would be churlish to end the list without confessing the influence of Quentin Skinner on its themes.

MARTIN HOLLIS

University of East Anglia
Norwich

CHAPTER 1

Introduction: problems of Structure and Action

The 1980s ended with the collapse of communist regimes throughout Eastern Europe. It has become hard to remember how impossible that had seemed. One great certainty of the world since 1945 was that communist and capitalist systems were both here to stay, with the Soviet Union and America as the two poles of a permanently bi-polar international order. Suddenly one pole was disintegrating. I recall switching the television on each morning with gaping disbelief, as governments fell one after another until the Soviet Union stood alone. Then the utterly impossible happened and there was no longer a Union of Soviet Socialist Republics.

Experts were as confounded as amateurs and fought unusually shy of explaining why these events were only to be expected. Brasher pundits who rushed to claim omniscience were received with amusement. The wry mood of Muscovites at the time is nicely caught by a Russian cartoon which I keep on my wall. It shows a tattered Marx, Engels and Lenin seated on a Moscow kerbstone with hats held out for kopecks. Marx is saying to the others, 'But the theory remains true!' At a lofty enough level of abstraction, of course, he could be right. There are ways of reading his work which imply that the Russian revolution in 1917 did not satisfy the conditions for the dictatorship of the proletariat, that the USSR was never socialist and that Soviet hegemony in Eastern Europe after 1945 was a further aberration. If the theory has never been tested, its truth is unimpugned. Equally, theorists who believe in bi-polarity can still contend that one pole has merely been vacated until occupied by a new power, perhaps China. But anyone open to astonishment will be more inclined

to suspect that, when the previous certainties exploded, some eminent structural theories went with them.

On the other hand, the fall of governments was not due simply to the action of a few heroic individuals calling the bluff of ramshackle organisations. Nor is it enough to add the massed thousands of more ordinary individuals to make up the weight which toppled the system. The story has to include social groups coming together to exert powers implicit in existing social networks. We can wonder which of the emergent pressures – nationalism? market forces? religion? – will prove to have been crucial throughout; but we cannot plausibly suppose that all previous structures were destroyed by pure action, rather as a boat is sunk by too many passengers climbing aboard. New regimes have replaced the old ones and, under the surface, old power groups have adapted and survived. So, even if some structural theories have bitten the dust, there is still a need to think about structures. Questions of structure and action have become more urgent and exciting, with the frisson felt even by philosophers, and they have only been made harder by seeing what action can do. Abrupt reminders that social order is fragile call for renewed thought about collective freedom and the cement of social life.

A spectacle of falling governments may seem too sensational an opening for a philosophical book. But I want to suggest from the start that the philosophy of social science cannot breathe in a conceptual vacuum. Although front line social science is for social scientists, they cannot advance without theorising and so, at least some of the time, without thinking philosophically. Conversely, philosophers, I shall maintain, cannot claim the ear of social scientists without being inquisitive. Boundaries are porous, more so than for the philosophy of natural science, especially when we come to discuss the understanding of social action. Meanwhile a spectacle of falling governments also serves as an image for dramatic, if slower, changes in the philosophical firmament. I was brought up with a clear idea of the proper tasks of philosophy and of its relation to an equally clear idea of what science was about. These ideas were supposed to combine without trouble, when it came to social science. In fact trouble was already brewing on all fronts, as I realised later, but its effects have been felt unevenly

and they are not always evident in social science textbooks which deal with method. Even where they have permeated, one still needs to understand the old picture in order to make sense of the new or, indeed, to resist it. I shall therefore begin with an unfashionable account of human reason and the nature of science. It carries no presumption that what is unfashionable must be mistaken.

THE ENLIGHTENMENT PROJECT

The schoolroom image of modern science is one of unprejudiced Reason exploring an independent realm of nature. Nature is independent, in the sense that it is as it is, whether or not human beings observe it, bring theories to bear on it or interpret it in one way rather than another. Reason is (or can and should be) unprejudiced in the sense that science eschews superstition, traditional authority, ideology and, in a word, prejudgements and relies solely on what it has learnt from nature itself. I call it a schoolroom image because this book would not be needed, if it were simply true. But it catches a core element in the familiar idea of what marks the transition from previous eras to the modern world, modern mind and modern science. It is also a noble image which retains great influence, despite the challenge of 'post-modern' doubts.

The noble story of modernity and the progress of Reason goes something like this. Some five centuries ago scientists began to realise that traditional beliefs about the cosmos were mistaken in more than detail. New discoveries, aided by new instruments, were making nonsense of the cosmos which the church had constructed by blending the Bible with a suitable reading of ancient texts, especially Aristotle. The telescope and the microscope were starting to reveal an ordered world which, in effect, had no business to be there. By the mid-seventeenth century it was clear to open-minded philosophers and scientists that the heavens, explored by telescope, were not remotely as described in the old account which fixed the earth at their centre. It was becoming clear that, seen through the microscope, everyday matter, organic and inorganic, was composed of elements infinitely

smaller and more variously structured than the Bible and Aristotelian science even hinted. This new world worked rationally but not by the principles traditionally supposed. To discern its structures and its hidden order a new scientific method was needed. The scientific revolution had a revolution in method at its core.

Call the method Reason and think of it as a light by which science can see into darkness. The light shines on nature and drives out two kinds of ignorance. One concerns matters of fact. The contemporary world had yet to be fully explored. It was rumoured to contain dragons, for instance. But were there really such creatures? If not now, then had there been any at other places and times? Such questions are empirical and to be settled by the test of experience. But human minds are finite and their direct experience extends only to a small stretch of space and time. So the light of Reason must supply a method for making inferences from what we already know to what we are justified in believing about the unknown. The other kind of ignorance concerns the idea that the inner workings of nature are hidden from the five senses. We can never see, hear, touch, taste or smell the structures, laws and forces which constitute the natural order. Newton saw apples fall with his eyes but the force and law of gravity are not to be perceived. Here the light of Reason illuminates in a deeper but more mysterious way. It lets the mind escape the confines of the senses – an idea which will give us trouble presently, especially if inferences from experience turn out to depend on knowing the principles of the hidden order, as seventeenth-century thinkers maintained.

Images of light penetrating darkness were often used by the scientific pioneers themselves. 'The Age of Enlightenment' was the eighteenth century's own name for its own progress in extending the scope of science. It refers also to a fresh direction of enquiry. If light could be cast on nature by a rational method which revealed a rational order, it could also be shed on human nature and human society. This new field of exploration offered a new kind of progress: if the human world turned out to be less well ordered than the rest of nature, science could show how to order it better. Impulses which make for conflict could be tamed and cooperative sentiments could be cultivated. With the aid of Reason, social harmony could be achieved. For, as Helvetius remarked in a memorable flush of Enlightenment optimism, 'Ethics is the agriculture of the mind'.

This whole grand attempt to discover all nature's secrets, including those of humanity, has become known as 'the Enlightenment project'. The schoolroom story opens with the progress of Reason in discovering and exploring the modern physical world. Then it adds the growth of the social sciences in the eighteenth century, as the light is turned on the enquiring mind itself and on the nature of society. The Enlightenment project is still with us and still shapes the assumptions which social scientists bring to their task. At the same time, however, it has run into serious trouble throughout the sciences and their philosophy. The trouble is especially urgent in the social sciences, where there have been special doubts about the project from the start. The broadest aim of this book is to reflect on the ambitions of Reason and to ask whether they need recasting in ways peculiar to the social sciences.

STRUCTURE AND ACTION

I have opened in this reflective vein to give warning that the realm of ideas is currently as unsettled as the map of nations. We shall return to the wider topic at the end of the chapter. Meanwhile political disturbances give rise to theoretical questions and this next section of the chapter introduces a general problem of structure and action. Political change can be analysed in two directions. One attempts to account for the action by reference to movement in an encompassing social structure and thus proceeds, so to speak, 'top down'. The other takes the actions of individuals to be the stuff of history and regards structures as the outcome of previous actions. Here the direction is 'bottom up'. We shall contrast these approaches with the aid of a robust example of each, noting that it is not obvious whether they are finally in radical conflict or can be got to complement one another. There follows a brief comment on the notion of causal explanation and what, if anything, it implies about human freedom. This

will lead on to a preliminary suggestion that social action needs to be understood 'from within', rather than explained after the manner of natural science. At this stage, however, the suggestion will serve only to make sense of the plan of the book.

Do governments fall because of structural pressures or are they pushed by individuals acting in concert? More abstractly, does structure determine action or action determine structure? Or is it a bit of both? There is no sensible answer to questions as compressed as these but we must start somewhere. So, to put flesh on the idea of 'top down', here is the famous and uncompromising line taken by Karl Marx in his Preface to *A Contribution to the Critique of Political Economy* (1859):

> In the social production of their life, men enter into definite relations that are indispensable and independent of their will, relations of production which correspond to a definite stage of development of their material productive forces. The sum total of these relations of production constitutes the economic structure of society, the real foundation, on which rises a legal and political superstructure and to which correspond definite forms of social consciousness. The mode of production of material life conditions the social, political and intellectual life process in general. It is not the consciousness of men that determines their being, but, on the contrary, their social being that determines their consciousness.

Here individuals are puppets, controlled from offstage by the interplay of forces and relations of production. Societies have a 'real foundation' and a 'superstructure'. The puppets have a consciousness of what they are doing, but a false one derived from the superstructure and generated from deeper down. They may think in terms of laws made by parliaments whose members choose what they believe to be right, and of themselves as individuals who create their legal and political system. But these beliefs are distortions which serve to mask the reality and aid the working of the hidden forces.

Why, then, do governments fall? The Preface continues:

> At a certain stage of their development, the material productive forces of society come in conflict with the existing relations of production, or – what is but a legal expression for the same thing – with the property relations within which they have been at work hitherto. From forms of development of the productive forces these relations turn into their fetters. Then begins an epoch of social revolution. With the change of the economic foundation the entire immense superstructure is more or less rapidly transformed.

Without stopping to trace the complex theory hinted at, we can note that revolutions are caused by conflict between the forces and relations of production deep in the real foundation. Structures evolve independently of actions which they generate and, since few actors are even aware of them, scientific explanations of change go deeper than the actors' own.

> In considering such transformations a distinction should always be made between the material transformation of the economic conditions of production, which can be determined with the precision of natural science, and the legal, political, religious, aesthetic or philosophic – in short, ideological forms in which men become conscious of this conflict and fight it out. Just as our opinion of an individual is not based on what he thinks of himself, so can we not judge of such a period of transformation by its own consciousness; on the contrary, this consciousness must be explained rather from the contradictions of material life, from the existing conflict between the social productive forces and the relations of production.

How then does the spectator manage to see more of the game than the players? The Preface only hints at an answer to this crucial question. It hints of clues to be found by studying the 'ideological forms in which men become conscious of this conflict and fight it out', and it claims that, somehow, the ultimate causes, which lie in 'the contradictions of material life', can be identified 'with the precision of natural science'. Whatever the method involved, it cannot be an empiricist one of submitting humbly to the test of experience, since it leads to sweeping conclusions, like that in the next sentence:

> No social order ever perishes before all the productive forces for which there is room in it have developed; and the new, higher relations of production never appear before the material conditions of their existence have matured in the womb of the old society itself.

The passages just cited, which are continuous, set a pithy agenda. Marx himself was not wedded to the line taken in

them. Elsewhere he declared, for instance, that 'Men make their own history', although adding, 'but they do not make it just as they please; they do not make it under conditions chosen by themselves' (1852, 2nd paragraph). When his works are read together, they allow much more scope for action and actors than the Preface does. But, taken in isolation, the lapidary statements quoted will do splendidly for purposes of this chapter.

They make three different sorts of claim, which it is worth distinguishing here for future reference. The first falls under the heading of *ontology* or what there is (from the Greek word for 'being') and embodies Marx's substantive view of the world and its workings. The Preface speaks of relations and forces of production, of the economic structure of society and of its legal and political superstructure. It refers to conflicts and contradictions which bring about transformations. It identifies a causal direction, which gives 'the real foundation' priority over 'the legal, political, religious, aesthetic or philosophic – in short ideological forms' in which men become conscious of underlying conflicts. These hidden elements and relations are presented as the reality of the social world. They determine the actors' consciousness and, presumably, their actions. This reality belongs to the independent realm which science explores, external to consciousness and prior to beliefs about it. Such an ontology, which includes the social world in the natural order, is termed naturalistic.

The second sort of claim falls under the heading of *methodology*. If the social world works as described, then a scientific method is needed which can identify the reality, missed or distorted in the actors' awareness, and can lead to causal explanations. Mention of 'the precision of natural science' makes it clear that Marx, in emphasising material conditions and material productive forces, commits himself to a unitary scientific method and a single notion of explanation, which serve for all sciences. The exact method and notion are not specified here but, since they are to identify hidden structures which determine ideological forms and hence the actors' self-awareness, both will be contentious. Meanwhile, since the method is to be modelled on the natural sciences, we can dub it naturalistic too.

Thirdly, then, implicit claims are being made in *epistemology* or the theory of knowledge (for which the Greek word is *episteme*). 'It is not the consciousness of men that determines their being, but, on the contrary, their social being that determines their consciousness.' How then can Marx or anyone else know the reality of the social world? How can social scientists escape the ideological forms which distort the gaze of all human beings including social scientists? Such awkward questions fall into two groups. One group is entirely general and calls for an account of how we know anything about the world. Traditionally such an account or 'theory of knowledge' starts by defining 'knowledge', for instance as 'justified, true belief', finds a class of facts which are beyond doubt, for instance facts of observation, and shows how we can justifiably build on these foundations. But it is far from clear that knowledge of hidden structures can be had in this way; and, besides, many recent epistemologists have radical objections to the traditional approach, as we shall see. Meanwhile, there is a second group, consisting of particular questions raised in making human consciousness and human action the subject of science. Does our knowledge of ourselves, our thoughts and actions, have the same character as our knowledge of the terrain at our feet and the material world about us? The players' understanding of the games of social life may turn out to be radically unlike the knowledge involved in the natural scientist's explanations of the natural world.

Having drawn these distinctions, we can return to the initial question. Does structure determine action or does action determine structure? The Preface comes down squarely on the side of structure as the determinant. So let us next try out an equally robust but opposite answer. John Stuart Mill is best known for his essay *On Liberty* (1859), a glorious defence of individual freedom against all political and social encroachments, on the grounds that 'the only freedom which deserves the name is that of pursuing our own good in our own way'. *On Liberty* speaks for liberalism, a form of consciousness which Marx's Preface assigns to the superstructure and accounts for in structural terms. Mill will have none of that. In an open society where individuality flourishes progress comes through critical thinking and rational persuasion. This

liberal vision is present in all his many works and goes with a denial that there are any such social forces as Marx alleged.

In *A System of Logic* (1843) Mill offers 'a connected view of the principles of evidence and the methods of scientific investigation', to quote the subtitle. This powerful work is divided into six books, which together still provide the best general rationale for what I shall call Positive science, especially as that term is used by social scientists. The first five books address the deductive and inductive logic of the sciences at large, with the natural sciences chiefly in mind. Book VI is titled 'On the Logic of the Moral Sciences' and turns to psychology and the social sciences, where it indeed takes 'a connected view'. Chapter 7 of Book VI opens with this ringing declaration:

> The laws of the phenomena of society are, and can be, nothing but the laws of the actions and passions of human beings united together in the social state. Men, however, in a state of society, are still men; their actions and passions are obedient to the laws of individual human nature. Men are not, when brought together, converted into another kind of substance, with different properties; as hydrogen and oxygen are different from water, or as hydrogen, oxygen, carbon, and azote, are different from nerves, muscles, and tendons. Human beings in society have no properties but those which are derived from, and may be resolved into, the laws of nature of individual man.

Social science, in Mill's view, must be grounded in 'the laws of nature of individual man' because it has as subject matter only 'the actions and passions of human beings united together in the social state'. These actions and passions are 'obedient to the laws of individual human nature', however, and the logic of the moral sciences is one which lets us identify these laws. They comprise 'the laws of mind' (Chapter 4) and 'laws of the formation of character' (Chapter 5). Granted this much, Chapter 6 is in no doubt about the prospects for a social science erected on them:

> All phenomena of society are phenomena of human nature, generated by the action of outward circumstances upon masses of human beings: and if, therefore, the phenomena of human thought, feeling and action are subject to fixed laws, the phenomena of society cannot but conform to fixed laws, the consequence of the preceding.

To find these laws is 'the object of the Social Science'. Once we have them we shall be able to explain and predict the whole history of society, even though we shall not know enough 'for thousands of years to come'.

Comparison with Marx's Preface is instructive. Let us use the same three headings. The *ontology* is sharply different. The whole apparatus of a real foundation of economic forces and relations is simply absent. Instead there are only individuals, their passions and actions, and, more vaguely, individual human nature governed by laws of mind and character-formation. The *methodology* is only somewhat different, however. Both thinkers hold that explanation proceeds by identifying causal laws and the conditions in which they operate. But Marx needs a way of penetrating the conscious superstructure to a deeper level in search of mechanisms which determine consciousness. Mill, untroubled by a belief in such hidden dynamics, is content to trace regularities in human behaviour to their source in human nature. This difference makes for sharp dissent about the strategy of explanation. Mill holds that the properties of human beings in society 'are derived from, and may be resolved into, the laws of nature of individual man'. Marx holds that consciousness must be explained 'from the contradictions of material life'. Such questions of strategy will concern us presently. Meanwhile the overall similarity is notable. Both thinkers espouse a naturalism implying a single logic of explanation for all sciences. Mill, although doubting whether what Marx calls 'the precision of natural science' is attainable, says clearly in Chapter 3 of Book VI that:

> the science of Human Nature may be said to exist, in proportion as the approximate truths, which comprise a practical knowledge of mankind, can be exhibited as corollaries from the universal laws of human nature on which they rest.

Their different strategies of explanation – one from structure to action, the other from action to structure – are also connected to a difference in *epistemology*. As we shall see, Mill belongs squarely to an empiricist tradition which confines knowledge of the world to beliefs which observation can justify. This would make nonsense of the Preface's ambitions for social science. It is not the only

rival tradition or theory of knowledge within the naturalist camp, however, although I shall leave the alternatives to the next few chapters. Any scientific theory which deals in hidden structures owes us an account of how we can know of such determinants.

DETERMINISM

The contrasts just drawn between Marx and Mill threaten to cause confusion over the vexed question of free will and determinism. It is often asked whether the social sciences increase human freedom or destroy the illusion that we have any. The Preface sounds very definite (whatever Marx may say elsewhere about men making their own history). 'It is not the consciousness of men that determines their being, but, on the contrary, their social being that determines their consciousness.' Is social science at large committed to a denial that people make choices (even if not under conditions chosen by themselves)? Well, the Preface denies it in a quite specific way by setting up an ontology of economic and social forces which shape the actors' consciousness and cause their actions. So it sounds as if Mill, by refusing any truck with such structures and forces, can readily argue that the social sciences actively help us to pursue our own good in our own way.

On the other hand Mill bases social science on the claim that 'the phenomena of human thought, feeling and action are subject to fixed laws'. How can there be freedom to pursue our own good in our own way, if all actions are the result of outward circumstances on human beings who obey universal laws of human nature? Perhaps, then, the threat of determinism arises from the idea that there are laws of any scientific kind, which govern our actions. If so, believers in human freedom may need to find a method peculiar to the social sciences, which offers more ways to explain action than by reference to causal laws. Mill, however, says exactly the opposite. It will save confusion later if we next define 'determinism' and then see how he untangles the topic.

Determinism, in the first instance and defined loosely, is the thesis that there is a complete causal order in nature: every event

or state has a cause. What exactly does that mean? Answers vary, depending on whether they mention 'laws of nature' and whether they attribute 'necessity' to the relations between cause and effect. In Newtonian mechanics and physics there are absolute laws of nature, holding universally and necessarily in all places and times, and forces which drive the natural world irresistibly. Nature is a 'determined' system in a very strong sense, which sets acute problems for anyone who supposes that humans sometimes choose what will happen next.

Even so, it is not obvious that human freedom is thereby ruled out. If we think of freedom as the ability to do what we want, then, even in a complete causal order where everything happens of necessity, we can sometimes behave in ways which achieve what we want. In the words of Thomas Hobbes, whom we shall meet later, 'water hath both the liberty and the necessity of descending the channel' (1651, Ch.21). Since the will is not an act of volition but 'the last appetite in deliberating', we act freely whenever what happens next suits the last appetite which preceded it. He thus maintains that there is no conflict whatever between freedom and determinism. Another famous line tried by thorough determinists turns on the idea that freedom is, at bottom, consciousness of necessity, or an acceptance of what happens which stems from understanding why things could not be otherwise.

The topic is therefore slippery. But most thinkers who mean to leave scope for human choice have not been determinists in so strong a sense. Yet scientists seem broadly committed to some kind of determinism. This is not obvious, because many of them hold that there is either a random element in nature or an indeterminacy about what we can know of nature even in principle. That might sound like a denial of determinism which creates scope for free action. But Mill spotted that when we speak of free action we do not mean action at random or action whose explanation is beyond our ken. He was content to accept that actions may be wholly caused and wholly predictable. Yet he unswervingly maintained that free action is possible, arguing not only that freedom and determinism are compatible but also that freedom presupposes causal order.

How is this remarkable trick worked? Mill performs it in *A System of Logic* Book VI Chapter 2 titled 'Of Liberty and Necessity'.

> Correctly conceived, the doctrine called Philosophical Necessity is simply this: that, given the motives which are present to an individual's mind, and given likewise the character and disposition of the individual, the manner in which he will act might be unerringly inferred: that if we know the person thoroughly, and know all the inducements which are acting upon him, we could foretell his conduct with as much certainty as we can predict any physical event.

He then points out that 'we do not feel ourselves the less free, because those to whom we are intimately known are well assured how we will act in a particular case'. Seeing nothing to fear from determinism, therefore, he goes on to argue that, although an individual always acts from a character which has been formed by circumstances, 'his own desire to mould it in a particular way is one of those circumstances, and by no means one of the least influential'. For 'we are exactly as capable of making our own character as others are of making it for us'.

Mill's hope is that, if we replace the necessity in events which is contributed by thinking in terms of structure and forces, there is nothing to fear from the idea that human action is predictable. Indeed, the more predictable the world is, and the more science helps us to predict it, the better we can know how to achieve what we value. Is this a trick? Now is not the moment to ask. For the moment, the point to notice is that determinists can disagree about the analysis of causation. Mill is not alone among determinists in denying that causes compel or necessitate their effects. He holds that laws of nature are merely regularities which allow reliable predictions. Whether he is right about that and right in his view that freedom is thereby saved are questions which will crop up again.

Marx's Preface is more strongly determinist and I am not sure that there is a consistent line to be had from all his works taken together. Nor, I think, have leading Marxist thinkers been sure. On the one hand historical materialism, construed scientifically, seems to chart an inevitable development of the economic forces and relations of production which leaves no room for conscious

human initiatives. On the other hand Marx issued a manifesto and the communist party has often assigned itself a vanguard role in speeding up history or even, as in the Russian or Chinese revolutions, of inspiring great leaps forward from feudalism to socialism. Intermittently at least, Marx, like Mill, thinks of scientific knowledge as a source of power to bring about change. Meanwhile I draw attention to the Preface for a further contrast with Mill in its idea of what is involved in causality. Its causal images are often images of specific mechanisms working in particular historical conditions. 'No social order ever perishes before all the productive forces for which there is room in it have developed.' This suggests that necessities are-not – or not only – those of general and universal laws but also those of particular productive forces and their working. Here is another reason why we shall need to think further about the idea of causation.

A shared, naturalistic belief in the unity of science thus leaves room for three disputes. The first is an *ontological* one about structure and action, with Marx contending that action is determined by structure and Mill insisting that all phenomena of society arise from the actions and passions of human beings. The second is *methodological*, to do with the analysis of causal explanation. Is the key idea that of necessity or merely of regularity? Is it geared to the general, for instance to general laws of nature, or to the particular, for instance to specific mechanisms? The third is *epistemological*, with Mill upholding an empiricist view that knowledge is a matter of experience and Marx needing a theory which allows knowledge of an underlying reality. We shall pursue all three disputes later.

For the moment, however, let us take stock with the help of Figure 1.1. 'Holism' refers to any approach which accounts for individual agents (human or otherwise) by appeal to some larger whole. 'Individualism' refers to any version of the contrary approach, which accounts for structures by appeal to individual agents (human or otherwise). (The reason for writing 'Systems' rather than 'Structures' in the top left box will emerge presently.) If the Preface has the right idea, then explanation proceeds 'top down' by accounting for individual actions in 'holist' terms, i.e. by reference to the working of a system. If Mill has the right idea,

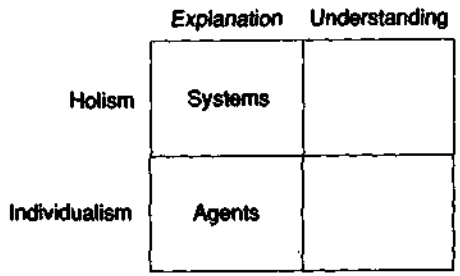

Figure 1.1

then 'individualism' prevails, with explanation proceeding 'bottom up' and systems making no independent contribution or even being 'resolved into' facts about individual agents. Anyone who holds that systems and individual agents must both feature in explanations of the social world is welcome to a position which cuts the dividing line. Compromises look entirely sensible, although they do set hard questions about how to combine their elements, as we shall see. Meanwhile, notice that there is a right-hand column marked 'Understanding'. This is the topic of the next section.

UNDERSTANDING

The central dispute between 'top down' and 'bottom up', as presented so far, is not peculiar to the social sciences. Nor are the questions of ontology, methodology and epistemology which accompany it. That is because Marx and Mill were both naturalistic thinkers, who believed that, since human beings and societies belong to the natural order, a single method, broadly defined, will serve for all sciences. There is a rival tradition, however, which has a profoundly different view of society, human life and social action. 'Understanding' promises a radical alternative to 'Explanation'.

The rival tradition aims at an 'interpretative' or 'hermeneutic' social science (from the Greek word *hermeneus*, an interpreter). Its central proposition is that the social world must be understood from within, rather than explained from without. Instead of

seeking the causes of behaviour, we are to seek the meaning of action. Actions derive their meaning from the shared ideas and rules of social life, and are performed by actors who mean something by them. Meanings – a nimble and ambiguous word which will give us great trouble – range from what is consciously and individually intended to what is communally and often unintendedly significant. The interplay of these elements will provide the filling for the right-hand column of Figure 1.1.

This approach stems from reflections on the character of history, especially those of Hegel, and on the writing of history. I shall take my cue from a nineteenth-century German idealist thinker, Wilhelm Dilthey (1833–1911). Dilthey identified 'meaning' as 'the category which is peculiar to life and to the historical world'. Human life, he wrote, can be understood only by means of categories which do not apply to knowledge of the physical world, like 'purpose', 'value', 'development' and 'ideal' – aspects of 'meaning'. In contrast to individualists in this same tradition, Dilthey held that the connectedness of a life can be understood only through the meaning that individual parts have for understanding the whole. But 'the whole' is not external to humanity. 'Life does not mean anything other than itself. There is nothing in it which points to a meaning beyond it' (1926, vol. vii, p.224).

Although a proper introduction to 'Understanding' will be left to Chapter 7, I shall say just enough now to fill in Figure 1.1. In glossing 'Structure' as 'Systems' in the top left quadrant, I picked a term which applies readily to the natural world. Images of mechanical systems, like the sun and planets, electro-motors or clockwork spring to mind, as do organic images of beehives, termite colonies and the human body. In more abstract vein one also thinks of computer systems, information systems and number systems. Holists often draw such analogies in explaining how social systems work, and individualists refuse to believe them. For the corresponding dispute in the right-hand column we need to gloss 'Structure' in a different way. What analytical concept best catches the idea of social life as a fabric of meanings? Recall Marx's remark about 'the legal, political, religious, aesthetic or philosophic – in short ideological forms' in which men become

conscious of underlying conflicts. These forms can all be thought of as structures of rules. There are legal rules in the sense both of laws and of legal practices. There are political rules – constitutions and political conventions. Religious rules define and regulate organised religions. Aesthetic rules delineate culture; and 'philosophic' rules could be said to encompass people's ethical beliefs and their shared ways of thinking generally about themselves, their world and their place in it.

Rules are not to be thought of only as entries in rule books. They are also embodied in social institutions and practices, thus more palpably forming a 'structure' than if considered abstractly. For the notion which best captures this thought, we shall borrow from recent philosophy. Ludwig Wittgenstein's *Philosophical Investigations* (1953) makes fertile use of the notion of a 'game' in discussing human action. The rules of a game not only regulate how it is played but, more importantly, define or constitute the game itself. People could have gone fishing before there were rules to regulate this activity; but they could not have played chess without rules. Moves in a game have meaning only within the rules, as, for instance, words have meaning only within a language and within practices of communication. Although the idea of social activities as 'games' will not become clear until later chapters, it carries just the intuitive suggestion wanted for the top right box. Part of what it suggests is that games are a human and social peculiarity and hence that Understanding may turn out to involve a denial of naturalism.

How do the institutions and practices of social life relate to the human actors who participate in them? A holistic answer would be to have the games absorb the players. If actors, at least in their social capacities, desire, believe and therefore do only what is socially expected of them, then they need no separate understanding. If, for instance, they are solely the bearers of social roles, which derive entirely from determinate social positions and dictate all that role-players do, then understanding can proceed as wholly 'top down' as a pure systems-theory would have explanation proceed. The presence of meaning would not make structure less constraining on this side of the house than on the other, even if meaning does not generate action as cause generates effect.

Conversely, however, a fully individualist approach would reverse the direction and proceed 'bottom up'. If meanings are subjective first and intersubjective only by mutual accord, an opposite account of understanding is needed. The players construct the games of social life, perhaps in the spirit of the social contract often postulated to account for moral and political order. In the words of Jon Elster, a staunch individualist:

> The elementary unit of social life is the individual human action. To explain social institutions and social change is to show how they arise as the result of the action and interaction of individuals. (1989(a), p.13)

More pithily still: 'There are no societies, only individuals who interact with one another' (1989(b), p.248). Accordingly let us write 'Actors' in the bottom right quadrant.

As when offered a stark choice between 'Systems' and 'Agents' earlier, readers will no doubt suggest a compromise. The rules of the game constrain the players but also enable them to pursue their own ends. The players make their own history, in part by creating their own rules, but they do not do it in conditions entirely of their own choosing. Action may presuppose structure and yet also shape it. As in the 'Explanation' column, there are options which straddle the dividing line, now bidding us furnish the social world with both games and actors so as to understand it from within with the aid of both. That seems entirely sensible and I remark only that we shall nonetheless find hard problems in the blending.

Completing the matrix gives Figure 1.2.

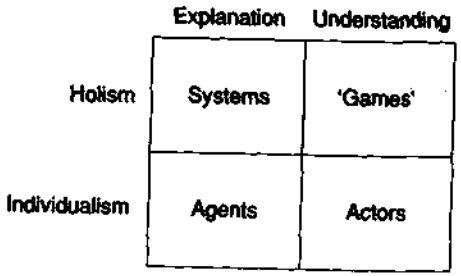

Figure 1.2

If positions which straddle the horizontal dividing line are allowed, thus mixing 'top down' and 'bottom up', how about the vertical divide? The difference between 'Agents' and 'Actors' invites probing and that between 'Systems' and 'Games' does not look compelling either. Even if Explanation and Understanding turn out to be radically distinct, how about a bit of both? Well, for the moment, think of 'Agents' as individuals and 'Systems' as structures seen from a naturalistic perspective, and think of 'Actors' as individuals and 'Games' as structures seen from an interpretative one. When we have worked these perspectives out separately, we shall be ready to think about combining them. Meanwhile treat Figure 1.2 as a suggestive device for setting problems of structure and action, not as a direct source of answers.

THE PLAN OF THE BOOK

The book is organised accordingly, with Explanation and Understanding as its major theme and Holism and Individualism as its minor one. The next three chapters examine some leading accounts of Explanation and apply them to the social world. Chapter 2 opens in the seventeenth century with a classic question about the parts to be played by reason and experience in discovering how the world works. It explores rationalist hopes of detecting the causal order of nature, conceived as wheels and springs driving a mechanical system. Chapter 3 retorts with a classic empiricism and goes on to issue a manifesto for Positive science. Discussion then focuses on Milton Friedman's rubric for Positive economics. This makes good sense of 'the hypothetico-deductive method' but raises acute problems about the role of theory in science. Chapter 4 traces the trouble to a misplaced belief that knowledge needs 'foundations'. The suggestion that *all* claims to knowledge involve the interpretation of experience leads us, by way of Karl Popper, to pragmatism and then to fashionable thoughts about 'paradigms'. But, although several accounts of Explanation are by now on offer, none is so commanding that the social sciences can safely adopt it.

We next pause to factor in the 'vertical' dispute between Holism and Individualism. Chapter 5 tries out the 'Systems' of the top left box in Figure 1.2. It starts with an ambitious claim that social facts have 'functional' explanations, which reduce human agents to cyphers. But it presently falls back on the more modest idea that society is not a mere sum of individuals. Even this is disputed in Chapter 6, where the example picked to represent Individualism – the 'Agents' of the bottom left box – is the analysis of action proposed by Rational Choice theory and Game Theory. Since the latter has become almost a compulsory tool for social scientists, the bones of it are introduced in some detail and from scratch. But a deep problem about the analysis of social norms remains unresolved.

The 'vertical' dispute now shifts to the 'Understanding' column of Figure 1.2. Chapter 7 takes up the theme that Meaning is 'the category peculiar to life and to the historical world'. To focus it, however, we are soon attracted by Max Weber's approach to understanding social action and, in particular, his analysis of rationality. When this is contrasted with Wittgensteinian ideas about social actors as followers of rules and of action as a move in a game, we find ourselves in the top right box of Figure 1.2, with 'Games' radically unlike those played by the rational agents of Game Theory. Chapter 8 holds out for the individual 'Actors' of the bottom right box, who play the games of social life without being wholly absorbed. They can be glimpsed in the playing of social roles or, invoking an instructive analogy, in theatrical roles. Or can they? Hard questions about social identity become harder when we consider the philosophical problem of personal identity.

Chapter 9 resumes the main theme in the light of what has been learnt. Perhaps the earlier question about social norms can now be answered by combining a reworked *homo economicus* with a reworked *homo sociologicus*. That suggests a general reconciliation between Explanation and Understanding. But a happy ending is delayed by the suggestion that the social world is *constructed* from within in a way quite alien to the natural world. In that case the social sciences must rely on intersubjectivity, whereas the natural sciences have always aspired to objective knowledge.

Is Understanding then committed to some form of relativism, for good or ill? Chapter 10 makes this question the occasion for asking whether value-neutrality in the social sciences is possible or desirable. Weber is again pressed into service, this time to present the official view that, although the social sciences are bound to be 'value-relevant', they can and should be conducted in a way which is 'value-free'. But, the more we think about this line, the harder it becomes to keep to it. Chapter 11 therefore broadens the discussion. The Problem of Other Minds involves other forms of relativism, as becomes plain when we consider anthropologists seeking to understand other cultures. Possible limits to relativism are examined, in search of an escape from the notorious 'hermeneutic circle'.

The concluding chapter reflects on what we have found on this journey, which it is now time to begin.

CHAPTER 2

Discovering truth: the rationalist way

Sir Francis Bacon, often hailed as the father of modern scientific method, distinguished two ways of discovering truth. In his *First Book of Aphorisms*, published in 1620, he declared:

> There are and can be only two ways of searching into and discovering truth. The one flies from the senses and particulars to the most general axioms, and from these principles, the truth of which it takes for settled and immovable, proceeds to judgement and the discovery of middle axioms. And this way is now in fashion. The other derives axioms from the senses and particulars, rising by a gradual and unbroken ascent, so that it arrives at the most general axioms last of all. This is the true way, but as yet untried.

The truth to be searched into was truth about nature, meaning the universe as God had created and furnished it. Both ways were ways of discovering the true order in nature by applying Reason scientifically. They differed sharply in their analysis of Reason and how to apply it, but they agreed on the project, that of constructing a new science based on absolutely certain truths. New ideas of Reason were accompanied by new ideas of nature and led to new ideas about human nature and society.

I start in the seventeenth century because that is when our modern intellectual world coalesced. The scientific revolution was already in full progress. In astronomy, for instance, telescopes wielded by Kepler and Galileo had long since smashed the crystal spheres, once believed to rotate around the earth. But it took some time for thinkers to realise that the new science was so systematically at odds with the old that nothing could be taken for granted. In the old story of heaven and earth everything had been found a meaning, purpose, reason, function and cause, so