

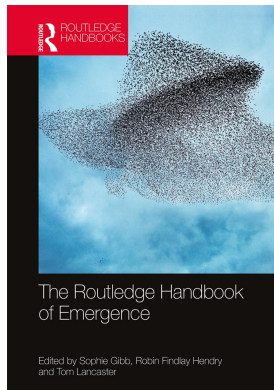
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EMERGENCE IN THE SOCIAL SCIENCES

Julie Zahle and Tuukka Kaidesoja

Introduction

In the social sciences, discussions of emergence mainly focus on social phenomena as they emerge from individuals. Social phenomena are commonly taken to be exemplified by universities, states, traffic jams, wealth distributions, declarations of war, firms' firing of employees and norms. Social scientists who invoke the notion of emergence typically maintain that social phenomena are emergent insofar as they arise from individuals and possess certain additional features such as being novel, irreducible, unexplainable and unpredictable relative to individuals. Among social scientists, there is no consensus as to which features should be regarded as the additional features constitutive of emergence. Moreover, the same features are sometimes characterized in divergent ways. Accordingly, diverse notions of emergence are being advocated in the social sciences.

Émile Durkheim's work from around the turn of the 19th century is often regarded as containing one of the earliest social scientific discussions of emergence, even though he does not use the term "emergence" (Sawyer 2005: 100). In the following decades, the notion of emergence is rather sporadically brought up. For instance, it is cursorily mentioned by social scientists such as Talcott Parsons, George Homans and Peter Blau (Parsons 1968[1937]; Homans 1950; Blau 1964). It is not until the latter part of the 20th century that the idea of emergence begins to receive more sustained attention in social theorizing. During this period, a number of influential approaches that appeal to emergence came into being, including the school of critical realism (see Bhaskar 1998[1979]), systems theory à la Niklas Luhmann (see Luhmann 1995[1984]) and agent-based computational modeling (see Epstein and Axtell 1996). Today, the idea of emergence continues to be explored and debated in the social sciences. One way in which to characterize current discussions is to note that some social scientists defend an epistemic notion of emergence, that is, they view emergence as a feature that social phenomena have relative to our limited knowledge of them, whereas others opt for an ontological notion of emergence, that is, they regard emergence as a feature of social phenomena independently of our knowledge about them. Ontological notions of emergence tend to be invoked in the context of discussions about how social phenomena should be explained and whether properties of social entities can somehow be reduced to properties of individuals. It is ontological notions, rather than epistemic ones, that have received the most attention in recent social scientific debates.

In this chapter, we examine the theories of ontological emergence advanced by two proponents of critical realism: Roy Bhaskar and Dave Elder-Vass. The school of critical realism

is arguably the social scientific approach in which the notion of emergence has played – and continues to play – the most central role. Moreover, it is currently a highly influential social scientific movement with many followers, its own journal, viz. *Journal of Critical Realism*, yearly conferences and so on. Roy Bhaskar’s two seminal works, *A Realist Theory of Science* from 1975 and *The Possibility of Naturalism* from 1979, laid the foundation for the movement (Bhaskar 1978[1975], 1998[1979]). Subsequently, his views have been further elaborated by critical realists such as Margaret Archer, Andrew Collier, Dave Elder-Vass, Tony Lawson, Douglas Porpora and Andrew Sayer (see, e.g., Archer 1995; Collier 1989; Elder-Vass 2010; Lawson 1997; Porpora 2015; Sayer 2010[1984]). Among these, it is Elder-Vass who has offered the most systematic exposition and elaboration of the notion of emergence. We begin by considering Bhaskar’s account of emergence and then move on to consider Elder-Vass’ position.

Bhaskar on emergence

Bhaskar (1978, 1998) develops his views on causal powers, emergence and social ontology in his first two books that established the critical realist movement in the social sciences. In these works, he construes the notion of emergence in synchronic terms, that is, he takes emergent phenomena to *co-occur* with the more basic phenomena from which they emerge. When presenting his philosophy of the social sciences, Bhaskar discusses emergence in relation to social structures (a subset of social phenomena). However, he does not provide a detailed analysis of what he means by social structures and emergence in this context. For this reason, it is necessary to do some reconstructive work to describe his views on these matters. Bhaskar introduces the notion of emergence in his philosophy of the natural sciences and then discusses it in the context of his philosophies of mind and social sciences. Similarly, we begin with a brief discussion of Bhaskar’s account of emergence as applied to the entities studied in the natural sciences before addressing his views on emergence with respect to social structures.

Bhaskar (1978) argues that the natural sciences as we know them are possible only if nature consists of entities (or things) with causal powers whose interactions generate the observable patterns of events. Apart from ultimate entities that have no structure (if there are any), Bhaskar (e.g. *ibid*: 51, 88) thinks that causal powers are emergent properties of complex entities, such as chemical substances and living organisms, and that complex entities possess these powers in virtue of their intrinsic structures (or essential natures). Further, he holds that the emergent powers of an entity are possessed by it conceived of as a whole and make the entity “capable of acting back on the materials out of which” it was formed (*ibid*: 114). Causal powers of this kind can be characterized as dispositional properties of entities to generate specific types of effects (or engage in specific types of activities) in suitable conditions.

Bhaskar (*ibid*: 181) maintains, too, that, on the condition that an emergent power of an entity and its parts have been identified and described, a reductive explanation (or explanatory reduction) of the emergent power may be provided. A reductive explanation specifies how the emergent power of an entity synchronically depends on, or arises from, the interrelated parts of the entity. Bhaskar emphasizes that reductive explanations do not eliminate emergent powers from the scientific ontology because they leave “the reality of higher order entities intact” (*ibid*). For example, the emergent powers of liquid water to put out fires and to dissolve sodium chloride (i.e. table salt) can be explained by reference to its molecular structure within a certain range of temperature and air pressure. The emergent powers of liquid water remain intact in spite of the fact that chemists have provided reductive explanations of them. Hence, this view of emergent powers of natural entities is compatible with these powers being reductively explainable.

In his works on the philosophy of the social sciences, Bhaskar (e.g. 1986, 1998) stresses the differences between natural entities and social structures. For our purposes, it is enough to mention that, according to Bhaskar (1998: 38–39, 174–175), there are two features that differentiate social structures from (most) natural entities: (i) social structures are ontologically dependent on the activities of human individuals (considered as self-conscious persons) and their (true or false) conceptions of these activities and that (ii) social structures can be geographically quite specific and are prone to historical transformations that may sometimes take place quite fast. Despite their differences from natural entities, Bhaskar thinks that social structures have emergent powers relative to individuals.

How should we then understand Bhaskar's notion of social structures? Though he does not clearly articulate the sense in which he uses the notion, we think that he most often construes social structures as consisting of the internally related social positions that are relatively enduring and distinct from the individuals occupying these positions and their activities. The idea is that internally related social positions, such as teacher and pupil, capitalist and worker or husband and wife, can only be understood in relation to each other. According to Bhaskar (*ibid*: 41–43), this entails that the social positions are constituted by the internal relations that connect them, meaning that these positions would not be what they essentially are unless they were related to each other in the particular way they are. In addition to internal social relations of this kind, there are external social relations, such as the relation “between two cyclists crossing on a hilltop” (*ibid*: 42). The latter are relations that do not define social positions.

In Bhaskar's view, social structures have emergent powers relative to those individuals whose social actions and interactions they enable, motivate and constrain. He argues that individuals occupy positions in social structures that are autonomous and (at least typically) precede them and that they reproduce or transform these structures by their activities (*ibid*: 33–35, 40–41). In addition, he suggests that individuals mostly reproduce social structures over time via the unintended consequences of their intentional actions (*ibid*: 35, 39). For example, the positions of teacher and pupil precede each new generation of teachers and pupils who enter these positions and whose reasons for engaging in various activities and practices in school classes usually have quite little to do with the reproduction of the social structure governing their school work. Bhaskar (e.g. *ibid*: 25–26, 36, 40–42) ascribes emergent powers to social structures of this kind because he thinks that they (i) affect the available resources and opportunities of individuals occupying the positions in these structures and (ii) define the rights, duties, tasks and informal norms that these individuals have to take into account in their social activities.

These reflections can be illustrated by considering a capitalist entrepreneur whose firm designs and manufactures products, such as clothes or technological devices. It can be argued that the entrepreneur is able to make profit on the condition that her business uses the latest production technologies. Further, she must avoid paying too high wages to her workers because otherwise she will not succeed in the competition with other firms in the market. In her entrepreneurial activities, she also has to take into account the relevant legislation about ownership rights, minimum wages and working conditions in order to avoid legal sanctions. According to Bhaskar (e.g. *ibid*: 42–44, 51), opportunities and constraints of these kinds are due to the capitalist relations of production that constitute the social positions of the capitalist and worker. Though he grants that the effects of the emergent powers of capitalist relations of production are always mediated through the actions of individuals, Bhaskar (*ibid*: 33–37, 49–54) tends to hold that social structures of this kind should be strictly separated from the activities of individuals and concrete social groups. This view is supported by his claims that structures (typically at least) precede individuals occupying positions in them and that structures may continue to exist once particular individuals in the relevant positions have been replaced by others. Bhaskar nevertheless believes that, at the

large scale, the capitalist relations of production are reproduced, among other things, by people's daily activities as capitalists and workers even though none of them is necessarily intending to accomplish this with their actions. Furthermore, a class of people occupying the social position of worker (or capitalist) in a capitalist society may also unite and seek to transform the relations of production according to their vested interests.

Bhaskar (ibid) provides his views on emergent powers of social structures as contributions to the agency–structure and individualism–holism debates in the social sciences. The agency–structure debate concerns the extent to which individuals and social structures, respectively, causally influence what happens in the social world, as well as the relation between individuals' social actions and social structures. Bhaskar maintains that because individuals and social structures are distinct and have irreducible emergent powers, they both causally contribute to social events. And, as was indicated earlier, he thinks that social structures are dependent on the activities of many individual agents and that individuals always reproduce and transform social structures through their activities.

The individualism–holism debate focuses on explanation rather than causation. It concerns the question of the extent to which social scientific explanations should focus on individuals and social phenomena, respectively. Bhaskar (e.g. ibid: 27–31) rejects methodological individualism, that is, the view that all social scientific explanations should revolve around individuals only. He maintains that sociologists, or maybe even social scientists in general, should focus on offering explanations that include reference to social structures with emergent powers.

Bhaskar's views on emergent powers of social structures and the relations between individuals and structures have generated a lively debate that has continued to the present date. Here we mention three critiques that are relevant to our topic.

First, Margaret Archer (1995, chapter 5) and Anthony King (1999) have argued that there is a tension between Bhaskar's emphasis on the activity and concept dependence of social structures and his account of social structures as internally related social positions that are autonomous from, and pre-exist, those individuals who currently occupy them. However, the critics differ in their view as to how this tension could be resolved.

Second, Charles Varela and Rom Harré (1996) and Tuukka Kaidesoja (2013: 72–76, 129–133) have argued that Bhaskar illegitimately ascribes emergent powers to internally related social positions because these positions are taxonomic categories rather than entities with causal powers.

Third, Kaidesoja (2013: 179–187) has indicated that Bhaskar uses at least two different concepts of emergent power without specifying their differences. The first concept of emergent power focuses on compositional relations between entities and their parts and is therefore compatible with the possibility of reductive explanations of emergent powers. This concept is mostly used in the context of Bhaskar's (1978) philosophy of the natural sciences. The second concept of emergent power ascribes emergent powers to internal relations between social positions instead of compositionally organized entities and, accordingly, these emergent powers cannot be reductively explained in terms of interrelated parts. This concept is used in the context of Bhaskar's (1998) philosophy of the social sciences.

Elder-Vass on emergence

Elder-Vass has published extensively on the topic of emergence while offering the most concentrated discussion of the issue in his book *The Causal Power of Social Structures. Emergence, Structure and Agency* (2010). In his writings, Elder-Vass offers a general theory of emergence and, drawing on this theory, he then shows that social phenomena sometimes qualify as emergent too. In the following, we present his account of emergence as applied to social phenomena. In many respects,

Elder-Vass' theorizing builds on Roy Bhaskar's work. Roughly speaking, Elder-Vass develops Bhaskar's specification of emergence in relation to the natural world, while arguing, *pace* Bhaskar, that this concept is equally applicable to the social world.

The starting point of Elder-Vass' discussion is the notion of a social entity, which he defines as a relatively enduring whole composed of interrelated parts (see *ibid*: 17). Notable types of social entities are organizations (like a firm, a household, a school and a religious association) and norm circles, that is, social groups, each sustaining a particular social norm. In most of his writings, Elder-Vass mainly identifies a social entity's parts with individuals. Moreover, he proposes that individuals who compose such an entity are first and foremost interrelated via their beliefs and dispositions; it is only sometimes that their physical or spatial relations matter too (*ibid*: 200). We concentrate on his position thus specified. Yet it should be noted that in a more recent paper Elder-Vass stresses that nonhuman material objects are often parts in social entities too (Elder-Vass 2017).

Social entities have various properties that Elder-Vass also refers to as causal powers. To begin with, social entities have resultant properties or powers relative to individuals. These are the properties of social entities that their parts, *viz.* individuals, also have in isolation or as elements in an unstructured collection of parts. Examples of these properties are the power to scream or walk as ascribed to a kindergarten; these are resultant properties since the children also have these properties independently of being, at that moment, parts of the kindergarten.

Furthermore, social entities have emergent properties specified as the properties of social entities that their parts do *not* have in isolation or as elements in an unstructured collection of parts. In this fashion, the emergent causal powers of social entities are *novel* properties relative to the properties possessed by their parts, *viz.* individuals. Social entities, Elder-Vass explains, have these emergent causal powers in virtue of at least some of their parts standing, at that moment, in certain relations to each other (see Elder-Vass 2014: 7). Here, "at that moment" is meant to capture that the emergent properties co-occur with the interrelated individuals from whom they emerge. In other words, Elder-Vass' notion of emergence is synchronic.

Elder-Vass specifies that there are two types of emergent social properties. One is the emergent properties ascribed to social entities as wholes and exemplified by a firm's power to adopt a new sales strategy and a barbershop quartet's "ability to produce [. . . a] harmonized performance" (Elder-Vass 2010: 154). The other is emergent properties of social entities that are exercised by their parts. Examples of these properties are the power to fire, to hire, to grade and to vote. At first sight, it may perhaps seem puzzling that these properties should be regarded as emergent properties of social entities rather than individuals. Yet Elder-Vass contends that they are properties of social wholes because individuals would not possess these properties if they were not, at that moment, interrelated parts of social entities. As an illustration of this point, he mentions the power to fire an employee:

[a] manager could not dismiss an employee unless both were parts of an organization of a certain kind, thus the causal power is a power of the organization, exercised on its behalf by the manager, and not a power of the manager as an individual.

(*ibid*: 74)

The fact that the emergent properties of social entities occur as a consequence of some or all of their parts being suitably interrelated means that it is always, in principle, possible to offer reductive explanations of the emergent properties of social entities. This point, Elder-Vass emphasizes, is compatible with the recognition that social entities have irreducible causal powers in the sense

of powers that are not identical with the causal powers that their parts, viz. individuals, also have in isolation or as elements in an unstructured collection of parts (Elder-Vass: 2010: 54).

As noted earlier, Elder-Vass' account of emergence applies to other phenomena than social ones. Accordingly, individuals may not only be considered from the perspective of being parts of social wholes. Individuals also may be regarded as wholes, composed of parts in terms of cells and possessing both resultant and emergent properties. A similar perspective may be adopted in regard to cells: these, too, may be viewed as entities composed of parts, and so on, until some basic parts that are not themselves composed of parts are perhaps reached.

Like Bhaskar, Elder-Vass regards his account of emergence as making a contribution to the agency–structure debate. In Elder-Vass' view, social structures have causal powers only insofar as they are identified with social entities; the ascription of causal powers to structures otherwise understood is simply wrong. Accordingly, his theorizing is not only a corrective to positions in the debate that deny that social structures have causal powers. Also, it goes against accounts that agree that social structures are causally effective yet fail to identify these structures with social entities. The kinds of accounts he opposes have been defended by Bhaskar and other critical realists. To avoid mistaken imputations of causality to social phenomena, Elder-Vass recommends that social scientists should carry out ontological analyses in which they identify the entity said to have the causal powers, analyze how its emergent properties arise from the entity's interrelated parts and so on.

In his writings, Elder-Vass also makes it clear that his ontological analysis has implications for the individualism–holism debate. According to him, explanations of events are always partial: they never describe all the multiple interacting causal powers that contributed to bringing about a particular event. Moreover, he holds, when methodological individualists claim that social scientific explanations should solely focus on individuals, this amounts to the view that social scientists should only offer explanations which lay out how individuals, in virtue of the properties they also have in isolation or as elements in an unstructured whole, partially brought about particular events.

On this basis, consider an explanation which states that a social entity, in virtue of its *resultant* social property, partially produced some event. An explanation along these lines may be rephrased by specifying how individuals who are parts of this entity each possess this property and together contributed to the generation of the event in question. By contrast, an explanation which states that a social entity, in virtue of its *emergent* social property, partially produced some event cannot be replaced by an explanation that focuses on individuals only. The properties that individuals also have in isolation or as elements in an unstructured collection of parts do simply not add up the emergent property that a social entity has in virtue of at least some of the individuals being suitably interrelated. By implication, these properties of individuals are unable, on their own, to generate the same effect as the emergent social property. Therefore, explanations that specify how social entities, in virtue of their emergent social properties, contributed to bringing about various specific events are indispensable: on pain of leaving aspects of these events unexplained, it will not do solely to offer explanations that focus on individuals. In this fashion, Elder-Vass maintains, his account shows that methodological individualists are wrong to insist that social scientists should confine themselves to providing explanations that revolve around individuals only.

A number of objections to Elder-Vass' position have been raised. For example, King has argued that Elder-Vass' account misrepresents the social world by holding that it “includes an ontologically distinct and causally efficacious layer: structure” (King 2007: 214). There is nothing more to the social world, King contends, than individuals' social relations and practices.

Coming from a different direction, Douglas Porpora, himself a critical realist, has complained that Elder-Vass' discussion fails to acknowledge that the relations between individuals who occupy

various social positions sometimes have distinct causal effects. To illustrate this point, Porpora mentions the power relation between a superordinate and a subordinate. A relation of this sort, he states, “is something analytically distinct from both a behavior and a rule and has its own distinct causal effects. A formal relation of power, for example, can give rise to informal power, the power, say, to harass” (Porpora 2007: 196). The focus of analysis should be these relations, or relational properties, Porpora continues, rather than the emergent properties of social entities. It may be noted that Porpora’s claim that relations are causally efficacious is in alignment with Bhaskar’s view on this matter.

Finally, Julie Zahle has criticized Elder-Vass’ position on the ground that he identifies explanations that focus on individuals with ones that state how individuals, in virtue of the properties that they also have in isolation or as elements in an unstructured collection of parts, brought about particular events. Methodological individualists typically work with a broader notion of these explanations according to which they may also appeal to properties that individuals have in virtue of being, at that moment, suitably interrelated parts of a social entity. This being the case, methodological individualists are likely to reject Elder-Vass’ argument against their position on the ground that it trades on his narrow conception of explanations that focus on individuals (Zahle 2014).

Conclusion

The examination of Bhaskar’s and Elder-Vass’ positions has brought out that there are differences as to how they each spell out the notion of emergence and apply it to the social world. The most significant difference is that Elder-Vass rejects Bhaskar’s doctrine of internal relations and attribution of emergent powers to abstract relations between social positions. In contrast to Bhaskar, Elder-Vass stresses that social structures with emergent powers have to be identified with social entities that are composed of interrelated individuals. Though Elder-Vass’ view on emergent powers of social entities is not accepted by all critical realists, the conceptual clarity of his views and the thoroughness of his arguments have surely raised the standards by which new accounts of emergence in critical realism should be evaluated.

Though their accounts vary, critical realists in general converge on the importance of offering ontological analyses (that appeal to emergence) of the social world. In their absence, they think, it is impossible to carry out social science in a satisfactory manner; to be successful, social scientific practice must rest on a firm ontological footing. In this sense, ontology precedes methodology and explanation. This approach seems to be one important reason why ontological discussions in critical realism tend to concentrate on rather simple and stylized examples of emergent phenomena instead of examples drawing on empirical research about social phenomena. As a result of this focus, it is reasonable to wonder about the following: may the theories of emergence, offered by the critical realist, serve as the basis for satisfactory in-depth analyses of the more complex social phenomena that current explanatory practices and theories in the social sciences typically deal with? Also, since social scientists are concerned with enormously heterogeneous social phenomena, may these phenomena all be adequately understood within the framework of critical realist accounts of emergence? Finally, it is worth noting that many social scientists oppose the view that getting the ontology straight is a precondition for doing good social science. In their opinion, there is really no need to provide ontological accounts of the social world before engaging in social research. Also, they often continue, the critical realist focus on ontology means that important epistemological and methodological issues tend not to be sufficiently addressed. These points raise another issue: How exactly, and to what extent, is the critical realist concern with ontology (and emergence) justifiable? These are all questions that are currently being discussed and that do indeed deserve careful consideration.

References

- Archer, M. 1995. *Realist Social Theory: The Morphogenetic Approach*. Cambridge: Cambridge University Press.
- Bhaskar, R. 1978[1975]. *A Realist Theory of Science*. Brighton: Harvester Press.
- Bhaskar, R. 1986. *Scientific Realism and Human Emancipation*. London: Verso.
- Bhaskar, R. 1998[1979]. *The Possibility of Naturalism: A Philosophical Critique of the Contemporary Human Sciences*. London: Routledge.
- Blau, P. 1964. *Exchange and Power in Social Life*. New York: John Wiley.
- Collier, A. 1989. *Scientific Realism and Socialist Thought*. Hemel Hempstead: Harvester Wheatsheaf.
- Elder-Vass, D. 2010. *The Causal Power of Social Structures: Emergence, Structure and Agency*. Cambridge: Cambridge University Press.
- Elder-Vass, D. 2014. "Social Emergence: Relational or Functional?" *Balkan Journal of Philosophy* 6(1): 5–16.
- Elder-Vass, D. 2017. "Material Parts in Social Structures." *Journal of Social Ontology* 3(1): 89–105.
- Epstein, J. M. and Axtell, R. 1996. *Growing Artificial Societies: Social Science from the Bottom Up*. Washington, DC: Brookings Institution Press.
- Homans, G. C. 1950. *The Human Group*. New York: Harcourt, Brace & World.
- Kaidesoja, T. 2013. *Naturalizing Critical Realist Social Ontology*. London: Routledge.
- King, A. 1999. "The Impossibility of Naturalism: The Antinomies of Bhaskar's Realism." *Journal for the Theory of Social Behavior* 29(3): 267–288.
- King, A. 2007. "Why I Am Not an Individualist." *Journal for the Theory of Social Behaviour* 37(2): 211–219.
- Lawson, T. 1997. *Economics and Reality*. London: Routledge.
- Luhmann, N. 1995[1984]. *Social Systems*. Stanford, CA: Stanford University Press.
- Parsons, T. 1968[1937]. *The Structure of Social Action*. New York: The Free Press.
- Porpora, D. 2007. "On Elder-Vass: Refining a Refinement." *Journal for the Theory of Social Behaviour* 37(2): 195–200.
- Porpora, D. 2015. *Reconstructing Sociology: The Critical Realist Approach*. Cambridge: Cambridge University Press.
- Sawyer, K. 2005. *Social Emergence: Societies as Complex Systems*. Cambridge: Cambridge University Press.
- Sayer, A. 2010[1984]. *Method in Social Science: A Realist Approach*. London: Routledge.
- Varela, C. and Harré, R. 1996. "Conflicting Varieties of Realism: Causal Powers and the Problem of Social Structure." *Journal for the Theory of Social Behavior* 26(3): 313–325.
- Zahle, J. 2014. "Holism, Emergence, and the Crucial Distinction." In J. Zahle and F. Collin (eds.). *Rethinking the Individualism-Holism Debate: Essays in the Philosophy of Social Science*. New York: Springer, 177–196.