# King's Research Portal

# K ING'S College LONDON

**University of London**

*Centre for Public Policy Research*
*Working Papers Series*
*Paper No: 1*

# An Introduction to Critical Realism as a Meta-Theoretical Research Perspective

## John Owens
*King's College London*

# Abstract

This paper offers an introduction to Roy Bhaskar's theory of critical realism, presenting it as a distinct meta-theoretical perspective from which research in the social sciences may be conducted. It begins by examining how critical realism emerged in reaction to the inadequacies of strong forms of the positivist and constructionist traditions, before considering the major conceptual and methodological differences between each of these positions. Against this background, critical realism is characterised as a 'maximally inclusive' meta-theoretical perspective which is able to accommodate the strengths of both the positivist and constructionist positions while avoiding their weaknesses.

## *1. Introduction*

This paper aims to provide an introduction to critical realism for those engaged in social scientific research. Conducting research in the social sciences invariably involves making certain philosophical assumptions, both about the nature of the object of research and also about the nature of the world in which it is situated. Indeed, one might say that the researcher must adopt a particular 'meta-theoretical perspective' from which to proceed (Bhaskar and Danermark 2006). Researchers tend to work within the parameters of an intellectual tradition, and in doing so they often inherit a meta-theoretical perspective which shapes their methodology and the way in which they interpret their results.

It might be argued that the discipline of social science provides an exception to this account. After all, many of the dominant positions in contemporary social science (which I will characterise broadly as 'constructionist') have emerged, at least in part, in reaction to the restrictions which strong forms of positivism place on the possibility of conducting social scientific research. Thus, social scientists might well be thought to be more aware than most of the problems which an inadequate intellectual tradition can have for a researcher. However, despite the innovative and reflexive spirit which characterises much contemporary social scientific method, I suggest that strong forms of constructionism which fail to pay sufficient attention to the ontological nature of the object under investigation and the world in which it is situated will also provide an inadequate position from which to conduct research. While there is much to be gained from the criticism that constructionists have directed towards positivism, I suggest that strong forms of constructionism also struggle to provide a credible ideological foundation upon which to base research in the social sciences, and argue that more nuanced forms of realism are preferable. This may include weak forms of constructionism which understand that social phenomena are not exhausted by their nature as socially constructed concepts, as well as sophisticated positivist positions which allow for the existence of socially constructed phenomena. However, of all such nuanced realist positions which tread the middle ground between strong forms of positivism and constructivism, I argue that Roy Bhaskar's *critical realism* provides the strongest meta-theoretical perspective from which to conduct research in both the natural and social sciences.

My aim for this paper is not to provide an in depth discussion which compares in detail the strengths and weaknesses of the positivist, constructionist and critical realist perspectives. Rather, I hope to achieve the more limited aim of introducing critical realism by describing how it has

emerged in reaction to the inadequacies of the strongest forms of the positivist and constructionist traditions. My treatment of these traditions must therefore be partly understood heuristically, and indeed I accept that once one moves to the weaker versions of these traditions the labels which separate them from critical realism lose much of their significance. However, while it may be consistent with weak forms of positivism and constructivism, I believe critical realism presents the most sophisticated meta-theoretical perspective from which to conduct social scientific research since it is able to capture insights from the positivist and the constructionist traditions and present them in a single coherent, "maximally inclusive" position (Bhaskar and Danermark 2006: 280). Presenting critical realism in such terms will inevitably introduce a critical dimension to my analysis, though a full defence of critical realism must be left for another occasion. I will begin by considering the positivist and constructionist positions, before moving on to present critical realism.

## 2. Positivism

Put simply, I shall describe 'positivism' in broad terms as a realist meta-theoretical position which understands the world to be a concrete, mind independent entity, existing 'out there' to be discovered by researchers through a process of observation. The emergence of positivism is often attributed to Auguste Comte who, in the nineteenth century, aimed to provide a systematic approach to developing a *positive* body of knowledge of the world, in contrast to the more speculative assertions provided by theology or metaphysics. Positivism developed through the influence of Humean empirical realism which took the world to be "constituted by the objects of actual… experiences" (Hartwig, 2007: 167), making observation of the world its starting point for knowledge claims. In so much as observation appears to routinely generate positive knowledge about the world, empiricism seems an extension of common sense attitudes towards research; our claims to knowledge of the world can be verified or discredited to the extent that our experience of the world supports these claims. The converse of this is that any claim to knowledge which cannot be verified through observation cannot be thought of as providing positive knowledge of the world and should therefore be discarded. *Logical positivism* developed this position into its strongest form by claiming that any statement which could not be verified through observation not only could not be claimed to be true, it must also be declared meaningless. However, since logical positivism is committed to a central statement which is itself unverifiable through observation, it thereby renders itself meaningless according to its own criteria. As such, logical positivism has become widely discredited, but weaker forms of positivism share its suspicion of the unobservable. Today the most notable form of positivism is perhaps the 'law explanation' model. This approach was developed by the work of Carnap (1996), Hempel (1959) and Popper (1959), who saw the role of research in the natural and social sciences as seeking to find universal laws of causal explanation for observed events. Law explanation positivism seeks to build theoretical models in the form of covering laws that will explain the observed phenomena. Again, the sceptical Humean attitude to the unobservable is present: since the researcher tends to observe only the constant conjunction of events rather than the particular mechanisms which cause them, the actual mechanisms which cause observable events are conceptualized as explanatory laws and denied existence in their own right.

Bhaskar argues that common to all forms of positivism is a "monovalent" "actualist" ontology (Bhaskar, 2008: 64). That is, he characterizes positivism as subscribing to the view that the world is composed of a single ontological domain in which all things are observable. Thus, for positivism,

observation forms the criteria for existence, and that which cannot be observed cannot be rightly said to exist. As such, non-natural objects which cannot be directly observed (including various psychological, social and cultural objects) are regarded with suspicion by positivism, if not denied existential status altogether. Moreover, as is seen in explanatory law positivism, relations and causal structures themselves tend to be considered to be imaginary cognitive constructs rather than concrete features of the world itself. For instance, under law explanation positivism gravity is conceptualized as a law which explains the way in which objects are attracted to one another rather than a substantive part of the world. Alternatively, methodological individualism, which can be understood as reliant on a positivistic meta-theoretical position, argues against the existence of unobservable social structures, seeing them as mere aggregates of individual behaviour. This emphasis on empirical observation leads to a methodological approach which focuses on the researcher cataloguing the constant conjunctions of observable events. Quantitative analytic techniques allow the researcher to develop an understanding of the patterns in which events are observed to occur. This understanding supposedly enables them to provide both explanations about the observed phenomena and predictions of their future occurrence, although a firm commitment to the observational criteria for existence leads positivism into the difficulties posed by Hume's problem of induction. Based on Hume's commitment to empiricism, this problem calls into doubt the existence of the unobserved causal structures which are responsible for the observed phenomena, thus rendering any claims to knowledge which are based on the recurrence of past observation problematic.

## 3. Constructionism

Law explanation positivism has been criticised as providing an unsatisfactory approach to both the natural and social sciences by those who would replace it with a qualified form of 'holistic' positivism, and those who reject the central tenants of positivism altogether in favour of an entirely different meta-theoretical approach to research. I will examine the latter position first before briefly considering the former.

Perhaps the most significant criticism of the positivist tradition has come from those social scientists who found that strong forms of positivism provided them with an inadequate perspective from which to conduct research into social phenomena. The positivist tendency to discount non-natural and unobservable entities as legitimate objects of research bred an opinion that social science could be conceived of as a subsection of the natural sciences, where the same covering law theories of explanation were appropriate. For instance, positivism supplies the theoretical foundation for theories like behaviorism in psychology and rational choice theory in economics which seek to describe psychological and social activity according to covering laws of explanation. Moreover, as we have seen already, the reductive tendency of methodological individualism encourages social objects to be considered unsuitable objects for investigation.

Broadly speaking, what I shall call the 'constructionist' meta-theoretical perspective developed out of the restrictions which positivism imposes on social scientific research rather than as a result of any concern about the ontological assumptions that positivism makes. Although this label lumps together a rich variety of constructionist traditions, common to them all is a resistance to the reductive methodology of positivistic social scientific research and a belief that social phenomena could not be adequately theorized through a process of observation and explanation. At least in part,

4

constructionism emerged out of a desire which many sociologists had for a research perspective which would allow them to do justice to the complex nature of social objects. This argued that social objects are not, (or at least not just), passively received through a process of observation, rather they are socially constructed through acts of interpretation and meaning ascription. Outhwaite (1987) describes how a 'hermeneutic critique' of scientific practice was developed in Europe by figures like Droysen, Dilthey, Windelband and Rickert and used to form a broadly hermeneutic approach to sociology which was later radicalised in the work of Gadamer and others and enriched by the linguistic tradition inspired by Wittgenstein and later figures like Winch and Collingwood. Winch (1958: 123) argued that the "social relations between men exist only in and through their ideas", implying that social scientists must incorporate into their research an awareness of the relevant concepts and rules which are in play. More broadly, constructionism understands the world, especially the social world, to be at least partly the product of social cognitive construction. Rather than merely observing how the world is, hermeneutics emphasizes that social scientific research should concentrate on how the world is constructed by the observer. Since human beings are always situated within some socio-cultural and linguistic framework, their tendency to engage in rule following behaviour must be seen within the local context in these rules are interpreted and given meaning. Thus, contra positivism, the study of the construction of concepts and the interpretation of events and ideas became an essential feature of constructionist social scientific methodology. Accordingly, qualitative research techniques were introduced which sought to better understand the way in which the world is interpreted and the processes by which agents ascribe meaning. The introduction of new qualitative techniques in the social sciences thus created a methodological division between natural scientific and anti-naturalist social scientific disciplines. Moreover, to some extent, this division was also philosophical since the hermeneutic critique of positivism highlighted the weakness of perspectives which fail to recognise that knowledge is a social product, mediated by a particular set of linguistic, socio-cultural, political judgements and interpretations (see Danermark, 2002). It describes how observations never take place from a neutral vantage point, rather access to external reality always involves a process of interpretation and conceptual construction. The strongest forms of constructionism occupy an anti-realist position, arguing that all reality is essentially a social construct (Lyotard, 1984). However, weaker forms of constructionism remain ambivalent to the debate between realists and anti-realists by ignoring questions of ontology and concentrating exclusively on questions of interpretation and meaning, thereby leaving open the possibility of a synthesis of constructionist and realist positions. Indeed, the most sophisticated forms of social constructionism, such as is provided by Searle (1995), do just this by grounding an account of the socially constructed aspects of the world within a wider realist understanding of a real, mind independent world of "brute facts".

Parallel to the development of the hermeneutic critique of law explanation positivism, a sophisticated form of "holistic" positivism emerged in the work of figures like Thomas Kuhn (1962), W.V.O. Quine (1970), Rom Harre (1970) and Mary Hesse (1966). Holistic positivism suggests that scientific theories cannot be tested in isolation from other theories, rather each theory must be seen as part of a coherent web of knowledge. Holism thus presents a sociologically enlightened approach to the natural sciences which undermines strong forms of law explanation positivism by suggesting that scientific method must respect the socially constructed nature of knowledge.

A holistic positivism on one hand and a weak form of social constructionism on the other represent qualified positions which reach out to one another across the ideological divide. In the next section I

present a third meta-theoretical position, critical realism, which goes further than these two positions by seeking to accommodate both a transcendental form of realism and a naturalistic form of constructionist social theory.

## 4. Critical Realism

Despite the force of its critique against positivism and the introduction of a valuable set of qualitative methodological techniques, constructionism is not without problems, motivating a search for a further alternative meta-theoretical position. I shall present critical realism in its two constituent parts: firstly in its response to positivism through the development of transcendental realism, and secondly through its opposition to constructionism detailed in Bhaskar's account of critical naturalism.

Bhaskar's transcendental realism objects first and foremost to positivism's conceptualization of causal mechanisms. Where positivism may understand terms like "gravity" to refer to an explanatory law which describes the causation of observable events, transcendental realism suggests that such terms are not merely explanatory constructs generated by human cognition but refer to real and concrete structures which operate within the world. Bhaskar (2008) insists that the world is composed of objects which possess causal powers by virtue of their internal constitutions. An object's causal powers interact with those of other objects to cause the events which are observed by the researcher. Moreover, Bhaskar argues that the world must be composed of concrete causal mechanisms in order for natural scientific enquiry to be possible, indeed, the task of natural science is simply to describe these causal mechanisms. To my mind this seems to embody a common sense scientific view of the world as determined by objects with particular causal powers, but it is a position which strong formulations of empirical realism and positivism cannot take up because of their commitment to empirical criteria for existence.

The basis for Bhaskar's assertion is the distinction he draws between epistemology, that which can be known (normally though observation), and ontology, that which is. He characterises positivism as routinely conflating these two concepts, committing what he dubs the 'epistemic fallacy' (Bhaskar, 2008). By accepting the principles of Humean empiricism, positivism understands the ontological to be a domain of the empirical, so that *what is* is limited by *what can be known*. Since causal powers cannot be directly observed, positivism suggests that they cannot be said to exist and so conceptualises them in the form of laws which explain observed regularities. By drawing a distinction between epistemology and ontology Bhaskar is able to argue that unobservable entities, like causal structures, exist on the basis that they play a causal role in the world, whether their effects can be directly observed or not. Bhaskar's criteria for existence is thus causal rather than observational. Indeed, he suggests that it is the nature of objects that determines their cognitive possibilities for us, not our cognitive abilities which determines the nature of objects since it is the natural constitution of objects that provides them with their particular causal properties. Thus, certain kinds of things (or 'natural kinds' to use the Lockean terminology) are governed by causal laws which make them behave in a specific way. Bhaskar describes this in terms of objects being governed by the natural necessity bestowed upon them by their constitutive causal powers. Natural necessity thus describes the necessary causal connection which governs the interactions between objects, taking us beyond the mere patterns of observed constant conjunctions described by

positivism to the deep interactions of each object's causal structures which determines the nature of these observable events.

One consequence of Bhaskar's argument is that it implies that, as well as containing an observable domain (what Bhaskar 2008 calls the '*empirical*' domain) where events are witnessed, the world must also contain a further domain beyond the scope of human experience where the interaction of causal structures which cause observable events takes place (the '*actual*') and a further unobservable domain where the underlying potential but unactualised causal structures of objects are located (the '*real*'). This schema is described as a 'depth ontology', to be contrasted with the flat, monovalent ontology of empiricism.

In presenting this account of depth ontology, Bhaskar's transcendental realism thus provides a deeper form of realism than is provided by positivism's empirical realism. Bhaskar suggests that scientific research should switch from concentrating on generating explanatory laws which describe observable events to develop a deeper understanding of the mechanisms which cause these events. This may seem like a trivial difference, but it is in fact significant: while a law is merely an explanatory model, a causal mechanism is a concrete and causally efficacious part of the world! Transcendental realism thus involves a move from studying the *imaginary* (i.e. unreal) laws described by positivism to *imagined* (but potentially real) causal mechanisms (Bhaskar, 2008). While this is obviously important for natural scientists, Bhaskar suggests it is also a vital step for social scientists. In parallel to natural science, critical realism suggests that social science should focus on developing an understanding of the mechanisms which cause social phenomenon with an added concern for making recommendations which will bring about the transformation of social outcomes through practical action.

Further to this account of depth ontology, Bhaskar describes an object's causal structures as being arranged in 'emergent' layers or 'strata' (Bhaskar, 2008) which reflect the natural divisions within nature. For instance, a human being is composed of various physical, biological, psychological, socio-cultural structures which engender it with the ability to cause certain outcomes to occur. As Andrew Collier puts it,

> "Nature... is a multiplicity of mechanisms jointly producing the course of events… these mechanisms are, so to speak, *layers* of nature, and are *ordered*, not just jumbled up together." (1994: 46, original emphases).

Structures at the most basic strata provide the basis from which more complex structures at higher strata can emerge. For example, all objects are composed of basic physical structures, but some more complex organic objects also contain chemical and biological structures which emerge out of these physical structures. In turn, these chemical and biological structures may give rise to the psychological structures of sentient beings, which in turn may generate socio-cultural structures through human activity. Basic structures at the lowest stratas of reality are effectively pre-conditions for, and partly explain, the existence of more complex structures at higher strata. It is important to note that as one moves up to higher strata, each structure contains a qualitative difference to the preceding structures from which it has emerged, providing a resistance to any attempt to describe an object in reductive terms. For example, social phenomena must be explained through reference to the interaction of social structures, and so cannot be adequately explained in reductive terms of the activities of structures at more basic strata (for instance, in the way that rational choice theory or

methodological individualism are prone to do).

Though transcendental realism certainly delivers a deeper form of realism than is described by the positivist's meta-theoretical perspective, when it is combined with his critical naturalism (1998) Bhaksar's position presents a far more nuanced, or *critical* form of realism.

Critical naturalism develops transcendental realism by following, (and contributing to) the hermeneutic critique of positivism, recognising that the knowledge claims made about reality have a necessarily interpreted character. Thus, critical naturalism further separates critical realism from positivism by characterising it as a "naive" form of realism on the grounds that positivism is insensitive to the necessarily socially constructed nature of knowledge (Bhaskar and Danermark, 2006; Sayer, 2000).

In addition to this, critical naturalism further qualifies the position of sophisticated realism by admitting that the observer's access to external reality is problematic. Again, avoiding the assumptions of naive realist positions which claim that sensory perception provides a secure foundation for knowledge claims, critical realism embraces the fallibility of knowledge claims on the basis that although the world *is* a certain way, our knowledge of it is never complete since much of the world lies hidden from our experience. That is, the events that we observe and come to have knowledge of are determined by the combined activity of hidden causal structures, located beyond the reach of our experience in the domain of the actual and the real. Resisting the epistemic fallacy means recognising that the truth about the way the world is lies outside the researcher's ability to observe the world, meaning that knowledge claims are always contingent. Simply put, the world is not a product of the models and laws discerned by human agents, rather our concepts and theories about the world must fit the way the world is, which may itself be unknowable. Though conceptual model building is the hallmark of scientific activity, it is impossible for us to be certain that any of these models correctly and definitively capture the way the world actually is in itself. These models thus ought rightly to be said to describe *tendencies*, rather than *laws* of nature.

In critical realist terms then, knowledge claims are described as the 'transitive' products of human inquiry into the 'intransitive' object of research (Bhaskar, 2008). There are multiple ways in which the intransitive world can be interpre, as transitive theories. Natural as well as social scientists must develop an awareness of the fallible and transitive status of their research by cultivating a reflexive understanding of the essential interpretative nature of knowledge production. Critical naturalism thus brings transcendental realism into line with the sociological insights common to constructionism and holism to produce a *critical* realist position. However, critical realism departs from both holism and constructionism on ontological grounds, criticising it for naively inheriting the flawed ontological assumptions of positivism and in doing so subscribing to the monovalent ontology assumed by positivism. As I suggested earlier, constructionism can be seen as a reaction to the methodological rather than ontological limitations imposed on social scientific research by positivism. The focus of those developing constructionism was to produce a more appropriate methodology for conducting social scientific research rather than to challenge the ontological deficiencies of positivism. The narrow focus of constructionist social science became the transitive domain of knowledge production, and the intransitive reality to which knowledge claims referred to tended to be either ignored or dismissed as part of the realist road block which had inhibited social science for so long. However, the unwillingness of constructionists to engage with the intransitive world does not mean that they will be able to avoid making any ontological commitments. Indeed,

those who ignored the ontological questions posed by the development of a new methodology for social science may retain a tacit support for some form of realism. Outhwaite (1987) suggests that weak constructionism's inattention to ontology means that they have largely inherited the shallow ontology of positivism, but equally, weak constructionism may be compatible with the depth ontology described by critical realism as both Sayer (2000) and also Bhaskar and Danermark suggest:

> "To weak constructionism, which involves the idea that there is a necessarily interpreted element in the construction of any theoretical understanding and any social object, a critical realist has no objection. However if... [constructionism] is taken to imply that the phenomenon investigated is just a theoretical interpretation or cognitive construction, or that a social phenomenon such as some specific form of disability exists only as an idea or belief, then it is clearly false." (Bhaskar and Danermark, 2006: 283-4)

Indeed, sophisticated forms of constructionism such as is presented by Searle (1995) appear happy to accept the existence of an intransitive, mind independent world. Yet we should note how by dividing the world into natural and institutional domains Searle himself seems to be rejecting a monovalent ontology for the sort of depth ontology that is presented by critical realism.

The strongest forms of constructionism are defined by their taking a strict anti-realist stance which rejects the existence of any intransitive mind independent reality. Critical realism objects to strong constructionism firstly for its extreme anthropocentricity, and secondly on the grounds that it commits a version of the epistemic fallacy by collapsing the intransitive object of investigation into the transitive domain as a mere epistemic construct. For example, a strong constructionist might claim that disability is not a physical impairment but a socially constructed phenomenon caused by public attitudes and the socio-cultural circumstances of society. This suggests that there is nothing to investigate beyond a social scientific study of socio-cultural attitudes towards physical impairment. But clearly what is missing from this picture is the role played by the physical impairment itself! Critical realism's objection to the constructionist's characterisation of disability argues that although disability is a complex phenomenon which is in part caused by socio-cultural attitudes, reducing it to just these set of structures ignores the important bio-physical elements which cause the physical impairment. Disability research requires a much wider scope, looking at all the structures at a full range of emergent strata which have contributed to the cause of the disability, from the bio-physical, economic and political structures to those socio-cultural structures responsible for popular attitudes towards the disabled. This requires a broadening of the focus of research, to include collaborations across and between the natural and social sciences.

Moreover, while critical realism understands how we speak to be important, it retains a belief that the object that is spoken about shouldn't be forgotten, and that researchers should hold a dual focus on both of these things. After all, transcendental realism establishes critical realism as a firmly naturalistic philosophy interested in the causal structures which govern the world and cause the occurrence of events, and critical naturalism seeks to develop naturalism into the social sciences in the way that constructionist or hermeneutic positions do not seek to do, or at least do not seek to do explicitly. Indeed, Bhaskar's approach to the social sciences (1998) mimics his approach to natural sciences by asking 'what must the social world be like in order for it to be a possible object for knowledge?'. As in the natural sciences the answer is the same for the social sciences: social

phenomena are caused by the combined activity of real but hidden causal structures and mechanisms. As such, although critical realism recognizes the role that concepts play in generating social phenomena, it does not see social objects as being exhausted by these concepts, rather they are composed of real generative causal mechanisms out in the world which social scientific investigation should be directed at identifying, understanding and in some cases transforming.

While constructionists may already claim to be engaged in seeking to identify the structures which explain social phenomena, such as the economic or class structures which underlie observed inequalities, there seems to be an important difference in the way constructionists and critical realists conceive of these structures. While constructionists may view social structures as cognitive constructs, critical realists see them as real and potentially mind-independent parts of the world on account of their causal efficaciousness. This is not to say that critical realism falls into the trap of reifying social structures by giving them an existence independent from human action. Indeed, Bhaskar (1998) suggests that social structures are not enduring in the same way as natural structures are, and emerge out of, and are as such dependent upon, human activity. However, Bhaskar points out that these social structures exist and will continue to exert a causal influence regardless of whether human beings are aware of them or not. Moreover, this enables critical realists to add a critical dimension to their analysis of social theories and discourses. For, if social structures are accepted to be a real, mind independent part of the world, one becomes able to describe how certain theories and practices rely upon their systematic misdescription. Marx's critique of master-slave wage relations might provide a case in point, as would any critique that demonstrates how a discourse employs false or disingenuous rhetoric in order to establish and reinforce power.

Though critical realism endorses epistemic relativism on the grounds that knowledge is always subject to interpretation, its commitment to ontological realism means that it does not follow that any interpretation is as good as another, rather, some descriptions of the world are more truth apt than others. This completes the 'holy trinity' of critical realism: ontological realism, epistemic relativism and judgmental rationality.

Finally, one last methodological consequence of adopting a critical realist approach to social science is that the division between the natural and social sciences can be resisted. If, like the natural world, the social world is governed by the interaction of real causal structures, the task of the social scientist will be to investigate the nature and interaction of these causal structures so that the resulting phenomenon may be better understood and either preserved, by retaining the current arrangements producing it, or transformed through a change in practice. However, given that research into the natural and social sciences takes place in the context of closed and open systems respectively there remain important methodological differences between them. Natural science tends to examine structures in the context of closed systems (such as a laboratory), so that objects can be isolated and mechanisms excluded in ways that social scientific research, which takes place in open systems (for example class rooms), cannot. Because the influence of unidentified causal structures in open systems cannot be guaranteed against, the social scientist will not be in a position to make predictions in the same way as the natural scientist is able to. Rather, critical realism suggests social scientists should be in the business of explanation and retroduction, leading to recommendations of transformative practice.

## 5. Conclusion

In part, critical realism emerged in reaction to the limitations and inadequacies of strong formulations of positivism and constructionism. It takes up a philosophical under-labouring role to offer an alternative meta-theoretical position from which to conduct research in the natural and social sciences, primarily by reasserting the importance of ontology and its relationship with epistemology. By combining the insights of a naturalistic realist and a critical hermeneutic position and setting these within the context provided by an emergent depth ontology, critical realism presents a "maximally inclusive" meta-theorectical perspective which can "accommodate the insights of the other meta-theoretical positions while avoiding their drawbacks" (Bhaskar and Danermark 2006: 280). By advocating ontological realism and epistemological relativism, critical realism bridges the divide set up by the realist/anti-realist dichotomy, suggesting that research practice be sensitive to both observation and interpretation and focuses on developing an understanding of the hidden structures and mechanisms which cause both natural and social phenomena.

## References

Bhaskar, R. (1996) *Dialectic: The pulse of freedom*. London: Verso.

Bhaskar, R. (1998). *The possibility of naturalism*. (3rd edition). London: Routledge.

Bhaskar, R. (2008). *A realist theory of science*. (3rd edition). London: Verso.

Bhaskar, R., & Danermark, B. (2006). Metatheory, Interdisciplinarity and Disability Research: A Critical Realist Perspective. *Scandinavian Journal of Disability Research*, *8* (4), 278.

Carnap, R. (1996). *Philosophy and logical syntax*. (2nd edition). Bristol: Thoemmes.

Collier, A. (1994) *An introduction to Roy Bhaskar's philosophy*. London: Verso.

Danermark, B. (2002). Interdisciplinary Research and Critical Realism: The Example of Disability Research. *Alethia*, *5*(1), 56.

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

Hartwig, M. (Ed.) (2007). *A dictionary of critical realism*. Abingdon: Routledge.

Hempel, C. G. (1959). The function of general laws in history in P. Gardiner (Ed.), *Theories of history*. (pp. 344-56). New York: Free Press.

Hesse, M.B. (1966). *Models and analogies in science*. Notre Dame (Ind.): Notre Dame University Press.

Hollis, M. (1977). *Models of man*. Cambridge: Cambridge University Press.

Kuhn, T.S. (1962). *The structure of scientific revolutions*. Chicago: University of Chicago Press.

Lyotard, J. F. (1984). *The postmodern condition: A report on knowledge*. Manchester: Manchester University Press.

Popper, K. (1959). *The logic of scientific discoveries*. London: Hutchinson.

Quine, W.V.O. (1970). *The web of belief*. New York: Random House.

Sayer, A. (2000) *A realist theory of science*. London: Sage.

Searle, J. (1995) *The construction of social reality*. Harmondsworth: Penguin.

Winch, P. (1958). *The idea of social science and its relation to philosophy*. London: Routledge and Kagan Paul.