

Science Bound? Transcending the Fourth 'Great Debate' in International Relations

Written by Gavin Stewart

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GAVIN STEWART, APR 3 2014

A common refrain throughout the history of debates in the discipline of International Relations (IR) is whether it can and should be treated as a science. Traditionally, it has formed itself around the issue of whether or not the objects we study are amenable to the same methods of knowledge-production used in 'hard' sciences such as physics and chemistry, and if they are, might we also generate a body of cumulative knowledge and display a similar level of practical success? What has often gone unremarked in these debates is the controversies surrounding the philosophical assumptions that scientists are actually making when producing knowledge. It has generally been assumed that there is a single, universal method applicable to all of the sciences and IR must adopt this method if it is to be scientific. It is the aim of this paper to unsettle this assumption and examine how a more informed account of this concept 'science' might contribute to the refinement and progression of the discipline.

In the first chapter, I provide a brief history of IR, focusing on this question of whether it can be construed as scientific. The discipline is treated as being structured by a succession of four 'great debates'[1] which, one way or another, have all centred around this 'science' question. I demonstrate here the manner in which the positivist philosophy of science has come to dominate these debates in such a way that its account has passed largely unquestioned for some time. Only in the latest debate, where positivists are locked in a stand-off with their interpretivist opponents as to what counts as valid knowledge of the social world, do some IR scholars begin to take a critical look at how positivists are defining science. The next chapter describes how one particular philosophy of (social) science, critical realism[2], claims to move beyond the fourth debate by drawing our attention away from the status of our knowledge-claims (epistemology) to what those claims are actually about (ontology). Critical realists begin by asking what the world must be like for science to be possible in the first place, and the arguments they provide in this respect call into question both the positivist reduction of reality to that which can be experienced, and the interpretivist reduction of reality to that which is spoken. The critical realist ontology is offered as a new meta-theoretical framework within which IR scholars, instead of ignoring each other from either side of an epistemological divide, can investigate how their ostensibly diverging insights are in fact inter-related. In the final chapter, I evaluate a separate account of science given by Patrick Thaddeus Jackson in *The Conduct of Inquiry in International Relations*, which seeks to contextualise both positivism and critical realism by focusing on the methodologies that these (and other) scientific approaches use to validate their knowledge-claims. It is Jackson's argument that all of these approaches are scientific and it is an invalid move by positivists and critical realists to provide an account of science which a priori excludes other systematic research in the discipline from being described as scientific. For Jackson, the default position should be an engaged pluralism and the model he provides is designed to encourage this.

There are specific reasons for the chapters being structured like this. Within the philosophy of science, realism has been predominant over positivism for some time (Joseph & Wight, 2010: 1/4). It is only within the past decade or so that we have seen a similarly significant challenge to the positivist account of science in IR. This challenge has taken on a general form, as described in the second chapter. Although some IR scholars have opposed the increasing influence of critical realism, their critiques have been somewhat *ad hoc* and have originated from different philosophical traditions; what really marks the differences between the various contending positions remains unclear. This is why I do not engage with critical realism's opponents in the second chapter; there are important conceptual

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problems at a more fundamental level which must be confronted first of all. Resolving these problems would allow us to *situate* critical realism in relation to its critics, and thus provide a possible framework for a 'fifth debate'. What we lack here is a suitable terminology for drawing out the key philosophical differences between IR scholars; this is precisely what Jackson addresses in his *Conduct of Inquiry* and why the final chapter of this paper evaluates his contribution. I argue that Jackson's model, although by no means incontrovertible, provides a useful starting point from which to sharpen the new contours of the discipline.

CHAPTER ONE

Science and the first debate

Prior to the First World War, the conduct of international relations had been the secretive province of diplomats so had never received any kind of sustained, public and systematic analysis. It was in these circumstances that the so-called idealists, motivated by a desire to build institutions which would prevent such relations from degenerating into the horrors they had just witnessed in the First World War, brought about the establishment of IR as a distinct discipline. Many idealists held such enquiry to be scientific, grounded as they were in the Enlightenment idea of progress through the accumulation of knowledge; progress which was plainly evident in the practical success of the natural sciences. As one idealist commentator noted, education about international affairs was necessary for "the correction of social theory and doctrine in the light of *fact* and *experience*" and insofar as it was "the scientific method applied to society" (Angell, 1947: 23, emphasis added).

Classical Realists such as E.H. Carr argued that the idealist approach to IR was not scientific enough, comparing the difference between the two approaches as the same as between chemistry and alchemy. Idealism represented, Carr argued, a necessary but insufficient stage in the development of a mature scientific discipline. Preoccupied as it was with the ends to which the discipline was created (the eradication or control of international conflict), idealist accounts paid little heed to the 'facts', or the analysis of cause and effect, which was preventing these ends being met in the first place. A truly scientific discipline would recognise that a political utopia could only be brought about within political reality and that sooner or later, the IR scholar must learn to "emphasise the irresistible strength of existing forces and the inevitable character of existing tendencies, and to insist that the highest wisdom lies in accepting and adapting oneself to these forces and these tendencies" (Carr, 1946: 258).

Science and the 'behavioural revolt'

The issue of science certainly played a significant role in the first great debate, but given that the philosophy of science was not fully established as a separate field of study at the time, debates about science itself remained largely implicit until the 'behavioural revolt' of the 1950s and 1960s (Kurki & Wight, 2010: 17). Behaviouralism is a school of thought that views scientific explanation of the social world as being grounded in the observation and measurement of human behaviour, typified in the works of Morton Kaplan (1969) and J. David Singer (1969). It draws heavily on logical positivism, which was emerging in the 1950s as the dominant philosophy of science following the work of the Vienna Circle in the first half of the 20th Century. Logical positivists hold that science is the only true form of knowledge and all knowledge-claims must be susceptible to empirical verification. On this understanding, it is the role of philosophy to examine the logical structure of language; any statements which are not analytic (true by definition) or synthetic (statements whose truth-value could be verified empirically) – in particular any ethical, aesthetic or metaphysical statements – are deemed literally meaningless and can be safely eliminated from the pursuit of knowledge. Data collection, systematic observation and measurement, and the discovery of laws to explain empirical patterns are the hallmarks of the logical positivist philosophy of science. Opposing the behaviouralists in the 1960s were the traditionalists; scholars such as Hedley Bull (1969) and Stanley Hoffman (1961), who placed greater emphasis on a classical approach to theorizing which was derived from philosophy, history and law, and relied above all on the exercise of "judgement ... and a scientifically imperfect process of perception or intuition" (Bull, 1969: 20).

The dynamics of this second great debate have had lasting consequences for the discipline. Although the austere practices of logical positivism were to be tempered somewhat as debates in the philosophy of science progressed,

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certain underlying principles were to remain in IR under the new label of 'positivism'. One such principle was the Humean account of causation: the idea that cause and effect obtain *only* in observable regularities which stand in a relationship of logical necessity; necessity which, when brought under a general law, allows for a symmetry between explanation and prediction (the deductive-nomological (DN) model of explanation) (Popper, 1992; Hempel, 1965). Another such principle was the 'unity of science' thesis. This holds that there is a single, universal scientific method, adhering to these empirical and logical strictures, which can be applied across all of the natural and social sciences. As the positivists in this way sought to demarcate what counted as science, and as traditionalists accepted this account of science in order to oppose it in terms of the analysis of international relations, positivism gradually came to be seen as synonymous with the label 'science' itself.

Science and the 'inter-paradigm' debate

Nevertheless, logical positivism was losing its dominance in the philosophy of science and this reflected itself somewhat in the principles of positivism as they developed in IR. Karl Popper (1959/1992) had dealt a critical blow to the practice of empirical verification by attacking the goal of epistemic certainty, highlighting the extent to which observation itself was theory-laden, and arguing that science in fact progressed by continuously attempting to *falsify* rather than verify theories (hence the DN model of explanation). After some detailed empirical studies, Thomas Kuhn (1962/1996) rejected this 'moderate' positivism and argued that progress occurred in periods of what he called 'normal science', during which time scientists were involved in 'puzzle-solving' within an explanatory framework of uncontested assumptions. This framework was itself, during a period of 'revolutionary science', challenged by competing frameworks or 'paradigms'. The switch from one paradigm to another was based on faith, rather than any rational criteria. Imre Lakatos (1970) drew on both of these thinkers to develop an account of science which accepted the discontinuous jumps identified by Kuhn whilst rescuing the notion of rational progress by placing the moment of falsification *after* a given paradigm (or 'research programme') had been superseded by another.

Although all three of these thinkers have had a profound influence on the development of IR as a science, it is the Kuhnian framework in particular which has penetrated the discipline as a whole because it was also used as a tool by those who were 'anti-science'. Putting aside the fact that Kuhn felt the social sciences to be in a pre-paradigmatic state and even doubted that they would ever become mature sciences, it was his argument that different paradigms emerge from radically different philosophical assumptions, with the result that "the proponents of competing paradigms practice their trades in different worlds" (Kuhn, 1962: 150). This is Kuhn's thesis of incommensurability; each paradigm has its own lexicon, with specific linguistic terms taking on specific meanings only within that paradigm, thus precluding any kind of inter-paradigmatic communication. On this reading, there is no common base from which scientists in different paradigms can speak to each other; they literally study different worlds.

Paradoxically, it was Kuhn's framework of incommensurable paradigms which gave form to the next great 'debate'. Classical Realism, which stressed the primacy of the state and power politics in the international system, had triumphed over idealism in becoming the dominant mode of enquiry in IR following the Second World War, but its methodology had been called into question during the behavioural revolt. The liberal tradition which underpinned idealism later manifested itself as a 'pluralist' perspective, which, although recognising the importance of the state in international affairs, emphasised the extent to which other centres of power were rendering it increasingly interdependent within the international system. A third paradigm, commonly referred to as structuralism, drew on Marxist themes to formulate a perspective of the international system which situated the state in terms of the global structure of capital. These three approaches were vying for theoretical dominance in the discipline during the 1970s and, given the ontological and epistemological fissures between them, seemed to fit well into the Kuhnian framework and thus constituted the third, 'inter-paradigm' debate.

At this point I wish to stress that, although it helps a great deal in organising our experiences, the self-image of the discipline as being structured by a series of great debates can fail to capture the nuances of what actually occurred. We can see certain areas of overlap across all of these debates. The second debate was never 'won' and both camps map uncomfortably on to the inter-paradigm debate, yet continued to use Kuhnian arguments themselves. Kuhn held that scientific progress only occurred when the scientific community converged around one particular paradigm, and he saw inter-paradigmatic communication as impossible and paradigm choice as a matter of faith. It is

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instructive to note how some IR theorists tended to use these (decontextualised) arguments to justify their positions. The traditionalists of the second debate could immunise themselves from positivist critique by asserting the incommensurability thesis; positivists could reassure themselves that they were progressing in the 'normal science' of their own paradigm; critically-minded scholars could present themselves as members of a new revolutionary paradigm; and proponents of all sides could argue for a 'pluralism' (a *de facto* hermeticism) of incommensurable paradigms which somehow enriched the discipline, yet threatened it with fragmentation (Wight, 2000:31, Wæver, 1996: 155).

Science and the fourth debate

The loci of debates shifted yet again, and Kuhn's incommensurability thesis lost some (but not all) of its lustre, as IR moved into the 1980s and 1990s and sources from disciplines other than the philosophy of science were mined to underwrite the various contending positions. The publication of Kenneth Waltz's *Theory of International Politics* (1979) saw the emergence of neo-Realism: a 'scientific' development of classical Realism which moved beyond general statements about history and human nature to the elaboration of a small number of precise statements concerning the logic of anarchy and the distribution of capabilities among states, both of which established the autonomy and theoretical potential of the international system. This parsimony was matched by scholars such as Robert Keohane (1989: 2) in the pluralist paradigm, who moved away from general interpretations about international relations towards precise statements concerning "variations in the institutionalization of world politics". By adopting a similar methodology to neo-Realism (which was itself drawn from micro-economic theory) and accepting the assumption of anarchy in the international system, the new 'neo-liberal institutionalists' created a common 'rationalist' language with neo-Realists which not only undermined the idea of incommensurability in IR theory, but created a common research programme which the rationalists felt would provide a cumulative body of knowledge within the discipline. Moving away from the inter-paradigm debate, Keohane sought to re-draw the main line of contention between rationalists and reflectivists. Whereas the rationalists studied how institutions function, reflectivists were concerned with how social and historical contexts affected how institutions were *constituted*, and criticised rationalists for ignoring these factors when theorising. Keohane accepted this limitation of the rationalist project and challenged the reflectivists to move away from incessant critique of the mainstream in order to create their own research programme to both complement the rationalist one and substantiate their knowledge-claims. To this end, he co-wrote *Designing Social Inquiry* with Gary King and Sidney Verba to demonstrate how qualitative research could be subjected to the rigour of 'scientific' inference (King *et al.*, 1994). This book reinforced the idea that science was synonymous with positivism and, given that the very core of their critique was positivist methodology, many reflectivists understandably rejected Keohane's challenge to become more 'scientific'.

We can see from the dynamics of the fourth debate how rationalism became synonymous with positivism (despite the latter's commitment to an empiricist epistemology) and we can understand how it has also been popularly characterised as between positivists and post-positivists. But the reflectivists/post-positivists are by no means a homogeneous group of scholars, nor is it always appropriate to elide the two terms. Some Critical Theorists, for example, are justifiably referred to as reflectivists, yet accept the validity of positivist research, questioning only whether it should be exhaustive of social enquiry, so it is not clear in what sense they are post-positivist (Wight, 2000: 33; Linklater, 1990). Meanwhile, Feminism is a reflectivist school of thought calling into question the disciplinary norm of equating positivism with science insofar as there are feminist scholars who regard their research as scientific but not positivist (Harding, 1991). Post-structuralists and post-modernists provide the most radical critiques of the positivist mainstream *and* several reflectivist positions, disputing not only the static and ahistorical approaches of the positivists, but also the minimal foundationalism which other critical theories posit as a platform for emancipatory action (Hoffman 1991: 178). Rather than attribute a false homogeneity to this diverse group of scholars, I shall refer to them under the collective heading 'interpretivist', given that all emphasise to a greater or lesser extent the importance of interpretation in analysing international affairs.

The fissure between positivists and interpretivists was deepened by Martin Hollis and Steve Smith (1990) when they published *Explaining and Understanding International Relations*, which drew upon philosophies of *social science*. Hollis and Smith used the Weberian distinction between explaining (*Erklären*) and understanding (*Verstehen*) to demonstrate how one could have an explanatory account of international affairs which drew on scientific methods, or

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an account which was based on hermeneutic principles, but never a combination of the two. The *verstehen* account provided in the text is largely drawn from the work of Peter Winch (1958), who argued that the scientific method was simply inappropriate for studying the most important factors in social affairs (reasons, ideas, beliefs and so on), and the *erklären* account largely reinforced the idea that the scientific method was based on positivist principles. That "there are always two stories to tell" (Hollis & Smith, 1990: 7) based on these fundamental philosophical differences allowed notions of incommensurability to resurface and epistemological fortresses to be erected which secured each side of the debate from critique.

There have been attempts throughout the 1990s and 2000s to transcend this debate by charting a 'middle way'; such attempts are generally referred to as 'constructivist'. This is a problematic label imported from social theory and used in IR to describe a wide variety of positions which are supported by often conflicting philosophical bases. The common themes which seem to run through constructivist research are an emphasis on norms, identities, intersubjectivity and the mutual constitution of agents and structures (Reus-Smit, 2009: 220); these can be contrasted with the rationalist emphases on methodological individualism and exogenously given identities and interests. But how constructivists treat norms, identities and so on, depends largely on the philosophical commitments of the researcher, and these can vary widely between different constructivists. Alexander Wendt (1999), for example, is the constructivist most associated with attempting to build a bridge between positivism and interpretivism. He argues that ideas are indeed the most important factor in analysing international relations, but maintains that there is no problem in treating them scientifically. The philosophy underpinning Wendt's bridge-building is scientific realism but, as shall be demonstrated in the next chapter, insofar as Wendt still retains positivist/interpretivist residues in his philosophy of science, he has failed to bring scientific realist arguments to their logical conclusion, which is a wholesale rejection of positivism. Friedrich Kratochwil (2007) is also commonly referred to as constructivist, but is much closer to the Winchian anti-science perspective than Wendt. This is a function of Kratochwil's commitment to pragmatism and the 20th Century 'linguistic turn' in philosophy, which emphasises the extent to which norms and rules are constituted by speech acts, so analysis of the social world should focus on the study of intersubjective meaning rather than a social reality which is 'out there'. The label constructivism covers a number of divergent philosophical positions; insofar as the discipline wishes to become more self-aware, it is not clear that its continued deployment is beneficial. This is despite moves to re-shape the debate as between rationalists and constructivists on the one hand, and constructivists and reflectivists on the other (Carlsnaes *et al*, 2000).

Conclusion

The question as to whether or not IR should be scientific has been present since the inception of the discipline. It was largely a rhetorical question during the first great debate, but gained methodological substance after the behavioural revolt of the 1950s and 1960's. The inter-paradigm debate was not so much characterised by the 'science' question itself; the discipline having settled on a positivist account of science, this debate was largely shaped by a decontextualised borrowing of Kuhn's incommensurability thesis, with the realist, pluralist and structuralist 'paradigms' struggling for the position around which 'normal' science could progress, as all the while traditionalists were opposing the positivist incursion. As the discipline moved into the fourth debate and anti-scientific philosophies of social science were used to underpin critical approaches to international relations, epistemological warfare broke out between positivists and interpretivists. These philosophical disputes continue to the present day, despite attempts by some 'moderate' constructivists to chart a middle way between the two. What is certain from this brief history of the discipline is that IR has become philosophically more self-aware as it has matured, even though it still largely labours under an unquestioned assumption that science equals positivism. Despite this increasing self-awareness, philosophical concepts are still often deployed with much confidence and little care for their origins and connotations. There are now a bewildering variety of '-isms' one can adopt in the discipline. The conceptual waters have been muddied as IR has matured, not least because ideas and concepts have been *uncritically* imported from other disciplines. To make any progress in moving beyond the fourth debate, closer attention must be paid to the philosophical bases underwriting all of these positions.

CHAPTER TWO

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Introduction

In the preceding chapter, I provided a genealogy of IR in order to highlight the main areas of contention in the discipline's history and how its scientific status has always in one way or another informed these controversies. At the same time, I demonstrated how 'science' came to be equated with positivism and how the fourth debate has centred around the epistemological fissure between positivists and (mostly) anti-scientific interpretivists. This has resulted in a sustained focus upon the philosophies of science and social science in order to refine the assumptions underpinning the various approaches to international relations. One philosophy of social science known as critical realism, represented in IR by scholars such as Colin Wight, Jonathan Joseph, Milja Kurki and Heikki Patomäki, is ascending in prominence and claims to have moved beyond the barren ground of the fourth debate by focusing on ontology instead of epistemology. It is the aim of this chapter to demonstrate precisely *how* critical realists claim to transcend this debate. There are three main 'pillars' of critical realism which structure the first two sections of this chapter. The first section explicates *ontological realism*: the assertion that there is a mind-independent reality; that reality is complex, differentiated and stratified; and that we can ascribe reality to objects in terms of causality (not just observability). The second section describes the critical realist commitments to both *epistemological relativism* (all knowledge is socially produced and historically specific) and *judgemental rationalism* (theory choice can nevertheless be rational). Given the important role that social structure plays in critical realism, the third section focuses on the agent-structure relationship, and the final section provides examples of how critical realism has been applied in IR.

Ontological Realism

The fundamental tenets of realism are that: there is a reality independent of the minds of those that would wish to come to know it; mature scientific theories typically refer to this reality; and they refer to it even when it is unobservable (Wendt, 1999: 51). For positivists however, reality is reduced to that which is (or can be) experienced, and interpretivists assent to a kind of linguistic empiricism where reality is reduced to rules, or even further, to that which is spoken. These anthropomorphic reductions are a function of prioritising epistemology over ontology, and commit what Roy Bhaskar (1975: 36) refers to as the epistemic fallacy: "...the view that statements about being can be reduced to or analysed in terms of statements about knowledge". Critical realists avoid this fallacy and offer a distinctive approach to the 'science' question by *inter alia* analysing what the world is like for knowledge to be possible in the first place.

This kind of 'how possible' question, commonly referred to as abduction, represents a mode of inference which is not applicable to positivist methodology. Such arguments are *transcendental* in form, when they refer to objects which are unobservable in principle. In this manner, Bhaskar (1975: 56) has inferred from scientific practice that reality is complex, differentiated and stratified. He distinguishes between three levels of reality: the empirical (realm of experience), the actual (realm of events) and the real (realm of structures and their powers/tendencies). An object's structure and its powers may exist but be unexercised (real); may exist, be exercised and unexperienced (actual); or may exist, be exercised and experienced (empirical). Rather than attempting to distinguish science from non-science in terms of a universal method grounded in the strict canons of logic and empiricism, critical realists argue that science should be defined by its *aims*: scientists are involved in abducting the unobservable structures and powers of objects by positing and testing the reality of theoretical entities which would explain given sets of empirical data. These hidden structures and powers are what Bhaskar (1975: 22) refers to as *intransitive* objects of knowledge; they are beyond the realm of experience, invariant to our attempts to come to know them and would exist even if no one wished to come to know them in the first place. Crucially, no matter how much we deepen our knowledge of an intransitive object, the product of such knowledge always remains *transitive* (discussed in the next section). This ontologically oriented approach necessitates a certain opportunism when it comes to epistemology and methodology, since "for realism, it is the nature of objects that determines their cognitive possibilities for us" (Bhaskar, 1989a: 25).

Critical realists, then, accept a *causal* as well as an observable criterion for existence, but their account of causation is diametrically opposed to the Humean account which structures the fourth debate. Interpretivists generally accept the Humean account of causation, but reject its applicability to the social world, arguing that it is the 'internal' meaning behind the behaviour of social actors, and/or the rules *constituting* social reality, which require analysis and

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this cannot be done by merely observing 'external' causal relationships between atomistic events (Kurki, 2008: 129). Critical realism rejects Humean notions of causation and provides an account which challenges interpretivist apprehensions of the concept. The causal powers of objects are accepted as real, that is, the relationship between cause and effect is seen as one of *natural*, rather than logical, necessity. What we actually experience in the world is a complex interaction of the causal powers of different structures in an open system (as opposed to the artificially closed systems of laboratory experiments which allow scientists to isolate causal powers). The causal powers of one structure, for example war, may be counteracted or neutralised by another, for example diplomacy, to produce an effect (or indeed no effect) (Wight, 2006: 35). Critical realism aims at 'depth' explanations in line with its ontological depth, rather than the positivist method of remaining on the empirical surface, gathering observable regularities together and subsuming them under a general law which, as William Outhwaite (1987: 8) argues, does not *explain* very much. Moreover, given their depth ontology and the fact that the world is an inherently open system, critical realists argue that there is an asymmetry between explanation and prediction. Although some estimates may be made of what can happen in the future, these should be based on an understanding of the generative structures from which the world emerges rather than a simple logical deduction from a universal law and initial conditions (Kurki, 2008: 216). It is an important consequence of their ontological diffidence and symmetrical treatment of explanation and prediction that positivists use theoretical entities *instrumentally*, that is, only 'as if' they existed. Critical realists such as Colin Wight (2007: 383) have argued that, although lack of evidence may now and again require a short-term instrumentalist treatment of unobservables, the actual practices of scientists show that it is the reality of these entities which is ultimately tested (hence attempts to split the atom, cure viruses, and so on).

The critical realist account of causation incorporates interpretivist concerns insofar as unobservable objects such as ideas, rules, norms and discourses can also be construed as causal (real). Kurki (2008: 219ff) has argued that, as well as giving the concept of cause ontological depth, we can also broaden it by re-introducing the Aristotelian 'four causes' typology: the commonly understood 'efficient' cause, where a thing through its action or movement brings about change; a 'material' cause, which refers to the material basis upon which an effect arises; a 'formal' cause, referring to that which gives form to an effect; and a 'final' cause, which refers to the purposive goals to which efficient causes are directed. This broadening of the concept of cause allows us to see *inter alia* how ideas, rules, norms and discourses can be described as formal causes. Rather than mechanistically bringing about change like an efficient cause, formal causes can be said to play a 'constitutive' or 'conditioning' role in the social world. Understood in this way, and despite their avoidance of the concept due to its positivist (mis-)appropriation, many interpretivist research projects can be described as engaging in causal analysis.

There is one other aspect of the critical realist ontology which is relevant to the argument of this paper: the theory of *emergence*. Not only is reality differentiated between the real, the actual and the empirical, but it is also stratified; some aspects of reality are more 'basic' than others. Reductionism is the doctrine that less basic aspects of reality must be explained in terms of more basic ones, that is, that complex systems must be explained in terms of their constituent parts. The theory of emergence, however, suggests that certain objects can have emergent properties; properties that cannot be reduced to more basic levels. For example, water emerges from hydrogen and oxygen, yet we cannot explain its fire-extinguishable properties in terms of its constituents, both of which are highly flammable (Sayer, 1992: 118). Similarly, societies, although rooted in and dependent upon more basic levels of reality (such as human individuals and matter), can have properties which are irreducible to these strata.

Epistemological Relativism and Judgemental Rationalism

To move beyond the epistemological impasse in which positivists and interpretivists find themselves, critical realists examine the conditions of possibility for knowledge-production itself. They reject the view that we have direct, unmediated access to a mind-independent world; knowledge is always mediated through language and held under a particular description. They also reject the view that knowledge arises *ex nihilo*. According to Bhaskar (1975: 194ff), knowledge emerges from the transformation of pre-existing knowledge; antecedent theories, facts, beliefs, hypotheses, and so on, are taken by scientists, who have acquired a set of skills through the inculcation of an historically specific set of ideas, and transformed into new materials which are intended to provide yet deeper knowledge of the world. Because knowledge is historically specific, we must accept the fact of epistemological relativism: "neither truth-values nor criteria of rationality exist outside of historical time" (Wight, 2006: 39). Yet this

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does not entail judgemental relativism, where there would be no grounds for choosing one theory over another, because realists are not *ontological* relativists. Despite the provisional nature of our knowledge, it is in a relationship of continual engagement with its intransitive object. That different paradigms may have different *transitive* objects, that is, they describe the world in different ways, does not preclude either inter-paradigmatic communication or judgemental rationalism.

An alternative way of considering the issue is to distinguish between incommensurability of sense and incommensurability of reference (Wight, 1996: 310ff). Two theories may have different senses, but the same referent. For example, the statements 'X whose capital is Edinburgh' and 'X whose population is 5.25million' both have different senses but refer to the same thing. Where incommensurability of sense is alleged, critical realists can maintain that the referent remains the same, allowing for judgemental rationalism: grounds for preferring one theory over another are based upon which theory, under its own descriptions, can explain more *of the same thing*. Where incommensurability of reference is alleged, then it is not clear that incommensurability is consequential in any way. As Bhaskar (1989b: 153) argues, "communication is impossible unless some descriptive and practical presuppositions are shared in common: unnecessary unless there is the possibility of discrepancy between them". Given the heated and often vituperative nature of the fourth debate, it seems gratuitous to suggest that the positivist and interpretivist paradigms are incommensurable in the same way that, say, floristry and astrophysics are. Insofar as there is some overlap of sense and/or reference in the fourth debate, and given their foregrounding of ontology, critical realists can argue that there is no a priori epistemological reason why different paradigms cannot communicate with each other; they simply do not study 'different worlds'.

Agents, Structures and Wendt's 'via media'

I wish to draw upon the above arguments and enter the realm of social theory in order to clarify a concept which is central to the critical realist framework and plays a pivotal role in their claim to transcend the fourth debate: social structure. In so doing, it will be demonstrated that Wendt's variation of realism in IR is problematic insofar as he retains certain anti-realist commitments when contributing to the agent-structure debate. For many critical realists, his *via media* is simply a reproduction of the problems inherent in both positivism and interpretivism, and has contributed to an unfortunate misunderstanding of realism and its transformative potential within IR (Kurki, 2008; Rivas, 2010; Wight, 2006). This is a function of Wendt's commitment to both a subjective ontology (structures are dependent on ideas) and an objective epistemology (objective knowledge of these structures is possible), whereas realism, properly understood, entails the inverse: an objective ontology (what exists cannot be reduced to what we know) and a subjective epistemology (all knowledge is historically specific and socially produced) (Rivas, 2010: 208).

An individualistic approach to the agent-structure problem, normally associated with methodological individualism, microfoundationalism and Weberian voluntarism, regards social structure as being stable patterns of the aggregate behaviour of individuals. Structures on this reading are methodological; they are not real and possess no causal powers in themselves. They are simply an abstraction of human behaviour. This approach to structure is based on commitments to empiricism, instrumentalism and reductionism. The holistic approach on the other hand is rooted in the Durkheimian tradition in social science, and emphasises the "collective consciousness" of structures into which individuals are socialised (Wight, 2006: 66). Although there are both positivist and interpretivist variants of this approach, they share in common the fact that human behaviour is purely the product of these structures; agency is replaced by structural determination (Rivas, 2010: 213ff).

To avoid the pitfalls of both individualism and holism, Wendt relies heavily on the structuration theory of Anthony Giddens (1995) which seeks to demonstrate how agents and structures are mutually constituted. In this account, a distinction is made between social system and social structure. The social system refers to "patterns of relationships between actors or collectivities reproduced across time and space" and are hence "constituted of situated practices", whereas social structure "exists in time-space only as moments recursively involved in the production of social systems. Structures have only a virtual existence" (Giddens, 1995: 26). Through conceptualising structure in this way, Giddens denies social relations (such as the relations between parent and child, capital and labour, the distribution of capabilities, and so on) any causal efficacy. Structure becomes the *rules* upon which social relations are produced and it *only* exists at those moments when agents instantiate it through their rule-following practices; it

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does not exist externally to agents in any way. Thus, although Giddens and Wendt proclaim the reality of social structure, and its co-constitution with agency, it is in fact *conflated* with agency insofar as its existence is dependent on the knowledge (or at least acknowledgement) of agents (Giddens, 1995: 28; Wendt, 1999: 185). As Douglas Porpora (1989: 202) argues, this is less about structure as an *objective* reality and more about structure as an *intersubjective* reality. Wendt's commitment to Giddens' structuration theory is a function of his subjective ontology and Wight (2006:144) argues that it represents little more than a complex version of Weberian voluntarism. The objective material and relational aspects of social reality are bracketed in the concept of the social system and given significance *only* insofar as they relate to the intersubjectively shared rules of agents which constitute social structure.

Critical realists argue that a consistent application of their philosophy to the agent-structure problem avoids the epistemic fallacy which Wendt has committed. Jorge Rivas (2010: 218) describes the critical realist account of social structure as "any set of relatively enduring and structured relationships that are a product of social activity and have an effect in the social world". Structure, on this reading, is irreducibly *relational* in nature. The critical realist rejection of an unwavering reductionism allows for the acceptance of *the emergent causal efficacy of social relations* from shared rules. It covers not only the relations between material objects, such as distributions of wealth and capabilities, but also the relations between ideational objects such as norms, rules, values and discourses. The question of whether material or ideational factors are more important in any given social situation then becomes an empirical instead of a theoretical question, with the researcher concerned to explain empirical actuality by examining the interaction of the causal tendencies of the various ideational and material structures involved.

The key difference between critical realist and structurationist accounts of the agent-structure relationship is clarified if we focus on temporality (Archer, 1998: 356). Rather than structures being recursively instantiated by agents' *current* actions, critical realists regard them as always pre-existing the agents who inhabit them at any point in time. As Bhaskar (1989b: 34) argues, "society is the ever-present *condition* (material cause) and continually reproduced *outcome* of human agency". Social relations (structures) emerge from shared rules, but they *endure* and thereby constrain and enable succeeding generations of agents who, in their practices, reproduce, alter or transform them. This pre-existence establishes the autonomy of social structure – despite its activity-dependence – from the *currently* practising agent, and its causal efficacy establishes its reality (Bhaskar, 1989b: 25). So whereas structuration theory collapses structure and agency into each other, the realist account maintains an ontological distinction between the two and sets itself the task of explaining how they inter-relate. The agent stands in complex relations to a network of social structures (both material and ideational), each of which has its own causal tendencies, and it is the task of the social scientist to identify these tendencies and explain how their interaction culminates in any given empirical situation. Crucially, it is at this point that we are able to talk of a *critical* realism. The uncovering of the structural contexts in which an agent is embedded may reveal that certain ideational structures exist to conceal other structures. It is the argument of critical realists that in the (factual) uncovering of such structural contexts, one can pass (without any intervening value judgements) straight to a negative evaluation of the ideational structure generating false ideas, and then, *ceteris paribus*, on to a positive evaluation of the remediation of that ideational structure (Collier, 1994: 444). Critical realists refer to this process as *explanatory critique*, and it represents a direct challenge to the Humean 'law' that one can never derive value statements from factual statements.

Colin Wight (2006: 296) brings some thoughtful ordering to the network of structures in which a given agent is embedded by distinguishing four 'planes' of social reality: the material, the intersubjective, social roles, and the subjective. The material plane accounts for those aspects of social life which are rooted in materiality, whether natural (such as the environment) or socially constructed (such as weapons); the intersubjective plane delineates those aspects of social reality which involve shared norms, rules, ideas, discourses and so on; social roles, although parasitic on the intersubjective plane, are distinct from it insofar as it is possible to have a shared understanding of a particular role without actually inhabiting it (for example, I have a shared understanding of the role of Foreign Secretary in the UK, but this does not endow me with the causal powers of the individual who inhabits that role, and performs, in Giddens' words, 'situated practices'); and finally the subjective plane, which falls somewhere between the social and psychological sciences because it comprises structures involving the inner subjectivity of the agent. By re-configuring the meta-theoretical landscape in terms of these different planes of social activity, the structures which comprise them, and the relationships in which the agent stands to these structures, critical realists can claim to open

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up research in IR to the possibility of dialogue between different but *commensurable* theories and deeper scientific explanations of international relations.

Critical Realism in IR

A number of IR scholars have taken this revised meta-theoretical framework and applied it to a variety of substantive issues in international relations. For example, Kurki has applied this framework to democratic peace theory. Contra both positivists, who merely 'index' democracy and try to determine whether it causes peace through patterns of observable regularities, and interpretivists, who tend to privilege only hermeneutic, historical and/or discourse analysis, Kurki (2008: 271) seeks to gather all of these facets of the social world together and "conceptualise how democracies are structured in complex ways through various economic, cultural and social relations and ... analyse how they work historically in different social contexts". This opens up a variety of research avenues missed by positivists and interpretivists: what (and to what extent do) social relations affect the behaviours of liberal democracies, how and why do these relations result in peaceful or violent activity, and how might the uncovering of these structural contexts affect the relations and behaviours themselves?

The research of Ben Whitham (2012) provides a good example of how the analytical methods of even the most radical interpretivists can be contextualised in a critical realist framework. Whitham analyses forms of liberal state violence and, whilst cognisant of the fact that all knowledge is mediated by language, is careful not to reduce explanations of such violence to discourse itself. By beginning with a critical realist ontology, he is able to situate discourses such as the War on Terror or neoliberalism in a wider social context which places due emphasis on concrete social events (such as waterboarding or NATO's intervention in Libya) and real social structures, allowing him to analyse how discourses in particular might "conceal, reproduce or support the operation of social structures of dominance" (Whitham, 2012: 13). This is a distinct endeavour insofar as other poststructuralist discourse analyses terminate with discourse itself through committing the epistemic fallacy. By making his ontology explicit, Whitham can examine how discourses interact with other social structures to produce empirical events.

These are just two examples of how critical realism has been implemented in IR. Similar methods have been applied to issues such as hegemony (Joseph, 2002), security communities and global futures (Patomäki, 2002/2010), international law and human rights (Bowering, 2010), and state theory (Koivisto, 2010). In general, through re-directing our attention to the object of explanation in any given substantive problem in international relations, critical realism allows us to focus on "not *which* factor matters more than another 'independently', but *how* and *why* the factors are inter-linked" (Kurki, 2008: 280).

Conclusion

Critical realists claim to transcend the fourth debate in IR by reversing a long standing tradition in Western philosophy which prioritises epistemology over ontology. This tradition informs the implicit ontologies of positivists and interpretivists, who both reduce reality to some aspect of the human condition. By transcendentally arguing for the complexity, differentiation and stratification of reality, critical realists aim for depth explanations of empirical events through the elucidation of the causal tendencies of the various underlying and interacting structures of social reality. These structures are regarded as social relations with emergent causal efficacy and the agent stands in a complex relationship to any given number of them. Moreover, the structures can be construed as embodying different planes of social reality, allowing for the scientific investigation of both material and ideational factors – and their inter- and counter-action – in international relations. Viewing IR from this critical realist perspective, current theories tend to analyse only one or two aspects of social reality and bracket the rest. For example, positivists/rationalists concern themselves mainly with the material and subjective planes, whereas interpretivist/reflectivist research tends to focus on the intersubjective plane. Valuable insights have been obtained from these abstractions, but in the development of our disciplinary history these have been achieved at the expense of theoretical fragmentation, and the relations between these insights have therefore been neglected. Critical realism seeks to underlabour for all IR research by reconfiguring the meta-theoretical landscape in terms of *structural relationality*; it is the relations between the different planes of social activity which should be our focus, and this necessitates a foregrounding of ontology. What remains unclear in all of this, however, is precisely what becomes of the IR scholars who reject the philosophical

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commitments upon which the critical realist framework depends; this is the subject-matter of the next chapter.

CHAPTER THREE

Introduction

The previous chapter described how critical realists defragment IR theory by shifting our focus from epistemology to ontology, but not all scholars are willing or able to display such ontological mettle. In this chapter, I analyse another recent attempt to transcend the fourth debate which *locates* the critical realist project in relation to other methodologies: Patrick Thaddeus Jackson's *The Conduct of Inquiry in International Relations*. Jackson's book is a bold attempt to wrestle the concept of science from both positivism and critical realism, and promises to exert significant influence in the discipline (see the forum in *Millennium* 41[2], 2013). He argues not only that critical realists have a misplaced confidence in their account of what 'science' is, but in applying this account they make certain presuppositions at a more fundamental level of ontology which determine the distinctive character of their own research and terminology, but also *a priori* exclude other valid methods of producing scientific knowledge. Jackson identifies critical realism as an emerging orthodoxy which simply replaces positivism, and argues instead for a very broad definition of science which should generate an engaged pluralism amongst scholars with different philosophical commitments.

The 'Science' Question Revisited

We have seen in the first chapter how the question of whether or not IR should be considered a science has bedevilled the discipline from its inception. The positivist account of science, which stresses a universal method based on an empiricist epistemology and the DN model of explanation, has provided the terms of reference for this question throughout much of the discipline's history. Critical realists challenge this account head-on, arguing that science is characterised not by a universal method, but by "the attempt to go beyond appearances and provide explanations at a deeper level of understanding" (Wight, 2006: 18). Jackson (2011: 16ff) argues that neither account of science is warranted; there is simply no consensus in the philosophy of science as to what science actually is (despite critical realist claims to the contrary). All that can be inferred from the existing literature is a general sensibility about how to distinguish a scientific from a non-scientific piece of research, and our treatment of the issue in IR should reflect this. Drawing on the work of Weber, Jackson (2011: 193) defines science as "the careful and rigorous application of a set of theories and concepts so as to produce a "thoughtful ordering of empirical actuality"", and is constituted by three parameters: its systematicity (conclusions unambiguously follow from premises), its openness to public criticism (with a view to improving knowledge) and the fact that it is an attempt to produce worldly knowledge, howsoever the scientist understands the concept of 'world' (see below). This broad definition allows us to distinguish science from other types of activity such as practical politics and normative enquiry. Jackson (2011: 23) is careful not to hierarchise here; science is not necessarily a better or worse, but for him it is a *logically distinct*, endeavour, and the question of how science is otherwise linked to values and political practice can be left open.

Philosophical-Ontological Wagers and the Status of Knowledge

This inclusive definition of science is designed to prevent the gate-keepers of the discipline from censoring any systematic attempt to produce factual knowledge of international relations because it is 'unscientific', and so it does not in itself give prescriptions for how scientific enquiry should proceed. Methodology, Jackson argues, is determined not by positivist decree, nor by the object of explanation, but by certain philosophical commitments the scientist makes, whether consciously or not, in the realm of ontology. Patomäki and Wight (2000: 215) make a distinction between philosophical and scientific ontology, which Jackson draws upon. Whereas the latter refers to what objects exist in the world, the former delineates the very basis on which these designations are made in the first place, that is, the way in which the mind is connected or "hooked up" to the world (Jackson, 2011: 28). Deep-seated and unresolved philosophical-ontological debates have underpinned all knowledge-production since at least the dawn of the Enlightenment, yet we have still managed to 'go on' in this state of affairs. Given both the ongoing lack of

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resolution of these debates and the necessity of staking a position in them in order to carry out any kind of research, Jackson refers to these positions as philosophical-ontological 'wagers' and highlights two such debates that, when combined, provide a 2x2 matrix which helps clarify the presuppositions made by IR scholars and the methodologies which they (should) generate (Jackson, 2011):

Table 4.1

Constraints of space prevent a detailed elaboration of each wager. Briefly, mind-world dualism refers to the subject/object distinction made by René Descartes (1968); knowledge in the Cartesian framework is obtained by successfully crossing the gap, or establishing a correspondence, between a world-independent mind and a mind-independent world. Mind-world monism dissolves the subject/object distinction; for monists, mind is an irreducible part of the 'world' so it is literally nonsensical to speak of reality as mind-independent, and knowledge is characterised by its practical utility rather than correspondence with a supposed reality 'out there' (Nietzsche, 1996). Phenomenalism refers to the idea that valid knowledge can only be obtained within the realm of experience, whereas transfactualism is a doctrine holding that it is possible to have knowledge of things which transcend experience. Scientists, then, can make a variety of knowledge-claims and the way in which they arrive at them is determined ultimately by the philosophical-ontological wagers made in the above matrix. The status of these knowledge-claims entail distinct procedures for evaluation (Jackson, 2011):

Table 4.2

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I have already considered neopositivism[3] and critical realism; let me elaborate on analyticism and reflexivity. Although sharing a phenomenalist commitment with neopositivists, analyticists do not concern themselves with bridging a mind-world gap by establishing the empirical adequacy of their theories. Instead, they build ideal-typical *models* which provide useful narratives for organising our experiences. Like all mind-world monists, analyticists start from their concrete practical immersion in the world. The cultural milieu in which they are located, and the sphere of values associated with it, provides their necessary starting point. The analyticist takes a value-laden stand within this milieu, her value-commitments are then formalised and idealised into an analytical model comprised of one ideal-type or more, and this model is in turn applied to specific empirical situations in order to produce *facts*. As Jackson (2011: 145) argues, an ideal-type is a “specialized conceptual filter” which “necessarily functions as a way of expressing values even as it calls attention to specific features of the actual world and gathers them together under one conceptual heading”. We can then *scientifically* evaluate a model by focusing on how the scientist has formalised and idealised their value-commitments; for analyticists, it is not scientifically appropriate to question or criticise those value-commitments themselves (though it may be politically or ethically appropriate to do so) (Jackson, 2011: 146). Thus, we have analyticists in IR as diverse as Karin Fierke (1998), James Fearon (1997), Emanuel Adler and Michael Barnett (1998) and Kenneth Waltz (1979) (who, Jackson argues, is emphatically *not* a neopositivist, despite several attempts by others to transform his model into a device for generating falsifiable hypotheses). What distinguishes these theorists is the value-commitments made and formalised; in terms of philosophical ontology, they make the same wagers. Moreover, because analyticists do not test their models against some mind-independent reality, it does not make sense to speak of these models as either valid or invalid, or true or false; they are in varying degrees *useful* or *useless*.

Reflexivists are also mind-world monists but combining this with transfactualism decisively shapes the design and execution of their research. This is generally the realm of methodology for Critical Theory (Cox, 1996; Linklater, 1998), feminism (Enloe, 1996), and postcolonialism (Gilroy, 1993). Reflexivists start with the researcher's concrete practical situation, but unlike analyticists, seek to locate it in its wider social and historical context. Knowledge-production for the reflexivist is turned back on itself in a way that is intended to elicit self-examination not only in the researcher, but her audience. Jackson traces this methodology to the dialectical responses to the Enlightenment offered by Hegel and Marx, (very briefly) where contradictions confront each other, resolve themselves, and take us to a higher plane with new contradictions (Edgley, 1976: 400). The reflexivist scholar is interested in bringing these contradictions to light through a detailed examination of the social and historical context in which she is researching:

“Reflexivists ... are committed to the proposition that a systematic effort to analyze their own role as knowledge-producers and to locate themselves with reference to their broader social contexts will yield knowledge not merely of things experienced, but valid knowledge of the social arrangements that order and give rise to those experiences” (Jackson, 2011: 159).

Situating Critical Realism and its Critics

So let us take Jackson's own ideal-typical model and examine with it some of the critiques of critical realism in IR. Fred Chernoff (2002, 2007a, 2007b, 2009), a neopositivist, has advanced a number of arguments against the deployment of critical realism in IR research, and in line with Jackson's model, they do seem to centre around a 'phenomenalism versus transfactualism' debate. Chernoff refers extensively to the constructive empiricism of Bas van Fraassen (1980), which is explicit in suspending judgement on the realism principle, arguing instead that knowledge-production must be restricted to the realm of experience. There is simply no warrant, on a neopositivist interpretation, for positing the reality of in-principle unobservable entities because all such postulations are made by (abductive) inference only; it is a questionable move to ascribe equal (scientific) ontological status to objects of which we have direct knowledge (such as tables and chairs) and objects of which we have only abduced knowledge (such as social structures) (Chernoff, 2009: 384). For neopositivists like Chernoff, then, unobservable entities postulated in scientific theories should continue to be treated instrumentally and causation should continue to be understood in terms of the constant conjunction of observable events. They appear to 'hit rock-bottom' with critical realists when it comes to deciding whether or not we can have knowledge of things outside of our experiences.

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For interpretivist (analyticist) Friedrich Kratochwil (2000: 95), critical realists concern themselves with irrelevancies: "...what is at issue is not the 'thing-in-itself' but its recognition as 'something' which can only be established by bringing it under a description", and descriptions "...are not somehow neutral and objective but embrace all types of social practices and interests *that then make the things into what they are called or referred to*" (emphasis added). Truth, argues Kratochwil (2007: 13), is not a function of any correspondence between knowledge-claims and a mind-independent reality, but rather pertains to *assertions* which are made under particular frames of reference; it is a "procedural notion of rule-following in accordance with the practices of a community". Thus the description of a table will differ if it comes from a community of physicists, chemists, art historians or ordinary users, and the 'essence' of the table itself cannot help us in determining the truth of these descriptions; the table 'is' different depending on the description used (Kratochwil, 2007: 6). Kratochwil criticises critical realism by *fusing* epistemology and ontology, or 'subject' and 'object', or 'mind' and 'world'; a method he had already used with John Ruggie (1986: 764) in criticising (neo-)positivism.

Kratochwil's interventions also display the utility of Jackson's model. In fact, we can say with some confidence that both of these scholars are mind-world monists and this deeply informs their critiques of critical realism. Jackson himself notes how discussions of ontology and epistemology in IR have largely taken their cue from Wendt's (realist) introduction of the concepts, where ontology is equated with scientific ontology and prioritised over epistemology; they have essentially entered the discipline as discrete entities. So the framework under which these debates are carried out in IR puts analyticism and reflexivity at an immediate disadvantage; questions of philosophical ontology fade into the background, mind-world dualism is uncritically accepted, ideal-typical models and reflexive critiques are occasionally shoehorned into theories designed to generate falsifiable hypotheses, neopositivism comes to be identified as 'a problem' and critical realism emerges as the only viable contender without having demonstrated its worth against analyticism and reflexivity (Jackson, 2011: 74). Given that these philosophical-ontological wagers are "like nothing else so much as an existential leap of faith", there is no warrant for privileging any particular methodology and the default position in the field should be an engaged pluralism (Jackson, 2011: 197, 207ff).

Jackson also expresses concern with the links critical realism has to certain forms of political advocacy. Whereas he argues that other methodologies may produce political *effects* through their scientific research, "critical realist commitments sometimes look like more or less straightforward translations of political positions...", the implication being that due care has not been applied in logically distinguishing between facts, values and practice (Jackson, 2011: 76, 224 [note 8], 233 [note 3]). Jackson, in conjunction with Stuart Kaufman (2007: 96), has previously defended this logical distinction as a means of preserving the nonpartisan nature of scientific research when intervening in public affairs:

"The fact that we have a perspective ... is philosophically and epistemologically important, but it has little bearing on the question of whether a piece of work is 'scientific' or not. Instead, the decisive issue is internal validity: whether, given our assumptions, our conclusions follow rigorously from the evidence and logic we provide".

A useful account?

Jackson's book is clearly an impressive attempt at reconstructing the discipline, but we might want to question precisely *how* useful his account is for clarifying the philosophical differences between IR scholars. Hidemi Suganami (2013), approaching the matter historically as well as philosophically, identifies a number of problems with it. Firstly, it is far from obvious that the mind-independent world of both neopositivists and critical realists is the same world, so we might question their commonalities in such a 2x2 matrix. The neopositivist world is essentially data-sets; it exists independently of the mind only as 'that which can be experienced', a mere means for testing empirical hypotheses. The critical realist world includes structures and causal powers which go deeper than the empirical realm and which critical realists seek to know through transcendental argument. What unites the two approaches, argues Suganami, is not the same mind-independent world, but the fact that their knowledge *represents* its object in one way or another. Better categories, then, might be epistemological in nature: *representational* versus *constructionist* views of knowledge (with both forming a continuum). Secondly, Suganami argues that the second wager is also epistemological, not ontological, in nature; the relationship between knowledge and observation speaks to what we can *know*. Thirdly, analyticists and reflexivists are separated not in their view of the relationship between knowledge

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and observation, but in the purposes to which their knowledge-production practices are put; the former is interpretive, the latter is transformative. The matrix then splits in two (Suganami, 2013):

Table 4.3

Table 4.4

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It is important to note that on this interpretation (which is not an alternative to Jackson's model, but merely an illustration of what it "deconstructs itself into" after Suganami [2013: 263 (note44)] has reflected upon it), critical realists may (in fact, do) have transformative aims in their knowledge-production, and there is no reason for analyticists to restrict production of knowledge to the phenomenal realm. Developing this framework further, Suganami suggests that Jackson's original model implies that all four methodologies are on a level playing-field, whereas lines of progression might be identified instead. Critical realism emerges as an ontological critique of neopositivism, claiming that we cannot make intelligible what neopositivists (or indeed any scientists) do without assuming a depth ontology. Analyticism on the other hand, provides an epistemological critique of neopositivism, arguing that knowledge-claims are not tested against the world but are only ever tested against other knowledge-claims. Reflexivity arises as a critique of both neopositivism and analyticism, seeking to move beyond explaining and understanding to emancipation, which in turn is also an interest of critical realism, so critical realism and reflexivity should in some sense form the same category.

Wight (2013) offers a critical realist intervention which also highlights the linkage between critical realism and reflexivity, noting that Jackson's account of the latter coincides with the former's transitive dimension of reality, where knowledge emerges through the transformation of pre-existing knowledge. Wight makes many other interesting points in his contribution but three more in particular stand out. First, the monistic position *always* presupposes a dualist metaphysics. If Jackson were a consistent monist, Wight (2013: 332) argues,

"...then such mind-world dualists as there are could not have an existence independent of the ideas Jackson, and other monists, hold about them. In which case, we could dismiss Jackson's account of dualists as nothing but constructions of Jackson's own way of thinking about the world. But Jackson ... seems to suggest ... that there really are mind-dualists (*sic*) ... that exist in the world independent of how he defines them".

It is an invalid move, Wight is saying here, to detach the act of reference from that to which it refers. Object *x* is more than a construction of the mind for the monist; it is external to her, it is *real*, and this can easily be seen by asking her to clarify the meaning of *x* after her first exposition of it, that is, refer to it again (Wight, 2006: 27). Yet, notwithstanding the fact that I assent to this argument, it is slightly disingenuous of Wight to deploy it when Jackson is involved in a project intended to create space for those who oppose it; it reinforces the idea that critical realism has 'imperialistic' ambitions in the discipline. I identify as a critical realist insofar as I have not yet encountered a convincing opposition to its philosophy, but part of this identity requires a clear and distinct idea of what I am *not*; my opponents require and deserve a conceptual framework which allows them to coherently articulate their opposition. Jackson may not have got it quite right, but his broader project does not deserve to be undercut on the basis of its problematic categories, upon which alone, in my judgement, it does not stand or fall.

Second, Wight questions the possibility of an 'engaged' pluralism within this framework. He draws attention to the philosophical wagers each position supposedly makes on a leap of faith and the inability of other positions to therefore criticise them; the spectre of incommensurability haunts the discipline yet again, despite Jackson's (2011: 210) call for "dialogical *encounters*" between positions (emphasis in original). Whilst critical realists offer an ontological solution to problems like this, Wight's criticism can also lead back to the point made in the previous paragraph. We can examine these 'philosophical-ontological' debates in more detail (that is, question the extent to which each methodology is internally justified) with the concepts Jackson provides, or – and I submit that this is the preferable option – we explore the salient issues and find better concepts. Perhaps this is what Jackson has in mind as a 'dialogical encounter' after all; his methodologies may not be as hermetically sealed as he portrays them.

Finally, Wight's (2013: 343) critique of Jackson's focus on methodology is powerful: such a focus obscures many important differences within and between the various positions. I wish to demonstrate the force of this critique with realism in particular. As mentioned in the first footnote of this dissertation, realism is a broad church; it has much potential in its application to IR. For example, one can be a scientific realist but not a critical realist (like Wendt), eschewing Bhaskar's theory of explanatory critiques. Or one can embrace the collapse of the fact/value distinction and be a *critical* realist about social reality. Switching our focus from ontology to methodology, and working within a framework of the type that Jackson has developed, might obscure realism's potentiality as well as the differences

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within and between realists and anti-realists, which are often ontological and epistemological in nature.

My own (tentative) *critical* realist response to Jackson is to question the logical distinction he makes between facts, values and practice in the first place. Expressed differently, and with a nod to the analysis carried out by both Wight and Suganami, Jackson's model inadequately develops and depicts the whole idea of a *critical* social science. This is a function of his own Weberian methodology and the value-commitments with which he began; it is politically, ethically, and – critical realists might argue – *scientifically* appropriate to criticise them. His model is less useful when trying to examine and distinguish between critical realism and reflexivity, partly because both positions are to a greater or lesser extent the progeny of Marxism, and it is in *this* scientific tradition, which views reason as dialectical, that we see a fundamental challenge to the logic which separates facts, values and practice; a logic which pervades Jackson's whole project. Internal validity and systematicity are still possible using a logic other than that which applies to the analytical tradition in philosophy[4]. Jackson develops the concept of dialectic only within the reflexivist position but it also applies to critical realism (Edgley, 1976; Bhaskar, 1993). Dialectic is an aspect of transfactualism broadly defined, a wager taken by both critical realists and reflexivists, but again the question remains as to how useful Jackson's dualist/monist categories are here for clarifying the key issues at stake[5]. Both Wight and Suganami recognise the blurred distinction between critical realism and reflexivity, which exposes a certain lack of utility in Jackson's model, but neither scholar investigates the matter fully; this is an area requiring further research, especially if the model emerges as an accepted framework for organising the discipline.

Conclusion

Jackson's *Conduct of Inquiry* is an excellent attempt at drawing the current lines of contention in the field. Science has been defined widely enough (and Jackson has defended this move with extensive reference to the philosophy of science literature) so that it encompasses the majority of IR research, depriving certain scholars from using the concept as a rhetorical ploy to marginalise their opponents. Situating some of the critiques of critical realism in IR within this framework suggests that Jackson's model captures important philosophical differences between scholars and provides a useful account which allows us to move beyond the fourth debate, where positivist/interpretivist, explaining/understanding, rationalist/reflectivist dichotomies have become unfit for purpose. But the question remains as to precisely *how* useful Jackson's account is. Both Wight and Suganami have identified a number of problems with his conceptual categories: historical analyses might point to progression of some sort rather than a two-dimensional plain of philosophical difference; key disagreements may be ontological or epistemological in nature, and thereby obscured by a focus on methodology; and questions remain as to how engaged scholars might be in this pluralist framework if it is to be adopted. Moreover, the similarities and differences between critical realism and reflexivity remain unclear. Even so, it is my judgement that Jackson has fastened on to something important. We need a new framework in IR which captures the diversity of philosophical positions amongst scholars, and its rudiments are to be found in his *Conduct of Inquiry*.

CONCLUSION

The 'science' question has been present in IR since its very beginning and it is highly doubtful that the cultural prestige attached to the label will fade any time soon (Jackson, 2011: 10). This is not to suggest that we simply embrace the concept and make it a Procrustean bed into which all research in IR must be made to fit. Rather, it suggests that we must make every effort to understand the concept so that we know both where it is relevant to the study of international relations, and when it is merely being used as a rhetorical ploy to traduce critical research. That is, we must take seriously what the philosophy of science has to say to the discipline. In the first chapter, I provided a brief history of IR to clarify the manner in which philosophy of science debates have been employed. It was seen that the mantle of science was assumed by positivists, and ceded by traditionalists, during the second debate and that this has had profound consequences for how science has been discussed ever since. The fourth debate, in which critically-minded scholars drew upon Winchian philosophies of social science to underwrite their positions, was framed around positivist precepts. But the epistemological chasm that opened up between positivists and interpretivists encouraged scholars such as Wendt to seek out possible avenues of reconciliation. Wendt turned to the philosophy of science and found scientific realism. Notwithstanding the problems he had in translating this philosophy into social and IR theory (and his idiosyncratic equation of realism with positivism), Wendt introduced

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ideas to the discipline that continue to prise apart the tenacious grip that positivism has on the concept of science.

Scholars such as Wight, Joseph, Patomäki and Kurki have similarly been drawn to scientific realism, but they have developed a mode of scholarship in IR that is particularly indebted to the philosophy of Bhaskar, who built his own realist theory of science which extended into a critique of the human sciences: critical realism. Through an emphasis on ontology rather than epistemology, critical realists present a framework which locates different IR theories in studying specific planes of social reality and they argue that the task of social science is to elucidate the relations between these planes. Bhaskar's theory of explanatory critique marks this approach out from scientific realism; it calls into question the fact/value distinction, insofar as the exposure of certain structures might reveal the falsity of other (ideational) structures and the social scientist (and her audience) may, *ceteris paribus*, pass straight to an evaluative judgement that the false structures ought to be corrected. This is by no means an essential component of realist philosophy and it should be stressed that realism has the potential to be used in IR without accepting the collapse of the fact/value distinction.

Whilst realism offers a convincing framework for defragmenting the discipline, it is clear that not all IR scholars assent to their philosophical arguments. Jackson embarks on a project to clearly articulate these differences. He conceptualises two debates in *philosophical* ontology – mind-world dualism versus mind-world monism, and phenomenalism versus transfactualism – with positions staked in each of which give rise to four distinctive methodologies: neopositivism, critical realism, analyticism and reflexivity. Applying this model to existing critiques of critical realism in IR reveals something of its utility, but as demonstrated in the last chapter, it conceals as well as reveals. Three questions arise from my interpretation of Jackson's book (and the responses to it from Wight and Suganami):

- What are the limitations in using the monism/dualism categories to distinguish between critical realists and reflexivists?
- What is the relation of dialectic to both the monism/dualism categories, and Suganami's suggested replacement (a continuum from representationalist to constructionist views of knowledge)?
- What are the ontological and epistemological issues obscured by Jackson's focus on methodology and how far do these issues help us clarify the different philosophical commitments made by IR scholars?

In the final analysis, I believe it is clear that we have already transcended the fourth debate in IR. The epistemological war of words between positivists and interpretivists has exhausted itself. New philosophies of science and new concepts have entered the discipline and the task now is to find where the new lines of contention are to be drawn. Whilst critical realists offer a powerful meta-theoretical framework within which different IR theorists can explore the relations between their research, they do not capture the philosophical differences which continue to divide scholars in the discipline; they represent one amongst many philosophical positions. Jackson's *Conduct of Inquiry* gives us a useful starting point from which to clarify these positions and construct the next great debate in IR.

Bibliography

Adler, E., & Barnett, M., 1998. *Security Communities*. Cambridge: Cambridge University Press.

Angell, N., 1947. *The Steep Places: An Examination of Political Tendencies*. London: Hamish Hamilton.

Archer, M., 1998. 'Realism and Morphogenesis', in Archer, M., Bhaskar, R., Collier, A., & Norrie, A., eds, *Critical Realism: Essential Readings*. London: Routledge. pp.356-382.

Bhaskar, R., 1975. *A Realist Theory of Science*. Sussex: The Harvester Press.

Bhaskar, R., 1989a. *Reclaiming Reality: A Critical Introduction to Contemporary Philosophy*. London: Verso.

Bhaskar, R., 1989b. *The Possibility of Naturalism: A Philosophical Critique of the Contemporary Human Sciences*. 2nd Edition. London: The Harvester Press.

Science Bound? Transcending the Fourth 'Great Debate' in International Relations

Written by Gavin Stewart

- Bhaskar, R., 1993. 'Critical Realism and Dialectic', in Archer, M., Bhaskar, R., Collier, A., & Norrie, A., eds, 1998. *Critical Realism: Essential Readings*. London: Routledge. pp.575-640.
- Bowring, B., 2010. 'What is Realism in International Law and Human Rights?', in Joseph, J. & Wight, C., eds, *Scientific Realism and International Relations*. London: Palgrave MacMillan. pp.101-114.
- Bull, H., 1969. 'International Theory: The Case for a Classical Approach', in Knorr, K., & Rosenau, J. ed., 1969. *Contending Approaches to International Politics*. Princeton: Princeton University Press. Ch.2. pp.20-38.
- Carlsnaes, W., Risse, T., & Simmons, B.A. eds., 2000. *Handbook of International Relations*. London: Sage.
- Carr, E.H., 1946. 'The Beginnings of a Science', in Linklater, A. ed., 2000. *International Relations: Critical Concepts in Political Science*. Vol. I. Ch.9. pp.252-259.
- Chernoff, F., 2002. 'Scientific Realism as a Metatheory of International Politics'. *International Studies Quarterly*. 46(1). pp.189-207.
- Chernoff, F., 2007a. *Theory and Metatheory in International Relations*. New York: Palgrave MacMillan.
- Chernoff, F., 2007b. 'Critical Realism, Scientific Realism and International Relations Theory'. *Millennium* 35(2). pp.399-407.
- Chernoff, F., 2009. 'The Ontological Fallacy: a rejoinder on the status of scientific realism in international relations', *Review of International Studies* 35(2). pp.371-395.
- Collier, A., 1994. 'Explanation and Emancipation', in Archer, M., Bhaskar, R., Collier, A., & Norrie, A., eds, 1998. *Critical Realism: Essential Readings*. London: Routledge. pp.444-472.
- Cox, R., 1996. 'Social Forces, States and World Orders: Beyond International Relations Theory', in *Millennium* 10(2), pp.126-155.
- Descartes, R., 1968. *Discourse on Method and The Meditations*. London: Penguin.
- Edgley, R., 1976. 'Reason as Dialectic: Science, social science and socialist science', in *Radical Philosophy* 15, pp.2-7.
- Enloe, C., 1996. 'Margins, silences, and bottom rungs: How to overcome the underestimation of power in the study of international relations', in Smith, S., Booth, K., & Zalewski, Z, eds, *International Theory: Positivism and Beyond*. Cambridge: Cambridge University Press. pp.186-202.
- Fearon, J., 1997. 'Signalling Foreign Policy Interests: Tying Hands versus Sinking Costs', in *Journal of Conflict Resolution* 41(1), pp.68-90.
- Fierke, K., 1998. *Changing Games, Changing Strategies: Critical Investigations in Security*. Manchester: Manchester University Press.
- Gilroy, P., 1993. *The Black Atlantic: Modernity and Double-Consciousness*. Cambridge: Harvard University Press.
- Harding, S., 1991. *Whose Science, Whose Knowledge?: Thinking from Women's Lives*. Buckingham: Open University Press.
- Hempel, C., 1965. 'The Logic of Functional Analysis', in *Aspects of Scientific Explanation and Other Essays*. London: Collier-MacMillan. pp.297-330.

Science Bound? Transcending the Fourth 'Great Debate' in International Relations

Written by Gavin Stewart

- Hoffman, M., 1991. 'Restructuring, Reconstruction, Reinscription, Rearticulation: Four Voices in Critical International Theory', in *Millennium* 20(2). pp.169-185.
- Hoffman, S., 1961. 'International Relations: The Long Road to Theory', in Rosenau, J., ed. 1969. *International Politics and Foreign Policy: A Reader in Research and Theory*. London: Collier-MacMillan.
- Hollis, M., & Smith, S., 1990. *Explaining and Understanding International Relations*. Oxford: Clarendon Press.
- Jackson, P., 2011. *The Conduct of Inquiry in International Relations*. New York: Routledge.
- Jackson, P. & Kaufman, S., 2007. 'Security scholars for a sensible foreign policy: A study in Weberian activism', in *Perspectives on Politics* 5(1), pp.95-103.
- Joseph, J., 2002. *Hegemony: A Realist Analysis*. London: Routledge.
- Joseph, J. & Wight, C., eds, 2010. *Scientific Realism and International Relations*. London: Palgrave MacMillan.
- Kaplan, M., 1969. 'The New Great Debate: Traditionalism vs. Science in International Relations', in Knorr, K., & Rosenau, J. ed., 1969. *Contending Approaches to International Politics*. Princeton: Princeton University Press. Ch.3. pp.39-61.
- Keohane, R., 1989. *International Institutions and State Power: Essays in International Relations Theory*. Boulder: Westview Press.
- Kessler, O., 2012. 'On Logic, Intersubjectivity and Meaning: is reality an assumption we just don't need?', in *Review of International Studies* 38(1). pp.253-265.
- King, G., Keohane, R., & Verba, S., 1994. *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton: Princeton University Press.
- Koivisto, M., 2010. 'State Theory in International Relations: Why Realism Matters', in Joseph, J. & Wight, C., eds, 2010. *Scientific Realism and International Relations*. London: Palgrave MacMillan. pp.69-87.
- Kratochwil, F., 2000. 'Constructing a New Orthodoxy? Wendt's 'Social Theory of International Politics' and the Constructivist Challenge', in *Millennium* 29(1). pp.73-101.
- Kratochwil, F., 2007a. 'Of false promises and good bets: a plea for a pragmatic approach to theory building (the Tartu lecture)' in *Journal of International Relations and Development* 10(1). pp.1-15.
- Kratochwil, F., & Ruggie, J., 1986. 'International Organization: A State of the Art on an Art of the State' in *International Organization* 40(4). pp.753-775.
- Kuhn, T., 1996. *The Structure of Scientific Revolutions*. 3rd Edition. Chicago: University of Chicago Press.
- Kurki, M., 2008. *Causation in International Relations: Reclaiming Causal Analysis*. Cambridge: Cambridge University Press.
- Kurki, M., & Wight, C., 2010. 'International Relations and Social Science', in Dunne, T., Kurki, M., & Smith, S., eds, 2010. *International Relations Theories: Discipline and Diversity*. 2nd Edition. Oxford: Oxford University Press. pp.14-35.
- Lakatos, I., 1970. 'Falsification and the Methodology of Scientific Research Programmes', in Lakatos, I., & Musgrave, A. eds., 1970. *Criticism and the Growth of Knowledge*. pp.91-196.

Science Bound? Transcending the Fourth 'Great Debate' in International Relations

Written by Gavin Stewart

- Lapid, Y., 1989. 'The third debate: On the prospects of international theory in a post-positivist era', in *International Studies Quarterly* 33(3). pp.235-254.
- Linklater, A., 1990. *Beyond Realism and Marxism: Critical Theory and International Relations*. Basingstoke: MacMillan.
- Linklater, A., 1998. *The Transformation of Political Community*. Cambridge: Polity Press.
- Nietzsche, F.W., 1996. *On the Genealogy of Morals*. Oxford: Oxford University Press.
- Outhwaite, W., 1987. *New Philosophies of Social Science: Realism, Hermeneutics and Critical Theory*. Basingstoke: MacMillan Education.
- Patomäki, H., 2002. *After International Relations: Critical Realism and the (re-)construction of world politics*. London: Routledge.
- Patomäki, H., 2010. 'Exploring Possible, Likely and Desirable Global Futures: Beyond the Closed vs Open Systems Dichotomy', in Joseph, J. & Wight, C., eds, 2010. *Scientific Realism and International Relations*. London: Palgrave MacMillan. pp.147-166.
- Patomäki, H. & Wight, C., 2000. 'After Postpositivism? The Promises of Critical Realism', in *International Studies Quarterly* 44(2), pp.213-237.
- Popper, K., 1992. *The Logic of Scientific Discovery*. London: Routledge.
- Porpora, D., 1989. 'Four Concepts of Social Structure', in *Journal for the Theory of Social Behaviour* 19(2), pp.195-211.
- Reus-Smit, C., 2009. 'Constructivism', in *Theories of International Relations*. 4th Edition. London: Palgrave MacMillan. Ch.9. pp.212-236.
- Rivas, J., 2010. 'Realism. For Real this Time: Scientific Realism is not a Compromise between Positivism and Interpretivism', in Joseph, J. & Wight, C., eds, *Scientific Realism and International Relations*. London: Palgrave MacMillan. pp.203-227.
- Sayer, A., 1992. *Method in Social Science: A Realist Approach*. 2nd Edition. London: Routledge.
- Singer, J.D., 1969. 'The Incomplete Theorist: Insight Without Evidence', in Knorr, K., & Rosenau, J. ed., 1969. *Contending Approaches to International Politics*. Princeton: Princeton University Press. Ch.4. pp.62-86.
- Suganami, H., 2013. 'Meta-Jackson: Rethinking Patrick Thaddeus Jackson's *Conduct of Inquiry*', in *Millennium* 41(2), pp.248-269.
- Van Fraassen, B., 1980. *The Scientific Image*. Oxford: Clarendon.
- Wæver, O., 1996. 'The Rise and Fall of the Inter-paradigm Debate', in Smith, S., Booth, K., & Zalewski, M. eds. 1996. *International Theory: Positivism and Beyond*. Ch.7. pp.149-185.
- Waltz, K., 1979. *Theory of International Politics*. London: McGraw Hill.
- Wendt, A., 1999. *Social Theory of International Politics*. Cambridge: Cambridge University Press.
- Whitham, B., 2012. 'Critical Realism and International Relations: Causal Explanations for Liberal War'. Conference

Science Bound? Transcending the Fourth 'Great Debate' in International Relations

Written by Gavin Stewart

paper presented at the *2012 International BISA-ISA Conference*. Edinburgh, UK: 22nd June 2012. Online: http://www.academia.edu/348746/Critical_Realism_and_International_Relations_Causal_Explanations_for_Liberal_War. Accessed 5th February 2013.

Wight, C., 1996. 'Incommensurability and Cross-paradigm Communication: What's the Frequency Kenneth?', in *Millennium* 25(2), pp.291-320.

Wight, C., 2000. 'Philosophy of Social Science and IR', in Carlsnaes, W., Risse, T., & Simmons, B.A. Eds. 2000. *Handbook of International Relations*. Ch.2. pp.23-51.

Wight, C., 2006. *Agents, Structures and International Relations: Politics as Ontology*. Cambridge: Cambridge University Press.

Wight, C., 2007. 'A Manifesto for Scientific Realism in IR: Assuming the Can-opener Won't Work!', in *Millennium* 35(2). pp.379-398.

Wight, C., 2013. 'The Dualistic Grounding of Monism: Science, Pluralism and Typological Truncation', in *Millennium* 41(2), pp.326-345.

Winch, P., 1958/1990. *The Idea of a Social Science and its Relation to Philosophy*. 2nd Edition. London: Routledge.

[1] I follow Ole Wæver (1996) and others in identifying four, instead of three (Lapid, 1989), great debates.

[2] Critical realism developed out of the philosophy of science known as scientific realism, which is itself part of the broader tradition of philosophical realism. It is not my intention in this paper to *evaluate* the differences between these bodies of thought so I generally refer to critical realism, although several critical realist commitments are shared with scientific and philosophical realism (and it is possible to be a scientific or philosophical realist without subscribing to critical realism – see Chernoff (2002/2007b) and Joseph & Wight (2010) for a more detailed discussion). Where the distinction is vague or unnecessary for the purposes of this paper, I refer simply to realism. The IR theories generally referred to as 'realist' are involved in an entirely different project; to distinguish the IR theories from the philosophies of science/social science in this paper, I capitalise the former.

[3] Jackson (2011: 33/59) adds the neo- prefix to distinguish it from logical positivism and because 'positivism' has become quite a nebulous concept; for our purposes, it is equivalent to 'positivism' in the previous chapters.

[4] Indeed, some attention, though not enough, has already been paid in IR to the history and philosophy of logic when considering these issues (Kessler, 2012).

[5] Suganami's epistemological replacements lack utility here as well. He believes there is "no doubt" that reflexivists have a constructionist view of knowledge, yet he goes on to juxtapose his representationalist/constructionist continuum with dialectic and suggests that reflexivity, as dialectical (not constructionist?), stands out from the rest (including representationalist critical realism, which, as I have pointed out, also makes use of dialectic) (Suganami, 2013: 262/264 [note45]).

Written by: Gavin Stewart
Written at: University of Glasgow
Written for: Dr Cian O'Driscoll
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