1 The Critique of Positivism

Despite the major significance attached by critical theorists to the critique of positivism, one of the few things that emerges clearly from their work on this is the absence of any clear conception of what positivism consists in. (This is a feature shared by many other critiques of positivism, an activity that has become almost obligatory amongst epistemologically sensitive social theorists over the past decade or so.) I believe it can be shown that what they call 'positivism' in fact consists of a number of distinct claims, which have quite complex logical and historical relationships to one another. My main aim here is to disentangle these, and thereby make some preliminary assessment of the success of their critique. I will begin by suggesting a certain paradox in this, which indicates the need for a more detailed analysis of the concept of positivism.

1 A PARADOX IN CRITICAL THEORISTS' CRITIQUE OF POSITIVISM

Most critical theorists appear to regard the doctrine of value-freedom as a central feature of positivism. This is true, for instance, of Horkheimer, in his early and influential article, 'The Latest Attack on Metaphysics';[1] of Marcuse, in his discussion of Comtean positivism in *Reason and Revolution*;[2] and of Habermas, in his contributions to *The Positivist Dispute in German Sociology*.[3] And for them, as for others, Weber's methodological writings represent one of the major expressions of this doctrine.[4] But when one examines these, one finds I believe that his overriding concern was to attack those who thought that political and ethical issues could be resolved by purely scientific means. He wished

to reject the legitimacy of a 'scientific politics'; to dispel what he regarded as the illusory authority given to political and ethical ideals propounded in the name of 'science'. Yet it seems that, for critical theorists, the scientization of politics is also one of their main targets of criticism which, like value-freedom, they take as a key element in positivism.

For instance, according to Habermas one of the earliest articulations of this scientific conception of politics is to be found in Hobbes; and it represents a wholesale rejection of what Habermas regards as the classical tradition of politics, going back at least to Aristotle.[5] For Aristotle, claims Habermas, politics was intimately related to ethics and both were distinct from 'theory', since they could not be ascribed the status of a rigorous science. By contrast, he argues, Hobbes believed it possible to construct a science of human activity that would enable the conditions for the proper ordering of society to be rationally determined. It is this (Hobbesian) scientization of politics that forms one of the main targets of Habermas's critical work, as was also the case for many of his predecessors in the Frankfurt School.

Positivism as the advocacy of a scientific politics first became a major theoretical and practical phenomenon in early nineteenth-century Europe, especially through the writings of Saint-Simon, Comte and their followers.[6] Thus Saint-Simon, speaking of how political decisions would be made in a society organized on the basis of the 'positive sciences', had this to say:

> These questions . . . are eminently positive and answerable; decisions can only be the result of scientific demonstrations, absolutely independent of all human will, which may be discussed by all those educated enough to understand them . . . . And just as every question of social interest will then be decided as well as it can be with acquired knowledge, so will all social functions inevitably be entrusted to the men most capable of performing them in conformity with the association's general aim. Thus, in this situation the three principal disadvantages of the present political system – arbitrariness, incapacity and intrigue – will be seen to disappear all at once.[7]

Here, and throughout Saint-Simon's writings, we are presented with the ideal of a society organized upon scientific

principles, and in which all social and political problems are open to a *rational* solution through the application of (social and natural) scientific knowledge.

But it is just this kind of view that Weber was concerned to reject, by insisting upon the separation of science and values emphasized by the Heidelberg School of neo-Kantians. His most important single paper on this issue, 'The Meaning of "Ethical Neutrality" in Sociology and Economics',[8] was initially written in the form of a position paper for a meeting of the committee of the German Association for Social Policy (*Verein für Sozialpolitik*) in January 1914. His argument involved a complete rejection of the dominant attitude amongst members of the Association, especially of its recognized head at that time, Gustav Schmoller. Thus Ralf Dahrendorf tells us that:

> It was Schmoller who had prescribed for the 'science of economics' not merely the tasks of 'explaining individual phenomena by their causes, of helping us understand the course of economic development, and if possible of predicting the future', but also that of 'recommending' certain 'economic measures' as 'ideals'.[9]

Weber argued that it was not possible to justify such normative claims by scientific evidence and argument alone, so the very idea of a scientific politics was epistemologically misconceived. He maintained also that once the relevance or significance of certain objects of enquiry was established, necessarily by reference to normative standpoints, it was possible to produce social scientific work whose statements could be assessed by reference to scientific, value-free criteria of validity. It is these claims which, I believe, form the central elements in his view of the place of values in social theory – the doctrine of value-freedom.

And this is why I suggest there is a paradox in the critical theorists' critique of positivism. For it seems that, at least in Weber's view, the doctrine of value-freedom represents an alternative to the ideal of a scientific politics, and is based upon an account of the relations between science and values that provides the basis for rejecting altogether that characteristic ideal of nineteenth-century positivists. Yet

according to critical theorists, both value-freedom and the scientization of politics are to be seen as key features of positivism, both of which are to be rejected in favour of their own preferred critical conception of social theory.

Nor is Weber the only figure whose position suggests a difficulty of this kind in the concept of positivism. Karl Popper, and his ally in the *Positivismusstreit* of the 1960s, Hans Albert, were both taken by the proponents of critical theory (Adorno and Habermas) to represent the positivist position they wished to attack. In the course of the exchanges between them, Habermas makes it clear that he regards Popper's espousal of value-freedom, of 'the dualism of facts [*Tatsachen*] and decisions [*Entscheidangen*]', as clear proof of his positivism.[10] Popper, of course, was vehement in his resistance to this label (for quite good reasons, I believe, related to his rejection of another supposedly positivist doctrine, 'scientism', which I will discuss later). But both he and Albert were emphatic in their support for the doctrine of value-freedom, and in criticizing the critical theorists' 'dialectical' rejection of it.[11] They, unlike their opponents, clearly regarded the espousal of value-freedom as entirely compatible with the rejection of positivism.

Many other examples indicating a similar state of confusion could be given. But what I will now do is attempt to remove it, by defining a number of distinct doctrines that have been taken to be 'positivist', and exploring their logical and historical relationships.

2 POSITIVISM: THE ONE OR THE MANY?

We can identify at least four doctrines, each of which may not unreasonably be termed 'positivist'. I shall call them 'scientism', 'the positivist conception of science', 'scientific politics', and 'value-freedom'. In this section I shall first define them, and then examine the logical relations between them. This will make it possible to understand precisely what is involved in a 'positivist' social science and thus, by contrast, what the supposedly non-positivist character of a critical social theory consists in.

'Scientism' is the view that science alone represents a genuine form of human knowledge. As Habermas puts it, scientism 'means science's belief in itself: that is, the conviction that we can no longer understand science as *one* form of possible knowledge, but rather must identify knowledge with science'.[12] It is important to note that scientism involves not merely a distinction between science and non-science, but the relegation of the latter to an inferior status, even to cognitive meaninglessness or nonsense. Typical examples of such pseudo-knowledge, for advocates of scientism, have been religion, metaphysics, 'ideology', and the normative discourse of politics and ethics – unless any of these can be suitably interpreted or reconstructed as scientific claims.

As a philosophical position, scientism has a long history, with the 'logical positivism' of the Vienna Circle providing one of its most influential recent expressions.[13] And one of the reasons why Popper has persistently maintained that he is not a positivist, is his rejection of this feature of logical positivism. From very early on, he argued that the Vienna Circle were mistaken in dismissing the non-scientific as meaningless. What was needed was a principle for demarcating science from non-science, but which did not thereby distinguish sense from nonsense.[14] It should also be noted that a standard objection to scientism has been that it is, in effect, self-refuting, since the statement of the doctrine does not conform to the criteria of legitimate knowledge specified by it. In particular, it is argued that scientism is itself a philosophical, epistemological doctrine, and not a scientific one. This, I take it, is one of Habermas's major criticisms of scientism, expressed in his pointed remark: 'that we disavow reflection *is* positivism'.[15] (Defenders of scientism may, however, argue that this objection can be met if logical analysis is included within the category of genuine knowledge, and epistemology then understood as involving this form of analysis.)

By itself, scientism says rather little without some further account of what scientific knowledge consists in. One such account is provided in the second of the four doctrines, 'the positivist conception of science'. According to this, science

aims at the explanation and prediction of observable phenomena by showing that these are instances of universal laws that apply in all regions of space and time. The truth or falsity of statements intended to express such laws is determined solely by their logical relationships to other, non-universal statements that describe particular observable 'data'. Statements of scientific laws may contain 'theoretical' terms, which do not refer to what is directly observable; but they are not to be understood as referring to unobservable items. Rather, their meanings must be specified (if only incompletely) via statements whose descriptive terms are exclusively observational. Further, the relationships that exist between phenomena display no form of necessity, of either a logical or non-logical kind: these relationships involve only universal regularities of occurrence between logically distinct items.[16]

As with scientism, the positivist conception of science has a long history.[17] Many of its elements can be found, for instance, in the writings of Berkeley and Hume; of Comte, associated with his 'law' of the three stages of human thought; and of Ernst Mach, who adopted it in his critical reconstruction of Newtonian science, eliminating from it such 'metaphysical' concepts as absolute space and time, force (except as a theoretical concept definable in terms of mass and momentum), and any idea of causality as consisting in something 'more' than regular relationships. Science, according to this view, must be kept free of metaphysics; and this is achieved by, amongst other things, eliminating the unobservable from its ontology.

It is more difficult to define precisely the third 'positivist' doctrine, the advocacy of a scientific politics. This is partly because many of its proponents, such as Saint-Simon, have hardly had the merit of philosophical clarity or sophistication. But it is, I think, well captured in the following passage from Fay's *Social Theory and Political Practice*:

> it is thought that if it were to be the case that political decisions would be made on the basis of technical application of social scientific knowledge, then the character of political argument

> would drastically alter. The point here is that, at least in the ideal, the disagreements that arise in engineering or medicine are not expressed in terms of personal value or wishes, nor are they debated on the basis of the power or position which the disputants have in the social order to which they belong, nor settled in terms of subtlety of exposition or rhetorical power; rather, the issues are tangible, measurable, and testable, and debates about them are conducted in such a way that it is these objective features accessible to all which decide the matter at hand . . . . If politics were to become an applied science, it is argued, its conjectural, arbitrary, emotional and personal elements would drop out, and its arguments and decisions would assume the same neutral characteristics as those of engineering . . . . In political arguments there would be, as there are in scientific arguments, reliable public standards of ascertainable truth, and therefore the possibility of a universally recognizable decisive solution to a particular problem. It is in this way that a social science would be able to eliminate the 'anarchy of opinion' which characterizes modern political thinking.[18]

So here the ideal is the use of scientific knowledge to provide rational solutions to all problems concerning the organization of society, and to free such decisions from influences of a non-scientific (and thus supposedly non-rational) kind. But it would seem that the possibility of doing this is denied by proponents of the final 'positivist' doctrine, value-freedom. According to them, it is essential to separate the realms of science and political or moral values. This separation has at least two dimensions. First, the criteria of validity for scientific theories involve no reference to the acceptance or rejection of particular moral or political commitments: whether a theory is true or false can be determined independently of such normative standpoints. Second, it is not possible to support political or moral judgments solely by means of scientific knowledge; so people may agree on the relevant scientifically establishable claims, yet legitimately disagree about the desirability of what is advocated in such judgments.

The doctrine of value-freedom, defined in this way, has been accepted by many philosophers and social theorists who in other respects have often had little else in common. Hume, Kant, Mill and Weber can all be seen to subscribe to it,

despite the considerable differences between them on other epistemological and normative issues. As I will suggest later, this is one reason for the complexity of the history of positivism – which is, in fact, not so much one history but many histories. But before exploring this I will outline what are, for my purposes, the most important logical relationships between these positivist doctrines.

First, scientism and the positivist conception of science do not entail each other. The latter can be maintained without acceptance of the former, since it is possible to adopt the positivist view of what scientific knowledge consists in without also believing that science is the only form of knowledge. Thus science may be conceived positivistically, and in this way distinguished from, say, religion or morality, without these being regarded as meaningless, epistemologically defective, non-rational, or suchlike. Indeed, historically, the positivist conception of science has sometimes been adopted by those who have wished to 'protect' the legitimacy of religion or metaphysics against the claims of science.[19]

Conversely, scientism does not entail a positivist view of science, since this view may well be rejected in favour of another, whilst it is still maintained that science has a monopoly on human knowledge. It will be useful here to note briefly some of the alternatives to a positivist account of science. First, a rough distinction can be made between 'realist' and 'instrumentalist' views, according to whether science is thought to provide statements about some theory-independent 'real world', or is instead regarded as a device or instrument that may serve certain purposes such as technical control or predictive power.[20] The former view involves adopting some form of correspondence theory of truth, whilst the latter involves either rejecting the idea of truth as characterizing the contents of scientific theories, and substituting instead some idea of 'usefulness', or adopting a pragmatic definition of truth itself. But it is important to note that a realist view of the cognitive status of scientific theories may be associated with the claim that the main goal of scientific enquiry is to serve human practical purposes; for it may be argued that the best way of achieving this is to

produce theories that are true in a realist sense. (This, I think, was Bacon's position.)

The positivist conception of science, as I have defined it, is a realist one – although some versions of it come very close to instrumentalism.[21] But there are also non-positivist forms of realism. In particular, there is the position often called 'theoretical realism', which differs from positivism mainly in not restricting scientific ontology to the domain of what is observable. For theoretical realists, scientific theories typically make claims about the nature and existence of unobservable items: so the positivists' attempt to define theoretical terms in an observational vocabulary is seen to be misconceived. Further, theoretical realism involves rejection of the positivist analysis of causality as regularity, and replaces this with some concept of natural, non-logical necessity.[22]

A second useful dichotomy for locating various conceptions of scientific knowledge is that between empiricists and rationalists. The former regard scientific theories as ultimately testable by reference to the compatibility of its claims with 'the evidence of the senses', perceptual observation. By contrast, rationalists see the truth or falsity of theories as determinable by *a priori* knowledge, in roughly the way that mathematical or logical statements are. The major difficulty for rationalists has been to find some way of non-arbitrarily choosing between different internally consistent theories, and showing just how they relate to the non-logical world. For empiricists, the main problem has been in identifying a form of perceptual information that is reasonably certain, free from problematic theoretical presuppositions, and related to the statements of scientific theories in such a way that it can be used to determine their truth or falsity. These difficulties for rationalist and empiricist philosophers of science have yet to be resolved.[23] But I believe that positivist and theoretical realist accounts of science are both empiricist – though some advocates of the latter would no doubt dispute this claim.

So the significance of the doctrine of scientism depends partly on what view is taken of the nature of scientific knowledge, the positivist conception being but one possibility, which can itself be adopted without commitment

to scientism. I will now examine the relations between both these positions and, in turn, scientific politics and value-freedom.

Neither scientism nor the positivist view of science entail the possibility of a scientific politics, since both are consistent with the claim that political decisions cannot be made solely by reference to scientific knowledge. Advocates of scientism who accept this claim must believe therefore that political life cannot be fully rational, since it requires answers to questions that are not scientifically resolvable, and thus not 'knowable'. By contrast, proponents of the positivist conception of science who reject the possibility of a scientific politics need not regard politics as inherently non-rational, since they may accept that science is not the only form of human knowledge or rational enquiry.

The relations between this conception of science and the doctrine of value-freedom is a little more complex. It is clear that the latter does not entail the former, since the separation of science and values implies no particular view of what scientific knowledge consists in. But the positivist view of science is consistent with regarding normative judgments as scientifically establishable, and thus with a denial of the second of the two elements of value-freedom that I specified. However, since this conception of science requires that scientific theories are assessed only by reference to empirical observation, it does entail the first element of value-freedom, the insistence that scientific criteria of validity are independent of normative commitments.[24]

The claims I have made about the logical relationships between these four doctrines can be summarized as follows (where 'S', 'PS', 'SP', and 'V-F' represent respectively scientism, the positivist view of science, scientific politics, and value-freedom; and '$\rightarrow$' and '$\not\rightarrow$' represent 'entails' and 'does not entail'):

1 (a) S$\not\rightarrow$PS
(b) PS$\not\rightarrow$S
2 (a) S$\not\rightarrow$SP
(b) PS$\not\rightarrow$SP
3 (a) V-F$\not\rightarrow$S
(b) V-F$\not\rightarrow$PS
(c) PS$\rightarrow$first element of V-F
(d) PS$\not\rightarrow$second element of V-F

This is not a complete list, of course, but it specifies the main relationships that are necessary for analysing critical

theorists' critique of positivism. But before going on to show how this critique fails to recognize these relationships, we need to consider one further doctrine, advocacy of a positivist social science. According to this, it is possible to develop a science of society that conforms to the positivist conception of science. However, this could be denied by proponents of that conception, since it might be argued that social phenomena cannot be studied in a scientific manner at all; and this is a position that defenders of scientism could also consistently adopt. Positivist social science stands in the same relationship to scientism, scientific politics, and value-freedom as does the positivist view of science (1 (a) and (b); 2 (b); 3 (b)-(d) above). But it also rules out the claim that social theory involves a different form of knowledge to the one specified in that view of science. In particular, it is opposed to advocates of a hermeneutic social science, who argue that this distinctively non-empiricist, and thus non-positivist form of knowledge is necessarily involved in the understanding of social reality.

3 HOW NOT TO CRITICIZE POSITIVISM

I will now provide some illustrations of how critical theorists, in their critique of positivism, have ignored or misunderstood the character of the logical relationships between the various positivist doctrines I have identified. I begin with a characteristic passage from one of Horkheimer's early papers, where he attacks positivism (at this point calling it 'empiricism') by claiming that there is a

> crucial point which empirical science fails to note, namely, the common interest and the idea of a truly human existence. Empiricism declares that such ideas arise from the confusion of personal desires, moral beliefs, and sentiments with science; it regards the strict separation of values from science to be one of the most important achievements of scientific thought. Empiricism further contends that other aims may be set alongside the will to freedom and that it is not the task of science to decide which of these is right.[25]

Here there is a definite confusion between scientism,

positivist science, and value-freedom. To claim that the values of 'freedom' or 'a truly human existence' (whatever they may mean – for here we have an example of the highly abstract, undifferentiated character of many critical theorists' normative concepts) cannot be established by a positivist science, is not thereby to deny the possibility and legitimacy of defending such values, and employing them in a critique of society. Value-freedom does not rule out the possibility of a rational normative critique, but only that this can be conducted on the basis of scientifically establishable claims. Further, it is mistakenly assumed in this passage that the practice of empirical science involves commitment to scientism, and that both of these entail rejection of the possibility of normative critique.

We find a similar set of confusions in the following passages from one of Habermas's contributions to *The Positivist Dispute in German Sociology*:

> The dualism of facts and decisions necessitates a reduction of permissible knowledge to strict empirical sciences and thereby a complete elimination of questions of life-practice from the horizon of science.[26]

And describing the implications of this dualism, he claims that it means that:

> decisions relevant in practical life, whether they consist in the acceptance of principles, in the choice of a life-historical outline or in the choice of an enemy, can never be replaced or even rationalized through scientific calculation. If, however, the practical questions which have been eliminated from empirical-scientifically restricted knowledge must be utterly dismissed in this manner from the scope of rational discussions; if decisions in questions of practical life must be absolved from every instance in some way committed to rationality, then the last attempt [to provide some basis for practical decisions] is not surprising: to secure institutionally, through a return to the closed world of mythical images and powers, a socially binding precedent for practical questions (Walter Bröcker).[27]

In the first passage, we see the mistaken claim that value-freedom entails scientism, together with the challengeable assumption that scientism rules out the possibility of political

issues being scientifically resolvable – clearly not the view of many advocates of a scientific politics. In the second, Habermas's argument depends on assuming that supporters of value-freedom must believe that, just because normative questions are not scientifically establishable, they are beyond 'the scope of rational discussions'. But this is not so, since the doctrine of value-freedom does not imply the non-rationality of normative judgments.

My next example concerns the scientization of politics, and involves some more complex issues. In *Social Theory and Political Practice*, Fay argues there is a conceptual connection between the practice of a positivistically conceived social science (which he defines similarly to the way I have done so) and a particular form of scientific politics, which he terms 'policy science'. He describes this in the following way, as:

> that set of procedures which enables one to determine the technically best course of action to adopt in order to implement a decision or achieve a goal. Here the policy scientist doesn't merely *clarify* the possible outcomes of certain courses of action, he actually *chooses* the most efficient course of action in terms of the available scientific information.[28]

As Fay is careful to point out, this version of a scientific politics is to be distinguished from another, 'stronger' form, according to which *every* aspect of political decisions is thought to be scientifically resolvable. Instead, it is accepted that value-judgements have to be made, non-scientifically, to establish the goals of political action; and policy science is then allotted the task of discovering the best means for achieving these externally determined ends. Thus, the dichotomy between facts and values is mapped on to that between means and ends. He proceeds, without much difficulty, to show what is wrong with this conception of policy science. Any means to a given end is itself open to evaluation by standards other than those which determine that end, for:

> *all* political proposals, no matter how instrumental, will alter and shape the personal relations of at least some members of a society, and will affect the relative welfare of various classes of people; as such they embody moral notions of what is permissible, just, or right in human affairs. They are a species of moral statement.[29]

So it is impossible to determine the 'technically best course of action to adopt' by this use of a positivist social science.

The crucial move made by Fay in this attempt to criticize positivist social science via the unacceptability of its supposed consequence for politics (namely support for policy science), is the mapping of the means-ends relationship onto that between facts and values. That this is somehow implied by positivism is also claimed by Habermas:

> Since Max Weber, what had long been pragmatically clarified in the relationship between natural sciences and technology seems to have been clarified for the realm of social sciences too; namely, that scientific prognoses can be realized in technical recommendations. These recommendations distinguish between a given initial situation, alternative means and hypothetical ends; all so-called value-judgments are simply attached to the third member of this chain, whilst the if-then relations can themselves be investigated in a value-free manner. This translation presupposes, of course, that in societal practice, as in the technical domination of nature, it is always possible to isolate ends-means relations in which the value-neutrality of the means and the value-indifference of the subsidiary consequences are guaranteed; in which, then, a 'value' is only linked with ends so that these ends may not, for their part, be regarded as neutralized means for other ends. In those realms of practical life for which social-scientific analyses are required, none of the three conditions is, however, normally fulfilled.[30]

> Conditions which define the situations of action behave like the moments of a totality which canot be dichotomously divided into dead and living, facts and values, into value-free means and value-laden ends without failing to grasp them as such . . . Consequently, practical questions cannot be sufficiently answered with a purposive-rational choice of value-neutral means.[31]

Now I agree with Fay's and Habermas's objections to this mapping manoeuvre, designed to allow the possibility of scientific judgments about 'the best means'. It is true, also, that this move is frequently made by proponents and

practitioners of scientific politics, and indeed generates what one might call a 'scientist mystification of political decisions'. But I see no reason for claiming that the use of a positivist, value-free social science, implies this move. (Nor, incidentally, do I think that Weber was guilty of making it.) For, as Fay correctly argues, what the knowledge produced by this kind of science enables one to do is to make conditional predictions of the form 'if certain conditions obtain, certain results will (invariably or usually) follow'. It provides information about what would happen if certain things were done, and about what are possible (and in some cases, necessary) ways of bringing something about.[32] But this is quite different from the idea that, in relation to a given end, the best means can be discovered independently of any further value-judgements. To show what are the possible ways of achieving some goal, and their other consequences, does not enable us to judge which of these is 'scientifically best'; nor does showing that a certain course of action is necessary for achieving some goal whose desirability is already accepted, entail that it is right or rational to perform those actions. And there is no reason why advocates of a positivist social science should not recognize these points. Thus, however misconceived this idea of a policy science may be, its defects cannot be used to criticize the positivist view of social science.

I will continue this discussion of positivist social science and scientific politics by noting their connections with utilitarianism. According to utilitarians, the rightness of an action is determined by its consequences for human happiness; and the best action (and thus also the best society) is that which produces 'the greatest happiness of the greatest number', which maximizes the total amount of happiness. It follows that, once the utilitarian principle is accepted, political and moral decisions can be made on the basis of scientific knowledge alone.

However, even utilitarianism does not involve the direct mapping of the fact-value distinction onto that between means and ends, at least in most cases. For whilst it in effect transforms all normative questions into scientific calculations of the consequences for its sole end, the maximization of

happiness, the goals of *particular* courses of action will typically be far more specific and limited than this. Utilitarians may, for instance, assess the desirability of different forms of punishment in relation to the possible goal of deterrence. But this has itself to be justified by reference to the overall end of maximal happiness; and so, too, must these forms of punishment. Thus showing scientifically that a particular form is the 'best' means of achieving the end of deterrence would not establish it as the right action, since this means would also have to be judged in terms of other of its possible consequences for the overall level of well-being.

Although utilitarianism is an apparently attractive view for proponents of a scientific politics, it is not a 'pure' form of this, unless one believes that its basic principle can itself be scientifically established. Some of the more sophisticated utilitarians, such as J. S. Mill, argued that this was not possible: no proof could be given for the principle of utility, let alone a strictly scientific one – though he did believe that strong reasons could be provided in support of it.[33] By contrast Saint-Simon tended to ignore this issue, and contented himself with claims of the following kind:

> It has been recognized that the rulers are only the administrators of society, that they must direct it in conformity with the interests and will of the ruled, and that, in short, the happiness of nations is the sole and exclusive purpose of social organization.[34]

And:

> In the present situation it is acknowledged that the permanent and sole duty of governments is to work for the happiness of society. But how is society's happiness to be achieved?[35]

The answer, for Saint-Simon, lay in the development and application of the 'positive' sciences, both natural and social. In this way, politics (and ethics) could also become positive sciences.[36]

Further, though utilitarians may find a positivist social science well-suited to their need for making predictions about the consequences of possible actions, there is no reason why support for a positivist social science should entail utilitarianism. For the former is compatible with a rejection

of scientific politics, including its only partial, utilitarian form. Advocates of a positivist social science may regard politics as requiring decisions that involve normative issues for which utilitarianism provides an inadequate guide: for instance, questions concerning the equitable distribution of social goods, which utilitarianism can deal with only in terms of the consequences for aggregate-maximization.[37]

Finally, it is worth noting one other version of the scientization of politics, associated with the 'end of ideology' thesis about modern capitalist societies.[38] According to this, such societies had developed to the point at which there was a consensus between previously competing groups about the basic goals of political and economic organization. For instance, significant conflicts between the interests and ideologies of different social classes were said to have been overcome. It followed that political questions could become matters of the most effective means to these accepted goals, and could thus be decided by employing the supposed expertise of social scientists, such as economists, sociologists and psychologists. As with utilitarianism, this is not a pure form of scientific politics, since it is accepted that there are distinctively normative questions which are not scientifically resolvable: but 'in practice' normative consensus made politics a scientific domain.

4 THE HISTORIES OF POSITIVISM

I began this chapter by suggesting a certain paradox in critical theorists' critique of positivism: that this involved the association of positivism with the doctrines both of value-freedom and scientific politics, whilst it seemed that advocates of the former, such as Weber, not only rejected the latter, but regarded value-freedom as a position from which the pretensions of a scientific politics could be revealed and criticized. My account of the logical relationships between these and other positivist doctrines has been intended to explain this paradox and in effect to justify Weber's perception of the situation. I will now sketch out some of the historical relationships between these doctrines, and suggest

in particular a partial independence between the histories of scientific politics and value-freedom.

Though anticipated in writers such as Hobbes, and perhaps some of the Enlightenment rationalists,[39] it was the early nineteenth-century positivists, especially Saint-Simon, who were the most influential and enthusiastic advocates of the scientization of politics. In the case of Saint-Simon, this ideal was associated with a form of scientism, and expressed a general commitment to the virtues of scientific knowledge, industry and the organization of society on the basis of a 'scientific outlook'. Whether this combination is philosophically coherent, is dubious – for it could be argued that the advocacy of scientific approaches is not compatible with the belief that only science provides genuine knowledge, since the advocacy of such approaches to social and political questions is not itself an item of scientific knowledge.[40] Nonetheless, philosophically more sophisticated thinkers than Saint-Simon have adopted the same combination: for instance, the authors of the Vienna Circle's first 'manifesto',[41] Neurath, Carnap and Hahn, who declared that:

> endeavours toward a new organization of economic and social relations, toward the unification of mankind, toward a reform of school and education, all show an inner link with the scientific world-conception,[42]

and who concluded their document by claiming:

> We witness the spirit of the scientific world-conception penetrating in growing measure the forms of personal and public life, in education, upbringing, architecture, and the shaping of economic and social life according to rational principles. *The scientific world-conception serves life, and life receives it.*[43]

These passages are particularly interesting since they express a political dimension of the Vienna Circle that has not normally been recognized in its reception amongst Anglo-American philosophers, who have focused primarily on the epistemology of logical positivism.[44] This political element is also evidenced in the inclusion, in the manifesto's list of the various philosophers and scientists whose writings were central to the Circle's discussions, of:

Hedonism and positivist sociology: Epicurus, Hume, Bentham, J. S. Mill, Comte, Feuerbach, Marx, Spencer, Müller-Lyer, Popper-Lynkeus, Carl Menger (the elder).[45]

The appearance in this list of several utilitarians gives some support to the suggestion made in the previous section that, for advocates of a scientific politics, utilitarianism may seem an attractive position. But it also raises the problematic issue of the relations between French positivists and British utilitarians in the nineteenth century. In particular, it is well-known that Mill was highly critical of Comtean positivism: partly because he thought that Comte had not provided a necessary element in any account of science, namely the methods of induction; partly because he believed that Comte was 'jumping the gun' in advocating a scientifically organized society in the absence of the requisite development of social scientific knowledge; and partly also because of the markedly illiberal, authoritarian elements in Comte's politics[46] – which were present also in Saint-Simon's, who claimed, for instance, that 'the cultivation of politics will be entrusted exclusively to a special class of scientists who will impose silence on all twaddle'.[47]

I will return shortly to this question of the possible illiberalism of the scientization of politics. But first, a few comments on the philosophical ancestry of the doctrine of value-freedom, especially its articulation in Weber's writings. It is frequently noted that Weber was strongly influenced by the Heidelberg school of neo-Kantians, whose two best-known figures were Windelband and Rickert.[48] Another member was Richard Kroner who, in *Kant's Weltanschauung* provided a characteristic statement of the Heidelberg interpretation of Kant's philosophy. Kroner's overall view of this is presented in the following passage:

> His entire philosophy receives its particular tone from a two-fold insight. On the one hand, along with modern rationalists since Descartes and Galileo, he sees, in the exactitude of mathematical knowledge, the pattern and ideal of all theoretical study of reality; on the other hand, in spite of his full appreciation of scientific truth, he does not accord it any metaphysical significance. Kant is of the opinion that the point of contact between man and the supersensible sphere is to be discerned in the facts of man's moral life, in his self-determination, and in the laws of his moral will; for it is on these laws that the dignity and freedom of man rest . . . . Only mathematical relations are knowable, and they are the objects which the mechanical and physical sciences can successfully treat. The world in which we as moral beings act and pursue our ends obviously cannot be penetrated by mathematical knowledge; therefore this world cannot be grasped in its reality by any theoretical [i.e. scientific] means.[49]

Kroner goes on to argue that, for Kant, the limitations he places on the scope and character of scientific knowledge are the result of his view that, without these, morality and freedom would not be possible. Thus:

> If morality is possible at all, the duality of nature and freedom must exist, and its existence must be a limitation of knowledge.[50]

Further:

> Practical reason [guiding the will of the free subject] does not know objects, it does not know nature; it knows rather the purposes of the will, its norms, its goal. The kind of knowledge which is appropriate in the field of the sciences – objective, theoretical, impersonal knowledge – cannot be applied in the fields of willing and acting.[51]

And in a comment which we might reasonably interpret as indicating what would be Kant's attitude to positivist advocates of a scientific politics, Kroner says:

> If Kant had attempted to extend this [mathematical-physical] method, which he deemed to be the only legitimate and feasible method for knowing reality, to the world in which we live as active beings (as indeed the disciples of materialism and naturalism would like to do), then he would have been compelled to abandon the respect he had for moral life. Within a nature interpreted mathematically no morality can exist, because there every action loses its meaning: in such a world the will cannot set any purpose for itself, since mathematics alone orders and determines all things in its own inexorable and absolute way.[52]

Clearly, we have here a view of the relations between

science and norms which is very different from the positivist doctrines of either scientism or the scientization of politics. It is also a view of ethics that is in most respects at odds with utilitarianism which, unlike Kant, focuses exclusively upon the consequences of actions and not upon the will, and denies the Kantian claim that morality presupposes the autonomy of a transcendental subject. Its only point of contact with utilitarianism, at least in the form presented by Mill, is the acceptance of a logical dichotomy between scientific and normative judgments. For Mill was a staunch defender of this dichotomy, but influenced here by his empiricist forefather Hume, rather than Kant.[53] Because of this, as I noted earlier, Mill's utilitarianism does not involve a pure form of scientific politics. But it is perhaps partly due to the apparent congruity on this point between Mill's empiricism and Weber's neo-Kantianism that the doctrine of value-freedom has been mistakenly associated by critical theorists with the ideal of a scientific politics.

Further, by noting the neo-Kantian influences on Weber, we can see why value-freedom has been associated by its critics with the impossibility of a rational normative critique of social reality, despite the fact that the doctrine by no means entails such a view. For it is clear that Weber himself not only advocated the separation of scientific from normative issues, but also claimed that the latter were not open to rational, objective resolution. Instead, they involved personal commitments to ultimate values which could not be rationally justified.[54] In this respect, Weber's account of value-freedom departs from the definition I have provided for it, which remains neutral on this question, and is thus consistent with a rejection of this element in Weber's account. And it is perhaps significant that the Heidelberg interpretation of Kant that influenced Weber seems in this respect to depart from other interpretations, which instead emphasize Kant's commitment to the rationality of normative judgments, especially through the universalizing requirements of the categorical imperative. By contrast, Kroner's reading of Kant is much closer in spirit to the position of existentialist writers such as Sartre, who, whilst clearly influenced by Kant, in effect emphasize the autonomy

of the will at the expense of the possible rationality or objectivity of values.[55]

Critical theorists' critique of positivism has typically involved claims about the 'repressive' character of its political implications. My attempt to show the logical independence of various positivist doctrines casts considerable doubt on these claims, and suggests that whatever plausibility they have would exist only when directed at the ideal of a scientific politics. But even here the situation is far from straightforward. First, whilst this political critique has often involved the charge that positivism is intrinsically committed to a defence of the existing social order, it is clear that in many respects this was far from true of the early French positivists such as Saint-Simon. He rightly saw himself as an advocate of radical change. He was not, after all, living in an already scientized society; and it may be that this charge of 'conservatism' (in the sense of preserving the *status quo*, whatever that may be) is partly the result of interpreting nineteenth-century theorists through a twentieth-century vision accustomed to the significantly scientized character of advanced industrial societies. Admittedly Marcuse, in *Reason and Revolution*, emphasizes the radical and progressive politics of (some of) the Saint-Simonians, and contrasts them with Comte's advocacy of *order*. But this contrast is highly problematic. For whilst Marcuse wishes to demonstrate a connection between Comtean conservatism and the epistemological claims of positivism, he fails to show any divergence between Comte's and Saint-Simon's epistemologies which could support their different political positions.[56]

Second, in the context of early nineteenth-century Europe, Saint-Simon's 'radicalism' consisted in, amongst other things, attacking the value of political or religious liberties, by associating these with the 'metaphysical' stage of historical development, which was to be replaced by the positive, scientific one. The 'lawyers and metaphysicians', he claimed, were at one time a historically progressive group through their role 'in modifying the feudal and theological system and ensuring that it did not suppress the scientific and industrial system once it began to develop'.[57] But he

bemoaned the fact that the French Revolution, in which the leading part should have been taken by 'the industrials and the scientists', was instead taken over by the lawyers and metaphysicians. It would, he said, 'be superfluous to recall the strange wanderings which resulted, and the misfortunes which resulted from these wanderings'. Further:

> The philosophers of the eighteenth century convinced people in general to accept the right of the individual to practice his own religion and to decide which religion his children should be taught. The philosophers of the nineteenth century will convince people that all children should study the same code of terrestrial morality, since the similarity of positive moral ideas is the only link which can unite men in society, and since ultimately an improvement of the social condition is nothing more than an improvement in the system of positive morality.[58]

The French positivists were not, of course, the only nineteenth-century theorists to display a marked antipathy towards the individual rights so central to liberalism. We find it also in the Marxist tradition (including Marx himself, for instance in his comments on the intrinsically 'bourgeois' character of such rights).[59] It seems that this is one of several connections between positivism and Marxism, especially where the latter takes the form of a supposedly 'scientific' socialism.[60] And the historical links between scientism, scientific politics and socialism emerged again in one of the most influential members of the Vienna Circle, Otto Neurath, who attempted to demonstrate the utilitarian and scientific bases of Marxist socialism. Thus Neurath argued that 'Marxism is, consciously, the philosophy of the socialist proletariat and promises it happiness'; that Marx 'teaches the decline of the bourgeois order and the coming of the socialist order'; and that 'it is precisely the proletariat that is the bearer of science without metaphysics'.[61]

As mentioned earlier, it was the illiberalism of Comteam positivism and scientific politics that provided one of the main reasons for Mill's opposition to them. This may seem surprising, given the partial links between utilitarianism and the scientization of politics. Yet, as is often noted, there is a definite tension between the utilitarian and liberal-democratic elements in Mill's political philosophy. This emerges, for

instance, in his problematic distinction between 'higher' and 'lower' pleasures, and in his equally problematic attempt to define happiness so as to include the interests of 'man as a progressive being'. Both of these revisions of earlier, Benthamite utilitarianism were perhaps necessary if a utilitarian rationale were to be provided for the value of individual liberties and democratic participation. But it is also important to note the legitimacy Mill ascribed to a certain form of authority belonging to those with the scientific and intellectual expertise for making the utilitarian calculations involved in rational political decisions.[62] Thus there may be a connection here between Mill's utilitarian version of the scientization of politics, and the somewhat elitist character of his political position.

5 THE CRITIQUE OF POSITIVISM: A PRELIMINARY ASSESSMENT

I have mainly been concerned in this chapter to identify a number of distinct doctrines that have been called 'positivist', and to examine their logical and historical relationships, and I have said little if anything about their intrinsic merits or defects. But it may be helpful, at least in understanding why the various lines of argument in the following chapters are the ones pursued, to now indicate my view of these positivist doctrines.

Scientism is, I believe, mistaken because not all human knowledge and rational enquiry can be interpreted on the model of scientific knowledge, however this is conceived. In particular philosophy itself, including epistemology, cannot be thus understood, and nor can the normative realms of politics and ethics. So I also reject the possibility of a scientific politics. As for the character of scientific knowledge, theoretical realism is, I believe, to be preferred to positivism. But, more generally, I support realism as against instrumentalism, and empiricism as against rationalism; and in terms of both these dichotomies, theoretical realism is closer to positivism than to non-realist, non-empiricist alternatives.

However, I also believe that in the *social* sciences no form of empiricism provides an adequate epistemology, since the distinctive character of social reality requires the use of hermeneutic, interpretive modes of analysis. So this is an additional reason, for me, for rejecting the positivist view of social science. But I do accept one element of that view, the doctrine of value-freedom. Further, at least consistently with my opposition to scientism, I support the possibility of rational argument about normative issues, and certainly do not regard them as non-rational just because they are not scientifically resolvable.

I will not try to justify these claims here. Some I have argued for elsewhere (such as the place of interpretation in social theory, and the merits of theoretical realism as an account of science).[63] Others, such as value-freedom, will be defended in later chapters. But I will conclude this chapter by outlining my view of critical theorists' critique of positivism. First, this has generally failed to understand the distinct nature of various positivist doctrines, and the logical relations between them. There has too often been a frontal assault on a loosely defined, undifferentiated target called 'positivism', or at least an assumption that, by successfully criticizing one positivist doctrine, the others are thereby shown to fail also. For instance, criticism of the scientization of politics has been taken to entail rejection of scientism, the positivist view of science and value-freedom. But this does not follow, and neither does the converse. Defence of value-freedom is compatible with rejection of a scientific politics; defence of positivist social science with rejection of scientism; and so on.

Second, I believe these mistakes have to a considerable extent misled critical theorists in their attempts to construct an acceptable alternative to positivism, a critical social theory. It seems that their central concern has been to develop a conception of social theory that can be critical of certain features of social reality, including its organization on the basis of a scientific politics, and that is linked to forms of social practice that will succeed in transforming societies that display such features. But whilst I support these general aims, I do not believe that critical theorists are right in thinking

that, in order to achieve them, it is necessary to specify the criteria of validity of a critical social theory in such a way that they are logically tied to acceptance of this normative standpoint, and indeed to the successful outcome of practices guided by this kind of theory. In particular, critical theorists are wrong to reject the doctrine of value-freedom. And I think they are partly led to do this by mistakenly believing that it either entails, or is entailed by, the ideal of a scientific politics and scientism. However, I need now to examine the doctrine of value freedom in more detail than I have so far.

1: THE CRITIQUE OF POSITIVISM

1 In Horkheimer, *Critical Theory*, pp.132-87.
2 Marcuse, *Reason and Revolution*, Part II, ch. II.
3 Habermas, 'The Analytical Theory of Science and Dialectics', and 'A Positivistically Bisected Rationalism'.
4 See especially the essays in Weber, *The Methodology of the Social Sciences*.
5 Habermas, 'The Classical Doctrine of Politics in relation to Social Philosophy', in his *Theory and Practice*, pp.41-81. McCarthy, in *Habermas*, presents this opposition to a scientific politics as a central theme in much of Habermas's work.
6 See Hayek, *The Counter-Revolution of Science*, for an interesting analysis of nineteenth-century positivism.
7 Saint-Simon, *Selected Writings on Science, Industry and Social Organization*, p.209.
8 In Weber, *Methodology*, pp.1-49.
9 Dahrendorf, *Essays in the Theory of Society*, p.2.
10 Habermas, 'Analytical Theory', p.144.
11 See Popper, 'The Logic of the Social Sciences'; and Albert, 'The Myth of Total Reason', and 'Behind Positivism's Back?'.
12 Habermas, *Human Interests*, p.4.
13 See Kolakowski, *Positivist Philosophy*.
14 Popper, 'Science: Conjectures and Refutations', and 'The Demarcation between Science and Metaphysics', in his *Conjectures and Refutations*, pp.33-65 and 253-93.
15 Habermas, *Human Interests*, p.vii.
16 For a fuller definition of the positivist view of science, see Keat and Urry, *Social Theory as Science*, ch. 1.
17 See Kolakowski, *Positivist Philosophy*; and Popper, 'A Note on Berkeley as Precursor of Mach and Einstein', in *Conjectures and Refutations*, pp.166-74.
18 Fay, *Social Theory and Political Practice*, pp.22-3.
19 An example of this is Duhem, *The Aim and Structure of Physical Theory*.
20 A classic defence of instrumentalism in astronomy is Duhem, *To Save the Phenomena*; an influential criticism, Popper's 'Three Views concerning Human Knowledge', in *Conjectures and Refutations*, pp.97-119.
21 See Keat and Urry, *Social Theory as Science*, pp.63-5.
22 The recent resurgence of theoretical realism in the philosophy of science has been strongly influenced by the work of Rom Harré, e.g. *The Principles of Scientific Thinking*. See also Benton, *Philosophical Foundations*; Keat and Urry, *Social Theory as Science*; and Bhaskar, *A Realist Theory of Science*, and *The Possibility of Naturalism*.

23 Many of the issues involved arise in the much disputed analysis of Galileo's conception of scientific knowledge: see Shapere, *Galileo: A Philosophical Study*; McMullin (ed.), *Galileo: Man of Science*, Part IV; Koyré, *Metaphysics and Measurement*; and Feyerabend, *Against Method*, pp.69-145.
24 But see below, ch. 2, sec. 2, for further discussion of the relation between these two elements in the doctrine of value-freedom.
25 Horkheimer, 'The Latest Attack on Metaphysics', in *Critical Theory*, p.164.
26 Habermas, 'Analytical Theory', p.145.
27 *Ibid.*, p.146.
28 Fay, *Social Theory*, p.14.
29 *Ibid.*, p.52.
30 Habermas, 'Analytical Theory', p.159.
31 *Ibid.*, p.160.
32 Fay, *Social Theory*, p.36.
33 See the discussion of this question by Mandelbaum, 'Two Moot Issues in Mill's *Utilitarianism*', pp. 221-33.
34 Saint-Simon, *Selected Writings*, p.207.
35 *Ibid.*, p.208.
36 *Ibid.*, p.113.
37 See Williams, 'A Critique of Utilitarianism', pp. 135-50; and Miller, *Social Justice*, ch.1.
38 See Waxman, *The End of Ideology Debate*.
39 See Hayek, *Counter-Revolution*, p.107.
40 This is argued by Habermas in 'Dogmatism, Reason and Decision', in his *Theory and Practice*, pp.253-82.
41 Significantly entitled 'The Scientific Conception of the World: The Vienna Circle', reprinted in Neurath, *Empiricism and Sociology*, pp.299-318.
42 *Ibid.*, p.305.
43 *Ibid.*, p.318.
44 For instance, Ayer (ed.), *Logical Positivism*; and Passmore, *A Hundred Years of Philosophy*, ch.16.
45 'The Scientific Conception of the World', in Neurath, *Empiricism and Sociology*, pp.303-4.
46 See Mill, *Auguste Comte and Positivism*.
47 Saint-Simon, *Selected Writings*, p.230.
48 See Beck, 'Neo-Kantianism', p.473.

49 Kroner, *Kant's Weltanschauung*, p.2.
50 *Ibid.*, p.62.
51 *Ibid.*, p.63.
52 *Ibid.*, p.50.
53 See the discussion of Mill's view of the dichotomy in Ryan, *J. S. Mill*, pp.101-4.
54 See Weber, 'Politics as a Vocation', and 'Science as a Vocation', in Gerth and Mills (eds.), *From Max Weber: Essays in Sociology*, pp.77-128, 129-56.
55 On this point see Solomon, *From Rationalism to Existentialism*, pp.1-5.
56 Marcuse, *Reason and Revolution*, pp.323-60.
57 Saint-Simon, *Selected Writings*, pp.227-8.
58 *Ibid.*, p.170, note.
59 See, e.g. Marx, *Critique of the Gotha Program*, p.324.
60 According to Hayek, the phrase 'scientific socialism' was first used in 1845, by K. Grün, applied to Saint-Simon's position: see Hayek, *Counter-Revolution*, p.167.
61 Neurath, *Empiricism and Sociology*, pp. 289, 290 and 260.
62 On this issue see Friedman, 'An Introduction to Mill's Theory of Authority'; and Ryan, *J. S. Mill*, chs. 4, 5 and 7.
63 Keat and Urry, *Social Theory as Science*. (See 2nd edn., 1981, for further discussion of theoretical realism's relation to positivism and hermeneutics).

2: VALUE-FREEDOM AND SOCIALIST THEORY

1 See Miller, *Social Justice*, chs. 2-4, for an examination of these and other principles of social justice.
2 Nagel, *The Structure of Science*, pp.491-4.
3 See Keat and Urry, *Social Theory as Science*, pp.196-204, for a fuller discussion of Weber and some of his critics.
4 Nagel, *The Structure of Science*, p.493, footnote 38, makes a similar point about his own position.
5 This reply is partly similar to an argument in Hare, 'Descriptivism', pp.241-7. It is also analogous to the treatment of the problem of theory-neutrality in Keat and Urry, *Social Theory as Science*, pp.50-4.
6 E.g. Bhaskar, *A Realist Theory of Science*; and Sloman, *The Computer Revolution in Philosophy*, ch. 2.
7 See, e.g. Nozick, *Anarchy, State and Utopia*, ch.8.
8 See also ch. 6, sec. 3, below.

9 My account of this objection is based on its presentation in Edgley, 'Reason as Dialectic', and in Bhaskar, 'Scientific Explanation and Human Emancipation'. See also Edgley, 'Dialectic: A Reply to Keat and Dews', and Keat, 'Scientific Socialism – A Positivist Delusion?'.
10 Taylor, 'Neutrality in Political Science'.
11 See, e.g. Lessnoff, *The Structure of Social Science*, pp.136-41. For a criticism of ethical naturalism which is generally consistent with my standpoint in this chapter, see Philips and Mounce, 'On Morality's having a Point'.
12 Taylor, 'Neutrality in Political Science', pp.39-42.
13 Weber, *Methodology*, especially pp.67-85.
14 *Ibid.*, pp.131-63; but my classification is slightly different from Weber's.
15 See, e.g., Giddens, 'Marx, Weber, and the Development of Capitalism'.
16 Lipset, *Political Man*.
17 Taylor, 'Neutrality in Political Science', p.41.
18 See, e.g., Lukes, 'Alienation and Anomie'.
19 The definition of 'reformism' is of course highly problematic: see, e.g., the discussion in Miliband, *Marxism and Politics*, ch. 6.
20 See, e.g. the accounts of these debates in Gay, *The Dilemma of Democratic Socialism*; and Lichtheim, *Marxism: An Historical and Critical Study*, Part Five.
21 Cf. ch. 1, sec. 4, above.
22 Korsch, *Marxism and Philosophy*, p.33, footnote 7.
23 See Bernstein, *Evolutionary Socialism*.
24 See the discussion of this in ch. 5, sec. 1, below.
25 Quoted in Gay, *Democratic Socialism*, p.158.
26 See especially Althusser, *For Marx*.
27 Thompson, 'The Poverty of Theory'.
28 *Ibid.*, p.363.
29 Thompson, 'An Open Letter to Leszek Kolakowski', pp.131-56.
30 *Ibid.*, p.146.
31 Lichtheim, *Marxism*, p.292, footnote 2.
32 Gay, *Democratic Socialism*, p.165.
33 E.g. by Edgley, 'Reason as Dialectic', p.7.
34 Here I follow the excellent analysis in Edgley, 'Reason and Violence'.
35 See, e.g. Searle, *Speech Acts*. The relevance of this to Habermas's theory of truth is discussed in ch. 6, sec. 2, below.