that those scholars who believe we are dealing here with fruitless "mechanism talk" are right.

But let us answer the main question: If we presuppose the ontology of mechanisms in ES and therefore the whole framework, it is arguably beyond doubt that many historians study mechanisms that make past or present systems tick and made them what they were, became, or still are.

If we presuppose the ontology of mechanisms in CR, it is arguably beyond doubt that many historians study mechanisms (social structures) or invoke individual or social powers (mechanisms) in explanations of individual or social events. Though we equally found out that "[i]t is not by any means obvious what the concept of mechanism refers to in philosophical and critical realist frameworks (. . .)" (Kurki 2008, p. 177). This diagnosis is mirrored in Bhaskar's statement (1978, p. 49) that a "generative mechanism" is "a 'real something' over and above and independent of patterns of events." Moreover, ascribing powers to "emergent" social entities seemed to be problematic.[59] Though it was not the central point in our discussion, CR clearly implicates some philosophy of history.

If we presuppose the ontology of mechanisms in ML, it is arguably beyond doubt that many historians study mechanisms,[60] although the same problems that were diagnosed in connection with CR concern the ML framework. Perhaps because of the affiliations to realist traditions, the concept of mechanisms as powerful properties and mechanisms as processes is often not clearly drawn. In summary, there is no reason whatsoever to believe that historians do not study mechanisms. This is the meager but positive result of this sketch.

But these answers are obviously utterly unsatisfying because the following question is which of these ontological frameworks or philosophies of history, if any, is adequate and why, given that they disagree on almost any central category, although we did only visit the main realist positions in social philosophy.[61] This is the negative result of this sketch. While their merits can only be further evaluated in

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[59]Bhaskar, of course, saw himself the problems that can occur in realist social ontologies (1982, 283): "Talk of 'emergence' can easily become vague and general, if not indeed laced with frankly idealist or romantic overtones."

[60]For lots of examples, see (Little 1989, 2010).

[61]Since we cannot discuss all the differences in these frameworks and I do not claim to be a metaphysician anyhow, let us list which notions are at stake in this debate: thing, property, types of properties, social property, change and transformation, event (historical), process, history, mechanism, structure, system, society, organization, institution, fact, social fact, causation and

comparison with accounts of mechanisms coming from other parts of social science and philosophy as well as in confrontation with historiological practice, to borrow Bunge's term, the merits of this exercise might be found in the simple observation that we did something resembling an ontology of history without engaging in speculation about the "course of history" and whether it moves in circles or squares, that is, we did not set out "historiosophical schemes" (Sztompka 1991, p. 182). Thus, our discussion suggests, among other "things," the need for an ontology of history, *if* the main question shall be answered on occasion. For short, there seem to be not many reasons to bury any philosophy of history from the start.

Finally, let us dwell a moment upon the philosophical problems that result from the claim, explicit in at least two of the sketched ontologies and furthermore as often supposed to be trivially true as it is straightforwardly denied, that (all) things have histories, that is, that they have properties that change. Those problems basically are which are those (social) things that have histories? What are their (social) properties that change? Why do they change or remain constant? Those questions do not seem to be far away from some of the questions some scientific historians set out to answer: What exists or existed? How does it change or how did it change? Why did it change or remain what it was or even still is?[62] And if I am not totally wrong, those are the more basic questions that are at issue in the debate over social mechanisms, although they are often hidden.

Obviously, the formulation above presupposes that things have histories. But isn't it a central implicit assumption of much philosophy of historiography that events have histories? Perhaps this might be one puzzle for philosophy of history, although it might also turn out to be ill posed.

References

Antiseri, D. (2005). Epistemologia e didattica della storia. Le ragioni della storiografia locale. In E. Di Nuoscio (Ed.), *Conoscere per tracce. Epistemologia e storiografia*. Milano: Edizioni Unicopli.

Archer, M. (1995). *Realist social theory: The morphogenetic approach*. Cambridge: Cambridge University Press.

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determination, energy and causal power, laws, agency, agents and action, levels, micro-x vs. macro-x, emergence, etc.

[62]Because this variety of ontology of history would take its stock of questions from debates among historians and social scientists, on the one hand, and the implications or presuppositions of their research, on the other hand, I call it loosely "science-oriented".

Barberi, F. (2004). *Meccanismi sociali. Elementi di sociologia analitica*. Bologna: Il Mulino.

Bennett, A., & George, A. L. (2005). *Case studies and theory development in the social sciences*. Cambridge: MIT Press.

Benton, T. (1977). *Philosophical foundations of the three sociologies*. London: Routledge.

Berry, S. (2008). Laws in history. In A. Tucker (Ed.), *A companion to philosophy of history and historiography* (pp. 162–171). Malden: Blackwell.

Bhaskar, R. (1979). *The possibility of naturalism. A philosophical critique of the contemporary human sciences*. Brighton: The Harvester Press.

Bhaskar, R. (1982). Emergence, explanation, and emancipation. In P. F. Secord (Ed.), *Explaining human behavior. Consciousness, human action and social structure* (pp. 275–310). Beverly Hills: SAGE.

Bhaskar, R. (1983). Beef, structure and place: Notes from a critical naturalist perspective. *Journal for the Theory of Social Behaviour, 13*, 81–96.

Bhaskar, R. (1994). *Plato etc. The problems of philosophy and their resolution*. London: Verso.

Bhaskar, R. (2008 [1978]). A realist theory of science. London: Verso.

Bhaskar, R. (2008 [1993]). Dialectic. The pulse of freedom. London: Routledge.

Bhaskar, R. (2009 [1986]). Scientific realism and human emancipation. London: Routledge.

Bhaskar, R. (2011 [1989]) Reclaiming reality. A critical introduction to contemporary philosophy. London: Routledge.

Bhaskar, R. (2001). How to change reality: Story v. structure – a debate between Rom Harré and Roy Bhaskar. In J. Lopez & G. Potter (Eds.), *After postmodernism. An introduction to critical realism* (pp. 22–39). London: The Athlone Press.

Blaikie, N. (1993). *Approaches to social enquiry*. Cambridge: Polity Press.

Boudon, R. (2010). *La sociologie comme science*. Paris: La Découverte.

Bunge, M. A. (1965). Phenomenological theories. In M. Bunge (Ed.), *The critical approach to science and philosophy* (pp. 234–254). London: The Free Press of Glencoe.

Bunge, M. A. (1967). *Scientific research* (Vol. 2). Heidelberg: Springer.

Bunge, M. A. (1968). The maturation of science. In I. Lakatos & A. Musgrave (Eds.), *Problems in the philosophy of science* (pp. 120–137). Amsterdam: North-Holland.

Bunge, M. A. (1974). Les présupposés et les produits métaphysiques de la science et de la technique contemporaines. *Dialogue, 13*, 443–453.

Bunge, M. A. (1977). *The furniture of the world. Treatise on basic philosophy, Ontology I* (Vol. 3). Dordrecht: D Reidel.

Bunge, M. A. (1979a). *A world of systems. Treatise on basic philosophy, Ontology II* (Vol. 4). Dordrecht: D Reidel.

Bunge, M. A. (1979b). A systems concept of society: Beyond individualism and holism. *Theory and Decision, 10*, 13–30.

Bunge, M. A. (1981). *Scientific materialism*. Dordrecht: D Reidel.

Bunge, M. A. (1982). The revival of causality. In G. Floistad (Ed.), *Contemporary philosophy. A new survey, philosophy of science* (Vol. 2, pp. 133–155). The Hague: Martinus Nijhoff Publishers.

Bunge, M. A. (1983). *Understanding the world. Treatise on basic philosophy, epistemology & methodology II* (Vol. 6). Dordrecht: D Reidel.

Bunge, M. A. (1984). *Das Leib-Seele-Problem. Ein psychobiologischer Versuch*. Tübingen: J C B Mohr.

Bunge, M. A. (1985). *Life science, social science and technology. Treatise on basic philosophy, epistemology & methodology III: Philosophy of science and technology* (Vol. 7). Dordrecht: D Reidel.

Bunge, M. A. (1988). The scientific status of history. In U. Hinke-Dörnemann (Ed.), *Die Philosophie in der modernen Welt. Gedenkschrift für Prof. Dr. med. Dr. phil. Alwin Diemer, Teil 1* (pp. 592–602). Frankfurt: Peter Lang.

Bunge, M. A. (1992a). System boundary. *International Journal of General Systems, 20*, 215–219.

Bunge, M. A. (1992b). Systems everywhere. In C. V. Negoita (Ed.), *Cybernetics and applied systems* (pp. 23–41). New York: M Dekker.

Bunge, M. A. (1993a). Realism and antirealism in social science. *Theory and Decision, 35*, 207–235.

Bunge, M. A. (1993b). Social systems. In R. R. Delgado & B. H. Banathy (Eds.), *International systems science handbook* (pp. 210–221). Madrid: Systemic Publications.

Bunge, M. A. (1995). *Sistemas sociales y filosofía*. Buenos Aires: Editorial Sudamericana.

Bunge, M. A. (1996). *Finding philosophy in social science*. New Haven: Yale University Press.

Bunge, M. A. (1997). Mechanism and explanation. *Philosophy of the Social Sciences, 27*, 410–465.

Bunge, M. A. (1998a). *Social science under debate: A philosophical perspective*. Toronto: University of Toronto Press.

Bunge, M. A. (1998b). *Philosophy of science* (Vol. 2). New Brunswick: Transaction.

Bunge, M. A. (1999). *The sociology-philosophy connection*. New Brunswick: Transaction.

Bunge, M. A. (2000a). Systemism: The alternative to individualism and holism. *Journal of Socio-Economics, 29*, 147–157.

Bunge, M. A. (2000b). Ten modes of individualism – none of which works – and their alternatives. *Philosophy of the Social Sciences, 30*, 384–406.

Bunge, M. A. (2001a). Systems and emergence, rationality and imprecision, free-wheeling and evidence, science and ideology: Social science and its philosophy according to van den Berg. *Philosophy of the Social Sciences, 31*, 404–423.

Bunge, M. A. (2001b). *Philosophy in crisis. The need for reconstruction*. Amherst: Prometheus.

Bunge, M. A. (2002). *Ser, saber, hacer*. México: Paidós.

Bunge, M. A. (2003a). *Emergence and convergence. Qualitative novelty and the unity of knowledge*. Toronto: University of Toronto Press.

Bunge, M. A. (2003b). *Cápsulas*. Barcelona: Gedisa.

Bunge, M. A. (2003c). *Philosophical dictionary*. Amherst: Prometheus.

Bunge, M. A. (2004a). How does it work? The search for explanatory mechanisms. *Philosophy of the Social Sciences, 34*, 182–210.

Bunge, M. A. (2004b). Clarifying some misunderstandings about social systems and their mechanisms. *Philosophy of the Social Sciences, 34*, 371–381.

Bunge, M. A. (2006). *Chasing reality. Strife over realism*. Toronto: University of Toronto Press.

Bunge, M. A. (2007). Review of *Dissecting the social. On the principles of analytical sociology*, by Peter Hedström. *American Journal for Sociology, 113*, 258–260.

Bunge, M. A. (2008). *Filosofía y sociedad*. México: Siglo XXI.

Bunge, MA. (2009a [1959]). Causality and modern science. New Brunswick: Transaction Publishers.

Bunge, M. A. (2009b). *Political philosophy. Fact, fiction and vision*. New Brunswick: Transaction.

Bunge, M. A. (2010). Soziale Mechanismen und mechanismische Erklärungen. *Berliner Journal für Soziologie, 20*, 371–381.

Bunge, M. A., & Mahner, M. (1997). *Foundations of biophilosophy*. Heidelberg: Springer.

Bunge, M. A., & Mahner, M. (2001). Function and functionalism. A synthetic perspective. *Philosophy of Science, 68*, 75–94.

Bunge, M. A., & Mahner, M. (2004). *Über die Natur der Dinge. Materialismus und Wissenschaft*. Stuttgart: S Hirzel.

Cherkaoui, M. (2005). *Invisible codes. Essays on generative mechanisms*. Oxford: The Bardwell Press.

Collingwood, RG. (1994 [1946]). The idea of history. Oxford: Oxford University Press.

Danermark, B., Ekström, M., Jokobson, L., & Karlsson, J. C. (2002). *Explaining society. Critical realism in the social sciences*. London: Routledge.

Demeulenaere, P. (Ed.). (2011). *Analytical sociology and social mechanisms*. Cambridge: Cambridge University Press.

Di Nuoscio, E. (2004). *Tucidide come Einstein? La spiegazione scientifica in storiografia*. Soveria Mannelli: Rubbettino Editore.

Elder-Vass, D. (2010). *The causal power of social structures. Emergence, structure and agency*. Cambridge: Cambridge University Press.

Elster, J. (2007). *Explaining social behavior. More nuts and bolts for the social sciences*. Cambridge: Cambridge University Press.

Fleetwood, S. (2009). The ontology of things, properties and powers. *Journal of Critical Realism, 8*, 343–366.

Fleetwood, S. (2011). Powers and tendencies revisited. *Journal of Critical Realism, 10*, 80–99.

Frauley, J., & Pearce, F. (Eds.). (2007). *Critical realism and the social sciences. Heterodox elaborations*. Toronto: University of Toronto Press.

Frings, A. (2007). Rationales Handeln und historisches Erklären. *Journal for General Philosophy of Science, 38*, 31–56.

Gibbon, G. (1989). *Explanation in archaeology*. Oxford: Blackwell.

Glynos, J., & Howarth, D. (2007). *Logics of critical explanation in social and political theory*. London: Routledge.

Groff, R. (2004). *Critical realism, post-positivism and the possibility of knowledge*. London: Routledge.

Harré, R. (1961). *Theories and things. A brief study in prescriptive metaphysics*. London: Sheed and Ward.

Harré, R. (1970). *The principles of scientific thinking*. London: Macmillan.

Harré, R. (1972). *The philosophies of science. An introductory survey*. Oxford: Oxford University Press.

Harré, R. (2002). Social reality and the myth of social structure. *European Journal of Social Theory, 5*, 111–123.

Harré, R. (2009). Saving critical realism. *Journal for the Theory of Social Behaviour, 39*, 129–143.

Harré, R., & Madden, E. H. (1975). *Causal powers. A theory of natural necessity*. Oxford: Blackwell.

Harré, R., & Varela, C. M. (1996). Conflicting varieties of realism: Causal powers and the problems of social structure. *Journal for the Theory of Social Behaviour, 26*, 313–325.

Hartwig, M. (Ed.). (2007). *Dictionary of critical realism*. London: Routledge.

Hedström, P., & Swedberg, R. (Eds.). (1998). *Social mechanisms: An analytical approach to social theory*. Cambridge: Cambridge University Press.

Kaidesoja, T. (2007). Exploring the concept of causal power in a critical realist tradition. *Journal for the Theory of Social Behaviour, 37*, 63–87.

Kaidesoja, T. (2009). Bhaskar and Bunge on social emergence. *Journal for the Theory of Social Behaviour, 39*, 300–322.

Klinger, W. (1997). Legge e spiegazione in storia: un approccio naturalistico, Dissertation, Università degli Studi di Trieste.

Kurki, M. (2008). *Causation in international relations. Reclaiming causal analysis*. Cambridge: Cambridge University Press.

Lawson, T. (1997). *Economics and reality*. London: Routledge.

Leuridan, B., & Froeyman, A. (2012). On lawfulness in history and historiography. *History and Theory, 51*, 172–192.

Lewis, P. (2000). Realism, causality and the problem of social structure. *Journal for the Theory of Social Behaviour, 30*, 249–268.

Little, D. (1986). *The scientific Marx*. Minneapolis: University of Minnesota Press.

Little, D. (1989). *Understanding peasant China. Case studies in the philosophy of social science*. New Haven: Yale University Press.

Little, D. (1991). *Varieties of social explanation. An introduction to the philosophy of social science*. Boulder: Westview.

Little, D. (1998). *Microfoundations, method, and causation: on the philosophy of the social sciences*. New Brunswick: Transaction.

Little, D. (2007). Levels of the social. In S. P. Turner & M. W. Risjord (Eds.), *Philosophy of anthropology and sociology* (pp. 343–371). Amsterdam: Elsevier.

Little, D. (2009). The heterogenous social: new thinking about the foundations of the social sciences. In C. Mantzavinos (Ed.), *Philosophy of the social sciences. Philosophical theory and scientific practice* (pp. 154–178). Cambridge: Cambridge University Press.

Little, D. (2010). *New contributions to the philosophy of history*. Dordrecht: Springer.

Little, D. (2011). Causal mechanisms in the social realm. In P. Illari, F. Russo, & J. Williamson (Eds.), *Causality in the sciences* (pp. 273–295). Oxford: Oxford University Press.

Lloyd, C. (1986). *Explanation in social history*. Oxford: Blackwell.

Lloyd, C. (1993). *The structures of history*. Oxford: Blackwell.

Mahner, M. (Ed.). (2001). *Scientific realism. Selected essays of Mario Bunge*. Amherst: Prometheus.

Manicas, P. T. (2006). *A realist philosophy of social science. Explanation and understanding*. Cambridge: Cambridge University Press.

Marrou, HI. (1975 [1954]). De la connaissance historique. Paris: Éditions du Seuil.

McLennan, G. (1981). *Marxism and the methodologies of history*. London: Verso.

Moessinger, P. (2008). *Voir la sociéte. Le micro et le macro*. Paris: Hermann Éditeurs.

Outhwaite, W. (1987a). *New philosophy of social science. Realism, hermeneutics and critical theory*. Houndmills: Macmillan.

Outhwaite, W. (1987b). Laws and explanation in sociology. In R. J. Anderson, J. A. Hughes, & W. W. Sharrock (Eds.), *Classic disputes in sociology* (pp. 157–183). London: Allen & Unwin.

Pickel, A. (2006). *The problem of order in the global age. Systems and mechanisms*. New York: Palgrave.

Porpora, D. V. (2007). Social structure. In M. Hartwig (Ed.), *Dictionary of critical realism* (pp. 422–425). London: Routledge.

Sayer, A. (2010a [2000]). Realism and social science. London: SAGE.

Sayer, A. (2010b). *Method in social science. A realist approach*. London: Routledge.

Schmid, M. (2006). *Die Logik mechanismischer Erklärungen*. Wiesbaden: VS-Verlag.

Sewell, W. H. (2005). *Logics of history. Social theory and social transformation*. Chicago: The University of Chicago Press.

Sztompka, P. (1991). *Society in action. The theory of social becoming*. Chicago: The University of Chicago Press.

Tilly, C., McAdam, D., & Tarrow, S. (2001). *Dynamics of contention*. Cambridge: Cambridge University Press.

Topolski, J. (1976). *Methodology of history*. Dordrecht: D Reidel.

Tucker, A. (2012). Sciences of historical tokens and theoretical types: History and the social sciences. In H. Kincaid (Ed.), *The oxford handbook of the philosophy of social science* (pp. 274–297). Oxford: Oxford University Press.

Veyne, P. (1996 [1975]). Comment on écrit l'histoire. Paris: Éditions du Seuil.

Wan, P. Y.-z. (2011a). *Reframing the social. Emergentist systemism and social theory*. Farnham: Ashgate.

Wan, P. Y.-z. (2011b). Analytical sociology: A Bungean appreciation. *Science and Education*. doi:10.1007/s11191-011-9427-3.

Wight, C. (2006). *Agents, structures and international relations. Politics as ontology*. Cambridge: Cambrige University Press.