

Introduction

The philosophy of social science has played an important role in the formation, development, and practice of IR as an academic discipline. Often issues concerning the philosophy of social science are described as meta-theoretical debates. **Meta-theory** does not take a specific event, phenomenon, or series of empirical real world practices as its object of analysis, but explores the underlying assumptions of all theory and attempts to understand the consequences of such assumptions on the act of theorizing and the practice of empirical research. One way to think about this is in terms of theories about theories.

The role of meta-theoretical debates is frequently misunderstood. Some see meta-theorizing as nothing more than a quick precursor to empirical research. Others see it as a distraction from the real issues that should concern the discipline. However, it is impossible for research to proceed in any subject domain in the social sciences in the absence of a set of commitments embedded within positions on the philosophy of social science. In this sense, meta-theoretical positions direct, in a fundamental way, the manner in which people theorize and, indeed, 'see' the world.

To put this in philosophical terminology, all theoretical positions are dependent upon particular assumptions about **ontology** (theory of being: what is the world made of? what objects do we study?), **epistemology** (theory of knowledge: how do we come to have knowledge of the world?), and **methodology** (theory of methods: what methods do we use to unearth data and evidence?). On the basis of these assumptions researchers may literally come to 'see' the world in different ways: ontologically in terms of seeing different object domains, epistemologically in terms of accepting or rejecting particular knowledge claims, and methodologically in terms of choosing particular methods of study. Meta-theoretical positions have deep, if often unrecognized, consequences for social analysis. Being aware of the issues at stake in meta-theoretical debate, and of their significance in terms of concrete research, serves as an important starting point for understanding IR theory and facilitates a deeper awareness of one's own meta-theoretical orientation.

Meta-theoretical debates surrounding the philosophy of social science in IR have tended to revolve around two interrelated questions. Is International Relations a science or an art? What does the 'scientific' study of world politics entail? A position can be taken on the question of whether IR can be a science only on the basis of some or other account of what science is, and an account of what we think IR is. Hence, the questions of what science is, and what IR is, are prior to the question of whether IR can be a science. This inevitably takes the discussion into the terrain of the philosophy of science. This seems a long way from the concerns of a discipline focused on the study of international political processes, and the frustration of some within the discipline concerning meta-theoretical debate is understandable. Yet, there is no way to avoid these issues and at a minimum all contributors to the discipline should understand the assumptions that make their own position possible; as well as being aware of alternative conceptualizations of what IR theory and research might involve.

That the philosophy of science has played an important role in the history and development of the discipline is easy to demonstrate. For a large part of the history of the field a

particular conception of science has dominated. The influence of **positivism** as a philosophy of science has shaped not only how we theorize about the subject, and what counts as a valid question, but also what can count as valid forms of evidence and knowledge. Moreover, the training in methodological techniques given to graduate students – particularly in the leading graduate schools in the USA – tends still to be deeply embedded within positivist assumptions. Indeed, so strong is the influence of positivism on the disciplinary imagination that even those concerned to reject a scientific approach to IR do so on the basis of a general acceptance of the positivist model of science. There are two points worthy of note in this respect. First, despite the acceptance of the positivist model of science by both advocates and critics alike, it is clear that the account of positivism that dominates the discipline is rudimentary. Second, within the philosophy of science positivism was long ago discredited as a valid account of scientific practice. Had the discipline been prepared to take the philosophy of social science, and by extension the philosophy of science, more seriously, a long and potentially damaging commitment to positivism might have been avoided. This does not mean that all research underpinned by positivist principles is invalid. Indeed, we believe that scholars, who might be considered to be working in the positivist tradition, have made some of the most important and lasting contributions to the discipline. Nonetheless, this view of science is highly contested and there is no reason to insist that all research should fit this model. Equally, a rejection of the positivist model of science need not lead to the rejection of science.

This chapter argues that social science debates within the discipline can be moved forward by a comprehensive re-examination of what science is. Hence, besides reviewing the historical and contemporary philosophy of social science debates in IR, the chapter also points towards new accounts of science that have been introduced to the discipline in the last decade or so; accounts that hold the promise of reformulating our understanding of the aims and methods of IR as a social science. Science, we argue, is not based on a dogmatic insistence on the certainty of its claims but, rather, rests on a commitment to constant critique.

The philosophy of social science in IR: an historical overview

The discipline of International Relations, in common with all the social sciences, has been deeply divided on many issues throughout its history. A common way of narrating this history is in terms of the **great debates** surrounding these key issues. In many respects debate is the wrong term to use, since in some of them a group of theorists situated their own approach as a direct counter to previous ways of thinking, without generating a substantial set of responses (Schmidt 1998). Some of the debates, however, were genuine and scholars within the discipline have often been prepared to engage with one another over substantial areas of disagreement. Although there is no consensus on the exact number of great debates four are generally accepted to have played an important role in shaping the discipline (Wæver 1996).

The first debate refers to the exchanges between the realists and idealists before, during, and immediately after the Second World War. This was primarily waged over the role of international institutions and the likelihood that the causes of war might be ameliorated. The second debate emerged in the 1960s. It pitted the traditionalists, who were keen to defend a more humanistic methodology, against the modernizers, who aimed to introduce a greater level of methodological rigour to the discipline. The interparadigm debate of the 1970s and 1980s focused on disagreements among the realist, pluralist, and Marxist perspectives on how best to understand and explain international processes. Finally, the most recent debate, which some IR theorists call the fourth debate, has centred on deep-seated disagreements about what the discipline should study and how it should study it. While these debates have often highlighted the paradigmatic divisions between different and distinct IR theoretical schools of thought, an often-unrecognized issue has cut across and underpinned all the debates. This is the issue of whether or not International Relations can be, or should be, a form of inquiry based upon scientific principles.

Science and the first debate

The first great debate in the discipline is said to have taken place between the idealists and the realists. The idealists were driven by a desire to develop a set of institutions, procedures, and practices that could eradicate, or at least control, war in the international system. They were motivated by the horrors of the First World War and they sincerely believed that there must be a better way to organize international affairs. The most visible, and historically important, aspect of their programme cohered in Woodrow Wilson's Fourteen-point Plan for a new postwar order. However, the most enduring contribution of the idealists in terms of disciplinary development was the idea of an academic discipline constructed to study the world of international politics. For the idealists, ignorance and lack of understanding was a primary source of international conflict. A better understanding of international processes was required if control of the system was to be achieved. The idealists believed progress was only possible if we could develop and use reason to control the irrational desires and frailties that infect the human condition. The pinnacle of human reason in the service of effective control was science. This thinking led to the establishment of an academic department of international politics located in Aberystwyth, Wales. The aim of this new discipline was the production of a body of knowledge that could be used in the furtherance of peace. Although the idealists never clearly articulated what they meant by science, they were committed to producing knowledge that was scientific.

The absence of a clear account of science in the early years of the discipline is understandable given that the philosophy of science was itself not yet fully established as an academic field of study. Science, to the Enlightenment mind, was self-evident. Yet the realist critique of the idealists was to challenge the extent to which the knowledge produced by the idealists was scientific. In particular, realists challenged the 'unsystematic' and value-driven idealist approach to IR. Both E. H. Carr (1946; 1987) and Hans Morgenthau (1947; 1948a; discussed in more detail in Chapter 3) accused the idealists of focusing their attention on how the world 'ought' to be, as opposed to dealing with how it objectively was. In a scathing attack Carr famously concluded that the difference between realism and idealism was analogous to that between science and alchemy (1946: 1–11).

Neither Carr, nor Morgenthau, however, can be said to have uncritically embraced a naive view of science. Carr was only too well aware of the problematic status of facts and associated truth claims. His celebrated notion of the 'relativity of thought' and his sophisticated treatment of historical method can hardly be said to constitute an uncritical commitment to science. Likewise, Morgenthau went to great lengths to distance his approach to political science from attempts to construct 'iron laws' comparable to those discovered in the natural sciences (Morgenthau 1947). Despite his belief that international politics was governed by 'objective laws' rooted in human nature, Morgenthau articulated a series of telling objections to any attempt to construct a science of international politics modelled on the natural sciences. After all, if international politics was governed by 'objective laws' rooted in human nature, then the true causes of war were to be found in biology, and any nascent science of IR could provide only suggestions for dealing with a realm of human activity that was to a great extent predetermined. Morgenthau's account of IR was not concerned to provide a series of depth explanations of the workings of the world but, rather, aimed at articulating a series of techniques and modes of operation for dealing with a world on the basis of a simple, but enticing, explanation. Nonetheless, despite these caveats, and the limited nature of debate surrounding understandings of science within the discipline, the status of science was clearly important in the early period of the development of the subject. In the second great debate, however, it was to take centre stage.

Science and the second debate

The second debate took the 'rhetorical' arguments about science and gave them methodological substance. Drawing on the behaviourist revolution in the social sciences a new breed of 'scientific' IR scholars, such as David Singer and Morton Kaplan, sought to define and refine systematic scientific methods of inquiry for the discipline of IR. The behaviourist research instigated fierce resistance from those committed to a more historicist, or interpretive, form of IR.

For the proponents of the behavioural revolution, IR could move forward only if it consciously modelled itself on the natural sciences. By the time the second debate had emerged in IR the philosophy of science was a well developed and institutionally located academic discipline. Moreover, within the philosophy of science one view had come to dominate; although ironically just as IR was to formalize its vision of science the consensus within the philosophy of science had already begun to unravel. The model of science that had dominated was called positivism, and the behaviouralists in IR embraced it enthusiastically. There are many versions of positivism and such was its promotion and reception in IR that it has come to be a synonym for science. This is a regrettable move since it effectively closes down all debate on what kind of science IR might be; if IR is to be a science, it must be modelled on positivist principles.

Positivism suggests that scientific knowledge emerges only with the collection of observable data. The collection of sufficient data, it was presumed, would lead to the identification of patterns that would in turn allow the formulation of laws. The importance of observable data for this approach cannot be over-stressed. The inscription on the Social Science Research Building façade, at the University of Chicago, reads, 'If you cannot

measure it, your knowledge is meagre and unsatisfactory.' This stress on observable data and measurement led the proponents of the new scientific model to engage in a series of sharp criticisms of the account of science adhered to by many realists and other IR scholars. Many of the core concepts of 'classical' realism were deemed to be lacking in specificity and were not susceptible to measurement. Power and the national interest, for example, if they were to be studied according to the principles of the new science, needed increased levels of clarity and specification; anything that could not be rigorously measured and subject to testing was to be purged from the new ontology. New methods were developed and the mathematical modelling of international processes took pride of place. The behaviouralists hoped that through the relentless accumulation of data, knowledge would progress and control would follow.

The behaviouralist criticisms of the traditional approach did not go unchallenged. Many argued that the core concepts of the discipline were simply not susceptible to the kind of austere data collection procedures advocated by the new model of science. Chief among them was the English school theorist Hedley Bull, but the traditionalists also included some of the initial defenders of science in IR such as Morgenthau (see exchanges in Knorr and Rosenau 1969). For these theorists, systematic inquiry was one thing, the obsession with data collection and manipulation on positivist lines was another. Study of IR for Bull and Morgenthau involved significant conceptual and interpretative judgements, something that the behaviourist theorists in their focus on systematic data collection and scientific inference seemed not to adequately recognize. The dispute over science also developed a geographical aspect. Although there were some advocates of the new science in Britain and Europe it was largely a US-led development. Despite the fact that the austere version of science advocated by the behaviouralists was significantly watered down over the passage of time, the underlying principles of that approach remain deeply embedded within the account of science that continues to dominate the discipline. It was also to have a lasting affect on the methodological techniques taught in graduate schools, with hypothesis testing, statistical analysis, and data manipulation becoming indispensable requirements of all methodological training.

Science and the interparadigm debate

In the 1970s and 1980s the so-called interparadigm debate ostensibly moved IR away from the 'methodological' issues of the 1960s. The question of science was not an explicit component of this debate because to a large extent a consensus had emerged around a commitment to positivism. Indeed, it could be argued that this debate could take the form it did only as a result of a general shared commitment to the principles of science. All parties to the interparadigm debate accepted the validity of a broadly conceived positivist account of science. Certainly, the fascination with data collection, the insistence on measurement, hypothesis testing, and the statistical analysis of the early behaviouralists had been modified and toned down but, nonetheless, no one seriously attempted to argue that these were not important aspects of the study of international phenomena. Despite the consensus on science, however, issues surrounding the nature of scientific inquiry quickly resurfaced; in particular, the problem of theory choice and the alleged incommensurability of differing theoretical perspectives.

Much of this was indebted to Thomas Kuhn's (1962) ground-breaking study of the history of science. Kuhn had argued that science developed through two distinct phases. In its 'revolutionary' phase, science was marked by theoretical fragmentation. New modes of thought would arise and challenge traditional ways of thinking. Although the revolutionary phase ensured that theoretical innovation was always possible, Kuhn argued that such phases did not lead to a progression in terms of a body of cumulative knowledge. In a revolutionary phase, the theoretical protagonists expend their energy on attempting to gain theoretical dominance as opposed to increasing the overall stock of knowledge surrounding a subject domain. Knowledge could only progress, Kuhn argued, in periods of what he called normal science. In an era of normal science one theoretical school, or what Kuhn called a **paradigm**, would dominate. In such periods knowledge could progress because everyone was in agreement on the validity of the chosen paradigm and hence the vast majority of scholars were working in a particular subject using agreed methods and techniques and could compare their findings.

Kuhn's model of scientific development was enthusiastically embraced by the discipline. Since its inception the discipline had been attempting to develop a body of cumulative knowledge surrounding international processes. Yet, after decades of study there was still very little agreement on key issues. Despite the disagreements between them, the realists and behaviouralists had suggested that progress could be achieved only by adopting a more scientific mode of study. Kuhn's model suggested a different, more conservative, conclusion. The discipline needed the adoption of a single paradigm around which research could converge. In the mid-1970s three paradigms vied for theoretical dominance; realism, Marxism, and pluralism. The question was how to compare them. Which paradigm should the discipline adopt in order to move forward? Kuhn provided no answers. Indeed, he suggested that there was no answer; paradigms were incommensurable; they simply could not be compared. Theory choice became largely a matter of aesthetics; or what one of Kuhn's critics was to call 'mob psychology' (Lakatos 1970: 178).

It is ironic that although the interparadigm debate did not directly involve disputes over the nature of science it was the period of disciplinary development in which the philosophy of science began to play a substantial and explicit role. The conservative nature of Kuhn's model, and the fact that theory choice becomes a matter of taste, ensured that some scholars would look to alternatives. Karl Popper (1959) became an important influence, but it was the importation of Imre Lakatos's (1970) model of research programmes that was to have the greatest impact, and it is his model that is generally adopted by the more scientifically orientated 'positivist' wing of the discipline.

Contemporary IR theory: science and the fourth debate

What we call the 'fourth debate' emerged in the mid-1980s. (Note that this debate is somewhat confusingly also referred to as the 'third debate' by some IR theorists.)² This debate has most explicitly focused on the issue of science in the disciplinary history of IR. Since the

discipline is still largely in the middle of this debate we will deal with it as a contemporary issue and discuss it in terms of the cleavages and divisions around which the discipline is currently organized. There are many ways to characterize the 'fourth debate'; as a debate between explaining and understanding, between positivism and postpositivism, or between rationalism and reflectivism. This section will examine these different terms and through them the key philosophical positions in contemporary IR.

Explaining and understanding

The terms explaining and understanding come from Max Weber's distinction between Erklären and Verstehen. Another way of describing this distinction is in terms of a scientific approach versus an interpretive or hermeneutic approach. While explanatory theorists seek to emulate the natural sciences in following scientific methods and in seeking to identify general causes, advocates of understanding focus on the analysis of the 'internal' meanings, reasons, and beliefs actors hold and act in reference to (Hollis and Smith 1990). For the advocates of understanding, social meanings, language, and beliefs are said to constitute the most important (ontological) aspects of social existence. Explanatory theorists do not generally disagree with this claim; however, they do not see how such objects can be incorporated into a scientific framework of analysis. Scientific knowledge, for the explanatory theorist, requires empirical justification; and meanings, beliefs, and ideas are not susceptible to validation by such techniques. Without such justifications knowledge claims can be nothing more than mere speculation. Advocates of an interpretive approach, on the other hand, argue that we should be guided in our analytical procedures by the most important factors impacting on human behaviour (beliefs, ideas, meanings, reasons), not by an a priori commitment to something called science.

Clearly, a particular vision of what science is frames this debate. The explanatory theorist reduces the ontological complexity of the social world to those aspects of it that can be observed and measured. Thus the ontology adopted by this approach is shaped by epistemological and methodological concerns. This leads to a sharp split between these two approaches in terms of methodology. Explanatory theorists privilege quantitative methods, or attempt to quantify qualitative data. Supporters of understanding adopt interpretive methods (qualitative, discursive, historical), shunning the generalizing approach of the explainers. This debate also has epistemological consequences insofar as explanatory theory emphasizes observation as perhaps the only way of generating valid knowledge, whereas the understanding side of the debate concentrates attention on the interpretation of unobservable, and hence immeasurable, contexts of action.

Positivism and postpositivism

Underpinning the explanatory framework is a positivist vision of science. This account of science has its roots in an empiricist epistemology. Often the terms positivism and empiricism are confused in the discipline. Positivism is a theory of science, and generally most positivists adopt an empiricist epistemology. However, not all empiricists embrace positivism, so it is important to maintain the distinction between the two terms. Equally, it is possible to accept the validity of empirical data without adopting a positivist account of

science. As an epistemology, the empiricist approach to the acquisition of knowledge is premised on the belief that the only genuine knowledge we can have of the world is based on those 'facts' that can be experienced by the human senses. The implication of this empiricist epistemology for science is that scientific knowledge is secure only when based on empirical validation. This is why positivists privilege observation, empirical data, and measurement; what cannot be an object of experience cannot be scientifically validated.

The key assumptions of the positivist view of science and social explanation can be summarized as follows. First, for positivists, science must be focused on systematic observation. The aim of the philosophy of science is to produce a set of logically rigorous guidelines concerning appropriate methodological techniques and criteria for ensuring that knowledge claims are grounded in appropriate observations. Indeed, for positivists the validity of science rests on these rigorous methodological guidelines; it is these guidelines that allow us to distinguish between scientific knowledge and mere 'belief'. Second, all positivists believe that the collection of sufficient data, generated through repeated instances of observation, will reveal regularities, which are indicative of the operation of general laws. These general laws are only the expression of relationships between patterns among observable events and there is nothing more going on behind the data. Any attempt to introduce non-observable processes, mechanisms, and events as explanations of the data are considered inadmissible. This belief in the importance of regular patterns when linked to the insistence on empirical validation becomes important in terms of how positivists conceive of causal analysis. For the positivists, causal relations are discovered through the detection of regular patterns of observable behaviour.

Third, because positivists emphasize the importance of observation, they avoid talking about 'realities' that cannot be observed. This directs them away from developing 'deep ontological' conceptual systems that aim to grapple with unobservable entities such as 'discourses' or 'social structures'. This insistence on observation means that positivists are not, as they are sometimes described, naive realists.³ Positivists do not believe in an external world independent of humanity (Kolakowski 1969). The positivist motto was *esse est percipi* (to be is to be perceived), which makes existence logically dependent upon perception (Hollis 1996). When non-observable entities are referred to, they are treated in wholly instrumental terms. These non-observables are useful fictions that help explain the data, but positivists refrain from giving them ontological significance. It follows that positivists emphasize the instrumental function of knowledge. Knowledge has to be useful not truthful (Waltz 1979). It is partly this commitment to the instrumental validation of knowledge that makes positivists some of the most vehement critics of the role of meta-theory within IR.

The positivist approach to social explanation has been modified in significant ways since the 1960s as the positivist philosophy of science has adapted itself as a result of a range of criticisms. The so-called 'soft' postbehaviourist form of positivism is still significant in contemporary IR. It underpins, for example, the influential contribution to social analysis of King, Keohane, and Verba (1994). They aim to build a unified logic of inference for both quantitative and qualitative inquiry, and foreground the role of observation and measurement. Indeed, they aim to rescue social science from speculative and unsystematic social inquiry by showing that the 'scientific logic of inference' can be applied in qualitative studies. By demonstrating how qualitative analysis can become 'scientific', King, Keohane, and Verba hoped to force qualitative approaches to 'take scientific inference seriously',

hence allowing these approaches to start making 'valid inferences about social and political life' (King, Keohane, and Verba 1994: 3, ix).

Against the positivist insistence on a 'science' of human behaviour, a diverse range of postpositivist positions has emerged. It is tempting to categorize these postpositivists as articulating a version of the interpretive understanding position detailed above. However, whilst many postpositivists draw inspiration from interpretive thinkers, the term 'postpositivist' can be used to refer to approaches that draw on a wider range of intellectual traditions; what unites them all is a commitment to reject positivism as a valid approach to the study of social processes.

Some postpositivists are influenced by developments from within the philosophy of science and attempt to use these to articulate a non-positivist version of science (see the later section on scientific realism for more detail). These postpositivists reject both the positivist account of science and the hermeneutic alternatives. Importantly, for these postpositivists it is only a particular version of science that is rejected, not the idea of science itself. Many feminist theorists (discussed in more detail in Chapter 10), who would rightly be considered postpositivists, are also keen to develop more sophisticated versions of science. And many postpositivists are keen to repudiate the positivist account of science that has dominated the discipline and accept the importance of meanings, beliefs, and language without adopting a hermeneutic perspective. This is particularly the case in relation to postmodern, or poststructuralist, theories (discussed in more detail in Chapter 11). The interpretive approach rests on the conviction that meanings and beliefs are the most important factors in the study of social processes and that social inquiry could play an important role in uncovering the deep meanings that exist beneath the surface appearance of observed reality. This conviction relies on the belief that there are hidden meanings to be had. Poststructuralist theorists are sceptical of this viewpoint and have no wish to return to what they term the 'hermeneutics of suspicion'. Poststructuralists are also sceptical of the validity of all knowledge claims and reject the idea that science produces anything like true knowledge, even in terms of the natural sciences.

In many respects, the positivist/postpositivist designation represents a particular moment in the history of the discipline. It marks a particular period in time when the positivist orthodoxy had begun to crumble in the philosophy of science, and the effect of this was felt throughout the social sciences. It is an accident of history that this collapse occurred at the same time as a range of new social theories, and philosophies, was emerging. These new theories all rejected the positivist vision of science and, in particular, its application to the social sciences. Yet in many respects this rejection of positivism was all they shared in common and it is incorrect to infer that this necessarily requires them to adopt an interpretive philosophy and methodology.

Rationalism and reflectivism

The rationalist/reflectivist divide takes the explaining/understanding divide and the positivist/postpositivist debate and encapsulates them both under a single label. This terminology, utilized by Robert Keohane (1988) in his address to the International Studies Association, can be associated with the explanation/understanding and positivist/postpositivist divides, but also has particular additional connotations. Keohane takes his label of

rationalism directly from rational choice theory. Rational choice theory is essentially a methodology constructed from a commitment to a positivist account of science. The rational choice theorist accepts the general complexity of the social world but ignores the majority of it in order to produce predictions based on a particular understanding of individuals. According to rational choice theorists we should treat individuals, and by extension states, as utility maximizers, and ignore every other aspect of their social being. This does not mean that rational choice theorists actually believe this is a correct description of what an individual is. However, they do believe that if we treat individuals in this manner we may be able to generate a series of well grounded predictions concerning behaviour on the basis of observed outcomes. Keohane accepts the limitations of this approach, but argues that it has been spectacularly successful in terms of knowledge production (Keohane 1988). This approach is deductive as opposed to the inductive bias of previous forms of positivism but, nonetheless, observation, measurement, and the attempt to specify general universal laws are still at the heart of this form of analysis. The approach is deductive because it begins with a theory of the individual and then utilizes observation and hypothesis testing to substantiate, or falsify, a set of claims relating to behaviour on the basis of this view. It is an approach to explanation that is compatible with the wider positivist tradition in IR, but it is not synonymous with it. It is for this reason that the term rationalism has been associated with both the explanatory and the positivist tradition in IR.

In his now (in)famous speech, Keohane (1988) also noted the emergence of a series of theories that were sharply critical of mainstream rationalist approaches to the discipline – critical theory, constructivism, poststructuralism, and feminism. He called these approaches reflectivist, due to the fact that they rejected the classical positivist/explanatory approach to IR theory and research, emphasizing instead reflexivity and the non-neutral nature of political and social explanation. He noted the potential of these approaches to contribute to the discipline but, in a direct reference to Lakatos's account of science, suggested that they could be taken seriously only when they developed a 'research programme'. This was a direct challenge to the new theories to move beyond criticism of the mainstream and demonstrate, through substantive research, the validity of their claims. Many of the so-called reflectivists have seen this as nothing other than a demand that they adopt the model of science to which Keohane and the mainstream are committed. On the other hand, the mainstream has been reluctant to take the knowledge claims of reflectivist scholars seriously, because they challenge the very status of the ontological, epistemological, and methodological assumptions upon which the mainstream depend.

Beyond the fourth debate? Rethinking International Relations as a science

The debates between explaining and understanding and rationalism and reflectivism have produced a dichotomous logic that has fashioned two wings of the discipline: a 'pro-science' viewpoint versus an 'anti-science' position. Typically, this debate has been framed around positivism as the dominant account of what science is. While positivism and its debate with the anti-science faction of the discipline has been the dominant issue in IR, recent developments in the philosophy of science and the philosophy of social science suggest that this way of framing the issues is unproductive. Significant strides have been taken

in the philosophy of science to move beyond positivism: positivism is no longer seen to be a valid account of science and has been replaced by scientific realism. A comprehensive account of scientific realism is beyond the scope of this chapter; however, the important contribution it makes in terms of social science is to reject any attempt to arrive at a set of clearly defined procedures that fix the content of the scientific method. For scientific realists, each science must arrive at its own mode of operation on the basis of the object domain under study (see, for example, Roy Bhaskar 1978; 1979). Because object domains differ in fundamental ways, scientific realists claim it would be inappropriate to expect methods deployed in one science to have a universal application. Hence the social sciences should not be attempting to copy the natural sciences, not least because given the immeasurable distinctions within the various natural sciences it is impossible to identify a set of procedures and techniques that are adopted by all.

For scientific realists, what makes a body of knowledge scientific is not its mode of generation, but its content. Contra a positivist account of science, a body of knowledge is not declared scientific because it has followed a particular set of procedures based upon empirical 'facts' but, rather, because it constructs explanations of those facts in terms of entities and processes that are unknown and potentially unobservable. For scientific realists, scientific knowledge goes beyond appearances and constructs explanations that often run counter to, and even contradict, observed outcomes. Social science involves the study of the complex and interacting social objects that produce the patterns we observe. Because of their unobservable nature, most social objects have to be 'got at' through careful conceptualization. This is always a complex process that involves mutually constituted processes between agents and the objects of knowledge; yet social knowledge, however imperfect and embedded in conceptual and discursive frameworks, is knowledge of something – something called social reality.

Epistemologically, scientific realists are relativists; they argue that no epistemological position has priority in the acquisition of knowledge for there are always many ways in which to come to know the world. But this does not mean that all views are equally valid and they believe in the possibility of rationally adjudicating between competing knowledge claims. What is important to science is that any and every claim is open to challenge and, moreover, that all claims require epistemological support. This does not mean that these epistemological supports are always predicated on facts, or other such empirical data, but it does mean that those concerned to challenge particular claims make clear the evidential basis on which the challenge is made. Science, it is argued, rather than being committed to a dogmatic insistence on the certainty of its claims, rests on a commitment to constant critique.

Methodologically, it follows that scientific realists adopt a pluralist approach: contrary to the positivist emphasis on quantitative methods and the interpretive emphasis on qualitative methods, scientific realists emphasize methodological pluralism. Because the social world is ontologically highly complex, and there are many ways to come to know the world, it is better that one does not restrict methods a priori. A student of democratic peace, for example, should not study only regular patterns in history (positivist approach), nor simply interpret particular decision-makers' perceptions ('understanding' approach), but should make use of multiple ways of obtaining data. Because the social world is ontologically complex, it is better that one does not take an a priori position on either methodology or epistemology.

Scientific realism has already made major contributions to social theory and the development of research techniques in other social sciences, and it is now beginning to make an impact in IR. It has played a major role in the development of constructivism, although not all constructivists have embraced it. Alexander Wendt (1999) is perhaps the most notable theorist to embed his theory explicitly in a scientific realist framework, and it underpins his attempt to construct a *via media*, or middle ground, between rationalism and reflectivism. However, Wendt's adoption of scientific realism has been criticized by other scientific realists on the grounds that he has failed to move sufficiently beyond the parameters of the current debate and that he remains basically locked into a modified commitment to positivism. Another version of scientific realism has emerged which uses the label critical realism to differentiate itself from Wendt's account. Critical realists such as Patomäki and Wight (2000) take scientific realist ideas further in important respects. Notably, they argue that the dichotomy between rationalism and reflectivism is mirrored in the distinction between an approach that focuses on materialist issues, and one that concentrates on ideas. For critical realists, both ideas and material factors are important in producing social outcomes, and both need to be integrated into the research process. According to critical realists, the question of whether material factors or ideational issues are the most important in determining outcomes is an empirical matter that can be decided only on the basis of research that examines the relationship and interplay of both. So while critical realists agree that meanings and ideas matter they insist that ideas always emerge in a material context, and that the meanings we give to events are, in part, a consequence of how these events were materially constructed, composed, and represented.

The emergence of scientific and critical realism in IR is an important new trend in the discipline. It has opened up new potentially constructive avenues for meta-theoretical and theoretical debate in IR. By refusing to juxtapose explaining and understanding and causal and non-causal analysis, by rejecting an a priori commitment to either material or ideational factors, and by refusing to endorse either the positivist model of science, or the rejection of science advocated by some reflectivists, it has enabled the discipline to move forward from the fourth debate and allowed the non-positivist theoretical perspectives to be appreciated in a new light; as scientific contributors to the discipline.

Case study: exploring the key implications of meta-theoretical differences in IR theory



Since the focus in this chapter is on investigating the role of meta-theory, it follows that, rather than examining a particular political process, event, or phenomenon in world politics, our case study will examine the ways in which meta-theoretical differences play themselves out in theoretical positions in IR. We will see that, depending on their meta-theoretical leanings, IR theorists come to formulate very different understandings of certain issues. We examine just four such issues here: the nature of theory, the possibility of objectivity, the criteria to be used in theory-testing, and the relationship of theory and practice. In many respects these issues emerge out of the debates considered above, and in some cases they are constitutive of