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The Promises of Critical Realism in the 2020s and beyond¹

Abstract: Positivists have been unsuccessful in finding laws in society and most post-positivists have little to say about causation. Critical Realism (CR) can help to overcome these kinds of aporias of social science by providing better understandings for instance about emergence, open-systemic causation and the role of critical reason in human sciences. However, due to both intrinsic and extrinsic reasons, the promises of CR have been only partially fulfilled. In this paper I argue that CR should be redefined as an open-ended process synthesising scientific realism and critical theories with the purpose of advancing our collective learning and development. Concepts such as emergence, causation and normativity are best understood as open sites of discussions and developments, neither originating nor ending in the philosophy of Roy Bhaskar or anyone else. Thus understood, CR can provide a plausible, rationally evolving framework for politics, political economy and other social sciences.

Keywords: critique, emancipation, emergence, law, ontology, open system, rationality, relativism

Introduction

Richard Feynman, a famous theoretical physicist, said in an interview in 1981 that “social science is an example of a science which is not a science [...] they follow the forms [...] but they don’t get any laws”.² In Feynman’s terms, little progress has been made since then (for a discussion, see Beed, Beed, 2000). A theoretical physicist such as Feynman may think that this is because social scientists do not control their experiments or data carefully enough, but there is a much

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² The interview “Feynman on Social Science” is available for instance at <https://vimeo.com/118188988>. See also (for instance) Tavares, 2014.

more simple explanation: a category mistake. In society, laws do not exist as causal laws or empirical regularities. Laws are legislated, most typically in a parliament. Laws created in this way get actors to do things they would otherwise not do. This is a simplification of course, as laws may not be followed and they do not exhaust social rules; actions involve improvisations; and there are many kinds of relational elements and wholes in society. The real issue here concerns the existence of causal laws.

As there are no invariant law-like regularities in society, does that mean that there is no social causation either? Many anti- and post-positivists seem to have concluded that this is the case. For instance, in the long-standing debate about understanding versus explanation, the side of “understanding” has tried to avoid causal language (see Hollis, Smith, 1990; for a critique see Patomäki, 1996, pp. 122–126). The avoidance of causal language is often taken to mean a focus on descriptive “how” instead of explanatory “why” questions, but also more extreme positions have been common. Some post-positivists represent themselves as epistemological radicals, maintaining against “ontological mainstream” that there is no world “out there” (e.g. George, 1994). The implication seems to be that it is all “in here”, usually meaning that what exists is what is being thought, said or written about the world.

Contemporary social sciences include also realistic discussions about what exactly is constructed socially and whether social constructivism is compatible with causal-explanatory analysis (e.g. Searle, 1995; 2010; Hopf, 1998; Hacking, 1999; Guzzini, 2000; 2017). What sometimes goes unnoticed in these discussions is the implicit notion of causation and related scheme of explanations. Social constructivism can be misleading to the extent that it fails to take clear distance from the notion of causation as invariant or law-like regularity. Herein lies a key contribution of critical realism (CR). Causation is about real powers and production of effects. CR explains society as an emergent layer of causally efficacious and open-systemic reality. In open systems the same or similar effects can be produced by many different causes; and the same causal powers and mechanisms are capable of generating different effects in different contexts. Moreover, CR has also stressed that in a world in which (i) structures are action- and concept-dependent, (ii) reasons can be causally efficacious, and (iii) rules and thus also laws can be changed; social sciences tend to have normative implications. Social sciences are routinely critical of existing realities.

I begin this article with a brief history of CR. Next I summarise CR ideas about emergence, open-systemic causation and the role of normative reason in human sciences. The apparent failure of social sciences to identify invariant causal laws or empirical regularities stems from a misunderstanding about the nature of our object of study and the tasks of social sciences. However, also the scepti-

cism and ontological super-idealism of radical post-positivism are unfounded. CR maintains that complex society is an emergent layer of reality. Not everything is socially constructed, not even in a highly reflexive complex society. Moreover, all layers of reality are causally efficacious and causation works also across layers.

The main original point of this paper is that the contributions of CR notwithstanding, concepts such as emergence, causation and normativity are best understood as open sites for further conceptual and scientific developments. These concepts neither originate nor end in the philosophy of Roy Bhaskar (1944-2014) or anyone else. Understood as a progressive research programme, CR provides a plausible, rationally evolving framework for politics, political economy and other social sciences. Philosophy of social sciences should be seen as an open-ended process

A brief history of CR

Critical realism is often associated with the works of Bhaskar. Rom Harré was a considerable influence on Bhaskar, whom Harré also supervised from 1970-1974. Although their paths soon diverged, Bhaskar's *Realist Theory of Science* (2008/1975) can also be seen, in important part, as a systematic articulation and further development of Harré's scientific realism. Harré had developed many of the notions which became central to scientific realism in the 1960s and 1970s (Harré, 1961, 1970; Harré, Madden, 1975; Harré, Secord, 1976). But Harré did not work in a vacuum. Mary Hesse, Mario Bunge, Hilary Putnam and Stephen Toulmin are other important names involved in forging new realist ideas about science.

Bhaskar was also influenced by anti-monistic philosophers and sociologists of science, such as Karl Popper, Thomas Kuhn, Imre Lakatos and Paul Feyerabend, who had signalled the corrigibility, historicity and relativity of knowledge. He also interpreted realist science in Marxian terms of production, adding a critical analysis of the connections between standard Western views of science, and the associated atomist or individualist sociology of action (not unlike the Frankfurt School). After these and subsequent developments, the term "critical realism" was coined in the late 1980s (also by Bhaskar himself, 1989, pp. 180–192). The term "critical" refers also to the Kantian legacy of critical philosophy and to the Frankfurt School of Critical Theory, especially to the works of Theodor Adorno (see Norrie, 2004).

CR has been a collective endeavour involving several prime movers such as Margaret Archer, Bob Jessop, Tony Lawson and Andrew Sayer. The 1990s saw the establishment of the International Association for Critical Realism (IACR) and *Journal of Critical Realism* (at first known as *Alethia*). Meanwhile, Bhaskar

was working on his new turns. The dialectical turn comprises *Dialectic: The Pulse of Freedom* (1993) and its somewhat more accessible accompaniment, *Plato Etc: Problems of Philosophy and Their Resolution* (1994). These difficult and multifaceted works have been less influential than Bhaskar's early works. The so called spiritual turn, first outlined in *From East to West: Odyssey of a Soul* (Bhaskar, 2000; for a global-political reading, Patomäki, 2003), became controversial also among self-proclaimed critical realists. In the 2010s, most critical realists continue to rely on a combination of scientific realism and critical theories.

The key ideas of CR can be understood with the help of three philosophical theses: ontological realism, epistemological relativism and judgmental rationalism. Ontological realism means that the world is not only real but it must also be differentiated, structured, layered, open-systemic and possess causal powers for science and many other practices to be intelligible. All systems are open, but at the level of society also artificial closure is impossible. Society is emergent from nature but, in part, qualitatively distinct from it. Social actors possess causal powers. Ontological realism forms the basis for our knowledge of the different aspects of the world, but this knowledge is always socially produced, contextual and fallible (epistemological relativism). This interpretative pluralism does not mean that all knowledge claims are equally valid. According to judgmental rationalism, we can always compare various interpretations, explanations and models to make well-grounded and plausible judgements about their truth and other merits.

The role of Bhaskar as a guru of CR and his subsequent turns have lessened CR's appeal in the neoliberalized academic world, quite independently of the validity of his and other critical realists' claims (subjected to critical scrutiny in Patomäki, 2010). The current reward- and funding system supports method-driven empirical research and encourages theoretical fragmentation (Joseph, 2014; Patomäki, 2016). Powerful interests favour neoclassical economics and approaches following the modelling approaches of rational choice theory, which are dominant in the US and many parts of Europe (see Patomäki, 2009). Success is not the same as good arguments.

Next I will summarise some of the main contributions of CR so far.

Emergence and layers of reality

New relations and things can emerge; a new combination and organisation of elements may result in new properties and powers at the level of the whole. British emergentists developed these ideas already in the late-nineteenth and early-twentieth centuries (for a review and good discussion, see O'Connor, Wong, 2015). The first emergentist was John Stuart Mill (1882, pp. 459–460), who ar-

gued that the “phenomena of life, which result from the juxtaposition of [inorganic] parts in a certain manner, bear no analogy to any of the effects which would be produced by the action of the component substances considered as mere physical agents”. In *Realist Theory of Science*, Bhaskar adopts Mill’s argument and explicates it a bit further:

[T]he operations of the higher level cannot be accounted for solely by the laws governing the lower order level in which we might say the higher-order level is ‘rooted’ and from which we might say it was ‘emergent’. [...] Let us suppose that we could explain the emergence of organic life in terms of the physical and chemical elements out of which organic things were formed and perhaps even reproduce this process in the laboratory. Now would biologists lose their object of inquiry? Would living things cease to be real? Our apprehension of them unmasked as an illusion? No, for in as much as living things were capable of acting back on the materials out of which they were formed, biology would not be otiose. (Bhaskar, 2008, pp. 102–103)

Apart from emergence *in* nature, there is also emergence *from* nature. As discussed in *The Possibility of Naturalism* (Bhaskar, 1998/1979, especially pp. 41–48), emergence from nature concerns the level of intentional action and society. Bhaskar argues that while the pre-existence of social forms are a necessary condition for any intentional act, reasons for actions can and must be causes. The causal powers of mind are explained in terms of “synchronic emergent powers materialism”. The brain provides a basis, medium and vehicle of mental powers, but the powers of the human mind are not reducible to the brain. The properties and powers of the mind evolve in social contexts; and psychological states are relational and make references to social states and structures. Social structures exist, however, in a different way than natural structures and mechanisms. Social structures are activity- and concept-dependent and are thus usually much less stable and enduring than natural structures. The tendencies generated by particular social structures are not invariant across time and space.

The standard CR account of emergence is based on the idea that there are only three main layers of reality: physical, biological and social (assuming that psychological is counted as part of the social level of reality). CR discussions about these levels are typically conceptual and philosophical rather than scientific and historical. Both are needed. In fact, CR is supposed to be first and foremost an underlabourer of science. The history of cosmos, life and human species seems to involve many layers of emergence, up to thirteen “scales of combogenesis” (Volk, 2017; cf. Christian, 2018). A new level emerges when things and relations at a prior level are combined and integrated, resulting in new things, relations and powers: from quarks to nuclei to atoms to molecules; from molecules

to prokaryotic cells to eukaryotic cells to multicellular organisms; and from animal social groups to human tribal metagroups to agrovillages and to geopolitical states. The likely next layer is a qualitatively new social combination and integration on a planetary scale (Volk, 2017, pp. 195–199).

This seems like a comprehensive account, but there is nonetheless a lot of uncertainty about the order and timing of the emergence of language, reflective consciousness and complex society. *Homo sapiens* migrated from Africa to other parts of the world some 70,000 years ago and from that time onwards, some signs of cultural developments started to appear. For tens of thousands of years these developments were extremely slow and haphazard compared to the standards of the modern, industrialised world. Full language with complex rules of grammar must have existed by the time of the agricultural revolutions (“agrovillages”) and early civilisations, but it seems plausible that metaphorical language and reflective consciousness emerged much later. If, as Julian Jaynes (2000) claims, the early empires were built by non-conscious bicameral minds, the emergence of social things and relations in the sense of CR social ontology would have occurred only as late as the first millennium BCE (however, for an alternative account of roughly the same change, see McGilchrist, 2012, pp. 260–266). Our social ontologies must be informed by our historical accounts of emergence.

Emergence of new things and relations occurs also within layers. New social relations and practices can emerge and through their combination and integration they also may give rise to emergent powers and properties. For example, my genealogy of the international problematic (Patomäki, 2002, ch. 1), is a partial analysis of such emergence, focussing on the pre-conceptions of practices and the consequent problematic, but also discussing the emergent powers and properties of capitalist market society and modern states. It should be stressed that “the international system”, as distinct from states, is not a layer in any sense. Modern sovereign states and the European institutions of international (or interstate) society emerged at the same time and have been co-constitutive. A related example is the emergence of rule of law during the 18th century European and American political revolutions.

Open-systemic causation

What must the world be like for laboratory experiments to make sense? Bhaskar’s answer in *Realist Theory of Science* and other works was that the scientists must be creating an artificial closure by their own labour and that a closure facilitates revealing the mechanisms of nature. The rationale for experiments is thus clear. Outside laboratory circumstances, causal effects are occurring only in open sys-

tems, where strictly regular law-like conjunctions are difficult to find. Causal powers and mechanisms are transfactually efficacious across natural and social contexts, but their precise effects in open systems are always context-dependent (being contingent upon what other forces and mechanisms are at play, etc.). Artificial closures are needed to study the effects of one mechanism at a time in a controlled manner.

In his early works, Bhaskar seems to have assumed that systems are either categorically closed or open. Event-regularities can occur only in closed systems. Gradually it became increasingly clear that all systems are open and closed to a degree. The openness of natural and/or social systems does not exclude the regularity of at least some things and connections. At this time, in the field of economics, Tony Lawson (1997, pp. 204–213) introduced the concept of contrastive demi-regularity, indicating the existence of partial closures also in society. Contrastive demi-regularities are about contrasts between categories or spacetime areas and are expressed in terms of regularities within a given range of variation with certain probability. They are not strict but probabilistic regularities, limited to a particular spacetime area, and liable to change. The identification of demi-regularities (or demi-regs) is not an aim in itself; rather, it is the task of social scientists to move quickly from identifying them towards analysing the deeper social structures and causal complexes generating these manifest phenomena.

The critical realist conception of causation takes as its point of departure the idea that real causal powers produce effects in open systems. From this perspective, it is wrong to assume that causation can be analysed in terms of simply necessary or sufficient conditions; yet this is presupposed if one talks about empirical invariances. The modified definition of cause as a so-called INUS-condition (see Bhaskar, 1998, pp. 142, 178 note 23; the concept is borrowed from Mackie, 1974) resolves this aporia. Cause is an Insufficient but Non-redundant element of a complex which is itself Unnecessary but Sufficient for the production of a result. One implication of the INUS-account is that a causal outcome depends on how different elements are organised and intra- and interact. Moreover, there are always many possible complexes capable of (co-)producing the same (or same kind of) outcome. In this conception causation should be understood not only in terms of complexes, but also in terms of the subject matter in question.

Critical reason and explanatory emancipation

The specific nature of social objects makes the task of social sciences distinct from the task of natural sciences. In addition to posing Kantian critical questions about the presuppositions of our knowledge, social sciences can and typically

must be critical of the existing social realities. This is because social actions and practices are meaningful. They are grounded on particular assumptions, understanding and claims about the world. Social sciences produce knowledge (SSK) that makes references to the knowledge circulated in practices (KoCiP). Typically what we have is:

SSK ≠ KoCiP → critique

If SSK is claimed to be valid, then KoCiP must be in some important regards false. This raises the question why KoCiP is being reproduced as part of certain structured activities and practices. If we have a theory that explains the circulation and reproduction of KoCiP in knowledgeable practices, it appears that we should evaluate negatively also those structures, mechanisms and processes that co-explain the continuous reproduction of KoCiP. For instance, KoCiP may involve rationalization and mystification of the existing reality or be illusionary for other reasons.

Bhaskar's (1998, pp. 59–71) original scheme of explanatory emancipation, inspired by Karl Marx's *Capital*, was based on a rather ambiguously formulated claim according to which no extraneous value is involved in making an inference from facts to negative evaluation of KoCiP. I have tried to show that in fact this inference relies on the positive value of truth and commitment to truth is a condition of any discourse (Patomäki, 2002, ch. 5). This shifts the discussion to the meaning, nature and criteria of truth. Epistemological relativism, combined with a dialogical account of truth judgements, have manifold ethico-political implications, also regarding the scheme of explanatory emancipation. For instance, it must remain politically possible in the transformed context to persuade adherents of SSK that it is in some ways false and should be replaced, at least in part, with better understandings, explanations and scenarios. This implies non-violence, need to cultivate pluralist public sphere, free arts and science, etc.

Moreover, while a society would of course be improved if its illusions, contradictions, violence and injustices were reduced, do we know how this could be achieved? Mere negative criticism is not sufficient for concrete action. Criticism presupposes the possibility of better practices and institutions (Sayer, 2000, p. 161). In response to this line of thought, Bhaskar (1993; 1994) adopted the notion "concrete utopia" from the Frankfurt School, defining it as a feasible and viable alternative to the existing social realities. In his dialectical works, Bhaskar started to engage with ethical and political theory also more generally. As Andrew Sayer (2011) argues, things matter to people, social sciences must be relevant to human concerns, and thus the task of social sciences involves investigating and furthering the human good.

Conclusions

The search for invariant causal laws in society is not futile because causation does not apply to society, but because the search is based on a misunderstanding of social objects and causation. Causation is about real powers and the production of outcomes in open systems. The early formulations of realist open-systemic causation in society generated a new aporia, however. If causation is complex and open-systemic, and if there is a radical asymmetry between explanation and prediction, it seems that there is little, if anything, that social sciences can say about the future. In a categorically open system everything must be un-anticipatable: anything can happen at any moment. Yet it is a key point of both pragmatism and CR that adequate social science consists in our ability to act in, and shape, the world.

This has led to a reconceptualization of the openness of systems. Openness is a matter of degree rather than categorical. Structures and tendencies tend to endure and they can generate contrastive demi-regularities. Moreover, many social organisations have causal powers to arrange social activities in a manner that generates some closure and thus also regularity, predictability and control. These powers can be used for anything from coordination of actions to manipulation of subjects. This closure is not similar to the one achieved in laboratory experiments, it is of a “spurious kind”, but nonetheless also implies some predictability, even though change is a constitutive characteristic of human societies. (Danermark et al., 2002, p. 68 *et passim*).

If we know that something that we either seek, or strive to avoid, follows from something we can influence, then technical control or manipulation becomes possible. CR shares the half-a-century old insight of Jürgen Habermas (1972) that some technical knowledge is needed and that technical applicability is one of the reasons why scientific information is valuable. But as Habermas underlined, technical interest may also serve non-generalizable particular interests such as money or power and may be unjustified for a variety of reasons. Further problems for technical control are posed by the reflexivity of anticipations in economics, political economy and other social sciences. Predictions become easily self-altering. The realisation of this possibility opens up a new problematic, which has been discussed in social sciences at least since Robert K. Merton (for a detailed exploration, see Patomäki, 2018). As can be seen, CR, like any philosophy or theory of social science, is subject to the dialectical cycle of conceptual complexification as depicted in Figure 1 below.

CR is a moment in this process. The process of conceptual complexification is evident in the way the conceptions of emergence, causation and critical reason have evolved since the mid-19th century. I have tried to show that these three key

conceptions are open and evolving sites of discussions and developments. CR can itself be understood as a relatively enduring but transient conceptual structure that is dependent on our activities and collective learning. While we know that even better theories can emerge, at this point it is plausible to maintain that CR can provide a rationally evolving framework for politics, political economy and other social sciences in the 2020s and beyond. It is the best account of social sciences so far.

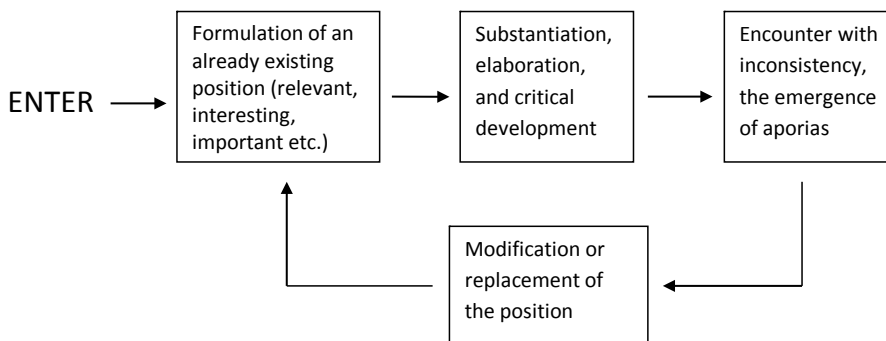


Figure 1: The dialectical cycle of conceptual complexification

Source: Rescher, 2006, p. 84.

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