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Introduction: Two Traditions

INSIDE AND OUTSIDE

The social sciences thrive on two intellectual traditions. One is founded on the triumphant rise of natural science since the sixteenth century. The other is rooted in nineteenth-century ideas of history and the writing of history from the inside. This book is guided by our belief that both traditions are fertile for the study of international relations, despite a lively tension between them. In international affairs, and throughout the social world, there are two sorts of story to tell and a range of theories to go with each. One story is an outsider's, told in the manner of a natural scientist seeking to explain the workings of nature and treating the human realm as part of nature. The other is an insider's, told so as to make us understand what the events mean, in a sense distinct from any meaning found in unearthing the laws of nature. Thus our title does not use two words where one would do. 'Explaining' is the key term in one approach, 'understanding' in the other.

The 'inside' story is the more familiar one. The media tell it whenever they present international relations as a dramatic encounter between world leaders who personify their countries. Think of the popular picture of US–Soviet relations as Bush-meets-Gorbachev, or of the US–UK 'special relationship' in the 1980s as a special personal relationship between President Reagan and Mrs Thatcher. The air of human drama and of history in the making is especially potent in times of crisis, when leaders can be shown locked in combat, for example Reagan with Gadaffi over the US bombing of Libya in April 1986. Reporters try to establish what the unfolding events mean to the principal actors concerned. They report their statements, analyse their actions, and re-create their thoughts, so as to convey the reasons which account for why each step was taken rather than any other. The actors themselves are generally keen to help, both in person and through the mouths

of officials at the time, and (often telling a rather different tale) in tranquil autobiographies afterwards.

No one supposes that international relations can be fully understood just by assembling a patchwork of what the actors say was in their minds. Nor should the media habit of personalizing events and trends be taken too seriously. Drama is easier to convey than analysis, rather as the political decisions of kings and queens make for more comprehensible history in the schoolroom than do gradual shifts in economic and social patterns. All the same, the actors' view is a starting point and, advocates of Understanding will say, the only starting point. We must know how the actors defined the issues and the alternatives, what they believed about the situation and each other, what they aimed to achieve, and how. Only then can we ask more pointed questions about their clarity of vision, their underlying reasons, and the true meaning of the episodes.

There is a distinction to be drawn here between simplifications and assumptions. It is a simplification to banish all but the principal actors from the international stage. The pretence is that the White House spokesperson is the voice of the President; the reality is closer to being that the President is the voice of the White House and other agencies of decision-making. There are a thousand other actors in the wings and the official tale about the President's intentions and reasons is never full and rarely frank. Everyone is well aware that the considered official record is as much a simplification (even if of a different sort and for different reasons) as is the news story filed by reporters for press and television—the actors, the reporters, the academic researchers, and, one hopes, the public too.

The assumptions raise deeper questions. For instance, there is usually a starting assumption that individuals make history, at least by the sum of their actions and even if not quite as they intended it to be. In that case the simplification is warranted because it encapsulates a truth about what is going on. But the general proposition that human affairs must be understood from within does not require the assumption that *individuals* make history, except perhaps as a convenient device for identifying what calls for deeper understanding. Individualism is a possible, indeed common, trump suit in the search for the meaning and true interpretation of social events: but, we shall find in later chapters, it is by no means

the only possible one. An 'inside' story can also be told in terms which subordinate individuals to some larger social whole.

At this stage, therefore, we shall say nothing about the range of theories which can be brought to bear on international relations, if one believes in working from the inside in pursuit of understanding. But it is worth pointing out one obvious hostage given by treating the 'inside' as a matter of the desires and beliefs of individual actors. It is that the actors' desires, beliefs, and resulting reasons for action may be generated in turn by external factors. In the jargon of social science, they may be intervening and not independent variables. Although there are 'inside' ways of trying to rescue the hostage, as we shall see, the point will serve to introduce the rival 'outside' story about explanation.

The 'outside' way of accounting for behaviour is modelled on the methods of natural science and is usually described as a search for causes. To explain an event or state of affairs is to find another which caused it. This bald statement conceals much dispute about the exact relation between a cause and its effect, about the right way to define 'cause', and about the nature of causality, both as a concept and in the world. So what follows is very preliminary. But the broad idea is that events are governed by laws of nature which apply whenever similar events occur in similar conditions. Science progresses by learning which similarities are the key to which sequences. That catches the familiar dictum that science explains particular events by generalizing and by making them cases of laws at work. To this is often (but not always) added an idea that a cause makes its effect happen, implying perhaps that to find a cause is to show why the effect had to happen as it did.

If these ideas are taken together, and if three centuries of physics and chemistry are taken as the model to emulate, it is tempting to suggest that it really does not matter what the actors on the international scene have in their minds. In the strongest version of this approach, behaviour is generated by a system of forces or a structure, external not only to the minds of each actor but also external even to the minds of all actors. In that case it is a basic mistake to reduce US–Soviet relations to the personalities of individuals. Bush and Gorbachev merely represent the forces which brought them to office and merely pursue an agenda so predetermined that its outcome could have been predicted in advance. If either were run over by the proverbial bus, his

replacement would carry on as before. Similarly, the special relationship between Thatcher and Reagan was a meeting of ideologies, which in turn expressed congruent interests within a larger system of forces. To call it a personal relationship or to believe that the individuals contributed more than its pleasantries is an illusion.

It must be said at once that nothing remotely as strong as this is required by the proposition that to explain an event is to find its cause. That would mean crossing most brands of psychology and economics off the list of social sciences. Theories cast in terms of external structures and systematic forces are at the 'holist' end of a range of causal theories, just as theories which take actors as the final authority are at the 'individualist' end of a range of theories in search of understanding. What marks the 'explanation' range is the assertion of only the weak determinism involved in claiming that similar effects always occur in similar conditions. The rest is a matter of dispute, as we shall find in Chapter 3, and there is no objection in principle to a psychological explanation of international relations or to one cast in terms of individual behaviour.

All the same, there is still point in contrasting 'insider' and 'outsider' accounts. The point could be simply made if psychology modelled on the natural sciences were always 'behavioural' and concerned with the actors' brains rather than with their minds. But, in international relations as in economics, there is scope for applying scientific method to the beliefs and desires of individuals. The crucial move is to insist that every individual works basically in the same law-like way, with individual variations depending on systematic differences in, for instance, preferences and information, or, more broadly, nature and nurture. Admittedly the difference between understanding from inside and explaining from outside will seem to be pretty thin, if beliefs and desires can appear in scientific explanations. But we ask for patience until Chapter 4.

Meanwhile, the contrast is best made for introductory purposes by thinking about the middle of the range, where individuals take the stage in a social capacity, as, for instance, Prime Minister or Secretary of State. In Figure 1.1 we have represented the holism–individualism range on the vertical axis and the explaining–understanding contrast on the horizontal, with the actors in their social capacities located on the dividing line, where, one might say, structure meets action. X is an actor conceived in the spirit of

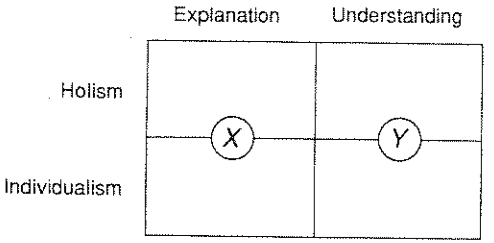

FIG. 1.1

the scientific tradition, Y the counterpart in the spirit of the interpretative tradition. For both there is a pull in two directions. On the one hand, X and Y are human beings with beliefs and aims, and we are interested in what is in their heads. On the other hand, their situation is structured, and ('holism' here standing for the idea that the parts of a whole behave as the whole requires) we are interested in the social constraints on their actions. Both pulls are strong and theories which purport to reconcile them tend to be fragile, even though they capture a stout commonsense conviction that, as Marx put it, 'Men make their own history but they do not make it just as they please; they do not make it under circumstances chosen by themselves.' But let us suppose that there are theories robust enough to hold the tension.

The contrast shows up in the different notions of 'social capacity'. Being part of the natural world and a proper object of scientific study, X is predictable on the basis of X's preferences and information, which are in turn the result of X's nature and nurture. There is a disputed question about the proportions of nature (psychology) to nurture (sociology), but, to keep X on the border between top and bottom boxes, both are important. Since no two mice are identical, let alone two human beings, replacing X would make a difference. Yet the situation is full of constraints and the difference is not as large as Mrs Thatcher, if she were X, might like to think. Social capacities are a useful source of predictions, since they greatly reduce the range of alternatives that an actor is likely to pursue.

The fabric of Y's social world is woven from rules and meanings, which define relationships among the inhabitants and give interactions their purpose. Social capacities are normative or prescriptive, in that they include responsibilities for whose discharge the

actor can be praised or criticized. Other actors are entitled to expect *Y* to live up to them, even if they would be wise not to count on it when temptations arise. In other words, *Y* is expected to pick an intelligent course through a variety of social engagements, to which actors bring something of themselves in exercising their social capacities. What this comes to will be clearer by the end of the book, but we need to mention both a normative element and a personal one, if *Y* is to be located neither above nor below the dividing line. The social world must be seen through the actors' eyes because it depends on how they see it and it works in whatever way social capacities are exercised.

It may sound as if *Y* has free will and *X* does not. But that is too simple. Some philosophers maintain that to act freely is to do what one wants and to act rationally is to do what will best satisfy one's desires. In that case it is no obstacle to freedom that actions are predictable; indeed, free *and* rational action is possible only in a predictable world. By this test *X* is a free agent. Other philosophers argue that free agents need to be self-directed (or 'autonomous') and hence need to choose in a sense not cashable as the effective satisfying of desires. In that case *X* is not a free agent, but it is not yet clear whether *Y* is one. So we cannot characterize the difference between inside and outside in terms of freedom vs. determinism.

The crucial contrast between *X* and *Y* lies in the stuff of their social worlds. For *X* the social world, like the rest of the natural world to which it belongs, is an environment, independent and to some extent predictable. For *Y* it is a construction consisting of rules and meanings. This contrast brings with it different theories of social action and how to study it. It also implies different analyses of human nature. Hence, to give warning, we shall find no easy way to combine a natural science approach with an interpretative one. For the moment, we repeat that there are two plausible stories to tell, one from outside about the human part of the natural world and the other from inside a separate social realm. One seeks to explain, the other to understand. We are well aware that many have attempted to combine these two stories, for example Anthony Giddens in his work on the concept of structuration.[1] However, we believe that readers will come to

[1] A. Giddens, *Critical Issues in Social Theory* (London: Macmillan, 1979), ch. 2.

understand by the end of the book that combining the two stories is not as easy as it at first seems. Although it is appealing to believe that bits of the two stories can be added together, we maintain that there are always two stories to tell and that combinations do not solve the problem.

With this broad theme in mind we turn to the subject of International Relations and then to an outline of the book.

LEVELS OF ANALYSIS: 'TOP–DOWN' AND 'BOTTOM–UP'

The study of international relations deals with a peculiar area of politics. Whereas domestic politics occur within a political system which includes a government to make and enforce laws, the international system is anarchic. By this we mean not that it is chaotic but simply that there is no government above the states which comprise it. The individual nation state is often therefore presented as a self-contained unit, analytically prior to its international relations. It may turn out not to be the final or the only unit of analysis but, even so, to contend that it were would not be so wildly wrong as treating America as fifty states without mentioning the Federal Government.

Our approach to theories of international relations will be based on a distinction between system and units, and will make central what the literature calls 'the level-of-analysis problem'. This was originally posed by David Singer in 1961 as the problem of whether to account for the behaviour of the international system in terms of the behaviour of the nation states comprising it or vice versa.[2] We propose to extend the problem in two dimensions. One dimension concerns the identities of system and units for purpose of what is, on reflection, a very general problem indeed. Singer's question was about the international system and national units. One answer to it might be that there are systemic forces strong enough to propel the nation states through their orbits, rather as if they were planets in a solar system in dynamic equilibrium. In that case one might hope to account for the working of the system without enquiring into the internal organization of the units. But if

[2] J. D. Singer, 'The Level-of-Analysis Problem in International Relations', in K. Knorr and S. Verba (eds.), *The International System: Theoretical Essays* (Princeton: Princeton University Press, 1961), pp. 77–92.

it turns out that the units make an independent contribution, then there is a further level-of-analysis problem. Are we to account for the behaviour of the state in terms of the behaviour of its constituent bureaucracies (and other agencies), or vice versa? Then, if the answer requires us to take the bureaucracies as making an independent contribution, there will be yet another level-of-analysis problem. Are we to account for the behaviour of a bureaucracy in terms of the behaviour of the human individuals comprising it, or vice versa? At each stage the 'unit' of the higher layer becomes the 'system' of the lower layer. We shall distinguish the three layers just indicated, and on each shall contrast an analysis which proceeds 'top–down' (from system to unit) with one which proceeds 'bottom–up' (from unit to system).

That way of describing the level-of-analysis problem is markedly scientific in tone. Our other dimension concerns the contrast between explaining and understanding. There is also a level-of-analysis problem for theories which try to work from the inside. Again, there are three layers. The highest requires that we think of the international system as a set of norms or purposes which shape the process of history. If a fully systemic answer to the problem were to prevail, something very ambitious would be needed, for instance the positing of a World Spirit to guide human history, as Hegelians and Absolute Idealists have sometimes seemed to suggest. But we ourselves shall not tackle such grand theories. In what follows the interpretative dimension will come alive only on the next layer of the problem, where we ask whether social rules and institutions account for the performance of social roles, or vice versa. In other words, we think international institutions too fragile to permit a fully systemic answer on the highest layer and so incomplete that an answer which favours the international units must yield to curiosity about how these units work. But it is certainly possible to argue for a systemic answer in which nations or cultures or, to use a phrase from Wittgenstein, 'forms of life', account for what goes on within them. Equally, it is possible to deny it, and the lowest layer of the level-of-analysis problem is broached by asking whether individual actors construct institutional rules and roles, or vice versa.

The three layers of the level-of-analysis problem are set out systematically in Figure 1.2, with the debate on each being a matter of whether to proceed 'top–down' or 'bottom–up'. In the

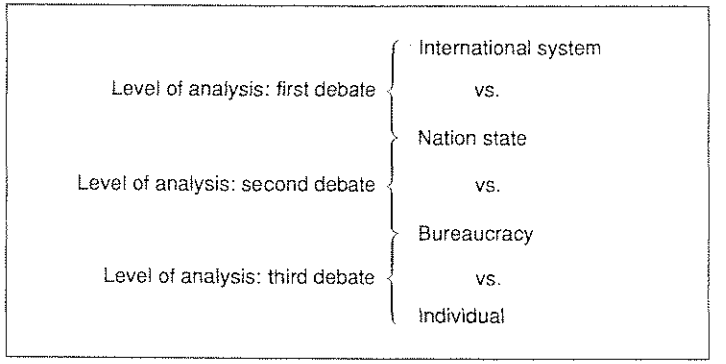

FIG. 1.2

first debate, 'top–down' makes the international system wholly dominant and 'bottom–up' retorts that it is the sum of what nations do. It is possible to conduct this debate without either side maintaining that the internal organization of the units matters (witness what will be said about Game Theory in Chapter 6). In the second debate, 'top–down' sees the state as a single agent responding rationally to its situation, whereas 'bottom–up' sees the state's behaviour as the outcome of bargains (and other manoeuvres) among bureaucratic agencies. (It may be helpful to note a parallel dispute in economics about whether firms respond rationally to their market situation or need to be analysed in terms of how they are organized internally.) In the third debate, 'top–down' contends that bureaucratic demands dictate individual choices, whereas 'bottom–up' makes individual choices central to the analysis of collective decisions.

Then there is the other dimension, whether the aim is to explain or to understand. It will be seen that Figure 1.1, which introduced two individuals *X* and *Y*, is a case of the third debate. We began there, because the contrast between explaining and understanding is likely to be less familiar than the contrast between holism ('top–down') and individualism ('bottom–up'). Also, it takes an austere mind not to believe that the scope and limits of individual human action are an absolutely central theoretical crux for the social sciences. But, in principle, there are ways of understanding the social world which dispense with individuals, at least as prime movers, and ways of explaining it which rely on them.

SOME KEY TERMS

Leaving the theme to develop as we go along, we shall next specify our use of some key terms. Let us start by saying that we shall never use 'explaining' (or 'explanation') and 'understanding' interchangeably. When we want a neutral word it will be 'analysing' (or 'analysis'). Thus, the 'level-of-analysis' problem is conveniently neutral between a level-of-explanation problem and a level-of-understanding problem, as we have just stated. The senses which we attach to 'explaining' and 'understanding' will emerge more clearly in Chapters 3 and 4.

In speaking of international relations, we shall sometimes be referring to the international world and sometimes to the theories of that world which comprise the discipline called 'International Relations'. To avoid a muddle we shall use initial capitals—'International Relations'—when we mean the latter and small letters—'international relations'—when we mean the former. Thus, International Relations is a discipline, where theories of international relations compete. These, for the most part, are theories about international relations (hence the small letters), although we may occasionally take note of theories about the conduct of the discipline itself (i.e. theories of International Relations).

There are some key terms that are sure to cause trouble because they have different meanings in International Relations and in philosophy. The first is 'Realism', which in International Relations refers to a school of thinking opposed to 'Idealism'. Realism, given classic expression in Hans Morgenthau's *Politics among Nations*,[3] calls for the explanation of international behaviour in terms of national interests and without regard for the moral sentiments and hopes which nations profess or which observers may have in their heart. It is squarely in the scientific tradition and is a conscious attempt to apply scientific method to international relations. In philosophy, 'realism' (usually with a small 'r') is broadly the view that whether a thing exists is a question about the world independent of questions about how we could know it or what statements concerning the thing mean. Thus, on a realist view, there are truths about the past which are distinct from all present

[3] H. Morgenthau, *Politics among Nations: The Struggle for Power and Peace*, 1st edn. (New York: Knopf, 1948).

evidence and may therefore remain unknown to us. Similarly, a realist claim that electrons exist is a claim not about the instrumental observations or theoretical predictions of physics but about an independent world which physics investigates. This is the broad definition of 'realism' in the philosophy of science, theory of knowledge, and metaphysics, and it licenses talk of unobservable structures which cause observable behaviour. Sometimes, however, it has a more specific sense, when used by authors with a materialist view of nature and human history.[4] But since this use implies the broader one, which is all we need in this book, we shall not pursue it.

Correspondingly, 'Idealism' in International Relations names an approach concerned with the human will and institutional progress. Arising in the aftermath of the First World War, it took the view that disasters are due partly to failures of understanding and partly to the lack of suitable institutions to encourage co-operation. Hence it is often seen as primarily normative, in contrast to a more scientific Realism. But it also involves a descriptive account of human nature and institutions. Its liberal hopes of progress are grounded in the beliefs that human beings individually have reconcilable goals like peace, health, and prosperity and that institutions are a human construct, not always deliberate and, once created, having effects of their own on people's thoughts and actions. Philosophically it inherited something from the Absolute Idealism of the Hegelians and other nineteenth-century opponents of materialism, thus refusing to think of 'reality' as distinct from ideas of reality. Meanwhile, 'idealism' (with a small 'i') is a broad philosophical term for theories which work in terms of experience, conceived as 'ideas' in the mind. Hence, although the connections are not automatic and are not embraced by all who call themselves idealists, there is an affinity between Idealists, idealists and an interpretative approach, just as there is between Realists, realists and a scientific one.

The other term is 'positivism'. In the social sciences at large the word has often been used very loosely for any approach which applies scientific method to human affairs, conceived of as part of the natural order. Thus, it is not uncommon to find Comte, Durkheim, Marx, and Weber all described as positivists, even

[4] e.g. R. Bhaskar, *A Realist Theory of Science* (Brighton: Harvester, 1978).

though from many points of view they make strange bedfellows. But current usage tends to be more precise, perhaps influenced by the philosophical meaning. For philosophers, the epitome of positivism is 'Logical Positivism', the hard-headed empiricism of the Vienna Circle popularized in English by A. J. Ayer's *Language, Truth and Logic*.[5] Here the stress is on experience (on observation and testing) as the only way to justify claims to knowledge of the world, and hence on methods of verification as the key to the meaning of scientific statements. When 'positivism' is so construed, it is opposed to realism and insists that theory is a guide to prediction rather than a source of substantive hypotheses about what could not, even in principle, be observed. This makes it empiricist in a very sharp and disputable form, which has lately cost it allegiance even among most other empiricists.

But Logical Positivism has retained more influence in the social sciences. When economists speak of 'Positive economics' they mean a predictive science, governed solely by the test of experience. The empiricism here is not so tight that all theoretical terms and assumptions must refer directly to observables, but all substantive hypotheses must be able to be confirmed or falsified. Notions of real structure are at least suspect and often rejected altogether. In this, Positive economics is typical of other 'Positive' sciences, although perhaps clearer and more developed in its approach. In International Relations, however, a further step is usually taken, in that 'Positivism' tends to be associated with quantitative analysis. The connecting thought is that, since only behaviour can be observed and measured, only behavioural data can provide a proper scientific basis. Hence Behaviouralism, the version of a more general behaviourism specific to International Relations, which we shall meet in the next chapter, is commonly spoken of as a Positive approach and often contrasted with Realism on this score. Certainly Realists are inclined to a belief in the structures which a Logical Positivist would reject. But, from the standpoint of current usage in other social sciences and the philosophy of science, Realism aspires to be a Positive science and Behaviouralism is a particular version of it with an austere view of what is testable. Since this brings out what they have in common and shows them to be on the same side, we too shall use 'Positivism' to include the Realist approach.

[5] A. J. Ayer, *Language, Truth and Logic* (Harmondsworth: Penguin, 1971).

THE PLAN OF THE BOOK

The book falls into two main parts. The first, comprising Chapters 2–4, introduces the main debates in International Relations and the philosophical considerations which bear on them. Accordingly, Chapter 2 summarizes the growth of the discipline of International Relations, focusing on Idealism, Realism, and Behaviouralism as its principal phases. It will end with a brief survey of contemporary debates, including those revolving around the issue of whether the nation state is still the major actor on the international scene. But, without dismissing the claims of other actors such as transnational corporations or revolutionary groups, it will conclude that they do not affect questions about explaining and understanding, which are more clearly raised by considering better established theories that address the state. Chapters 3 and 4 explore philosophically the two traditions with which we began. Chapter 3, 'Explaining', asks what is involved in applying the philosophy of natural science to international relations and Chapter 4, 'Understanding', asks a similar question about international relations approached from the inside. The whole first part provides a framework for what we have just described as a level-of-analysis problem with three layers and two dimensions.

The second part, Chapters 5–8, conducts the three debates catalogued in Figure 1.2. Chapter 5 asks whether it is possible to develop a theory of international relations wholly at the level of the international system. We look at some of the main attempts to do so, spending most time on Kenneth Waltz's systems account.[6] Chapter 6 sets out the counter-case for an analysis in terms of the state, working 'bottom–up' from states to system. The vehicle chosen is Game Theory, which treats the state as a closed, utility-maximizing unit and so denies the need to 'open the box' to see how states are organized. In Chapter 7, however, we do 'open the box', by taking bureaucracy as a rival to the state in what is thus the second debate about the level of analysis. We use Graham Allison's Bureaucratic Politics model to see whether foreign policy can be convincingly portrayed as the result of bureaucratic bargaining.[7] If it cannot, that might mean victory for the state in

[6] The best source is K. Waltz, *Theory of International Politics* (Reading, Mass.: Addison-Wesley, 1979).

[7] The best source is G. Allison, *Essence of Decision* (Boston: Little, Brown, 1971).

the second debate. But, alternatively, it might mean that there is a further debate to conduct. Accordingly, in Chapter 8 we 'open the box' again and ask about the bureaucrats, the men and women who do the bargaining. Are they rational decision-makers of the kind proposed in microeconomics and Game Theory? Or are they mere voices of the bureaucracy (which, in this third debate, is the 'system')? A possible reply is that they are neither. That leads us to examine Wittgensteinian ideas of action and meaning, and to consider a very different notion of a 'game' in social life, where the actors are players of roles.

The debates will turn out to be less clear and clean than they seem in this outline. Argument on each layer tends to have half an eye to what is at issue on the others. Thus, objections to a full-blown systems theory such as Waltz's come both from those who think of the state as a rational closed unit and from those who think that its internal organization matters. Similarly, Game Theory faces objections both from systems theorists and from those opposing a Bureaucratic Politics model to every form of Rational Actor model. When, in Chapter 8, we reach what one might have hoped was, so to speak, the basement, we shall find that some arguments about the nature of role-play lead back up to the previous layer. To this extent our framework is artificial and offered only as an *aide-mémoire* for theoretical intricacies richer than we have made them. But we stand by our contention that the issues which we simplify are genuine, very much alive, and illuminated by philosophical treatment as well as by reference to the International Relations literature.

That the issues are very much alive becomes plainer still in the final chapter, Chapter 9, where we admit to disagreeing on them! The chapter begins by summarizing the common ground—that analysis can proceed 'top–down' or 'bottom–up' on all three layers and in the dimension either of 'Explaining' or of 'Understanding'. But, although the common ground is large and includes almost everything said in the first eight chapters about how to fill in the framework and conduct the disputes, unity then becomes too much for us. One of the pleasures of writing the book has been the attempt to settle an amicable debate of our own. We are not sorry that it failed and that, accordingly, Chapter 9 breaks into dialogue. Hollis (the philosopher) opts for 'Understanding' and a position just below the horizontal dividing line in Figure 1.1; Smith (the

International Relations scholar) for 'Explaining' and a position just above the dividing line. Stopping only to emphasize that this is not because we belong to different disciplines and that several other final positions are open to anyone from either discipline, we then leave readers to make up their own minds, or else to decide that there is no monopoly of wisdom to be had.

human nature. In so far as economics is offered as a model of explanation, a theory of individual behaviour is likely to be a component of International Relations theories as much as of theories of microeconomics. For the moment, however, we adjourn discussion until we reach the topic of Bureaucratic Politics in Chapter 7. Meanwhile, we give notice that we mean to bring the individual actors back from the wings later, because we believe that states and systems do not account for everything important in international relations. As noted in the introduction, we are not fully agreed about how much these actors matter, or why. But we make common cause in attaching more significance to them than do the theories (except perhaps for Idealism) discussed so far. We also believe that the issue is one that leads to a number of problems that are fundamental to the social sciences.

3

Explaining

The growth of International Relations as a discipline has been much influenced by ideas of science. Realism, as described in the last chapter, is essentially a call for the application of scientific method. Carr and Morgenthau rejected the prescriptive and utopian elements in Idealism for the sake of a science which sees the world as it is. A shared concept of scientific explanation is a unifying theme among Realists (and Neo-Realists) who are otherwise divided on, for instance, whether to pitch the explanation at the level of the system or its units. When Behaviouralists objected to the presence of unobservables in Realist theories, they did so in the name of science and the same basic idea of what science demands. (That is why we refused to treat them as a separate school.) Even current theories, which break with the mainstream over non-state actors, usually retain the claim to offer *scientific* explanations.

This potent theme needs exploring not only for its past influences but also because it affects what sort of theories are thought worth considering in current debates. At the same time we must stand back from it. The shared concept of scientific explanation was always contestable and has of late been radically contested. What 'science' demands is a very open question, and we need to be as clear about it as we can before broaching the claims of 'Understanding' in the next chapter. In this chapter we shall trace some leading ideas in the history and philosophy of science and shall identify those most influential in International Relations. Then we shall stand back and ask what notion of scientific explanation best suits the attempt to apply the methods of natural science to the world of international relations.

THE SCIENTIFIC REVOLUTION

By applying scientific method, Realists hoped to locate causes and laws of behaviour which Idealists were too starry-eyed or

woolly-minded to detect. Morgenthau's six principles are instructive from this point of view. Some of them are substantive: for instance, that politics is an autonomous realm where universal interests, rooted in human nature, take particular forms connected with the distribution of power. But some depend on a specific view of science, notably that there are objective and timeless laws at work and that normative considerations are to be excluded. This view is commonly known as Positivism and, in its heyday, was so widely diffused among social scientists that to spell it out would have seemed a mere statement of the obvious. But its heyday is over, at least for philosophers of science, and we promise that its merits will no longer be obvious by the end of the chapter. We shall lead up to it by starting where the modern world began, with the scientific revolution.

When people speak of 'science', they usually mean the sciences of nature, especially physics, chemistry, and biology, in line of descent from the scientific revolution of the sixteenth and seventeenth centuries. The starting point is Sir Isaac Newton's discovery of the laws of gravity and his formulation of the laws of motion to explain the movement of bodies in response to forces. This is a symbolic starting point. Newton was not the first or the only great scientific thinker of the time. By the test of later reflection his idea of explanation was confused and his findings have been at least modified by the theory of relativity. But, symbolically, he inaugurates three centuries of amazing progress in explaining how nature works and in harnessing these discoveries. We may have mixed feelings about scientific triumphs which have included nuclear weapons as well as electric light but we cannot deny the comprehensive debt we owe to the emergence of scientific method.

At their broadest, leading ideas of the scientific revolution divide into a substantive picture of how nature works and a set of methodological rules for filling it in. The Newtonian picture was of nature as a mechanical system of causes and effects, driven by invisible forces and governed by ineluctable laws. This mechanical system was not directly presented to our five senses. For instance, there are no yellow daffodils in the underlying system of mass in motion; daffodils appear yellow to us because of the effect of suitable wavelengths (or corpuscules in a rival theory) of light on human sense-organs. So there was a need for a method of getting

behind 'appearances' in order to detect the reality which caused them. In a typical seventeenth-century image, the world was likened to a watch whose face is presented to our five senses but whose real workings are governed by springs and wheels, hidden from sight behind the back. Science was a method for prising the back off the watch with the aid of mathematics. Through science we can detect the necessities—the unalterable forces—which cause the appearances.

This picture broke with the past by dispensing with the idea that everything in nature has a purpose or proper function, which explains why it behaves as it does. That was not obvious at first. Witness the image of the watch: it remained easy to think of the system as having a grand purpose built into it. To explain a watch we need to realize both how its springs and wheels (or, nowadays, microchips) work and that its purpose is to tell the time. But the larger and more complex the system, the further one can get by studying its workings. Provided that each state of the system results from the previous state in accordance with known causal laws, its behaviour can be explained and, in principle, predicted without worrying about what the system is for. Although notions of purpose ('teleology') still have a place in biology, they have dropped out of the physics and chemistry which have become our model sciences.

It is worth noting, however, that teleological explanations are still common in biology, most grandly in theories of the evolution of species. The idea that organisms or even whole species adapt in order to survive is a useful explanatory hypothesis to account for the acceptance or rejection of small genetic mutations. Analogously, the social sciences have often employed notions of equilibrium and of what is functional or dysfunctional for achieving and maintaining equilibrium. Thus, Morgenthau's use of the balance-of-power mechanism is related to the maintenance of the system; and recent Structuralist theories contend that patterns of international interaction reflect the needs of capitalist exploitation. Similarly, ideas of self-interest or of 'real interests' often give explanations a teleological character. At the same time, however, all such explanations are contentious, as we shall see. Meanwhile, so as not to break the thread of our story, let us just remark that any 'purpose' involved is internal to the agent or system and not that of a hidden hand. Modern teleology too breaks with the past.

Newtonian science, as epitomized by physics, thus yielded a picture of nature as a mechanical, inanimate, purposeless system of forces acting on matter in a way governed by inevitable laws of cause and effect. Luckily perhaps for those who believe in human free will, however, this was not the complete and only picture on offer when the social sciences began to take shape at the end of the eighteenth century. If the five senses do not give us knowledge of reality (as opposed to appearances), what does? The seventeenth-century answer was 'Reason', meaning the kind of analysis which mathematics offers to the enquiring mind. This was not at all a foolish answer, if one supposes that geometry describes the properties of space and that occupancy of space is the basic property of matter. Truths of geometry can be proved, and so known not only to be true but also to be *necessarily* true. For instance, Pythagoras' proof that the sides of a right-angled triangle are related by the formula $a^2 + b^2 = c^2$ shows more than the mere fact that all right-angled triangles do have this property. It shows that they *must* have it and that an exception is not improbable but *impossible*. This is an example of a necessity in the fabric of space, typical of the necessities which govern motion. If, moreover, 'the senses reveal no necessities' (to quote an old tag), then our mental grasp of it is not given by the senses.

Here lies what was later deemed a confusion between two ideas of necessity. The premisses of a proof in logic or mathematics *entail* the conclusions: causes *compel* their effects. It is not plain that knowledge that x entails y is a suitable model for knowledge that bodies attract one another with a force in inverse proportion to the square of their distance apart. Meanwhile, however, there is a much more radical objection to the whole presumption that science is the search for necessities. It is that our knowledge surely starts from what our five senses tell us and can extend beyond this direct experience only to generalizations of what we know by experience. At any rate, this line of thought was explored in the eighteenth century, notably by David Hume in *A Treatise of Human Nature* (first published in 1739) and has come to be termed empiricism. Hume's *Treatise* set out to lay the foundations for 'a complete system of the sciences' relying ultimately only on 'experience and observation'—an ambition which empiricists all share. Science cannot know anything of the kind of necessities with which causes *compel* effects and does not need to suppose that there are any.

Hume's centrepiece was his analysis of causation, the relation between a cause and its effect. From the standpoint of 'experience and observation', what do we actually know about the forces which one billiard ball transmits to another, when compelling it to move after a collision? In essence, we know only that there is a regular and predictable series of events, whenever the same conditions hold. (To be precise, there are four Humean conditions to satisfy, if we are to be sure that c caused e on some occasion, namely: c preceded e; there was no intermediate event; events like c are always followed by events like e in those conditions; and we are in the habit of expecting the sequence.) Yet this is enough. Provided that we can identify the regularities in nature, then we need nothing more in order to predict and explain what happens. The idea that there are forces and necessities in nature is spurious, a piece of mysticism which we can do without.

This brilliantly simple thought continues to reverberate. (It will be found in Volume I of Hume's *Treatise* which should be read at first hand, as we are not trying to do it any justice here.) It sets up a continuing argument about the proper character of scientific method, which 'Realism' has not resolved. To see how deep the argument goes, think about this remark from *A Sketch for an Historical Picture of the Human Mind* (Tenth Stage) by the Marquis de Condorcet, written in 1794:

> The sole foundation for belief in the natural sciences is this idea, that the general laws dictating the phenomena of the universe are necessary and constant. Why should this principle be any less true for the development of the intellectual and moral faculties of man than for the other operations of nature?

Notice first that Condorcet, writing in the spirit of the Enlightenment, proposes to apply the methods and assumptions of the natural sciences to the study of human beings. This will produce the same triumphant progress only if 'the intellectual and moral faculties of man' are not of a deeply peculiar sort which makes the social world radically unlike the natural. Notice secondly that the general laws governing nature are said to be 'necessary and constant'. This phrase is crucially ambivalent between the idea that they are constant because they are *necessary* and the idea they are necessary only in the tenuous sense that they are reliable because *constant*. The ambivalence would be easily dealt with, if

Hume were right in his analysis of causation. But, as we shall see next, attempts to translate an austerely simple empiricism into an austerely simple scientific method do not yield a satisfactory account of explanation. There is more to 'cause' than a constant and predictable correlation between events.

POSITIVE SCIENCE

'Realism' in International Relations inherited both the presumption that the methods of natural science are the key with which to unlock the social world and the ambivalence about 'necessary and constant'. The 'necessity' sought was not that of Newton's grand mechanical scheme of iron laws and inescapable forces but was strong enough to sustain the thought that the international *system* is more than the constant and regular behaviour of its parts. On the other hand, a neat, simple, and not implausible scientific method can be offered using no more than constancy, and 'Realism' coincided with a distinguished attempt at this. The attempt was inspired by the work of the Logical Positivists in the 1930s, notably Rudolph Carnap, Carl Hempel, and Ernest Nagel,[1] and prompted very many social scientists to believe that scientific method could be boldly distilled in diagrams like Figure 3.1.

This diagram is taken (slightly simplified) from R. E. Lipsey's *Introduction to Positive Economics*, which remains a standard textbook and whose title includes the key word 'Positive'.[2] Its rationale is very neat. To detect the regularities in nature, propose a generalization, deduce what it implies for the next case and observe whether this prediction succeeds. If it does, no consequent action is needed; if it does not, then either discard the generalization or amend it and try out the fresh implications. The process continues until a solid body of successful generalizations has been

[1] Rudolph Carnap, *Der Logische Aufbau der Welt* (*The Logical Structure of the World*), trans. R. A. George (California: University of California Press, 1967) and *Logical Foundations of Probability* (Chicago: University of Chicago Press, 1962); Carl Hempel, *Aspects of Scientific Explanation* (New York: Free Press, 1965); Ernest Nagel, *The Structure of Science* (New York: Harcourt Brace, 1961). For a useful guide to this and other topics of the present chapter see A. F. Chalmers, *What is this Thing called Science?*, 2nd edn. (Milton Keynes: Open University Press, 1983).

[2] R. E. Lipsey, *Introduction to Positive Economics*, many editions (first edn. London and New York: Harper and Row, 1963).

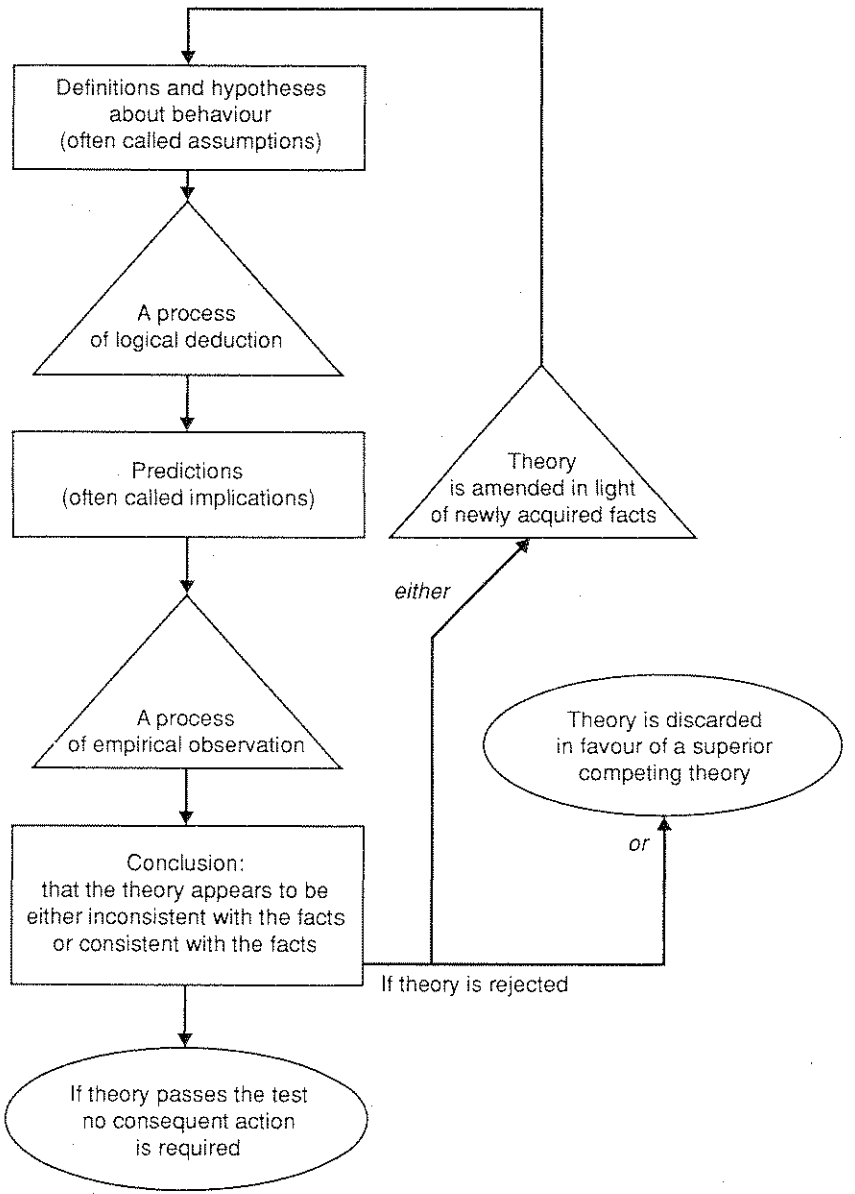

FIG 3.1

established to serve as a reliable source of explanations. The solid body constitutes a 'Positive' science, in contrast both to metaphysical speculations and to normative judgements. Lipsey lays this out in the Introduction to his *Introduction* and the rest of his book sets down the basis of a Positive economics.

Lipsey is not in fact relying *solely* on 'experience and observation'. The top left box of Figure 3.1 includes 'definitions' and mentions 'assumptions'. More is being covered by 'definitions' than the obvious point that hypotheses need to be clearly stated in words whose meaning has been defined. There is also a question of what words to use, what concepts to bring to bear. For instance, if the hypothesis were that nation states pursue their own self-interest, then one could ask not only what is to count as a nation state and as pursuit of self-interest but also why these particular concepts were the ones chosen. The answer might seem to be that experience tells us that nation states are a key fact of the current world and that they plainly do often behave in a self-interested way. But this misses the point. Sir Karl Popper, whose 'Conjectures and Refutations' is crucial for understanding the recent philosophy of science, points out that the mind can never be a passive register of experience.[3] He recalls once telling a group of students to clear their minds and observe what was going on in the room. As he expected, they found themselves quite unable to do as instructed. They could not 'observe' until they had been given an idea of what to look *at* and what to look *for*. It is simply not true that the mind is, as traditional empiricists used to suppose, a *tabula rasa* or blank tablet on which experience writes. Observation is an intelligent activity of bringing concepts to bear.

The point is potentially radical. But Popper limits its implications by distinguishing between the process of discovery and the logic of validation. The simplest form of empiricism is that there is a single method for both: observe, notice a pattern, generalize, test for new instances. This is a purely inductive method, tempting both for its simplicity and because it does without unobservables. Popper insists that neither facts nor hypotheses simply obtrude themselves. He adds, however, that to recognize the point is only

[3] K. Popper, 'Conjectures and Refutations', in his *Conjectures and Refutations* (London: Routledge and Kegan Paul, 1969). See also his *The Logic of Scientific Discovery* (London: Hutchinson, 1958) and *Objective Knowledge* (Oxford: Oxford University Press, 1972).

to recognize that testing is what matters. Let scientists get their ideas in the bath rather than in the laboratory, from imagination rather than statistics. All sources of conjecture are welcome, provided that science is then utterly strict about the logic of validation. Thus it is fine to think in terms of unobservable entities, provided that such theorizing results in statements capable of being tested.

On the logic of validation itself, Popper make the striking proposal that what counts is not confirmation but falsification. It is easy to suppose that it must be good news for a theory when experience confirms it. Not at all, says Popper in 'Conjectures and Refutations', citing the examples of Marx and Freud. A Marxist or Freudian theory is so constructed that experience is sure to confirm it. But this is no merit. Far from being models of scientific progress, such theories are not properly scientific at all. It is 'pseudo-science' to put forward a theory which runs no risk of refutation by experience. True scientists are always willing to state the conditions under which they would abandon their theories and to accept a refutation when the conditions turn out to hold.

Lipsey admires Popper and has embodied his message in the diagram. The 'assumptions' of the topmost box can include more than experience puts there, but whatever finds its way in has to be transformed by deduction into predictions which can be tested by observation. Yet, since confirmation is not what counts, the oval at the bottom, where theory passes the test, says austerely 'no consequent action' rather than 'rejoice!' Putting Lipsey and Popper together, we get a neat diagram of how to proceed, backed by a hugely influential rationale for it. The combination is sharp-edged. It removes a standard Behaviouralist reason for thinking that science should stick to observables and for presuming that observation can be pure. It issues a warning to systems theories so generously constructed that experience could never refute them.

But it leaves problems too. Figure 3.1 says that when prediction fails and the theory is 'apparently inconsistent with the facts', it is to be 'amended' or 'discarded'. But which? Suppose we are trying out a Rational Actor theory of the microeconomic sort applied to international relations and assuming that nation states pursue their self-interest. Contrary to prediction, we find Ruritania embarking on a hopeless war with a much stronger neighbour. Does this refute the assumption that nations pursue their self-interest?

There are many other options. For instance, if 'self-interest' means 'perceived self-interest' or 'self-interest as defined by a ruling elite', then a minor amendment will serve. If the exception is genuine but arises only because Ruritania is a small state whose affairs are heavily influenced by some powerful neighbour, then a larger amendment is called for. Meanwhile, Figure 3.1 says not 'Discard' but 'Discard in favour of a superior competing theory' and, since there are many shades and kinds of competition between rival theories, this leaves it unclear where amending stops and discarding begins. In other words, whereas Figure 3.1 presents the meeting of prediction with facts as a clear and decisive moment of truth, a little thought will show that there is always plenty of room for manœuvre.

This is not a point which arises because the diagram oversimplifies a complex process. It goes to the root of the Positivist idea that hypotheses can be tested one at a time by comparing their implications with objective, neutral facts of experience. The problem has been recognized in the International Relations literature, especially since the rise of Behaviouralism in the 1950s. Critics were quick to complain both that the available evidence supported conflicting theories equally well and, more radically, that the 'evidence' varied in interpretation between theories. Consider, for instance, the neutral-sounding question: 'Is there a link between levels of external and internal conflict?' Dozens of scholars have tackled it, without achieving much by way of agreement. That is partly, no doubt, because they use different sets of data and time-periods. But these differences reflect different ideas of what counts as relevant evidence; and much of the literature is a debate on evidence and the proper and improper uses of techniques for manipulating data.[4]

Graham Allison's study of the 1962 Cuban Missile Crisis provides an example in the realm of foreign policy decisions.[5] He shows how the same events can be given at least three explanations, each related to different facts, or to the same facts differently interpreted. The explanations are not flatly in conflict but neither

[4] For a discussion of this debate see M. Sullivan, *International Relations: Theories and Evidence* (Englewood Cliffs, NJ: Prentice-Hall, 1976), ch. 4; James Dougherty and Robert Pfaltzgraff, *Contending Theories of International Relations*, 2nd edn. (New York: Harper and Row, 1980), ch. 8.

[5] G. Allison, *Essence of Decision: Explaining the Cuban Missile Crisis* (Boston: Little, Brown, 1971).

are they compatible—a nuanced matter which suggests that facts and interpretations cannot be kept apart. At any rate, this has increasingly become the received wisdom in the philosophy of science, where the neutrality assumptions of Positive science have been under persistent attack. The major lines of objection have come from Quine's pragmatism and Kuhn's work on paradigms, and it is to these that we now turn.

PRAGMATISM

Quine's article 'Two Dogmas of Empiricism' remains the best short statement of three radically subversive reasons for despairing of a Positive science constructed in the manner of traditional empiricism.[6] The first is that the five senses do not and cannot give us 'unvarnished news'—information independent of the concepts used to classify it. A concept is not just a sticky label, so to speak, which we apply to objects as they present themselves to our senses. In applying a concept we pick out relevant and reliable features of what we perceive. We group features of one experience with those of other experiences (relevance) and presume that the grouping is significant for other cases too (reliability). There is no way of describing experience independently of its interpretation. There are no 'brute' facts—no facts prior to interpretation.

Secondly, therefore, the process of testing cannot be as described earlier. A test cannot be a moment of pure empirical truth where theory is judged against reality. Just as concepts are entwined with perception, so too theory is entwined with experiment. The question is never 'what do the facts show?' but 'which theory shall we prefer?' In that case, Lipsey's diagram includes a further moment of choice, in the box in Figure 3.1 where 'the theory appears to be either inconsistent with the facts or consistent with the facts'. Pragmatism would put the stress on 'appears'. Since theory is involved in deciding what the facts are, there is room for choice when deciding whether the theory at stake is consistent with them. To put it another way, a third option is always to save the theory by rejecting the facts! For instance, if the results of an experiment are too disconcerting, the scientist will

[6] W. v. O. Quine, 'Two Dogmas of Empiricism', in his *From a Logical Point of View* (New York: Harper and Row, 1961). For a basic guide to the spirit of Quine's pragmatism see Quine and J. S. Ullian, *The Web of Belief* (New York: Random House, 1978).

check to see whether the experiment was rightly conducted without breach of *ceteris paribus* ('other things being equal') conditions. Pragmatists maintain that such checks are not merely tricky but also always leave the same option of whether to accept their apparent results. Facts are always theory-dependent.

Thirdly, there is therefore never a single hypothesis at stake. Popper's case for the falsifiability of genuine hypotheses involved definite refutations by experience. Quine suggests very plausibly that, even if experience shows something to be wrong with a theory, it cannot point a finger at any particular hypothesis. The idea behind confirmation is that if hypothesis H implies prediction P, and if P succeeds, then H is confirmed. Popper objected that pseudo-scientific theories can be confirmed by this logic, and recommended the logic of refutation: if H implies P, and if P is falsified, then H is refuted. Now we find Quine saying that H is never a single hypothesis but a bundle of them. If H_1 and H_2 and H_3 . . . etc. imply P, and if P is refuted, then we must reject H_1 or H_2 or H_3 or . . . ; but there is no reason to think that the culprit is H_1 in particular.

We could continue in this vein, since pragmatism is a rich theory of knowledge and Quine an electrifying exponent of it. But that would take us deeper into philosophy than we have space to go. Here instead are two famous paragraphs from Quine's 'Two Dogmas of Empiricism', which sum up the spirit of this fashionable alternative to Positive science:

> The totality of our so-called knowledge or beliefs, from the most casual matters of geography and history to the profoundest laws of atomic physics or even pure mathematics and logic, is a man-made fabric which impinges on experience only along the edges. Or to change the figure, total science is like a field of force whose boundary conditions are experience. A conflict with experience at the periphery occasions readjustments in the interior of the field. Truth values have to be redistributed over some of our statements. Re-evaluation of some statements entails re-evaluation of others, because of their logical interconnections—the logical laws being in turn simply certain further statements of the system, certain further elements of the field. Having re-evaluated one statement we must re-evaluate some others, which may be statements logically connected with the first or may be the statements of logical connections themselves. But the total field is so underdetermined by its boundary conditions, experience, that there is much latitude of choice as to what statements to re-evaluate in the light of any single

> contrary experience. No particular experiences are linked with any particular statements in the interior of the field, except indirectly through considerations of equilibrium affecting the field as a whole.
>
> If this view is right, it is misleading to speak of the empirical content of an individual statement—especially if it is a statement at all remote from the experiential periphery of the field. Furthermore it becomes folly to seek a boundary between synthetic statements, which hold contingently on experience, and analytic statements, which hold come what may. Any statement can be held true come what may, if we make drastic enough adjustments elsewhere in the system. Even a statement very close to the periphery can be held true in the face of recalcitrant experience by pleading hallucination or by amending certain statements of the kind called logical laws. Conversely, by the same token, no statement is immune to revision. Revision even of the logical law of the excluded middle has been proposed as a means of simplifying quantum mechanics; and what difference is there in principle between such a shift and the shift whereby Kepler superseded Ptolemy, or Einstein Newton, or Darwin Aristotle?[7]

PARADIGMS

Also crucial for the empiricist basis of Positive science is a distinction between 'analytic' and 'synthetic' statements. Analytic statements are those which relate concepts to concepts and are true (or false) solely in virtue of the meanings of their terms, for instance the statement that all bachelors are unmarried. Synthetic statements are those which make a claim about how the world is and are true (or false) accordingly, for instance that all bachelors are carefree. There is in fact no completely clear or uncontentious way to draw this distinction but the broad idea is enough for present purposes. The broad idea is that statements belong to languages and facts to the world. Sometimes we can judge the truth of a statement solely from its relation to other statements, as in mathematics. Such a statement is analytic, whereas the truth of synthetic statements can be judged only by reference to facts of the world.

By this test, a 'theory', as in Lipsey, is a mixture of hypotheses (synthetic general statements of regularities or laws of nature) and analytic statements, which define terms, introduce the logic and mathematics needed for deducing implications, and link the

[7] Quine, 'Two Dogmas', section 6.

hypotheses together. For International Relations, a good example of theory so construed is James Rosenau's 'pre-theory'.[8] Because facts do not speak for themselves, analysts need a 'pre-theory' or conceptual apparatus to articulate their significance. Rosenau's 'pre-theory' consists of a set of definitions of the sources of foreign policy, three measures of the type of state (size, economic development, and political system) and two analytical dimensions (issue areas and permeability), which together define a matrix for investigating foreign policy. The apparatus contributes no truth of its own but, he claims, theory construction needs it because facts become significant only through being lodged in a matrix defined by analytic statements. The same line of thought has been famously expounded for economics in Milton Friedman's essay on 'The Methodology of Positive Economics'.[9] The task of Positive economics, Friedman says, 'is to provide a system of generalisations that can be used to make correct predictions about the consequences of any change in circumstances'. It is to be done by 'the development of a "theory" or "hypothesis" that yields valid and meaningful (i.e. not truistic) predictions about phenomena not yet observed'. This theory is to be a blend of two elements, a 'language' and 'a body of substantive hypotheses'. In its former role 'theory has no substantive content; it is a set of tautologies. Its function is to act as a filing system . . .' In its latter role, 'theory is to be judged by its predictive power for the class of phenomena which it is intended to "explain" '. That is a memorably neat summary of a Positive science approach.

The 'analytic/synthetic distinction' is crucial for Lipsey's diagram (Figure 3.1), as for Positivism at large. It asserts that there is a clear distinction between the two kinds of statement and that there is no third kind.[10] That there are no hybrid statements which defy classification is a crucial 'dogma'—one of the two radically

[8] J. Rosenau, 'Pre-Theories and Theories of Foreign Policy', in R. B. Farrell (ed.), *Approaches to Comparative and International Politics* (Evanston, Ill.: Northwestern University Press, 1966), pp. 27–92.

[9] M. Friedman, 'The Methodology of Positive Economics', in *Essays in Positive Economics* (Chicago: University of Chicago Press, 1953). The quotations are from the opening pages.

[10] The Logical Positivists were well aware that they set themselves problems by making the analytic/synthetic distinction exclusive and exhaustive. In particular, how should one classify 'bridging statements' which yielded criteria for applying parts of a theory of the world? Nevertheless there *could* be no third kind, on pain of undermining the whole approach. For discussion see the references to Carnap, Hempel, and Nagel cited in footnote 1 above.

attacked in Quine's 'Two Dogmas of Empiricism'. That there is no third kind is crucial for the denial that Reason has the sort of task which Newton assigned it in detecting the underlying order of things. Disconcertingly, however, Thomas Kuhn's account of the development of science in *The Structure of Scientific Revolutions* makes a strong case for a third kind, even if not quite a kind which would suit Newton.[11]

Kuhn's study of the history of science led him to notice that there are sometimes abrupt conceptual revolutions in science and to ask why they occurred. To see the point of the question, generalize Lipsey's diagram and reflect that, since amendment and replacement are fluid alternatives, one would expect a process of gradual and continuous accumulation. Kuhn's answer is that the thinking of a scientific community takes place within a 'paradigm' which governs what scientists are to make of recalcitrant experience. Experience which conflicts with a so far accepted theory can be treated in two ways. It can be seen either as a counter-example, demanding that the theory be amended or discarded, or as an anomaly, in which case it is put in the pending tray or discarded. Which of these responses is made depends on how deeply the scientific community is committed to the theory.

Deep commitment takes the form of a 'paradigm', meaning both a set of very broad assumptions whose falsity is almost unthinkable and a set of institutional practices governing the current conduct of science. For instance, Newtonian assumptions that all events are causally determined by the operation of forces and causal laws acted as a paradigm in both senses. Apparent exceptions were put on one side to await later explanation within the Newtonian framework; and this was the proper attitude for anyone wanting public recognition as a good scientist. Thus routine science and routine scientific progress occur while, and only while, the governing paradigm copes successfully with apparent exceptions. But sometimes the pending tray becomes overloaded. So many and such large anomalies pile up that the paradigm suddenly collapses, as, for instance, when Einstein put the exceptions to the Newtonian paradigm together and proposed the theory of relativity. When this happens, there is a scientific revolution and the old paradigm is replaced with a new one.

[11] T. Kuhn, *The Structure of Scientific Revolutions*, 2nd edn., (Chicago: University of Chicago Press, 1970).

Kuhn stated the idea boldly, making paradigms very general and unitary and making their collapse very sudden and complete. Thus he considered the social sciences too messy to have a paradigm or even to be likely soon to acquire one. But the line of thought can readily be adapted to our previous reasons for questioning Lipsey's diagram. The diagram presumes that which theory it is rational to hold is (or can be) fully determined by the findings of experience. If, however, there are always general substantive assumptions being made, which are not at the mercy of experience, because they govern the interpretations of experience, then the diagram is not a complete model of scientific method. If theory is underdetermined by experience, which is itself permeated by theory, then the rational choice of theories is still mysterious.

This so exactly catches the current position in the social sciences that, with or without Kuhn's blessing, 'paradigm' has entered the language of social science. In International Relations specifically there is much talk of competing paradigms, meaning not just that there are conflicting unrefuted theories but that the conflict reflects starting points which can hardly even be compared. For instance, Realism and Idealism are not in direct competition, in so far as the former relies on a view of scientific method which the latter rejects. Each has systematic ways of dealing with apparently awkward cases and there is no hope of specifying neutral conditions for testing one against the other and thus deciding between them. Or, to take another example which will occupy us in later chapters, there is a similar snag to the dispute between Rational Actor and Bureaucratic Politics models of national decision-making. Each model can cope with all the evidence and the choice between them is thrown back on criteria like elegance, economy, fruitfulness, or perhaps, indeed, conformity with deep underlying presumptions about human nature.

The point is well illustrated by the current literature on international relations. In the last chapter we argued that there were three main current approaches, Realism, Pluralism, and Structuralism. Each of them has many adherents in the discipline, and at first sight it looks as if the approaches are in direct competition. Yet it is virtually impossible to think of a way in which they could be tested against one another. It is not simply that they have different views of the world, but that they each define what is the evidence in a different way. There is no body of

evidence that we could use to compare their explanations. For example, those who adhere to Realism simply do not see the same world as those who adhere to Pluralism or Structuralism: they see different actors, different issues, and different pieces of evidence. Nor could we expect the adherents of each approach to treat *any* anomaly as a reason for rejecting it. Each of the three approaches operates as a kind of intellectual club: each has its own journals, meetings, and leaders. Each knows the weaknesses in its own and in the other approaches and therefore debates between them tend to result in predictable discussions within a well-trodden terrain. Inter-paradigm debate is very rare and indeed, if we follow Kuhn in casting doubt on the final scope of Popper's falsifiability criterion, impossible.

TRUTH, THEORY, AND EXPERIENCE

Quine and Kuhn give very solid reasons for agreeing that scientific theories contain more than experience can pronounce upon. This will not surprise anyone in the old tradition which opposes Reason to Experience and contends that the absolute knowledge which science seeks comes only when Reason certifies the findings of Experience. But this kind of rationalism largely yielded to empiricism with the rise of the Logical Positivists and it is therefore disconcerting to find that experience cannot do its job. The threat to truth as the goal of science is not just a threat to absolute certainty. If Quine and Kuhn are right, there is no longer a universal test of what is probable or what it is rational to believe on the basis of experience. Yet we must hold on to the basic idea that science discovers the truth of how the world works. In what follows we shall try to suggest a way of combining theory and experience, which draws on work by Imré Lakatos, Roy Bhaskar, and others but can be read as it stands.[12]

The tasks of a scientific theory are to *abstract*, to *generalize*, and to *connect*. Abstracting is a matter of grouping together events,

[12] I. Lakatos, 'Falsification and the Methodology of Scientific Research Programmes', in I. Lakatos and A. Musgrave (eds.), *Criticism and the Growth of Knowledge* (Cambridge: Cambridge University Press, 1970), the other articles in which are also very relevant. See also his *Proofs and Refutations* (Cambridge: Cambridge University Press, 1976) and *Collected Papers* (Cambridge: Cambridge University Press, 1980; and Roy Bhaskar, *A Realist Theory of Science* (Brighton: Harvester, 1978) and *Scientific Realism and Human Emancipation* (London: Verso, 1986).

situations, or objects which are not identical. For instance, all mice are different; yet all mice are mice. For some purposes it matters that mice are not cats, while for others what counts is that both are animals. The groupings vary with the concepts applied. It may (or may not) be useful to abstract from the behaviour of nations according to similarities of geography, size, weather, constitution, race, religion, economic organization, and so forth. Indeed, even 'nation' is an abstraction, grouping France and Fiji in distinction to General Motors or Hitachi, which sometimes behave more like France than Fiji does. To perform the abstraction one needs well defined concepts (for example, what exactly is meant by 'a democracy'?) and criteria for applying them (for example, is Indonesia one?).

Generalizing is a matter of saying what else things identified by the same concept have in common, not as a matter of logic but as a matter of fact. This distinction is clear-cut only at its extremes. Democracies have freely elected governments as a matter of definition and elect a minority of women as a matter of fact; but their possession of a rational–legal system is not so easily classified. Generalizations hold for the known cases which prompted them but are not scientifically interesting unless they also hold for others. For instance, Milton Friedman gives examples of economies where expansion of the money supply has been followed by inflation. Can this sequence also be found in other cases? That is the moment for 'empirical observation' in Lipsey's diagram (Figure 3.1). Even granting that theory is involved in applying concepts like 'money supply' and 'inflation', and that there is room for dispute about which is prior to which, there is no substitute for observation.

So far so good. The problems lie in the connections. John Stuart Mill remarks in *A System of Logic* (Book VI, Chapter 7): 'It is not the empirical generalisations that count but the causal laws which explain them.' He strikes us as right; but Lipsey's diagram bears no trace of this distinction between generalizations and causal laws. Perhaps one agrees that expansion of the money supply and inflation do often go together but refuses to accept it as significant unless told *why*. If the diagram were complete, it would have to include a call for further, perhaps broader, correlations, logically linked into a bundle but not different in kind. The diagram equates explanation with the success of prediction (and the failure of rival

predictions). Are we just being unreasonable in asking *why* the predictions hold?

Well, what is being demanded? That brings us back to Condorcet's remark that the general laws dictating the phenomena of the universe are necessary and constant. The demand is for some kind of necessity, some sense in which an increase in the money supply *must* result in inflation. Current philosophy of science largely remains hostile to the idea that iron laws and irresistible forces are at work. The objections remain that we cannot know of them and do not need to postulate them. Yet the current view is also that explanation involves an appeal to causal laws and not solely to generalizations. A cause has a power to produce its effect. This way of putting it is meant to attribute causal properties to things (or to the structure of things), falling short of a grand determinist scheme but still thinking in terms of real productive powers. But, although making claims for Reason less ambitious than those of the seventeenth century, it still sets a problem of how causal powers can be known to exist.

The problem can perhaps be addressed from the standpoint of theory. Concepts, criteria, definitions, and their implications seem at first just verbal and so a matter of convention or even arbitrary. But this typically Logical Positivist view can be disputed. Take the rationality assumptions of microeconomics or of Morgenthau's Realism, for instance. Although they embody a real-world claim about how agents are motivated, they function more like a paradigm than a generalization. They regulate the interpretation of behaviour and hence make it at least very difficult for evidence to count against them. For example, Realism relies on the concept of national interest. Yet, if every state is following its national interest by maximizing power, how can Realists account for situations when states seem to behave in a way that undermines their power? Think of the Vietnam War or of the British policy of appeasement in the 1930s. The answer from Realists is that the leaders had either misperceived the situation or miscalculated what to do in it. Examples of power not being maximized can always be explained by redefining the actions as mistakes or miscalculations. In this way all actions can be made to fit within the framework.

Or consider the claim of the Bureaucratic Politics model that foreign policy is decided by the most powerful domestic bureaucracy

(or coalition of bureaucracies) involved in the process. It is sometimes objected that this 'middle-range' theory is an over-bold generalization of the American scene. But its advocates can readily concede that the Russian or British equivalents of, say, the US State Department have less national influence without thereby conceding an inch on the general proposition about the power of bureaucracies. There are plenty of Russian or British bureaucracies to fill any gap and a fertile general theory of bureaucratic role-play to cement any cracks. *Of course* foreign policy decisions are made by persons who represent bureaucratic pressures on the outcome. This middle-range theory is wholly equipped to interpret any process of decision consistently with its assumptions.

In that case the necessities which account for what is constant in foreign policy are those of the conceptual logic of the explanatory theory. A theory is a model whose internal logic we understand together with a claim that reality conforms to the concepts and logic of the model. Mathematical models of, say, the behaviour of particles are a good example. The mathematics includes equations relating variables and allowing the values of some to be deduced, given the values of others. These internal connections are explanatory of the behaviour of particles in so far as the world conforms to the model.

This way of looking at causal laws is a delicate compromise. On the one hand, one is inclined to say that it gets the relation of theory to reality the wrong way round. Models are supposed to reproduce the causal features of the world and so the necessities must be those of the world, not those of the model's inner logic. If the USA and the USSR are locked into an arms race, this is a fact of *Realpolitik*, not of Game Theory. On the other hand, there is no alternative to understanding the world through interpretations and models and hence through what are, in the last analysis, intellectual fictions whose warrant is only that it is *as if* they were true. It is *as if* the USA and the USSR were caught in the logic of the Prisoner's Dilemma or the Chicken Game and the only sense in which this is not mere fiction is that it lets us predict successfully what will happen next.

These conflicting considerations are both to be taken seriously. One insists that science has at least something in common with map-making. The world is discovered, not invented, and, just as a map should record the presence of dragons only if there are

dragons, so science should deal in forces and causal laws only if there are such things. The other insists that science has much in common with model-making, which differs from mapping in the modeller's licence to construct an artificial world and include in it all sorts of features beyond all possible observation. The test of whether there are unobservable electrons cannot be the test just given for the presence of dragons. Both points are presumably right but each sets a problem for the natural idea that explanation is the discovery of hidden order.

A compromise attempts to deal with both problems. The test of the 'fictions' in a model cannot merely be the success of prediction. For, as we have seen, interpretation is involved in the description of facts (including the results of tests) and hence the consistency of prediction with fact is partly a matter of how we choose to read it. Besides, theories can live with anomalies. So the success of prediction is neither necessary nor sufficient for explanation. Theory has more to it than experience can check and the further elements are not just fictions. The theoretical structure of the model represents the workings of the world modelled; or rather, this is the claim made when a model is offered as an explanatory device. But the empirical evidence for this claim is only that the facts can be read consistently with it.

This kind of compromise, we confess, raises as many questions as it answers. But it does at least help in seeing why debates among Realists, Pluralists, and Structuralists in International Relations are so hard to umpire. Theories of such general character all fail Popper's demand for clear conditions under which experience would be deemed to refute them. But this is bound to be so, granted Quine's case for the role of theory in interpreting experience. Each, in any event, offers explanations at a level deeper than prediction. The explanations, being of differing character, are not directly comparable. Consider their explanations of the US–Soviet arms race. Realists present it as the natural response to a bipolar international system. Pluralists make it the outcome of bureaucratic battles within each state. Structuralists trace it to the workings of a permanent arms economy, necessary both to capitalism and to state capitalism. Each explanation creates anomalies but, as noted, a theory can live with many anomalies before they need be deemed counter-examples. Meanwhile, each leads us to expect the arms race which experience confirms.

Why, then, is Realism dominant? Kuhn's paradigms are not only intellectual frameworks but also accompanying institutional practices. It is not hard to see how Realism has become so firmly established in research programmes supported by official funds and to construct a sociology of knowledge explanation of its dominance. But that is, finally, not where we want to leave the question of truth. In Lakatos's reply to Kuhn, all turns finally on a distinction between progressive and degenerating research programmes.[13] In that case, Realism is dominant because, despite anomalies, its selection of aspects of events and identification of trends is more enlightening and fertile than those of its rivals. If this is indeed so, then that is an intellectual answer to the question. But, we are bound to add, its intellectual superiority is by no means plain.

CONCLUSION

It would be immensely helpful to have a clear and simple account of explanation in the natural sciences as a guide to scientific method in the social sciences. When Realism first took the stage, there seemed to be one. A loose Positivism, in the broad spirit of Comte's Positive sociology and embracing all who thought of themselves as bringing the scientific revolution to the study of the social world, had been newly refined by the Logical Positivists. This powerful form of empiricism yielded a scientific method where the success or failure of predictions was the key to identifying causal laws, which were, at heart, simply correlations between variables. So Realists could suppose that hypotheses, derived from a theory got by generalizing from observation, could straightforwardly be tested against the observed facts of an independent world. The hypothesis that states pursue their national interest could be shown to be empirically superior to its rivals, thus grounding a Positive science of international relations.

Unfortunately, the facts of the independent world are more elusive. Even facts of observation need interpreting before they can be counted on, and any facts about underlying mechanisms or structures are 'visible' only through theoretical spectacles. The

[13] Lakatos, 'Falsification and the Methodology of Scientific Research Programmes'.

point serves as a corrective to behaviourist tendencies in general, and therefore to Behaviouralism in International Relations, since it undermines a main reason for holding that science must stick to observable behaviour. But it adds nuances to even the basic questions of objectivity and scientific method. So the Lipsey diagram (Figure 3.1) is as simple as we could plausibly manage, and it is not a definite guide. In particular, it fails to guide the choice between amending and discarding theories which are in trouble with the facts, and it fails to acknowledge that facts depend on theory to identify them. Meanwhile, it squarely embodies an assumption that causal laws are correlations, thus ruling out reference to structures and structural forces to explain the correlations. Realists in International Relations will not be content to abandon structural explanations.

We shall not offer a neat summary of the present position in the philosophy of science. There is no neat position to summarize. The note must be one of unfinished business. Theories must be allowed to contain more than experience can pronounce upon. This makes it always possible to rest competing theories on the same facts. Also, it is usually possible to dispute the facts themselves by challenging the theory involved in their identification. It is usually possible, too, to live with awkward facts as anomalies awaiting further explanation. All this does not mean that the natural sciences are in disarray. But it does mean that there is no definitive or agreed canon of scientific explanation on which theories of international relations can rely. If International Relations aspires to be a science, it must be open-minded about what that entails.

Finally, in transition to the next chapter, we close with an awkward point about truth. Nuclear fusion is in the news as we write. If this scientific breakthrough comes, nature will unmistakably have yielded up another of its secrets. Despite all the nuances we have introduced in the last few pages, there is no other way to put it. Whatever we may have said about theory permeating experience or paradigms governing science, truth will sometimes out, because nature is not a human creation. But can the same be said about the social world? From some points of view it is clearly a human creation. Perhaps nothing follows from that. But there are reasons to wonder, or even to suggest that the goal of International Relations should be understanding rather than explanation.

4

Understanding

When it rains, those who predicted otherwise are proved wrong and those who refuse to believe it is raining get as wet as anyone else. However subtle we are forced to make our idea of science, nature remains an independent realm awaiting discovery. It is indeed possible to say the same about the social world; but it is also possible to deny it. International affairs are at least less independent of what human beings believe about them than are the shifts in the weather. It may turn out that it is therefore a mistake to construe social science along the lines of natural science. But, whether it does or not, there are certainly differences between natural events and social actions which affect the kind of theories most promising for International Relations.

KINDS OF MEANING

Natural science is happy to take a spectator's view of the workings of nature, and any retreat, as in quantum theory in physics or for the philosophical reasons in the last chapter, is reluctant. But the most obvious fact about the social world is that what happens in it has meaning for the inhabitants. Here are four senses in which this is true and which do not apply to the atoms studied in physics or chemistry, even if biologists might want to use some concept of meaning when thinking about animals.

First, people find meaning in their experience. Here we should distinguish between signs and symbols. When we say that a ring round the moon means rain, we refer to a connection in nature. A ring round the moon is a natural sign of or evidence of rain to come, just as a paw print in the dust is a sign that an animal has passed by. When we say that a flag at half-mast means that someone has died, we refer to a social convention that death shall be marked in this way. Natural signs and social symbols might

seem to form a continuum, marked by the presence of convention at the social end but always involving natural expression too. For instance, a flag at half-mast is a symbol of grief, whereas tears are a sign of grief. But the symbol is meaningless on occasions when no one in fact feels what it expresses. On the other hand, symbols can be manipulated, so as to convey false messages. When President Nixon put all US forces on a heightened state of alert during the Yom Kippur War of 1973, it 'meant' that he was worried and ready to intervene. Or did it? Perhaps he merely wanted the signal to be read in that way. Decision-makers in crises take trouble in analysing how their words and actions will be interpreted by others, sometimes so as to avoid misinterpretations, sometimes so as to create them. These possibilities exist because some of the meanings which human beings find in experience depend on symbols and can only be given symbolic expression. There is no parallel in the home life of the hydrogen atom or even in that of the rabbit.

Secondly, language being the usual vehicle of expression, linguistic meaning is a crucial component of social life. Luckily, theories of international relations need not grapple with the nature of language in any depth. But we should distinguish at least between the meaning of an utterance and what the utterer meant by it. Words have public meanings, governed by the rules for their use, whereas people who use words have intentions and motives in using them. To see the difference, think of the arcane debates about the 'real' meaning of the 1972 Anti-Ballistic Missile Treaty, given new life by the decision of the US administration in 1985 to shift to a 'broad' interpretation, allowing 'Star Wars' research to continue within the terms of the treaty. This led to complex debate between the USA and the Soviet Union about what the terms of the treaty really meant, and to acrimonious dispute between the US Congress and the President over the meaning of various key phrases. A treaty is an agreement to abide by whatever the words of the treaty mean. A dispute over what they do mean is, in principle, like a legal dispute over the meaning of a statute. What each side is up to in advancing its interpretation is a different kind of question. We shall say no more for the moment, but the difficult topic of meaning, intention, and motive will be central to Chapter 8. It is not a topic which concerns physicists.

Thirdly, there is a wider question about action and its context,

which can be put as one about meaning. It starts with a distinction similar to the one in the last paragraph, between what an action meant and what the actor meant by it. Actions, like words, have a meaning governed by public rules—a deployment of missiles, for instance, may mean war. The actor need not have intended war to come about. But 'context' is a loose term, extending well beyond the moment of action. The Russian occupation of Berlin in 1945 did not 'mean' the start of the cold war at the time, although, with hindsight, it has come to mean this. One task of theory in International Relations is to find a meaning in actions and events, which may elude all the actors involved. It is not the same sort of task as that of the natural scientist in search of hidden causes, because the context of action cannot be divorced from the actors' understanding of the context.

That becomes clearer, if, fourthly, we notice that ideas have meaning for social actors. What people mean by their actions depends on what ideas inform their thinking. These include what they think valuable or worth striving for—'ideology', in brief. But they also have ideas about how the social world works and what makes its inhabitants tick. As we shall show later, what people mean by their actions depends on what *expectations* they have about the actions of others. Whether this matters for International Relations is disputed. Some theories, especially those pitched at the level of the international system, refuse to enquire what the human actors have in their heads. But other theories do enquire and thus have to take an interest in what actors think that other actors think. These are questions with no parallel in physics and very little in biology.

Since some of what is in people's heads is taken from social science, there is a complication worth mentioning at the start. Theories of international relations influence those who decide foreign policy. For example, many International Relations scholars are directly involved in the US foreign and defence policy community. They try to use their theories to improve policy-making and they search for theories which will be relevant and useful for this purpose. A very high proportion of work in the field has closing chapters on policy-making implications. Even if this degree of interpenetration is peculiar to the USA, policy-makers in other countries must allow for it in their dealings with US policy-makers. Hence the truth of International Relations theories

has something to do with which theories are known and applied in the process which they purport to analyse. They are, so to speak, tied to their own tail—an intriguing thought if one grants that what happens in the social world depends on what people expect to happen.

Nothing follows at once from the presence of these various kinds of meaning in the facts of experience, language, action, and self-consciousness. But we can see already that disputes are looming. It may be that meaning is only a complication and that social science can allow for it by regarding human affairs as simply more complex than the other workings of nature. Alternatively, however, it may be that considerations of meaning take us beyond the scope of scientific method. In that case there are two broad options. One is to put meaning sternly aside and concentrate on behaviour, on the ground that science must stick to what can in principle be tested against experience and observation. This response leads to behaviourism, whose International Relations version is known as Behaviouralism. The other is to make meaning central and to construct a scientific method peculiar to the social world. This response leads to 'hermeneutics' or the interpretative tradition in social thought—*hermeneus* is the Greek for an interpreter—which we described briefly in the introductory chapter. We shall next explore some leading hermeneutic ideas, setting off from Max Weber.

A WEBERIAN APPROACH

'The science of society attempts the interpretative understanding of social action,' wrote Max Weber in the opening pages of *Economy and Society*.[1] Weber there distinguishes between *Erklären*, or the kind of causal *explanation* proper to natural science, and *Verstehen*, or the kind of *understanding* proper to social science. The social sciences study social action. In 'action' he includes 'all human action, when and in so far as the acting

[1] M. Weber, *Economy and Society* [1922] (New York: Bedminster Press, 1968). This famous essay has often been reprinted, a good version being G. Runciman (ed.), *Weber: Selections in Translation* (Cambridge: Cambridge University Press, 1978).

individual attaches subjective meaning to it'. The idea of 'subjective meaning' is a loose one, covering all ways in which someone may act deliberately or expressively and excluding only reflex actions. For example, compare winking with blinking. There is no obvious physical difference, but winking has 'subjective meaning' and blinking is merely reflex.

By 'social action' Weber refers to action 'which takes account of the behaviour of others and is thereby oriented in its course'. When it rains, people put up umbrellas. This is not social action. When riding bicycles, people watch for the signals of others and steer accordingly. This is social action. The distinction is not clean and complete, partly because the umbrella has some social significance and is not customary everywhere, partly because some behaviour, like avoiding other people when wanting to be alone, takes account of the behaviour of others without exactly being social. But the idea that social behaviour is oriented by and to the behaviour of others is one from which we can start.

To locate the idea in an interpretative or hermeneutic setting, we need to specify that there is meaning both in 'the behaviour of others' and in the 'account' which the acting individual takes of it. That leads directly to the central hermeneutic theme that *action must always be understood from within*. The theme has the two elements which we picked out earlier. One is that the investigator needs to know the rules, conventions, and context governing the action—the meaning of the action regarded as a move in a socially defined 'game'. The other is that the investigator needs to know what the agent intended by and in performing the action: why this agent played this move in the 'game'.

The rules of the social world are, from a hermeneutic point of view, importantly different from causal laws. In the first place, to group actions by reference to rules is unlike grouping objects by reference to their observable properties and to the causal laws which they obey. For instance, winking groups with other ways of warning or of doubting or of sharing complicity, depending on a context which is a matter not of physical description but of the form of social intercourse. Blinking groups with all unconscious rapid closing and opening of eyelids in humans and animals; it can be described physiologically and there are causal laws to account for its occurrence. Two people winking are not always doing the same thing. One might be doing what can also be done by

whispering 'Do not believe what I said to George'; the other might have winked to say 'We are being watched'. Two people blinking are in the same physical state and that is all there is to it. To misuse or break the rules of winking is to produce misunderstanding, puzzlement, complaint, or some other social reaction. Every blink conforms to the causal laws of this physical movement. In short, although a wink is a movement of the eyelids, the movement is no help in understanding its meaning. The meaning is given by the relevant rules, of which there are several, each giving the wink a different significance.[2]

The last paragraph sums up a standard hermeneutic objection to behaviourism. A behaviourist is committed to finding differences in behaviour to accompany differences between winking and blinking and differences between one kind of wink and another. The task is either hopeless or depends on a very bold speculation about brain differences, if one focuses only on the wink itself. But since different kinds of wink cause other people to behave differently, there is no quick way to settle the dispute and we are not trying to say that behaviourism is plainly wrong. Equally, the contrast just made between rules as breakable conventions and laws as something 'necessary and constant' (to echo the previous chapter) would also be rejected by behaviourists. They would retort that, if rules are causally effective, it must be in the manner of other causal laws. Thus, for Behaviouralists, the task of explaining international relations is not made impossible by the existence of ideologies and religions, each with its own internal meanings. How deep the problem goes we shall see later in this chapter. For the moment we simply note that the hermeneutic objection to behaviourism (and hence to Behaviouralism) marks a basic crux for International Relations.

Part of understanding action from within, then, is understanding the rules which are operative. The neatest image is perhaps that of playing a game like chess. To know what is happening when a small bit of wood is shifted, one must grasp the rules of chess and so grasp what move has been made. It is possible to argue that there is, in principle, nothing more to understand, because the 'subjective meaning' of an action consists in conformity to the governing rules. For example, Peter Winch comes at least close to

[2] P. Winch, *The Idea of a Social Science* (London: Routledge and Kegan Paul, 1958).

maintaining not only that there can be no action outside some governing public rules but also that a full account of the rules obeyed also yields a full account of the action done.[3] But, as the image of chess suggests, one may want to ask why the agent played the move. Kasparov conforms to the rules when playing *P–K4*, but that is not why he picks *P–K4* from among his legal options. Nothing follows at once, because the formal rules of chess are not the only ones. There are also informal rules of good play (like 'castle early') and perhaps social rules governing the proper conduct of chess matches. So to ask why Kasparov played *P–K4* may be to look for further rules. All the same, however, it is at least tempting to think that 'why?' here demands a switch of attention from rules to the intentions and motives of the agent.

Weber makes the switch by applying a microeconomic model of rational action in order to understand action which is a calculated means to an end. Action occurs within a framework of shared meanings—rules and collective values—but is not dictated by that framework. In the style of economists, we are to reconstruct the agents' choices, given their preferences and information sets, assuming that they are rational agents. Unlike other sociologists, notably Emile Durkheim, whose basic emphasis is on social structure, Weber is firmly individualist in his insistence that individuals choose among alternatives according to their particular aims, interpretations, and calculations. Understanding proceeds by reconstruction at an individual level. This Weberian line has been much used in International Relations, especially in the sub-field known as Foreign Policy Analysis. Here the concern is to understand decisions from the standpoint of the decision-makers by reconstructing their reasons. The foreign policy behaviour of states depends on how individuals with power perceive and analyse situations. Collective action is a sum or combination of individual actions.

The last paragraph introduces a contrast within hermeneutics between understanding individual actions through social rules and collective meanings—what one might call 'top–down'—and understanding collective arrangements through their individual elements—'bottom–up'. This general contrast will engage us later. For the moment we shall focus on Weber's way of introducing the

[3] Winch, *The Idea of a Social Science*.

individual elements. One common source of distrust of hermeneutics in social science is that the idea of 'meaning' is so various and elusive, as the first few pages of this chapter make all too plain. Action can be said loosely to have all sorts of meanings. When Weber remarked initially that he would consider 'all action when and in so far as the acting individual attaches subjective meaning to it', he invited the comment that there are all sorts of subjective meanings. 'Meaning', in short, lacks that exciting mixture of generality and precision which marks the explanatory concepts of the 'hard' sciences like physics. *This* billiard ball behaves precisely like *any* billiard ball in the same conditions, and there are causal laws to explain why. Any attempt to nail down individuals with the aid of rules and collective values seems doomed to vague and complex generalities. Recourse to 'subjective meanings' threatens to make each action unique, to say nothing of the problems set by asking whether the actors need be conscious of them. Meanwhile, if actors' perceptions and values are caused, then we seem to be back with explanation again.

Weber's crucial suggestion is to take 'rationality' as the key concept. Rational actors in the same situation make the same choices, but only in so far as the situation is the same from within. To make this precise, he takes a well-defined notion of instrumental rationality (*Zweckrationalität*) from economics, as specified for an ideal-type case where the agent is fully rational and the rational choice fully calculable. In standard modern terms, the rational agent has:

1. *fully ordered preferences* (for any pair of possible outcomes, the agent prefers one to the other or ranks them equal; and the sum of these pair-wise rankings is a *consistent* and *complete* ordering);
2. *perfect information* (the agent has true—or at least rational—beliefs on all relevant matters; and, where an action may have several possible consequences, can assign a subjective probability to each); and
3. *accurate information processing* (the agent makes all sound inferences, inductive and deductive, from the information, as if equipped with an efficient computer).

The rational agent can then calculate the *expected utility* of each action by assigning a 'utility' (a quotient of happiness, so to speak) to each consequence and discounting it for how likely or unlikely it is to be the actual consequence. This may not always produce a uniquely best action, because a higher probability of lesser utility

may equal a lower probability of greater utility. But, at least, the agent never makes an inferior choice, never choosing *x* when *y* has greater expected utility. The rational agent is a bargain-hunter.

This is a good moment to recall Morgenthau's Realism again. He proposed that decision-makers should be understood to act *as if* they were maximizing utility. Even if foreign policy was not so fully rational in practice, this was still the best starting assumption, with 'utility' being glossed as 'power'. Similar lines of thought, sometimes with nations as the rational maximizers, sometimes with individuals, have been common in International Relations. The international system is often conceived along the lines of a market system whose moving force is maximization. Yet it sounds an oddly unrealistic assumption, especially for a theory proudly named Realism!

The 'ideal-type' case is certainly very idealized. In practice agents do not, or even perhaps could not, have complete and consistent preferences, partly because what they want is often affected by what they believe, and they do not, or could not, have perfect information. In particular, probabilities often cannot be quantified (even if it is *likely* to rain there may be no percentage probability of rain) and so the image of the efficient internal computer is suspect. Here lies a hugely difficult and disputed area of doubt about the relation of the ideal-type model to the real world, and we shall need to air some of the disputes presently. But, for the moment, we should think of the ideally rational agent as a limiting case or abstraction from *homo sapiens* in social life. Economists sometimes liken the abstraction to the use of frictionless motion as an ideal model of a world where there is always some degree of friction.[4] It is important to know what the acceleration of a body down a surface would be without friction as a start to explaining its actual acceleration. In much the same way, Morgenthau wants to know what a fully rational decision-maker would do in order to start explaining foreign policy behaviour.

Irrationality is a departure from the ideal type through defective information, defective processing, or, up to a point, defective preferences. Thus, if one wants to get to London, it is irrational to take a train which one should have known not to be going to

[4] For example, M. Friedman, 'The Methodology of Positive Economics', in *Essays in Positive Economics* (Chicago: University of Chicago Press, 1953).

London or which one wrongly calculated to be quicker than the bus. That is straightforward (at least until questions about the marginal costs of information are raised). Defective preferences need more care. A desire to get to London can be irrational only in relation to other desires. If one wanted to meet someone in London who is in fact elsewhere and had to spend a morning travelling which one could pleasantly have spent in bed, then the desire to travel can be faulted. Immediate desires can be at odds with longer-term satisfactions. A set of desires can be inconsistent in the sense that they cannot all be satisfied. But there can be nothing irrational about preferences which are reflectively consistent, so that the agent who pursued all of them would have no regrets. In other words, instrumental rationality has nothing to say about either the source or the rationality of the agents' goals. It is all to do with the most effective means to ends, at least some of which must be given (and thus are perhaps open to structural explanations of how the agent came to have them).

Instrumental rationality is not the only kind recognized by Weber. There is also 'value-rational' (*wertrational*) action, where the goal is so dominant for the actor that it drives out all calculation or concern for consequences. Acts of self-sacrifice or heroism may be rational, and so understandable, in this sense. Pure cases are rare, not so much because humans are selfish as because action on principle or from duty often involves the weighing of consequences, especially in politics. But here too we are invited to start with a limiting or ideal-type case to serve as a reference point for mixed cases. Economists tend either to ignore *wertrational* action or to assimilate principles as 'ethical preferences' which, like others, are a source of utility. International Relations theorists too tend to treat states which seem not to be power-maximizers either as unimportant or as maximizing power in their own eyes and according to their own ideas. Scandinavian countries, for example, have been treated in these ways. But Weber gives *wertrational* action its own standing and importance and, when we come to think about expressive rationality later, we shall return to the topic.

To complicate things, Weber adds two further kinds of action: 'traditional' and 'affective'. Affective action is simple, unreflective action prompted by immediate desire, like drinking water when one is thirsty. This is commonplace enough but not theoretically

interesting. Traditional action, however, may be very important. It is a typical form of action in 'traditional' societies which are governed by custom, in contrast to the rational–legal organization of modern ones. Weber's thoughts about rationality are directed to the modern world of industry and bureaucracy. So he is dismissive about traditional action, defining it as 'the expression of settled custom' and glossing it as 'simply a dull reaction to accustomed stimuli'. But the modern world is not neatly distinct from traditional society, even in its most Westernized corners, and it would be a mistake for International Relations to suppose otherwise. Think, for example, of the force of traditionalism represented by contemporary Islam. Also, even bureaucrats, those Weberian embodiments of modernity, do not behave in a purely rational–legal manner, we shall find. In short, we shall want to apply a notion of rationality to foreign policy decisions which is neither wholly calculative (*zweckrational*) nor mindless of consequences (*wertrational*) nor a mere mixture of the two.

These are the ingredients of Weber's notion of 'understanding'. The notion itself works like this. *Verstehen* has a first, primary sense of 'empathy' or 'direct understanding', which tells the inquirer what action is being performed. By 'empathy' one knows, for instance, that a man swinging an axe is cutting wood or that a man is aiming a rifle. Whereas natural science works with a basic or datum language of physical *behaviour*, which, if adopted for social science, would mean that action-descriptions were *inferred* from descriptions of behaviour, Weber offers the social sciences a datum language of *actions*. The 'subjective meaning' of what the woodsman or marksman is doing is built in to the basic description or interpretation of the facts. This fits neatly with his initial remark that the social sciences study social action and that action is connected with the subjective meaning which the acting individual attaches to it.

Secondly, there is 'explanatory understanding' (*erklärendes Verstehen*), by which we know that the woodsman is earning a living or the marksman engaged in a vendetta. The action of aiming a rifle can have many reasons and a vendetta is only one of many possibilities. Explanatory understanding is a matter of assigning the action to the right 'complex of meanings'. This can be done, Weber says, in three ways. One is 'historical', where we want to know what particular motive moved a particular actor on a

particular occasion. For instance, the marksman is hunting his brother's murderer, not taking part in army manœuvres. Another is 'sociological', where we lodge the action in an institutional practice, like the vendetta, as 'intended by the average agent to some degree of approximation (as in sociological studies of large groups)'. In other words, we cite the rules governing the conduct of business in this arena of social life and show how the agent was acting in accordance with them. The third is 'ideal-typical', as when we invoke microeconomic theory in order to model the rational choice by the agent (in so far as the action was *zweckrational*).

Of these markedly different ways of understanding why someone does something, the 'ideal-typical' is the least clear. In economics, its use is a blend of two ideas, abstraction and pure problem-solving. As when working with a model of frictionless motion, it is useful to abstract from the real world with its impurities and interferences and to study an agent's alternatives in an idealized setting. As with model answers to mathematical problems, one can then see how close the agent came to finding the right alternative by the right route. That leaves obvious questions about why exactly this illuminates decisions by finite human agents in worlds full of 'friction', but we would rather leave them to Chapter 6, where Game Theory will be found illuminating for thinking about international relations in an ideal-typical way.

Meanwhile, to make it harder, Weber adds another kind of 'ideal type'. This is a more social one which works by analysing a concept, like 'feudal', 'patrimonial', 'bureaucratic', or 'charismatic', so as to be able to use it clearly as a theoretical term. For instance, his concept of bureaucracy defines a bureaucratic organization as one where rules and procedures are the source of actions and, since this is again a pure case, the only source of actions. The relations among the actors all relate to their positions in the bureaucratic organization and it is as if the bureaucracy were a self-contained world, except for the points of contact where commerce with the rest of the world enters and leaves. The ideal type codifies a scheme of reasons which would motivate someone who was wholly a bureaucrat, and understanding proceeds from what such purely rational–legal persons would think and do. But, witness this example, there is no single method for conceptualizing which would let one idealize bureaucrats and, say, charismatic

leaders together. Let us just say that we are dealing with pure conceptual models of types of social action.

The two ideal types relate to reality in different ways. If economic agents do not arrive at the solutions indicated by the economic model (or if foreign policy decision-makers do not choose the strategies recommended by game theory), that is, one might say, so much the worse for the agents. But if bureaucrats turn out not to organize and act as in the model, then that is so much the worse for the model. The economics 'ideal type' idealizes a problem; the social or conceptual 'ideal type' idealizes an institution or practice. One sees the purpose of each and how each might help the inquirer understand what would be a rational course of action in the context. But they are none the less so different that many questions arise.

Perhaps the most urgent is that of how the elements in ideal-type models relate to actors' own beliefs about what they are up to. Are shoppers somehow at fault if they have no concept of liquidity preference? Conversely, is an ideal theory of bureaucracy somehow at fault, if bureaucrats do not think in its terms? Weber gives no general guidance. But he does introduce what he calls 'average types' of the kind needed for statistics. The 'average bureaucrat' might be average in two ways. One is, as in the last paragraph, by embodying the core of the theory. The other is by being representative of the majority of actual bureaucrats, rather as the average reader of a newspaper like, say, *The Times* is simply a profile assembled out of the actual features of actual readers. The point of introducing averages is to be able to show that the ideal type is relevant to the actual world. Do bureaucrats in fact behave as Weber's theory of bureaucracy says? To find out, we need empirical and statistical techniques for sampling what goes on in offices. Theory provides a possible account but does not guarantee its own scope and truth.

That might also seem to mark a difference between understanding and explaining, with the former for making possible sense and the latter for identifying actual causes. At any rate, Weber may have this in mind when he makes his famous distinction between 'adequacy on the level of meaning' and 'adequacy on the causal level', adding that both are required:

> Without adequacy on the level of meaning, our generalisations remain mere statements of *statistical* probability, either not intelligible at all or only imperfectly intelligible . . . On the other hand, from the point of view of sociological knowledge, even the most certain adequacy on the level of meaning signifies an acceptable *causal* proposition only to the extent that evidence can be produced that there is a probability . . . that the action in question *really* takes the course held to be meaningfully adequate.

Certainly this captures a common view of how meaning relates to causation. Generalizations in social science are mere generalizations unless (a) they reflect internal connections in a system of rules for action and (b) there is hard evidence that actors are really moved by the causal elements identified.

For example, an account of group decision-making couched in a logical context of rational deliberation might seem pleasingly adequate at the level of meaning as a reconstruction of how groups decide. But it might then fail dismally to be causally adequate. For instance, Irving Janis has developed an account of foreign policy-making which he termed 'Groupthink'; according to this account, members of a decision-making group may fail to voice their reservations over proposed courses of action in order to remain on good terms with the rest of the group.[5] Critical thinking is replaced by a consensus that is illusory. If dissent is voiced, self-appointed mind-guards apply verbal and non-verbal pressure to isolate dissenters. The effect of this self-censorship of doubts and the application of sanctions to any dissenter results in policy fiascos. Janis argues that this applies to cases such as the Bay of Pigs invasion of 1961, the Vietnam War, and the Korean War. More recently, this phenomenon has been applied to the attempt to rescue the US hostages in Iran in April 1980.[6]

Philosophically, a further problem arises when we ask what notion of 'causation' to apply at the causal level. Weber himself seems to take a Humean or Positivist view of causation. Whether 'the action in question *really* takes the course held to be meaningfully adequate' depends on assigning a high probability, which in turn depends on appealing to a well-established generalization. But, as we saw in the last chapter, there may be reasons to reject this analysis of causation in favour of the one involving real connections or causal powers or both. In that case

[5] I. Janis, *Groupthink*, 2nd edn. (Boston: Houghton Mifflin, 1982).

[6] S. Smith, 'Groupthink and the Hostage Rescue Mission', *British Journal of Political Science*, 1985, 15(1), pp. 117–23.

we are still unclear how a 'meaning' account, in terms of actors' choices within a set of rules, relates to a claim to have identified what '*really*' moves them to particular actions. Is it merely that evidence of probability provides reassurance that the 'meaning' account is correct? Or does the causal level contain factors of another sort which do the *real* work? Is the meaning account merely preliminary to a real causal explanation? Or, conversely, do alleged causes finally need to make sense in a system of rules and rational choices? Although we shall postpone further discussion to later chapters, we want to put these questions firmly on the agenda. They are central both to the 'level-of-analysis' issue and to problems of how seriously to take the actors' own explanation of their actions.

Meanwhile, we must return to the point where we introduced rationality as a Weberian way of making precise the concept of meaning. That let us think of the understanding of action in individualist terms, typified by the rational choices of the individual microeconomic agent. This is indeed a possible approach and one very important in International Relations when, just as economists treat firms as rational individuals, International Relations theorists treat nations as rational individuals moved by national self-interest. But it is not the only approach. Had we emphasized not the choices made but the social rules followed by social actors, then a more collective account of social action would have emerged. Our passing reference to Peter Winch's *The Idea of a Social Science* can now be pursued.

PETER WINCH'S IDEA OF A SOCIAL SCIENCE

Winch, inspired by Wittgenstein, offers an analysis of social life in terms of the concept of a rule. He starts by remarking that scientists and (at that time; he was writing in the 1950s) philosophers usually take science as the understanding of an independent reality, with the presumptions that they know what it is for something to be 'real' and for someone to 'understand' it. The book boldly attacks both presumptions. First, to be real is to satisfy criteria for being real which belong to some social practice or institution. For instance, there are particles because physics has tests for the existence of particles and rules for referring to

particles. Equally witches are real if and only if there are criteria for identifying witches. The parallel is disconcerting but deliberate. In some, but not all societies, it is therefore true to say that there are witches; the same goes for subatomic particles; there is no more ultimate sense in which things belong to reality. 'Our idea of what belongs to the realm of reality is given for us in the concepts which we use.'[7]

Secondly, to understand something about the world is to have mastered the use of the relevant concepts, which belong to some organized practice or institution, for example physics or religion. To learn about the world is to learn the rules of the institution, to come to know, in Wittgenstein's phrase, 'how to go on'. Think, for example, about Scottish dancing, which one comes to understand as one learns what the right steps are. Thus the Gay Gordons has some particular rules (like the rule telling the dancers when to form trios) within broader rules for the proper conduct of all Scottish reels. These rules, like those for, say, the conduct of prayer among Muslims, govern the meaning of behaviour and (as we said apropos of winking and blinking) so constitute actions. The same goes even for apparently outward-looking practices like experiments in physics. Muslims too claim to address themselves to an external reality and their claim is parallel to the physicists'. There are, of course, differences between science and religion but they are institutional differences in the kinds of rule which govern 'how to go on'. In the end there is nothing external to the broadest and most significant institutions. As Wittgenstein put it: 'What has to be accepted, the given, is—so one could say—*forms of life*.'[8]

'Social relations are expressions of ideas about reality,' Winch holds.[9] Social relations are the key to all ideas and hence to whatever reality a culture constructs. Even the criteria of logic 'are not a direct gift from God but arise out of and are intelligible only in the context of ways of living or modes of social life'.[10] Nor are subjective meanings or rational choices independent of public social rules for doing the right or rational thing. Hence to understand action we must begin by identifying the intention and motive involved in it. But intentions and motives are themselves a

[7] Winch, *The Idea of a Social Science*, p. 15.
[8] L. Wittgenstein, *Philosophical Investigations* (Oxford: Blackwell, 1953) section ii, p. 226.
[9] Winch, *The Idea of a Social Science*, p. 23.
[10] Ibid. p. 100.

matter of rules of right and rational conduct in socially defined situations. Individuals' purposes do not determine their forms of life: their forms of life determine their purposes.

Winch's argument has notable relativistic implications for the study of international relations, where there are systematically different ideologies and world views. The international system not only has a major division between communist and capitalist states but also deeper cultural divisions between what are usually termed the First and Third worlds. Many commentators believe that the superpower divide has its source in ideology, thus making impossible any long-term co-operation or peace between the protagonists. This assumption has been behind much of the conservative reaction to the 'Gorbachev phenomenon'. The Soviet Union, so the story goes, is simply a different type of state, and we cannot expect it to live peacefully or comfortably with its main adversary. Indeed, the differences in ideology between the USA and the USSR are often said to result in the two sets of decision-makers seeing different worlds. Their ideologies create enclosed belief-systems that cannot be affected by evidence which contradicts them. Normative perceptions colour empirical perceptions. Their world views are so different that we cannot treat them as participants in the same world. They are, to use Wittgenstein's term, distinct 'forms of life'.

If this is true of differences between the two superpowers, then it is truer still of differences between the First and Third worlds. (The point is only strengthened by noting that the Third World itself spans several deeply discrepant ideologies.) For example, think of the depth of difference between Britain and Iran. The Rushdie affair, touched off by Muslim reactions to the publication of Salman Rushdie's *Satanic Verses* and reaching a crescendo in 1989 when Ayatollah Khomeini called for Rushdie's assassination, revealed irreconcilable views about the duties of government in the face of blasphemy. The publication of a book by a private citizen led to the breaking-off of diplomatic relations. A similar problem arose when the USA had to deal with Iran over the seizure of its Embassy staff in 1979–81. Notions of law and morality seemed to be so far apart that the two sides were talking different languages.

Such examples suggest a strong case for claiming that the existence of deeply different forms of life constitutes a formidable

barrier to a theory of international relations. How can there be an underlying *Realpolitik* common to all states? How can Morgenthau's Realism explain the behaviour of states as different as the USA and Iran? What sense is there in seeing the international system as affecting all states in the same way, when these states practise such widely differing forms of life? Furthermore, differing moral codes give different guides for state action. How can we understand Iranian foreign policy without seeing it as reflecting Islamic notions of morality? On the surface these seem to be very serious objections to the whole enterprise of analysing international relations by means of a general theory.

These questions are so plainly hard to answer that it is worth pausing to consider why they have not had more effect on the development of International Relations theories. The broadest reason is the influence of systems theory, with its view that the foreign policy behaviour of states is determined above all by the location of the state in the international system. We shall consider systems theory in the next chapter. Meanwhile, there have been two basic responses to the kind of intellectual position implied by Winch.

The first is that forms of life themselves reflect material causes. Ideology is a result of a set of material factors, and so has no independent explanatory role. Ideology is an effect, not a cause. The second is that the pressures emanating from the international system override the specifics of forms of life or ideology. This is clear in Morgenthau's work, where he argues that the requirements of national interest drive out ideological considerations in the formulation of foreign policy. One great advantage which he claimed for Realism was that it allowed the analyst to dispense with the motives and intentions of the decision-makers. Morality could not take precedence in the determination of foreign policy because of structural differences between the setting for individual behaviour and the setting for international behaviour. International politics, he claimed, was the domain not of morality but of power politics.

For these reasons the moral dimension of world politics has not been deemed to constitute an overriding objection to the development of International Relations theory. Even states with very different forms of life and different moral world views do in fact behave in similar ways. During the Rushdie affair, the Iranian

Foreign Ministry was busy trying to prevent the breaking-off of diplomatic relations with Britain, and seemed willing to take a conciliatory role. Similarly, the Iran–Contra deal indicates not only the differences between US statements and actions over terrorism, but more revealingly the Iranian government's willingness to engage in *Realpolitik*. More generally, while there is no denying that leaders couch their statements in moral language, which seems to emphasize differences and minimize similarities, their actions often bear little resemblance to these moral pronouncements. Although President Nixon may have come to the White House committed to ending the war in Vietnam, it just so happened that his way of ending it was to escalate it.

The thesis that moral codes *function* similarly, despite differences in content, has been analysed within International Relations in the literature on belief-systems.[11] The analysis has been helped by assuming that its task is to *explain* how belief-systems operate, whereas Winch invites us to *understand* why they matter. From the point of view of *explanation*, moral and ideological features of social life can be treated as legitimizing devices which may facilitate but do not account for what is really going on. Here lies a central dispute throughout the social sciences, and it is one to which we will often revert.

To return to Winch's account of social life, readers may well have two other sorts of query. One is about the assimilation of natural science to religion (or, for that matter, to Scottish dancing). The other is about the absorption of individual action by the system of rules governing it. Both raise key issues for the social sciences, and, although Winch's text is the occasion of our raising them, we are not claiming to exhaust his subtle text, which well repays reading in full.

In likening natural science to religion, Winch is presenting both as ways of ordering experience by means of rules which tell us how to go on. They remain different ways, because the institutions of natural science involve the practice of giving causal explanations with the aid of models and statistics, whereas those of religion involve nothing of the sort. But both are self-warranting, in the sense that each declares what is real and rationally believed through its own internal practices. There is no neutral, objective,

[11] See R. Little and S. Smith (eds.), *Belief Systems and International Relations* (Oxford: Blackwell, 1988), especially chs. 1–3, for an overview of this approach.

external criterion for reality or rationality. Crucially, therefore, causal explanation is the proper procedure when we engage in natural science but not elsewhere. It is not the proper procedure for anyone trying to make sense of other areas of social life. The central theme of hermeneutics, that action is to be understood from within, suggests that causal explanation is of interest only where people (like physicists) use causal explanation and that this is a fact about them, not about nature.

The point brings to life the contrast between explaining and understanding. But it does so in a relativistic way which needs to be examined with care. It is one thing to say that the understanding of how people order their experience is in contrast to the explanation of how the world works. It is quite another to argue that there are as many worlds as there are ways of ordering experience. Hermeneutics is committed to the first and hence to giving some account of how internal orderings relate to reality. But the second is only one such account, and a more relativistic one than hermeneutics may care to adopt. At this stage we want only to make an initial contrast between explaining and understanding. To understand is to reproduce the order in the minds of actors; to explain is to find causes in the scientific manner.

The second query is prompted by Winch's idea that the order in the minds of the actors is to be traced by identifying the rules which guide their thoughts and actions. As a suggestion for a hermeneutic notion of social structure, it seems to us to have great merit. For instance, it would let International Relations theories refer to 'the international system' if and only if there is enough of a set of rules (explicit, tacit, or even perhaps latent) which international actors share and follow. This is in contrast to theories like Morgenthau's and Waltz's, which deliberately employ natural science notions of a system. It is in accord with Morton Kaplan's *System and Process in International Politics*, where different rules are formulated for various international systems.[12] Waltz's criticism of Kaplan to the effect that *rules* do not make a *system* invites a hermeneutic retort that nothing else possibly could in the social world.

But, if the idea is that, in understanding the rules governing action, we understand everything about the actors, then one may

[12] M. Kaplan, *Systems and Process in International Politics* (New York: Wiley, 1957).

wish to demur. Weber speaks for an individualism which starts out from the 'subjective meanings' which individuals attach to their actions and, when he moves to ideal types of rational action, his focus remains on individual choices. An ambitious theory of rational choice, coupled with Game Theory, can attempt to account for rules, practices, and institutions, as we shall see in Chapter 6. Meanwhile, hermeneutics is not committed in advance either to understanding rules in terms of actions or to understanding actions in terms of rules. Equally, there is a good case for holding that understanding should proceed in both directions, although, like all such compromises, that sets problems with the tension involved in combining them. In other words, the 'level-of-analysis' problem set in the last chapter also arises for Understanding. It belongs to a large question about holism and individualism which plagues every approach.

CONCLUSION

By combining this chapter with the last we can see why International Relations is so unsettled and so ready to try very varied approaches. The reason is not just that international affairs are hard to reduce to intellectual order, perhaps because they are changing character even as one tries. It is also because there are radically competing ideas of intellectual order. Thus Realism was able to make a quick conquest by importing a neat and powerful idea of science and showing how an economics-style analysis of nation states as pursuers of national interest scored high as science. But it has since proved vulnerable both to changing ideas of natural science, which have undercut Positivism, and to hermeneutic ideas about how the social world should be understood. In terms of Weber's call for adequacy both at the level of meaning and at the causal level, there is argument at both levels, which, of course, much complicates questions of how to relate them to each other.

At the causal level, the main argument concerns theory and experience. The starting point is the contention that experience is not neutral, uninterpreted fact and cannot serve as an independent umpire of what theories it is rational to accept. Hence there is room for competing middle-range theories, and not merely

because not enough empirical testing has been done. That is good news for those which claim to identify hidden structures and forces, although this itself does nothing to tell us how to justify such a claim. Also, pragmatists draw the very different moral that the test of a theory is whether it organizes our beliefs into an elegant and suggestive web of belief. That moral is no help to claims on behalf of hidden forces and external structures.

The clearest way to focus the questions raised so far is by posing the level-of-analysis problem with more care. As Singer put it originally, it was a problem of deciding whether to explain the units of the international system in terms of the system or vice versa. This makes it a problem about explanation (not about understanding) posed with the tradition of natural science in mind. Its most striking answer in International Relations has been systems theory, which we shall examine in the next chapter. The most ambitious suggestion will be that the units behave in a way *functional* for the system, as demonstrated by showing why the system could not otherwise maintain its impetus. This is even stronger than saying that the dynamics of the system *determine* the behaviour of the units, as causes determine their effects, because 'functional' presumably implies something about the purpose of the states' behaviour in achieving equilibrium, thus going beyond mere causal determination. But even a softer claim that there is causality, with the system as the primary cause, will be hotly disputed by anyone opposed to holistic theories.

This classic dispute does not exhaust the level-of-analysis problem, which recurs as one about whether the foreign policy behaviour of states has international or domestic determinants. The latter answer is given, for instance, by those favouring a Bureaucratic Politics model, where policy emerges from the interplay of domestic bureaucracies, as we shall see in Chapter 7. Here the state is, so to speak, the system, the bureaucracies the units, and the question still one about explanation. Nor does this dispute exhaust the problem. One can also ask whether bureaucracies determine the behaviour of the men and women who take part in the process of decision or whether these human individuals determine, among other things, the behaviour of the bureaucracies to which they belong. In other words, the dispute between system and unit is a formal dispute which can be filled out according to what is claimed to be the relevant system and what the relevant

unit. An individualist rational choice or Game Theory line can take states as units or take flesh-and-blood individuals as units; witness the way in which microeconomics often treats firms as individual units needing no further analysis.

The present chapter has given the level-of-analysis problem a new dimension. The chapter on Explaining made trouble for Positivist ideas of explanation but did not suggest that they might be beside the point. The present chapter has suggested precisely that. If Understanding proceeds by rational reconstruction of rules and reasons for action from within, then it seems radically different from the enterprises of natural science. How radical is radical? That depends crucially on how seriously we are to take the actors' own accounts of what they do. Every hermeneutic approach takes them as the alpha of understanding but not all make them also the omega. In the first place, actors never see all of the game and, even in the corner which they do see, they are not always transparent even to themselves. Secondly, actors inherit collective ways of seeing the world, languages for describing it, and institutions for organizing it. Their autobiographies owe more to this intimate social context than they recognize. Thirdly, particular actors are rarely, if ever, indispensable to the processes in which they take part. The more interchangeable they are, the more it matters to understand the process independently of the actors. As Marx remarked, even when we make our own history, we do not make it in conditions of our own choosing and much of it is made behind our backs. Although strenuous versions of individualism have answers to all three points, one sees their force.

Hence the level-of-analysis problem also troubles a hermeneutic approach. There are similar disputes, first, between a Grand Theory of history (system) and the claim that states (units) make whatever international society there is; secondly, between analyses that make the national state internally sovereign in its policy and decisions (system) and those which fragment it into its bureaucracies (units); thirdly, between bureaucracy (system) and the human individuals who play the internal roles (units). The chapter has introduced these disputes without trying to settle them.

Nor have we tried to decide whether rules and reasons can *only* be considered in a hermeneutic framework incompatible with causal explanation. Although Winch contends that there cannot be causes for the rules followed or for the intentions and motives of

the actors who follow them, other philosophers disagree. There are plenty who hold that beliefs and (especially) desires can be causes of action.[13] This argument will be taken up later. For the moment, we mention it to point out that the relationship between Explaining and Understanding is not yet clear. Since there is an interesting case for each, it certainly seems that there may be a compelling case for combining them. That is what Weber bids us do, when declaring that the final account must be adequate both at the level of meaning and at the causal level. This would be easy in principle if the world-from-within were somehow lodged in an external world, which held the causal key to it. Then Understanding would be the alpha and Explanation the omega. But the hermeneutic tradition prevents such final accounts at least from being easy and perhaps from being possible. So we shall draw no conclusions yet. Instead, we shall next deploy a grand systems theory, conceived in the scientific manner and presenting the units of the system as if they were 'black boxes' whose inner workings need not be examined. When it turns out that we do need to 'open the box', we shall be readier to ask whether the workings are to be explained, understood, or both.

[13] J. S. Mill, *A System of Logic* [1843] (London: Duckworth, 1988). Book vi, especially chs. 1, 2, remains classic. A strong recent case is made by Bernard Williams, 'Internal and External Reasons', in *Moral Luck* (Cambridge: Cambridge University Press, 1981). Central to recent discussion, but not ultimately coming down clearly on one side, are Donald Davidson's essays on the subject, especially chs. 11–14 in *Essays on Actions and Events* (Oxford: Oxford University Press, 1984). L. Doyal and R. Harris, *Empiricism, Explanation and Rationality* (London: Routledge and Kegan Paul, 1986), ch. 3 is a relevant and useful guide.