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The narrow notion of realism in human geography

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Abstract. The paper provides an analysis of the reception of realism in human geography. Gaps are identified between geographers' realism and realism as conceived by philosophers of science. The paper first outlines philosophers' abstract or thin 'CoreRealism' in simple ontological, semantic, and epistemological terms. It then shows how human geographers' 'GeoRealism' has concretised and thickened this core notion by incorporating a specific metaphysics of causation, a specific metaphysics of society, and a specific methodological doctrine about how to conduct (empirical) research. Additionally, GeoRealism has neglected central concerns of contemporary philosophy of science: the ontology of existence, the semantics of truth, and the epistemology of warranted belief. This has resulted in a notion of realism that is narrow in terms of its domain of application and its philosophical resources. The domain narrowness of GeoRealism may lead to inaccurate attitudes and antipluralist policies towards theories and approaches that are compatible with the broader CoreRealism. The resource narrowness of GeoRealism threatens to weaken its capacities to reflect critically on social constructivist and other allegedly antirealist trends as well as on the radical fallibility of human geographic theories and explanations. The paper offers an account of GeoRealism as an outgrowth of historically contingent circumstances and suggests that human geographers would benefit from reconsidering their understanding of realism within the broader perspective of philosophical literature.

1 Introduction

In the course of the 1980s human geography discovered realism and seemed to have established a secure relationship:

"realism has become the major approach to science in human geography, with special attractions for those pursuing the political economy approach" (Peet and Thrift, 1989, page 17).

Realism has been believed to have played the dual role as "the de facto position underlying much scientific research, as well as the ideal position for social science" (Sarre, 1987, page 3; see also Cloke et al, 1991, page 134). In the course of the 1990s and onwards, systematic treatments and explicit references to realism seem to occur less frequently in the geographical literature. At the same time, one finds explicit and uncontested statements about realism as a mainstream approach: geographers "have abandoned positivistic accounts in favour of realist approaches" (Martin, 1999, page 81). There is no doubt that realism continues to be a live issue and we are convinced it should be. At the same time, we believe a serious and thorough reconsideration of the very concept of realism and its implications is due in human geography.

The concept of realism adopted by human geographers seems to derive from the writings of a few British authors. Roy Bhaskar's *A Realist Theory of Science* (1975) and *The Possibility of Naturalism* (1979) have been the main philosophical sources (see also Bhaskar, 1989; Harré, 1972; Harré and Madden, 1975). Russel Keat and John Urry's *Social Theory as Science* (1975) and Andrew Sayer's *Method in Social Science: A Realist*

Approach (1984; 1992) have made a more direct impact on human geographers' reception of realism (see also Sayer, 1982; 1985a; 1985b). Many others have joined in and contributed to the shaping and establishing of realism as a metatheory of human geography. This has resulted in quite a specific use of 'realism' in geography. Here are two representative characterisations. The first brings out a specific metaphysics of causation and a respective methodological principle, suggesting that realism is a

"philosophy of science based on the use of abstraction to identify the (necessary) causal powers and liabilities of specific structures which are realised under specific (contingent) conditions" (Gregory, 1994, page 499; compare 2000, page 673).

The second gives a methodological principle based on a specific metaphysics (ontology) of society:

"Realism is a philosophy of science wherein researchers attempt to identify structures and agents present in society and how they tend to act" (Lawson and Staeheli, 1990, page 13).

It may come as a surprise to geographers that philosophers of science will not recognise these as statements about realism as they know it. Scientific realism is a major stream within the philosophy of science; indeed much debate in the philosophy of science is between various realist and antirealist positions with regard to a number of pressing issues (for example, Cohen et al, 1996; Devitt, 1991; Hacking, 1983; Kukla, 1998; Leplin, 1984; Mäki, 2001; Niiniluoto, 1999; Psillos, 1999; Putnam, 1978; Smart, 1963; van Fraassen, 1980). In human geography no attention is paid to the extensive literature on scientific realism in philosophy of science. We will attempt to bring the two conceptions of realism in contact with one another. We will show how some elements in standard philosophical notions of realism have not been attended to by geographers whereas others have been given very specific contents. The outcome has been a selective and concrete conception of realism, with a weak identity *as realism* and a narrow domain of application.

We propose a reconstruction of the received conception of realism in human geography. We call it GeoRealism. We show how GeoRealism selects and specifies various general ingredients in realism as conceived by philosophers in general and philosophers of science in particular. We call the latter CoreRealism. Whereas CoreRealism is rather abstract, broad, and flexible in its applicability, GeoRealism is more concrete and narrow, less flexible, and weak in its realism. Generic CoreRealism offers, we submit, more powerful resources and more pluralistic perspectives.

Sections 2 and 3 below are devoted to our reconstruction of GeoRealism. We begin, in section 2, by outlining an abstract and thin core concept of realism, including ontological, semantic, and epistemological components. We point out a few key components of CoreRealism that have been neglected by human geographers, resulting in a weakening of their realism. In section 3 we list three ways in which GeoRealism has concretised other components in CoreRealism by supplementing it with further specific ideas: these are the additions that have resulted in a thick concept of realism. What emerges is the received notion of realism in human geography that is inclined towards a heavily loaded specific version of ontological realism accompanied by a set of methodological precepts but devoid of ontological considerations of existence, semantic considerations of truth, and many epistemological concerns central for contemporary scientific realism in philosophy. In section 2.4 we offer a schematic map describing this conceptual journey travelled by GeoRealism.

In section 4 we look back and make a few observations on the origins of the usage of 'realism' in the development of human geography; and, looking ahead, propose to liberate the concept of realism in human geography from the oversights and the loads. We also point out the beneficial consequences of such broadening and

unburdening for geographers' self-images and encounters with their rivals and allies in matters of substantial geographical research: being aware of one's concept of realism makes a difference.

We submit that GeoRealism is narrow realism in two senses and that each has some unfortunate implications that should be remedied by adjusting the concept of realism: (1) The domain of GeoRealism is narrow because of the three additions that result in thickness or specificity or concreteness: GeoRealism 'applies' to a far smaller domain of theories and methods than CoreRealism. This is what we call *domain narrowness*. An unfortunate consequence of domain narrowness is that some theories and methods that are compatible with realism are misrepresented as being incompatible with it by being portrayed as nonrealist [for example, see, Marchionni (2004) about the case of geographical economics]. Not only is this inaccurate and unfair, but it also distorts the terms of scholarly conversation—and is bad for pluralism. The remedy is to go back to CoreRealism: this will help us see the potentially wider domain of realism.

(2) The range of conceptual and argumentative resources of philosophical CoreRealism that GeoRealism mobilises and specifies is narrow in that many such resources are omitted or ignored. This is what we call resource narrowness. An unfortunate consequence of resource narrowness is that it makes GeoRealism weak or completely powerless in those particular encounters where it is confronted with some genuinely antirealist currents, such as radical versions of postmodernism, relativism, and social constructivism. Given the narrow philosophical resources of GeoRealism, it may be difficult to identify these currents as antirealist (and also to identify versions that are consistent with realism) and hard to resist them by refined argument. The remedy is to go back to CoreRealism: this will help mobilise further realist resources that are needed for dealing with some such contemporary controversies in a more effective way.

A word of warning may be in order. First, we are not suggesting that all uses of the term 'realism' in geography are committed to such a 'full GeoRealist package'. Some geographers put stress on one or two of the three loads only, and there are occasional other usages too. Second, our account is deliberately streamlined. It is intended mainly as a focused conceptual reconstruction rather than as a rich historical narrative of the various incarnations of the concept of realism in human geography.

2 CoreRealism (and what GeoRealism misses in it)

In this section we provide abstract or thin versions of realist core views. We also point out certain components of CoreRealism that are by and large missed by Geo-Realism. We take CoreRealism to consist of permutations of ontological, semantic, and epistemological theses.

2.1 Ontological realism: issues of existence

Ontological realism lies at the innermost core of realism. The most abstract formulation of ontological realism takes it as the thesis that

'X exists' or 'Xs exist' or 'X is real'.

Here, 'X' (the set and nature of existents) and 'exists' (the nature of existence) remain to be specified, or the two questions, 'What exists?' and 'What is it to exist?' remain to be answered. This will give us thicker formulations building upon ontological CoreRealism. [For this approach to defining ontological realism, see Mäki (1989; 1992; 1998a; 1998b; 2001).]

2.1.1 Existents

As for the set of existents (the 'X part'), an ontological realist may include items at various levels of abstraction (this is important for seeing the difference between

CoreRealism and GeoRealism). At the most abstract level, the world can be said to exist, but this is not very informative for many purposes. More concretely, but still at a high level of abstraction, the list of presumed existents may include universals and particulars, things and properties, events and capacities, necessities and possibilities, physical and mental entities, and so forth. Still more concretely, the ontological issue may concern items posited by the broad range of special sciences, such as gravitational fields, viruses, continental drifts, multiple selves, consumption habits, marginal utility, the invisible hand of the market mechanism, exploitation, ethnicity, social capital, local culture, and industrial agglomeration.

Obviously, each scientific discipline has its characteristic emphases on the sorts of items that are relevant from the ontological point of view. We will show that the focus of GeoRealism is precisely on the 'X part' of ontological realism. GeoRealism postulates a specific metaphysics of causal powers, necessary and contingent relations, and social structuration (sections 3 and 4). It ends up with a thick version of an aspect of ontological realism based on specifications of 'X'. Thus, one characteristic of GeoRealism is an emphasis, at relatively low level of abstraction, on what exists.

2.1.2 Existence

One does not qualify as a realist just by supplying specifications of the constitution of X. A specification of the concept of existence is needed as well: what is existence, what is it to exist, what does it mean to exist? No special attention seems to have been paid to these questions in discussions about realism in human geography. This is unfortunate, because (a) not all concepts of existence satisfy the minimum requirements of realism, and (b) not all those that do are indiscriminately appropriate in the context of human geography. The implication is that the identity of GeoRealism as *realism* is not completely stable.

First of all, there are nonrealist senses of 'exists'. For instance, realism about X will rule out reductionist accounts that suggest that Xs exist but only in the sense that Ys exist: Xs are, after all, nothing but Ys—thus Xs are to be reduced to Ys. Thus, a phenomenalist is a reductionist who would say that tables exist but only in the sense that certain bundles of sense data exist; tables do not exist as tables because tables are nothing but those bundles of sense data. Similarly, a reductionist about the existence of learning regions could say that learning regions exist, not sui generis (were they so to exist, this would imply that regions qua regions are able to learn), but only in the sense that actors interacting within the region learn. Another nonrealist sense of 'exists' is included in ontologically relativist positions. One may hold the view that this or that existent—say, social institutions or the distinction between necessary and contingent relations—exists, not in itself, but only relative to theory or paradigm or only as constituted by particular cognitive perspective or social interest. Relativism of this sort will not qualify as realism (at least not without further qualifications).

Second, not all genuinely realist specifications of 'exists' match with many sorts of existents posited in human geography. The widely used notion of *mind-independent existence* in definitions of realism serves as a major example. Although it is natural to say that continental drifts exist independently of the human mind, this cannot be said of territorial structures or mental maps: the latter are essentially dependent on the human mind for their existence. For similar reasons, the concept of existence should not be defined in terms of independence of people, by suggesting, for example, that the existence of the world 'independently of us' is a defining feature of realism (Sayer, 1984, page 63; 1992, pages 66–67). Human geography and the social sciences in general talk about entities whose existence is essentially dependent on human beings and their minds: conventions and communities, marriages and money, cities and regions, agglomerations and interfirm networks. Thus, it is not advisable to say that "scientific

realism in the social sciences ... celebrates the existence of reality independent of human consciousness" (Yeung, 1997, page 52)—it should not celebrate this idea.

Some other concept of *objective existence* is needed to accommodate mind-dependent entities. Something exists objectively if it exists unconstituted by some particular representations or beliefs about it, or by inquiries into it. Continental drifts as well as territorial structures and mental maps may exist objectively. By creating conceptual representations, or by adopting particular beliefs, about these entities, geographers do not thereby, by that very same token, create the entities, bring them to existence. Sayer comes close to this idea when he characterises realism as subscribing to the notion that "the world exists independently of our knowledge of it" (1992, page 5). What we would like to emphasise is that an objectively existing entity does not have to exist independently of knowledge or belief in general (because this would expel social entities from the set of objective existents), but just independently of 'our knowledge of it' where 'our' refers to geographers as the relevant cognitive subjects.

We may also think that, although both territorial structures and mental maps exist objectively, there is an ontological difference between them: although entities such as territorial structures exist *externally* to individual human minds, mental maps do not so exist. Territorial structures, along with other social entities and facts of a Durkheimian kind, may be taken to exist in a distinctive way. This gives us a third concept of existence, that of *external existence*. [For these three concepts of existence, see Mäki (1990; 1992; 1996).]

On another dimension, a distinction can be drawn between actual existence and possible existence: one may claim that 'X actually exists' or that 'X is the sort of entity that it might exist' (see Mäki, 2001; 2002). (1) One may claim that electrons exist as constituents of matter, that there is racial segregation in the housing market of many US cities, and that there is a tendency for high-technology firms to cluster in space. These are claims about actual existence. They are different from claims about possible existence: one may claim that there might be extraterrestrial life, that there might have emerged a 'new economy', and that there might be necessary relations between firm clustering and learning. The notion of possible existence is implied in much scientific practice whenever scientists entertain as yet unsubstantiated causal conjectures: something like XYZ, were it to the exist, might be the cause of, or the causal mechanism giving rise to, some explanatorily puzzling phenomenon. Such a formulation leaves open the possibility that the thing in question does not exist after all. But it takes a realist attitude to grant it the chance of being real. The thing might exist, thus it is worthwhile engaging in further inquiries and discoveries in order to establish whether it does or does not actually exist.

Without careful specifications of appropriate sense of 'exists', no specifications of 'X' will be sufficient for any position to qualify as realist. The meaning of 'realism' is essentially dependent on such appropriate interpretations of 'exists'—while at the same time it is not dependent on any particular interpretations of 'X'. Insofar as GeoRealists focus on the 'X part' and neglect the 'existence part' they have weakened the identity of their realism as realism and have contributed to the resource narrowness of GeoRealism. In the following, we proceed on the assumption that this gap, even if considerable, can be filled in without insurmountable difficulties.

⁽¹⁾ It should be noted that most work on scientific realism in the philosophy of science operates with the concept of actual existence without recognising the notion of possible existence as central for realism. This is a limitation of the discussions within the philosophy of science.

2.2 Semantic realism: issues of truth

A major category of realism has been largely neglected by GeoRealists: *semantic realism*. It deals with how chunks of language (or representations in general) relate to what exists extralinguistically (or at least objectively). The concepts of reference and truth characterise aspects of this relation. Linguistic expressions may refer to objectively existing entities and represent them truly or falsely. Here we focus on the notion of truth.

According to the traditional realist idea of truth, a representation R of X is true if and only if R represents X as the kind of thing that it is independently of R. R is true or false in virtue of what X is like, objectively. This is a rough formulation of the classic correspondence notion of truth, permitting various further specifications. Many realists, although not all of them, think that this idea of truth is necessary for defining the concept of realism. More generally, it is a standard feature of realism that truth is taken to be nonepistemic. This means that truth does not depend on whether and how we are able to recognise it, on whether we believe something to be true, on the grounds for and ways of justifying our beliefs and disbeliefs, and so on. If, in contrast, one takes truth to be recognition dependent, truth becomes epistemic: truth as warranted assertibility or ideal acceptability or rational justifiability are among such epistemic truths. On the realist view, truth is recognition transcendent and belief independent and in this sense objective (for example, see Alston, 1996; Devitt, 1991; Kirkham, 1995; Mäki, 2004; Niiniluoto, 1999).

Realist geographers have adopted two major strategies regarding the classical realist views about truth. Most of them ignore the whole question of truth and concentrate on other matters. Some others argue against, or abandon without much argument, the correspondence notion and adopt some other idea of epistemic adequacy instead. Sayer's idea of 'practical adequacy' is a major example of this latter strategy (see also Bird, 1989, page 110; Peet, 1998, page 166).

Sayer seems ambivalent about whether the notion of practical adequacy is supposed to replace or specify that of truth: "Here, it may help to replace (or if you prefer, modify) the concept of truth with that of 'practical adequacy." He then defines the notion: "To be practically adequate, knowledge must generate expectations about the world and about the results of our actions which are actually realized" (Sayer, 1984, page 66; 1992, page 69). This definition seems to provide a version of an epistemic and pragmatist notion of truth: it defines the concept of truth in terms of expectations and actions. As such it will not qualify as a realist notion of truth.

For a realist, practical adequacy is neither sufficient nor necessary for truth. The geocentric models of Ptolemaic astronomy were practically adequate for purposes such as navigation and agriculture even though it got the facts about the structure of the solar system wrong. And some theory of, say, the causal powers driving the economy may be true even though our expectations (predictions) frequently turn out to be wrong and even though we never take any action based on our theory. Within the philosophical discussion, some realists hold the view that something like practical adequacy or technological success provides us with the best evidence that a scientific theory on which that success relies is true—or that the truth of such a theory gives the best explanation for such technological success. This (controversial) argument brings truth and practical success in contact with one another but assumes that they are conceptually independent: success offers evidence for, but does not define, truth (for example, see Boyd, 1981; Psillos, 1999; Putnam, 1978; Smart, 1963).

Whatever appeal the notion of practical adequacy may enjoy, this appeal may be parasitic upon some implicit notion of correspondence. We think this also shows in Sayer's writings. Using phrases that can be read in a genuinely realist spirit, he says,

"The question is not only what works, but what it is about the world which makes it work" (Sayer, 2000, page 42). In other words, "we are not content merely with knowing what works; we want a coherent understanding of what it is about the world which enables certain practices and expectations to be successful" (Sayer, 1984, page 74; 1992, page 79). Here is our realist rendering of these sentences that may reveal their debt to correspondence: Theory T works (is practically adequate); T works because the world has structure S; T's practical adequacy is explained by theory T* that gets the facts about S right (corresponds to S), thereby providing us with 'understanding' of why T works in relation to S. (T and T* may be the same theory such as heliocentric astronomy; or they may be different theories such as T being a geocentric theory and T* being a heliocentric theory.) Thus it seems that reference to a need to understand 'what it is about the world' requires a notion of truth that is not reducible to practical adequacy but that is required for practical adequacy to have any appeal to people with realist intuitions (that is, the vast majority of us).

We suspect that the unpopularity of an explicit commitment by GeoRealism to the notion of correspondence—and generally to the view of truth as nonepistemic—may be the result of a felt pressure from certain populist criticisms of those views and from the recently regained popularity of pragmatist ideas. Whatever the reason for their dismissal, here GeoRealism departs from semantic CoreRealism by dropping the nonepistemic view of truth. This is a second feature of GeoRealism that has contributed to the resource narrowness of GeoRealism and to the weakening of its identity as realism.

2.3 Epistemological realism: issues of knowledge

The final component in CoreRealism consists of a sort of epistemological optimism: the world, or at least large parts of it, are knowable in the sense that truths about it are attainable. Truths are discoverable and recognisable, beliefs in truth claims are justifiable, evidence is available or attainable for supporting truth claims. Much of the contemporary debate in the philosophy of science focuses on issues of epistemological realism. We mention only one such prominent issue: that of underdetermination. This issue has lots of important ramifications, but it is conspicuously absent from the agenda of GeoRealism.

The argument from underdetermination says that the acceptance and rejection of scientific theories are underdetermined by empirical evidence; therefore one is never justified in believing a theory to be true or closer to the truth than its rivals. Many philosophers regard this as the most powerful argument against realism and for antirealism about scientific theories. Although we are not inclined to go quite as far as that, we think it gives rise to very important issues that geographers should address systematically in order to have a richer grasp of what is at stake, not only in the realism debates but also in the various controversies in their own discipline.

In a nutshell, the argument from underdetermination is this. One premise is the claim that all scientific theories have numerous—indefinitely many—empirically equivalent rivals: for any theory that is consistent with given empirical evidence, there are a number of others that are equally consistent with that evidence. Because theories are in such a way empirically indistinguishable, they are also equally believable. Basing one's judgments on considerations of empirical evidence only, a belief in one theory to the exclusion of others must therefore be unfounded and arbitrary. If we take epistemological realism to be the thesis that truths are discoverable in that beliefs in truth claims are justifiable, then the argument from underdetermination appears to undermine realism (see Kukla, 1998; Psillos, 1999).

There are a variety of responses to the underdetermination challenge. Many sociologists of scientific knowledge have suggested that, even though theories are underdetermined by empirical evidence, they are determined nevertheless: they are shaped and conditioned by various social factors such as social interests, academic power and credibility, institutionalised standards and practices of persuasion, and so forth. 'Social construction' of this sort is often contrasted with the realist ambition of seeking and discovering objective truths about the world. In a discipline such as human geography, the social constructivist solution to the underdetermination problem would not yield a convergence to a consensus on a single theory. There would rather be several convergence processes with their respective consensual outcomes, one for each subcommunity with its own social dynamics. This would give us relativism about truth.

Realist philosophers of science, on the other hand, have traditionally appealed to the role of extra-empirical virtues that theories may possess as a solution to the underdetermination issues (see Kukla, 1998; Psillos, 1999). Even though the choice between two or more theories may be empirically undecidable, justified choices can be made on the basis of some of the epistemically relevant extra-empirical properties of empirically equivalent rival theories. Among such properties are included simplicity, completeness, unifying power, mathematical elegance, lack of ad hoc characteristics, and coherence with other established theories. Of all empirically equivalent theories, one is thereby advised to accept, and believe, the one that is simplest, unifies the largest variety of kinds of phenomena, is mathematically more elegant than its rivals, and maximises other such theoretical virtues. With respect to recent disputes between economic geographers and geographical economists, this solution to the underdetermination problem would yield an interesting outcome: insofar as a theory in geographical economics is rivalled by some geographical theory equally consistent with the data, an appeal to a subset of such extra-empirical virtues, such as those listed in the previous sentence, would be likely to yield the advice to accept, and believe, the geographical economic theory.

A realistically minded human geographer may react to these considerations variously. One may challenge the link between rational belief and such a list of extra-empirical virtues. The connection between realism and such virtues is indirect and not fully tight, and thus can be questioned. One may also choose to reconsider the list of such virtues in order to strengthen their link with epistemological realism (perhaps dropping simplicity and mathematical elegance, for example). One may furthermore give up epistemological realism altogether, while sticking to ontological and semantic realism. This would be based on the conviction that one's theory is about the objectively existing real world and has a chance of being largely true about it—but that there is no way of confirming the theory as superior to its rivals, and thus worthy of belief as true. Such an epistemological skepticism is an option for otherwise hardline realists.

These epistemological issues are particularly pressing in any social science, and certainly no less pressing in such a radically volatile nonexperimental and theoretically kaleidoscopic discipline as human geography. GeoRealism does not address these issues directly and systematically: this is another manifestation of its resource narrowness. Thus, interestingly, it seems GeoRealism dismisses some of the hottest issues around the realist philosophy of science—and it does so even though those issues are, if possible, more challenging in the context of human geography than, say, in much of physics. The challenge may be harder in human geography as a result of the multiplicity of its various theories and potentially relevant explanatory factors, lack of effective experimental control, ambiguities of measurement and concept application, etc. We think these issues deserve much focused attention. We believe this is an area in which serious work is needed to understand the structure of theoretical diversity

and dispute in human geography and in order to check the implications of scientific realism for the discipline.⁽²⁾

2.4 Path from CoreRealism to GeoRealism

We conclude the present section by providing a schematic map depicting the conceptual path from CoreRealism to GeoRealism. Within our reconstructed path, three kinds of steps are taken by GeoRealists on the way: some components of CoreRealism are dropped; some others are given very specific interpretations; and new components are added. GeoRealism takes the first kind of step by ignoring the key ontological issue of what it is to exist; by dropping nonepistemic views of truth; and by failing to address some of the most pressing issues in epistemological realism. This leads to resource narrowness. The second kind of step consists of adopting very specific versions of the ontology of causation and the ontology of society—with a stress on what exists rather than on what existence is. The third kind of step amounts to adding a subscription to what is called 'realist methodology'—no part of CoreRealism. These steps result in domain narrowness. In the three subsections to follow we describe the last two steps in more detail. They focus on what is in GeoRealism, whereas in the present section we have discussed what is not in it. Here is a map of the conceptual connections:

GeoRealism is CoreRealism

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minus ontological realism concerning existence
minus semantic realism concerning truth
minus aspects of epistemological realism

plus a specific metaphysics of causation
plus a specific metaphysics of society
plus a specific metaphysics of society
plus a specific methodology of research

(omission 1: section 2.1)
(omission 2: section 2.2)
(addition 1: section 3.1)
(addition 2: section 3.2)
(addition 3: section 3.3)
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Note that we are not at all suggesting that this route has actually and deliberately been travelled by GeoRealists: on the contrary, we believe the destination of this journey has been reached without being aware of the path, and that this is indeed where part of the problem lies. Thus the path leading GeoRealism away from CoreRealism is our reconstruction, and the steps along the path that we ascribe to GeoRealists have not actually been taken by them in this sequence. The reconstruction is logical rather than historical. Yet the reconstructed path may be useful in locating oneself on a philosophical map, and helping find one's way to other locations if needed.

3 GeoRealist metaphysics and methodology

3.1 Metaphysics of causation

We now show how some of the metaphysical categories adopted by realist geographers bring about a specification or thickening of the 'X part' of ontological realism. They are the categories of nature, causal power, and causal mechanism, as well as the distinctions between necessary and contingent relations and between internal and

⁽²⁾ Sayer (1992, pages 12 – 84; see also Sayer, 2000, pages 48 – 52) offers good starting points for such epistemological inquiries. Note that Sayer emphasises the importance of fallibilism for realism. On this we fully agree: any sensible realism has to subscribe to the fallibility of scientific cognition. But fallibilism here remains a general principle: it is not examined in the context of the special problems of human geography. Other GeoRealist literature seems largely silent about this and other epistemological issues. In contrast, the debates between realists and antirealists in the general philosophy of science put a lot of stress on the epistemological issues related to the difficulties with discovering truths and to substantiating the truth claims of science.

As we noted above, one may be realist about existence and about truth and yet a radical skeptic about knowledge without contradicting oneself. Such an epistemological antirealism would turn fallibilism into extreme skepticism while committing itself to ontological and semantic realism.

external relations. These categories provide a richer and more specific picture of the structure of what is claimed to exist, even though there is nothing specifically geographical about these concepts themselves. They help attribute a set of (first and higher order) properties to the other existents of the world, geographical or otherwise.

Our main focus here is on causation and its existence in some required realist sense. We take realism about causation or causal realism to be a special instance of ontological realism. It says that causation (causings, causal relations, causal capacities, etc) is a real feature of the world. One form of causal realism says that, whatever causation is, it exists independently of our beliefs and representations of it. Realism about causation therefore allows for alternative ideas of what causation amounts to, provided causation is taken to enjoy objective existence.

GeoRealism subscribes to one specific version of causal realism—even though its focus is not on causal *realism* but instead on the structure of *causation*. This is the first addition to generic ontological realism in our reconstruction. The GeoRealist conception of causation is in the Aristotelean tradition of active and passive powers, possessed by things in virtue of their natures. This is often explicitly contrasted to the 'Humean' view of causation that is put in terms of constant conjunctions (that is, empirical regularities) of events. (3) Thus, advocates of GeoRealism reject the idea of event causation in favour of a classical notion of agent causation (for example, Bhaskar, 1975; Harré, 1970; Harré and Madden, 1975). Other views of causation are usually not considered by GeoRealists: it seems the contrast between the regularity view and the power view is assumed to exhaust the main contenders.

Now, if one takes the objective existence of causation to be sufficient for causal realism, there is no problem with conjoining realism with a Humean constant conjunction view: on this view, causation consists in empirical regularities characterised by spatiotemporal contiguity and temporal succession. If one takes such regularities to be real features of the world—ones that exist independently of what we think of them—we get a version of causal realism. Another account of causation that easily qualifies as causal realism is Wesley Salmon's theory of causal processes put in terms of causal interaction and causal transmission (Salmon, 1984). This account is intended to do without causal powers, but this does not undermine its subscription to causal realism in the present sense: those causal processes are taken to constitute causation that obtains in the world independently of any beliefs or theoretical descriptions of it. Other examples of causal realism that do without powers include Michael Tooley's account of causation as a theoretical relation between particular states of affairs (Tooley, 1987) and Douglas Ehring's account in terms of persistence of individual properties (Ehring, 1997).

We may next strengthen the criterion to be met by any realist account (in line with section 2.1). To claim that X exists requires that X exists not only objectively but also irreducibly: it is not to be reduced to something else—it exists as X. On this more stringent criterion, realism about causation again allows for alternative ideas of what causation is all about. On this criterion, the constant conjunction account will not qualify as realist because causation is reduced to noncausal facts: regular sequences of events that are spatiotemporally contiguous and occur in temporal succession. But the account of causation as a theoretical relation between particular states of affairs would qualify as realist. So would the recent persistence account of causation. And so

⁽³⁾ It is controversial whether David Hume was a 'Humean' about causation. There is textual evidence that supports the view that Hume was an ontological realist about causal powers—they exist, and they constitute causation in the world—whereas he held an epistemologically skeptical position about them: they cannot be known. GeoRealism contains a combination of ontological and epistemological realism about causal powers: they exist and are knowable.

would a power account provided powers are supposed to enjoy objective and irreducible existence. It seems obvious that Sayer and many others are power realists even though the notion of existence has not attracted much attention from them (as suggested in section 2). The point is that power realism is not the only version of causal realism.

Here is a much cited and representative passage by Sayer: "On the realist view, causality concerns not a relationship between discrete events ('Cause and Effect'), but the 'causal powers' or 'liabilities' of objects or relations, or more generally their ways-of-acting or 'mechanisms'. People have the causal powers of being able to work ('labour power'), speak, reason, walk, reproduce, etc., and a host of causal liabilities, such as susceptibility to group pressure, extremes of temperature, etc." (Sayer, 1992, pages 104–105; compare 1984, page 95). This is taken to characterise the realist view of causation, not just one version of causal realism. On this view, "Powers and liabilities can exist whether or not they are being exercised or suffered; unemployed workers have the power to work even though they are not doing so now and iron is liable to rust even though some pieces never get the chance to. ... Causal powers and liabilities may thus be attributed to objects independently of any particular pattern of events" (Sayer, 1984, pages 95–96; 1992, page 105). Thus causal powers are thought to enjoy irreducible existence.

The concept of necessity is used to characterise the relationship between causal powers and their categorical bases, their 'natures'. "The nature of constitution of an object and its causal powers are internally or necessarily related: ... gunpowder can explode by virtue of its unstable chemical structure; multinational firms can sell their products dear and buy their labour power cheap by virtue of operating in several countries with different levels of development" (Sayer, 1984, page 96; 1992, page 105). The relationship between causal powers and their manifestations is thought of as contingent. There are two phases or aspects of this contingent relationship: the exercise of causal powers and the impact of exercised powers. It is contingent whether the causal powers "are ever activated or exercised. When they are exercised, the actual effects of causal mechanisms will again depend upon the conditions in which they work. The relationship between causal powers or mechanisms and their effects is therefore not fixed, but contingent" (Sayer, 1984, page 99; compare 1992, page 107, emphasis in the original).

These concepts provide broader ontological services. Sayer holds that the classical distinction between necessary (or internal) relations and contingent (or external) relations is important for a realist human geographer. He understands them in a traditional fashion: "the relation between a master and a slave is internal or necessary, in that what the object is is dependent on its relation to the other; a person cannot be a slave without a master and vice versa. Another example is the relation of landlord and tenant; the existence of one necessarily presupposes the other" (Sayer, 1984, page 82; 1992, page 89). Not so in the case of external relations: "The relation between yourself and a lump of earth is external in the sense that either can exist without the other. It is neither necessary nor impossible that they stand in any particular relation; in other words it is contingent" (pages 82/89). The concept of structure is then defined in terms of internal relations. "Sets of internally related objects or practices may be termed 'structures'. The landlord—tenant relation itself presupposes the existence of private property, rent, the production of an economic surplus and so on; together they form a structure" (Sayer, 1984, page 84; compare 1992, page 92).

All in all, GeoRealism contains a specific ontology or metaphysics whose key categories—causal power, nature, necessary and contingent relations, internal and external relations, and structure—provide specific contents to the 'X part' of ontological realism. Our point is simple, almost trivial. What GeoRealism offers us is not *the* realist ontology, but rather one possible realist ontology: realism about powers, necessary

relations, etc. We are not suggesting that power realism does not qualify as causal realism—it surely does, even though it is a controversial doctrine among realists (we ourselves feel attracted to it). What we are suggesting is that power realism is just one form of causal realism. This implies two things to which we wish to draw attention. First, power realism is more specific and thereby narrower in scope than generic causal realism. (4) Second, an account of causation in terms of powers is not 'the realist view of causation'.

Indeed, GeoRealists often conceive of the connection between this specific metaphysics and realism as a conceptual one. Take Derek Gregory's 1994 dictionary entry on 'realism'. He writes that "its ontology"—that is, the ontology of realism—comprises "mechanisms and structures" where structures are "sets of internal relations which have characteristic ways-of-acting, i.e. 'causal powers and liabilities' which they possess by virtue of what they are and which are thus 'necessary', and which are realized through 'mechanisms'" (Gregory, 1994, page 500). Another example is in a comparative account of metatheoretical positions in human geography: "Realism ... views causality in terms of the 'nature' intrinsic to what is being studied, the interactions between that and other things, and the causal powers and liabilities involved" (Cloke et al, 1991, page 136). As a consequence of this definitional strategy, those forms of realism that do not share this specific ontological conception of the causal constitution of the world are excluded from the realist camp: causal realisms other than power realism are excluded solely by the power of definitional stipulation. This is another way of saying that GeoRealism is narrow as realism: it suffers from domain narrowness.

3.2 Metaphysics of society

The second conceptual addendum in GeoRealism amounts to linking realism to a specific metaphysics or ontology of the social world. CoreRealism does not imply any particular social ontology. It simply states that 'X exists' and assumes that the existence of X is objective. This may be applied to material, mental, moral, and social entities and properties. With respect to social ontology, this means that whatever society is, and whatever social entities are, a realist about those things takes them to exist independently of particular theories of them. Thus, ontological realism is in principle compatible with, and does not, a priori, proscribe against, any particular views of the constitution of society: it rather allows for a variety of more specific social ontologies. These include, to cite two extremes, Durkheimian collectivism in sociology (Durkheim, 1895/1964) and Austrian individualism in economics (von Mises, 1949), both of them traditionally linked with a realist outlook [for a realist interpretation of the former, see Jones (1999); and of the latter, see Mäki (1990)]. This means the domain of realism with respect to social ontology is rather broad, capable of accommodating a variety of conceptions of the constitution of the social world. This domain can be made narrower by focusing on the claim that 'social entities and properties exist' and prohibiting reductionist readings of the sort, 'social entities and properties exist in the sense that they are constituted by real individual entities and properties to which they can be reduced'. This will rule out reductionist individualism but will still allow for a wide variety of social ontologies that take social entities and properties to exist sui generis with a variety of further ideas about what they are and how they are related.

⁽⁴⁾ It is indeed advisable to refer to this as a *version* of realism, such as in saying, "the Bhaskarian version of scientific realism ... ascribes causal powers to human reasons and social structures (realist ontology)" (Yeung, 1997, page 52). But it should be noted that *realist ontology* as such does not imply anything about the existence of (a) causal powers, (b) human reasons, or (c) social structures. Indeed, other versions of ontological realism deny their existence: realists about universals may deny powers, realist materialists deny reasons, realist individualists deny structures.

GeoRealism, in contrast, is usually described as subscribing to a fairly specific account of the constitution of society, namely structuration theory (Giddens, 1984). It "has been promoted as a viable approach for the study of human geography" (Johnston, 1986, page 61) and is intimately linked with the realist outlook: "Realist researchers proceed from a world view that takes as given the existence of unseen social structures that both influence, and are influenced by, the actions of individuals. Realists identify the structures and agents present in society, and the way they tend to act. The action is embedded in particular social structures" (Lawson and Staeheli, 1990, page 13).

A certain ambivalence seems to prevail, however, about how to establish (or express) the link between realism and structuration theory. Here, geographers are wavering between thinking of it as a conceptual connection and as a contingent connection. In Lawson and Staeheli's (1990, page 13) view (quoted in the introduction), realism and the preoccupation with structures and agency are conceptually connected. Yet, formulations abound of what seems to be a contingent connection thesis: "realism is often coupled with structuration theory" (Gregory, 1994, page 501); "realism has been increasingly harnessed with structuration theory (Cloke et al, 1991, page 134); "realism is also important to human geography because of its associations, both potential and actual, with 'structuration theory'. ... Realism entertains some ontological overlap with structuration theory" (Cloke et al, 1991, page 134); "Another link between realism and structuration occurs through Giddens' contextual theory of the time - space constitution of social systems" (Cloke et al, 1991, page 134). Many formulations just establish the link but leave the nature of the relationship open: they range from strong ones according to which structurationist claims "are derived from a realist philosophy of science" (Gregory, 1982, page 255) to weaker versions such as the one in which three themes are 'intertwined', namely those of the relative importance of structure and agency, and how they might be reconciled in a single approach; the efficacy of a realist methodology; and the importance of localities (Peet and Thrift, 1989, page 15).

What seems clear is that many human geographers who have advocated realism also typically advocate structuration theory and vice versa, and often talk about them as if they went together: "the problem of the making of structures through human agency is a main preoccupation of realist approaches" (Peet, 1998, page 164). Our point here is that structuration theory is neither necessary nor sufficient for realism. One may be an ontological realist about social objects without subscribing to structuration theory, and one may accept structuration theory without being a realist. We believe that the themes addressed by structuration theory are relevant for human geography, but propose to obliterate any conceptual connection with realism. An attempt to establish a conceptual link between realism and structuration theory would serve to burden the concept of realism inappropriately and to contribute to the domain narrowness of GeoRealism. (5)

3.3 'Realist methodology'

We regard the notion of particular 'realist' ways of doing research as a third addition to generic CoreRealism: a component that contributes to the domain narrowness of GeoRealism. Various expressions are used to convey the idea that realism as such implies a definite conception of the appropriate methods of inquiry: "realist methods" (Sayer, 1985a, page 161; Foord and Gregson, 1986, page 197); "realist research" (Sayer, 2000,

⁽⁵⁾ One aspect of our view seems close to that expressed by Cloke et al (1991, page 149–151): "realist thinkers have tended ... to allow the philosophy of realism to inform their view of structure and agency. Thus the debate over the relative roles and natures of structure and agency in social change has been something realism addresses from a particular epistemology and ontology ... rather than being something seen as the keystone in the building up of that viewpoint."

page 22); "realist practice in human geography" (Cloke et al, 1991, page 152–158); "a realist approach" (Cloke et al, 1991, page 158); "a realist perspective" (Cloke et al, 1991, page 159; Johnson, 1987, page 211). When specified, these expressions often refer to the preferred way of doing empirical research (see Cloke et al, 1991, pages 152–158). In Ron Martin's words, "Methodologically, geographers have abandoned positivistic accounts in favour of realist approaches, in which explanations are built 'from below', often relying upon close dialogue with individual agents and organisations, and linking this 'local' knowledge with wider, larger stylised facts and conceptual frameworks" (Martin, 1999, page 81).

It seems the methodological doctrine has appeared in two versions in GeoRealism. The first—one could say the 'authorised' version—draws rather directly on the metaphysics of causation (and, derivatively, of society). The second version narrows the first version further, adding an extra burden vis-à-vis CoreRealism.

We begin with the version that is fairly directly derived from the metaphysics of causation and is mainly designed by Sayer (see Sayer, 1984; 1992; 2000, pages 19 – 22). It builds on the distinction between necessary and contingent relations: To get at necessary relations related to structures and mechanisms, theoretical categories are needed; this amounts to abstract research. And, to establish contingent relations in actual events, empirical study is needed; this amounts to concrete research. For Sayer, conceptualisation and abstraction lie at the heart of doing realist research: "We try to reduce a complex entity into its component parts, abstracting them out one by one in order to consider their properties ... realism attempts to formalize and develop abstraction ... where necessary relations are discovered, we can make strong theoretical claims about them Empirical work will then be needed both to check such claims and to discover the configuration (including their spatial form) of the many relationships, which are contingent" (Sayer, 1985a, pages 170-171). In any particular research area, "Progress in terms of cumulative knowledge ... needs intensive research, repeated movement between concrete and abstract, and between particular empirical cases and general theory" (Sayer, 2000, page 23). This 'authorised' version is in no way implied by CoreRealism, but it is a natural outgrowth from GeoRealist ontology (and we ourselves find it largely a sensible methodology). The point is that there are numerous other methodological principles and procedures that are compatible with CoreRealism.

Whereas the first version puts more or less equal stress on theoretical abstraction and empirical inquiry, the second version is heavily inclined towards emphasising the primary significance of empirical work. Although abstraction, conceptualisation and theorisation are central for Sayer, much of the subsequent commentary and geographical research practice puts considerable stress on conducting extensive empirical research by way of rich descriptions of particular cases based on "close dialogue with individual agents and organisations" (Martin, 1999, page 81; see also Marchionni, 2004). We might call it the 'dirty hands' version: it suggests that realism requires geographers to delve into the richness of empirical detail in particular spatiotemporal circumstances. The need to understand 'uniqueness and difference' was emphasised in the late 1970s and the early 1980s (compare Scott, 2000, page 491), and this was accompanied by the rise of a methodological credo amongst geographers celebrating the centrality of understanding the particularities in particular cases. This search for particularity was seen as supported by GeoRealist methodological views: "In realism, as Sayer (1984) argues, one can produce an explanation, a statement of what caused an event, but one does not assume that this applies to other events. ... Positivists explain with reference to general laws; realists explain with reference to the particular case" (Johnston, 1986, page 88). So much emphasis was given to the 'realist method' of conducting empirical research on particular cases that it has been judged as GeoRealism's main achievement: "Perhaps realism's greatest

impact has been in promoting the thoughtful conduct of empirical research" (Peet and Thrift, 1989, page 17).

We are not arguing that the two versions of 'realist methodology' are in conflict with CoreRealism. We are just saying that they represent specific and narrow conceptions that appear to rule out other views that are equally consistent with realism. Forms of hypothetico-deductivism have traditionally been linked with realism: one conjectures a hypothesis about some real relation, derives implications, confronts them with empirical evidence, and draws conclusions about the truth of the hypothesis. Covering-law explanations may be lined up with realism: one believes there are general laws in the real world, does one's best to discover them so as to make true claims about them, uses one's best conjectures about them in explanations, and explains phenomena in terms of such general-law statements conjoined with singular claims about contingent initial conditions. Forms of modelling may be attempts to truly describe the structure and functioning of real causal mechanisms in isolation from interfering causal influences—regardless of whether the models are quantitative or qualitative, mathematical, verbal, or diagrammatic. Moreover, realism dictates nothing about whether and to what extent these activities should be constrained by empirical evidence. Rationalists relying on a priori reasoning may commit themselves to realism (simply by aiming at nonepistemic truths about objective reality) just as legitimately as those who believe that the only way to get to the truth about the real world is by way of detailed historical narrative or a 'grounded theory' approach or 'triangulation'. And generic realism as such has no preferences about kinds of empirical evidence and their production, such as those generated by interviews, textual exegesis, laboratory experiments, field experiments, or statistical sampling. None of the views listed in this paragraph is unproblematic—some of them are seriously contestable—but their problems do not lie in being incompatible with realism.

We might say the only constraint on methods implied by realism is this: one's conception of appropriate methods of inquiry should be constrained by one's specific ontology of the world. But an ontology can only be very broadly constraining instead of strictly determining: instead of a one-to-one there is a one-to-many relationship between one's ontology and one's methodology. And realism does not determine one's specific ontology, as we have seen: there is also a one-to-many relationship between ontological realism and specific ontologies. Thus a wide variety of methods of inquiry is compatible with realism: the domain of 'realist methodology' is very large indeed. The two versions of GeoRealist methodology manifest its domain narrowness. Generic CoreRealism is methodologically more permissive and pluralistic.

Interestingly, the methodological permissiveness of CoreRealism can be used to save the dirty hands version of GeoRealism from a peculiar charge, namely the charge of being antirealist! As we saw, the dirty hands version is not particularly optimistic about the role of general theory in research. Not only does it tend to downplay or marginalise general theory, it is also straightforwardly pessimistic about abstract and unified theories that seek to unify broad ranges of diverse classes of phenomena. If it is right to say there was an atheoretic tendency of this sort in GeoRealism (there has been some debate about this amongst geographers), then a vast gap opened up between it and scientific realism in the philosophy of science. It is one of the central thrusts of scientific realism to seek philosophical arguments for optimism about scientific theories and models, about their capacity to capture truths about the world and their capacity to unify. The dirty hands version thus appears as an antirealist position. (6)

(6) In those postmodern times, in the late 1980s, it was not uncommon to attribute antitheoretical attitudes to realism: "realism ... incorporat[es] the scepticism about the powers of theory characteristic of late 20th century philosophy" (Peet and Thrift, 1989, pages 16–17).

Yet, the methodological permissiveness of CoreRealism offers the possibility of reasoning along the following lines: our ontological conviction suggests that the social world as studied by human geography is a fragmented set of unique and particular facts devoid of uniformity and general laws or mechanisms; therefore the only reasonable way of studying it is by way of idiographic descriptions of unique organic wholes. And other realists with different ontological convictions may question this view without violating any *realist* tenets.

4 Retrospect and prospect

4.1 Contextualizing GeoRealism

The context of the adoption and evolution of GeoRealism involves a phase in the development of human geography itself. It has evolved along a historically specific, path-dependent process and it is in terms of this process that GeoRealism can be made intelligible. First, GeoRealism relates to the debates on theory and method in geography. In the 1960s, the 'quantitative revolution' broke through within human geography. In contrast to the traditional atheoretical and idiographic regional geography, the discipline was no longer a 'craft' aiming at idiographic descriptions, but a 'science' that formulates and works with theories. In due course, however, its 'nomothetic' approach relying on quantitative models to capture empirical regularities came under critique: 'theories' had become models; 'data' were taken as given; concepts remained largely unreflected. What was found to be wrong with geography was the result of 'positivism'. This critique gave rise to an era of 'postquantitative' geography. This is geography that was concerned with conceptualisation, supported the reemergence of idiographic—yet theoretically informed—research, and accepted historical analysis and narratives as explanatory (Sayer, 1985a, pages 159-161; Scott, 2000, pages 491-492). For many, GeoRealism offered the philosophy of science for the postquantitative geography. It has been claimed that "realism is built first and foremost on a rejection of positivism" (Cloke et al, 1991, page 135; see also Sayer, 1982, page 83). It was readily absorbed by the positivism-aversive scientific community emphasising "the differentiated and stratified character of the world" (Gregory, 1989, page 356). Recognising this phase in geography's development helps to explain why the specific metaphysics of causation discussed in section 3.1 and the specific methodological doctrines discussed in section 3.3 have been included in GeoRealism.

Second, the 'postpositivist' or 'antinomothetic' thrust for understanding uniqueness and difference led geographers to look into the richness of particular cases. On Trevor Barnes and Derek Gregory's (1997, page 86) interpretation, critical realism was "a philosophy that among other things attempted to create an opening within theory for concreteness and contingency In particular, critical realism lay behind the call in human geography during the mid-1980s for new place-based, local inquiries (for example, locality studies) that took geographical specificity and uniqueness seriously." (8) These concerns and some of GeoRealism's specific features may be seen as having given rise

⁽⁷⁾ Much confusion has appeared here, however, as Johnston (1986, page 4; see also chapter 5) rightly observes: "Much of the debating in human geography in recent years has ranged over the philosophy of positivism. A lot of it is ill-informed, since it equates positivism with both scientific rigour and quantification."

⁽⁸⁾ David Harvey and Allen Scott (1989, page 221) placed realism in the same camp as deconstructionism, postmodernism, poststructuralism, and pragmatism, all of them withdrawing from any attempt to create theoretical syntheses (see Scott, 2000, page 492 for a milder criticism). On the association between locality studies and postmodernism, see, for example, Liz Bondi (1990), and for a critique of the confusions involved, see John Lovering (1989).

especially to the dirty hands version of the methodological addendum (section 3.3), with the conviction that the realist method provides access to local specificity. (9)

And, third, since the earlier atheoretical phase in the evolution of human geography, geographers have also searched for closer ties with general social theory (compare Massey, 1989). In Barnes and Gregory's (1997, page 85) view, "the history of human geography since the 1960s is one of a continual importation of grand theories devised elsewhere, a result partly of pressures to conform to other social sciences, and partly a lack of indigenous grand theory on which geographers could draw." Following other social sciences, geographers were struggling with Marxist and more extreme structural functionalist forms of 'grand theorising'. Anthony Giddens's (1984) idea of structuration offered a compromise between individualism and holism in the form of a processual duality of individual agency and social structure. This historical background might help partly explain the inclusion in GeoRealism of the specific social ontology discussed in section 3.2. So strong was the association between GeoRealism and structuration theory, that still recently for Richard Peet (1998, page 165) "Realism was often seen as a radical alternative to a 'discredited' Althusserian structuralism".

So, it seems that geographers created and used GeoRealism in their three disciplinary crusades, to a large extent coinciding with one another since the late 1970s: against positivism; for (the lost) local specificity; against structural functionalism/Marxism. In addition to developments within geography itself, reference must also be made to the role that Bhaskar's work has played in British social science. His writing is heavily polemic, and thus perhaps found appealing by critically minded scholars. His ideas and arguments are highly simplified, and thus perhaps easily accessible to nonphilosophers (and, interestingly, ignored by philosophers). They have become part of a sort of working philosophy for some critically oriented practising social scientists especially, but not only, in the United Kingdom. It may have been just a historical accident that these ideas were available at the time when geographers needed something like them, so they grabbed them and put them to use subject to the constraints imposed by the developments within geography itself. On this interpretation, GeoRealism emerges as a historically highly contingent phenomenon.

For those who do not (or no longer) share the causes of the three crusades, GeoRealism may have lost its relevance. Metatheoretical challenges now come from other directions, however. Generic CoreRealism, we argue, has resources to tackle them. As GeoRealism evolved to serve other purposes, it appears incapable of meeting many of the new challenges.

4.2 Liberating realism

We have argued that GeoRealism is a thick and specific version of realism and that its identity as realism is rather weak. The *thickness* of GeoRealism is a result of the three addenda: specific metaphysics of causation, specific social ontology, and the doctrine of realist methodology. The *weakness* of GeoRealism as realism is a result of the three omissions: lack of an elaborate account of objective existence and of objective truth, and the neglect of pressing epistemological issues such as that of underdetermination. These features of GeoRealism have consequences that one might want to avoid.

The consequences of thickness are obvious. If one defines the term 'realism' in terms of rather specific ideas rather than keeping it abstract, one thereby narrows the domain to which the term applies. Defining 'realism' in terms of the contents of GeoRealism results in the dismissal of other realist views as nonrealist by way of a

⁽⁹⁾ Note that Sayer (for example, 1991; 2000, page 138) has strongly argued against such associations between realism and the study of local contingency.

narrow monopolistic usage of 'realism'. As an outcome, the descriptive adequacy of the metatheoretical self-image of the discipline may be damaged. This sort of definitional strategy distorts the terms of fair communication and at worst may serve to replace genuine scientific (theoretical and empirical) debate by philosophical label making and label imposition of an ad hoc kind. Another possible victim is the ideal of pluralism and the accompanying wish for mutually inspiring communication between different approaches. The distance between two or more variants of realism will appear relatively easy to travel whereas the bigger gap between realism and nonrealism may seem hard or impossible to bridge. Some scholars with intuitions in line with one or another form of realism may be turned away if realism is equated with the full GeoRealism package, perhaps with political connotations. The admission of a broad plurality of kinds or realism will have liberating effects and help avoid these consequences. It liberates realism from fixed and narrow philosophical, scientific, and political connotations. It liberates 'realism' to be used of realisms other than GeoRealism. It liberates realism to join pluralism. It liberates from a priori definitional links in virtue of which it is at most able to accomplish certain special and limited tasks (the three crusades) in a particular problem situation characteristic of recent historical epochs in human geography.

The consequences of weakness are different. Although the thickness of GeoRealism serves to exclude theories and approaches that are *compatible with realism*, its weakness as realism results in an incapacitation in dealing with some positions that are *incompatible with realism* (or whose compatibility with realism is an open question). Because of its resource narrowness, GeoRealism lacks the resources (such as elaborate notions of existence and truth) that would be needed for analysing various kinds of social constructivism so as to determine whether they are to be treated as friends or as foes, and what arguments to use in welcoming the former and resisting the latter. Some forms of social constructivism are antirealist, whereas others are not—but it is hard to tell without refined philosophical tools. The focus of GeoRealism on (the otherwise supportable) power ontology has led to powerlessness in some of the most significant contemporary debates. Equipping one's realism with a broader and sharper philosophical toolkit will have liberating effects in yielding it greater analytical and argumentative powers in managing deep and hard intellectual issues.⁽¹⁰⁾

We want to block a possible misunderstanding. We have argued for the importance of recognising an abstract CoreRealism and insisted that any doctrine worth the name 'realism' must be compatible with it. We have not claimed that CoreRealism is all there is to realism. Nor have we claimed that it is inadvisable to develop thicker or more specific forms of realism. On the contrary, we recognise the variety of kinds of scientific disciplines and disciplinary practices as well as the importance of developing specific forms of realism that are sensitive to the peculiarities of those disciplines. We are skeptical about the possibility of a single global realism capable of accommodating all disciplines and their specific features in an enlightening manner. We are in favour of a series of local scientific realisms instead (see Mäki, 1996; 2003), each tailored to accommodate one type of discipline (such as realism about physics, realism about biochemistry, realism about archaeology, realism about cognitive science, realism about economics, realism about human geography—or even about smaller units such as research fields or particular theories such as particle physics, evolutionary biology, or queer cultural geographies). It is a desideratum of any local realism that it meets two constraints: the contents of Core Realism and the peculiar features of the local discipline.

⁽¹⁰⁾ In his 'postmodern-realist encounters' Sayer (2000) offers what seem to us promising beginnings in dealing with the new challenges. It also seems to us that here Sayer largely takes departure from the thick and narrow GeoRealism and employs a broader range of straightforward CoreRealist tools.

In regard to the first constraint, we have argued that GeoRealism misses some of the key tenets of CoreRealism, thus obscuring and weakening its identity *as realism*. GeoRealism seems to do a better job in regard to the second constraint: it has been responsive to the special characteristics of human geography. But it is not a job perfectly well done: a specific philosophical system has been borrowed from outside (Bhaskar) instead of having been developed systematically from within geography in close and critical interaction with a rich variety of philosophical resources. This may slightly obscure its status *as a realism about human geography*.

It is natural that the reception of a philosophical doctrine such as realism in any specific scientific discipline or research orientation is accompanied by modification: selection, specification, refinement, and expansion. The process can take on two forms. Either the concept of realism itself remains intact or it becomes transformed. In the first case, the modification of CoreRealism(s) does not affect the definition of realism, whereas in the second it does. In the first case there is a *contingent* connection between realism and various addenda, whereas in the second there prevails a *conceptual* connection. It seems to us that human geographers have wavered between these two lines and often have been trapped by the second. GeoRealism had better be liberated from this latter policy.

5 Concluding remarks

We have shown that the realism held by many human geographers is a special variant. This variant is narrow in two ways. It is narrow in scope because of its thickness, because of its specific contents in the areas of ontology and methodology. And it is narrow in its philosophical resources because of which its identity as realism is rather weak. Its thickness results in excluding from the realist camp approaches and theories that are compatible with realism in the sense that this notion is understood in the philosophy of science. Its weakness makes it rather powerless in dealing with some contemporary intellectual currents that challenge or appear to challenge realism. Another way of putting these ideas is to say that there is much more to realism than GeoRealism, and that this can be taken to mean two things. There are many more specific forms of realism—selective specifications of CoreRealism—than just GeoRealism. And CoreRealism contains essential realist resources not selected by GeoRealism, turning it weak as realism.

From an insular GeoRealist point of view, geographers may have felt safe with their chosen realism, believed to be grounded in prominent philosophical literature. This sincere belief has persisted over the years. "Realism is a philosophy of science based on the use of abstraction as a means of identifying the causal powers of particular social structures In many ways, realism consists of a state-of-the-art philosophy of science allowing for structural explanation but incorporating the scepticism about the powers of theory characteristic of late 20th century philosophy" (Peet and Thrift, 1989, pages 16–17). The 1994 entry on 'realism' in the *Dictionary of Human Geography* suggests that Bhaskar's *A Realist Theory of Science* and *The Possibility of Naturalism* are "two of the most influential *philosophical* expositions of realism" (Gregory, 1994, page 500; emphasis in the original). In the same vein, a more recent statement suggests that "the Bhaskarian version of realism (and Andrew Sayer's version of critical realism in human geography) ... is the most accepted version in the philosophical literature" (Yeung, 1997, page 71, footnote 1).

Contemporary philosophers of science would not recognise GeoRealism as any of the realist positions they have been busy debating over the last three decades and more.

Regrettably perhaps, they do not pay attention to Bhaskar's work. And the mission of scientific realism in the philosophy of science has been and still is to defend an optimism about the powers of scientific theory. It thus seems that, on this matter, the continuity between the two disciplines, philosophy and geography, has been broken. There is a more general principle from which the desideratum of disciplinary continuity can be derived. It is the norm according to which interdisciplinary work is to be informed and critically reflective about the developments in the relevant neighbouring disciplines. GeoRealists subscribe to this norm in their work as geographers. It might be to their benefit to observe it also in their work as realist metatheorists.

Finally, we may ask why geographers nowadays invoke the notion of realism less frequently than they used to. Three possible reasons come to mind. First, many geographers may have internalised realism as a semiofficial metatheory of human geography, taking it for granted so as not to require explicit mentioning. It is possible that GeoRealism has been so strongly ingrained in their thinking that 'it does not need to be said'. Second, it is possible that many geographers have been charmed by the explicitly antirealist varieties of postmodernist and social constructivist thought and have therefore turned away from realism. The third option emerges perhaps more directly from our analysis: geographers have intuitively seen the limitations of GeoRealism: the limited philosophical toolkit; the fixation with the abstract vocabulary of structuration; the association with intensive methods of empirical inquiry. Simply because GeoRealism has become so specific and narrow, evolved so as to serve a limited set of historically contingent purposes, it is no surprise if it fails to serve other purposes that keep emerging as scholarly work and communication advance. Some may be misled to conclude that realism has run its course, whereas they should perhaps consider concluding that GeoRealism—at least as a 'full package'—has run its course. In one somewhat dramatic scenario, realism has to be defended against GeoRealism if the latter serves to put the former under serious threat. For many of us, after all, science is and should be an institutionalised endeavour of discovering relevant truths about reality, of finding out about the way the world works. On this principle, to defend science is to defend realism about science.

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