

How Do We Justify the Project for an Inclusive Democracy?

In this chapter, the foundations of 'objectivity' in both its positivist and dialectical versions will be examined, and the feasibility, as well as the desirability, of grounding the project for an inclusive democracy on an 'objective' theoretical system will be questioned. The question that arises here is whether there is in fact a genuine dilemma in attempting to justify the democratic project, a dilemma that forces us to choose between either a modernist 'objectivist' approach or a post-modernist subjectivist approach.

The choice of the former implies that, following the *modernist* tradition, in order to justify the need for an inclusive democracy, we have to rely on *objective* theories and methods, i.e. on procedures that are valid, irrespective of our expectations, wishes, attitudes and ideas. The implicit argument in favour of such an approach is that such theories and methods reflect in fact 'objective processes' at work in society or the natural world. However, as I will try to show in this chapter, the choice of an 'objectivist' method to justify the need for an inclusive democracy is both problematic and undesirable. It is problematic because few still believe today, after the decisive introduction in twentieth-century science of the uncertainty principle and chaos theory, that it is still possible to derive any 'objective' laws or 'tendencies' of social change. If cause and effect can be uncertain even in physics, the most exact of sciences, and the reference to necessary and universal laws is disputed even with respect to the natural world, it is obvious that postulating objective laws or tendencies that can be applied to society is absurd: It is *undesirable* because, as the case of the socialist project has shown, there is a definite link between the 'scientification' of that project in the hands of Marxists-Leninists and the consequent bureaucratization of socialist politics and the totalitarian transformation of social organization.

But, if modernist objectivism seems problematical and undesirable, this does not mean that post-modernist subjectivism is less problematical, as it

may easily lead to general relativism and irrationalism, if not to complete abandonment of radical politics. Thus, adopting the post-modern 'generalized conformism',¹ in effect, implies the abandonment of any idea of a liberatory project under the (miserable) pretext of letting 'polyphony' flourish and under the (right) banner that 'politics, rightly understood, is firmly *subjective*'.²

My aim in this chapter is to attempt to show that the above dilemma is, in fact, a false one. Today, it is possible to define a liberatory project for an inclusive democracy without recourse to controversial objective grounds or to post-modern neo-conservatism. If we define freedom and the liberatory project in terms of the demand for social and individual autonomy,³ as we did in Chapter 5, we do so because we responsibly choose autonomy, as well as its expression in democracy, and we explicitly rule out the possibility of establishing any 'objective' laws, processes or tendencies which, inevitably, or 'rationally', lead to the fulfilment of the autonomy project. However, once we have chosen, broadly, the content of the liberatory project, some definite implications follow regarding our interpretation and assessment of social reality. In other words, the very definition of a liberatory project conditions the 'way of seeing' and criticizing social reality.

In the first part of this chapter, the claim of objectivity of the 'orthodox' epistemological tradition (empiricism/positivism and rationalism) is questioned, at least as far as the interpretation of social reality is concerned. The decisive influence of power relations in the interpretation of social phenomena is reflected in the much lower degree of intersubjectivity that characterizes social versus natural sciences. Next, the objectivity claim of the alternative tradition, dialectics, is considered with respect to two major applications in the interpretation of social reality, dialectical materialism and dialectical naturalism, and it is concluded that it is neither feasible nor desirable to derive a general theory of social 'evolution' on the basis of an 'objective' interpretation of social or natural history. Finally, in the last section it is argued that the liberatory project for an inclusive democracy can only be based on a democratic rationalism which transcends 'scientism' and irrationalism as well as general relativism.

The myth of objectivity: orthodox 'objectivity'

The first question arising in any attempt to 'objectivize' an interpretation of social reality refers to the methodology used in this process. The term 'methodology' is taken here in the broad sense of the philosophy of science — as an investigation of the concepts, theories, assumptions and criteria of assessing them. The concerns with methodology have, of course, a long history in the debates between orthodox social scientists on the one hand

and Marxist theorists on the other, and it has recently reappeared, explicitly or implicitly, in the debates within the Green movement. Thus, it can be shown that significant disagreements between various streams in the Green movement are due to methodological differences with respect to the way 'reality' is seen. Such differences sometimes make even the very communication between the Green currents extremely difficult, if not impossible (see, e.g., the debate between social ecologists and deep ecologists). It is therefore of crucial importance to clarify the methodological issues involved in the current debates.

Any attempt to objectivize the interpretation of social reality either takes the existing socio-economic order for granted, implicitly aiming at the justification of its reproduction (as 'orthodox' social 'scientists' do) or discards it, explicitly aiming at drastic social transformation (as radical theorists do). For reasons that I will develop later in this chapter, it can be shown that the concepts of objectivity developed within the two main traditions in the philosophy of science, the empiricist/positivist tradition and the dialectical one, have an intrinsic relationship to the above aims of social analysis. The conception of objectivity developed by empiricists/positivists (orthodox 'objectivity') is most amenable to a kind of 'objective' interpretation of social reality that takes the existing social-economic system for granted, and, vice versa, the conception of objectivity developed by dialectical philosophers (dialectical 'objectivity') is most suited to an effort to justify a radical transformation of society.

An immediate question which arises here is whether dialectics can be seen as a 'method'. Dialectical philosophers like Murray Bookchin disagree with the conception of dialectics as a method on the grounds that 'it distorts the very meaning of dialectic to speak of it as a "method" [since] it is an ongoing protest against the myth of "methodology": notably that "techniques" for thinking out a process can be separated from the process itself'.⁴

However, even if we see the dialectical approach principally as an ontological logic, this does not negate the fact that this approach, in assessing the truth value of theories, does use a set of concepts, categories and criteria which are very different from those used by positivists and that, in this sense, it is *also* a method. Furthermore, the very fact that, even today, contemporary dialecticians in very different traditions (e.g. Marxism and social ecology) use the dialectical approach to elucidate the same realm of reality (social evolution) and in the process derive very different conclusions at the interpretational and ethical levels is a clear indication that dialectics is being used *and* as a method.

Coming now to the orthodox epistemological tradition, the main streams in this tradition are rationalism and empiricism/positivism with its

later versions of falsificationism and 'scientific research programmes'. A brief outline of these currents in the orthodox tradition may be useful in understanding the methodological differences among various schools of social thought in their endeavour to interpret social reality.

Rationalism versus empiricism/positivism

Rationalism mainly flourished in continental Europe (Descartes, Spinoza, Leibniz, Wolff *et al*), whereas empiricism (Bacon, Hume, Berkeley), with its descendants of positivism (classical and logical) and falsificationism, has always been dominant in Britain and the USA. Rationalists as well as empiricists share a common pursuit of certainty in knowledge, that is, of truths that are certain because they are necessary. It is for this reason that in both traditions it is possible to speak of proof. Still, rationalists and empiricists differed between themselves, both as regards the source of truth and as regards the procedure to be employed in grounding knowledge on these truths. Rationalists find the source of truth in 'reason', whereas empiricists/positivists find it in sense-data, the 'facts'.

These differences, in turn, reflect different theories of truth. Thus, rationalism reflects a coherence theory of truth,³ according to which the criterion of truth is coherence with other propositions or judgements, something consistent with the deductive method of analysis. The foundation for this criterion of truth is the belief in the impossibility of developing a 'neutral' language, that is, a language not dependent on a particular theoretical system or conception of reality. Therefore, as there is no neutral way of comparing reality with out judgements, all that we can do is to compare one set of judgements with others. Knowledge, in other words, is conceptually mediated, and objectivity can only be established within a particular conceptual framework. This has two important implications. First, the incommensurability of rival theories, as well as their inferences, is the consequence of different assumptions/axioms used. Second, that any selection among such theories is based eventually on non-scientific criteria.

So, there is no objective way of demonstrating the superiority of one theoretical system (in explaining reality) over another when both systems are internally consistent and coherent. If, for instance, both the Marxist and the neo-classical theories of value can be shown to be internally consistent and coherent, then there is no 'objective' way to demonstrate the superiority of one over the other. For rationalists, therefore, knowledge of the world inevitably involves a priori truths, namely, truths which are not inductive generalizations from experience, but are virtually innate and, therefore, in no need of empirical confirmation. By pure reasoning,

rationalists argue, we can arrive at substantial knowledge about the nature of the world, through the use of concepts and propositions, where the connection between subject and predicate is necessary. The rationalists' ideal was 'a deductive system of truths, analogous to a mathematical system, but at the same time capable of increasing our factual information ... a system of deducible truths [that] can be considered as the self-unfolding of the reason itself'.⁶

It was in reaction to rationalism's a priori and subjective character of knowledge that the alternative tradition of empiricism developed. Empiricism reflects a completely different theory of truth, a correspondence theory, according to which the criterion of truth is correspondence with fact, although, as modern versions of the theory have shown, it is certainly not always the case that every statement can be correlated with a fact.⁷ Experience therefore becomes the necessary basis for all our knowledge, and as factual knowledge is based on perception, we cannot obtain factual knowledge by a priori reasoning. All a priori propositions are analytic ones (where the concept of the predicate is contained in the concept of the subject) true by definition, so that their denial involves a contradiction. As such, they do not claim knowledge of the world, they are not truths about matters of fact. On the other hand, all synthetic propositions (where the predicate is not contained in the subject) are a posteriori; i.e. the connection between subject and predicate is not and cannot be necessary.

Still, not all synthetic propositions are a posteriori. Some are a priori, independent of experience. Thus, as Kant first emphasized, concepts like that of causality (the truth that every event has a cause) are necessary truths and yet afford information about the world, in some sense quite independent of experience. More important, perception is not just an unconscious process. As, for instance, Kuhn⁸ points out, perception itself, though unconscious, is conditioned by the nature and amount of prior experience and education. There are therefore no 'brute facts': all facts are theory-laden, and perception is always concept-dependent. But, as any meaningful talk about knowledge founded on sense-data presupposes that language is neutral, the lack of such a language implies that the empiricist position is untenable, since sense-data are not independent of our knowledge of the world.

However, in spite of the attacks by rationalists, Kantians/neo-Kantians, Marxists, relativists and others, empiricism, in its various forms, has become the dominant epistemology among orthodox social scientists — a process that was helped enormously by the success of natural sciences and the corresponding rise of scientism. It was, in particular, during the emergence of what could be called the 'scientific-industrial complex' that

Comte's philosophy of (classical) positivism — the next step in the evolution of empiricism - began dominating social sciences. Comtean positivism introduced the well-known fact/value dichotomy, a dichotomy to be used widely by orthodox social scientists in their effort to develop a neutral, 'value-free' science of the economy, or society in general. Still, the introduction of the fact/value dichotomy, far from creating the conditions for a 'value-free' science of society, not only helped enormously in creating the myth of scientific 'objectivity' but, also, as Murray Bookchin observes, denied speculative philosophy the right to reason from the 'what is' to the 'what-should-be', i.e. its right to become a valid account of reality in its 'truth'.⁹

Orthodox social scientists were helped enormously in their effort to develop a 'science' of the economy and society by two parallel developments: first, the advent of logical positivism and, second, significant advances in the theory of testing hypotheses in the 1930s and 1940s that made possible the application of empirical testing procedures in the study of social phenomena, i.e. phenomena that, by nature, are not subject to experiment. In fact, logical positivism, which became dominant in the orthodox philosophy of science at about the same time that the developments in statistics were taking place, explicitly asserted the doctrine of *methodological monism*, that is, that all sciences, natural or social, could and should use the same method.

Logical positivism, initially expressed by a group of philosophers — subsequently known as the Vienna Circle - which included M. Schlick, R. Carnap and others, claimed to produce a synthesis between the two epistemological traditions, that is, between the deductive and a priori rationalism on the one hand, and the inductive and a posteriori empiricism on the other. Still, logical positivism is more firmly founded in the empirical tradition, as is obvious from the fact that its main theses are well within the empiricist tradition. This applies, in particular, to the thesis that a theory must be verifiable to be scientific, namely, that it must not contain metaphysical statements and value judgements. It also applies to the thesis that the primary source of knowledge is considered to be (once more) observation, or sense-experience; reason is merely mediating as a logical check on the coherence between hypotheses and their implications.

However, although logical positivism, by insisting on verifiable truths, definitely represented an improvement and, at the same time, a retreat, with respect to the extreme empiricist position of a belief in proven truths, it still suffered from serious weaknesses. I would mention here just three of the criticisms raised against it. Thus, first, the Carnapian proposition, that although scientific theories are equally unprovable, still, they have different degrees of probability relative to available evidence, was shown by Karl

Popper to be untenable on the grounds that under very general conditions, all theories, whatever the evidence, can be shown to be not only equally unprovable, but, also, equally improbable.¹⁰ Second, as there is no specification whatsoever of the number of tests a theory has to pass in order to be verified, the question arises as to how we know that the regularity established today will also be valid tomorrow. Finally, as Katouzian points out, the two most important criteria of logical positivism (verifiability/verification) are normative (as they have not been verified themselves) and normative statements, according to the principles of logical positivism, are simply tautologies. Logical positivism, therefore, far from providing an objective methodology, became an ideology 'inhibiting the growth of knowledge and serving the interest of the status quo'.¹¹

Falsificationism and scientific research programmes (SRP)

The weaknesses of logical positivism led to another version of empiricism, falsificationism, which represents a further retreat from the original empiricist position. The demarcation criterion of what is scientific now changes from verifiability/verification to falsifiability/falsification. It is therefore explicitly recognized that theories are equally unprovable/improbable, but, still, they may not be equally disprovable: a finite number of observations can disprove a theory, so that empirical counter-evidence becomes the one and only arbiter in assessing a theory. However, even this further retreat from empiricism did not produce a tenable thesis. Sophisticated falsificationists (like Karl Popper in his later writings, Lakatos and others) rejected this form of 'dogmatic falsificationism', as they called it, on the basis that it rested on false assumptions and a too narrow demarcation criterion between scientific and non-scientific.

The false assumptions were, first, that we can distinguish between theoretical and factual propositions. Such an assumption, however, is based on the belief that non-theory-laden facts do exist. Second, that propositions satisfying the criterion of being factual are true - an assumption implying that factual propositions can be proved from an experiment. But as Lakatos¹² emphasizes: 'We cannot prove theories and we cannot disprove them either; the demarcation criterion between the soft, unproven "theories" and the hard proven "empirical basis" is non-existent: all propositions of science are theoretical and incurably fallible.' Finally, the falsificationist demarcation criterion is so narrow that it would leave out of science the most admired scientific theories, which can easily be shown to be neither provable nor disprovable. Thus, as Lakatos pointedly noticed, acceptance of the falsificationist criterion would mean that all probabilistic theories, together with Newton's, Maxwell's and Einstein's

theories, would have to be rejected as unscientific, since no finite number of observations could ever disprove them.¹³

The next development in the empiricist/positivist tradition was the Lakatosian approach of Scientific Research Programmes (SRP), which were defined as sets, first, of hard-core hypotheses or propositions that are not subject to the falsification process and, second, of less fundamental auxiliary hypotheses forming a 'protective belt' around this core, which are the proper object of testing and amendment. Lakatos, starting from the position that scientific theories are not only equally unprovable/improbable but also equally undisprovable, attempted to provide some scientific standards (a demarcation criterion) which, though founded again on some sort of empirical basis, still, would not be subject to the inflexibility characterizing 'dogmatic' or 'naive' falsificationism. Thus, he changed the demarcation criterion so that the empirical basis was no longer required to prevent the disproof of a theory, but just to make possible its rejection. A theory may therefore be falsified and still remain true. Also, a non-falsifiable theory can now become falsifiable by specifying certain rejection rules in advance. That would allow probabilistic theories back into the scientific fold, provided the scientist specifies the rejection rules that would render the statistical evidence found inconsistent with the theory. Finally, whereas for the 'naive' falsificationist any theory which can be interpreted as experimentally falsifiable is acceptable/scientific, for Lakatos, a theory, or, better, an SRP, is acceptable/scientific if it has corroborated excess empirical content over its rival, that is, if it leads to the discovery of novel facts.

Lakatos therefore claimed that he had solved the problem of objective criteria that so much bothered the orthodox philosophy of science. An SRP, including its untestable hard core, could be rejected, 'objectively', using normal testing procedures. However, as Feyerabend¹⁴ points out, the standards that Lakatos offered are, in fact, vacuous because they neither specify any time limit over which the 'excess' empirical content of an SRP should be verified, nor could they possibly do so, if return to naive falsificationism was to be avoided. That is why, Feyerabend concludes, Lakatos seems to retain these (supposedly permanent) standards, 'a verbal ornament, a memorial to happier times when it was still thought possible to run a complex and often catastrophic business like science by following a few simple and "rational" rules'.¹⁵

Objectivity versus intersubjectivity

It is clear that orthodox philosophers of science have failed to provide criteria either of 'proven' truth (the truth of rationalists and classical empiricists) or of 'provable/verifiable' truth (the logical positivists' truth)

or even of truth based on permanent falsificationist standards (the Lakatosian truth). Therefore, as 'the requirements [for objectivity] were gradually weakened until they disappeared into thin air',¹⁶ the 'Kuhnian revolution' brought the power relation into orthodox epistemology through the adoption of the relativistic position of 'truth by consensus'. What is 'scientific' or 'objectively true' becomes a function of the degree of intersubjectivity, that is, of the degree of consensus achieved among the theorists in a particular discipline. Objectivity, of course, implies intersubjectivity, but the opposite is not true. Intersubjectivity simply means:

*a common framework against the background of which people can communicate [so that] . . . what counts as fact depends on how we have come to see the world and upon the conceptual structure that is presupposed in our seeing it in this way.*¹⁷

All this brings us to the concept of 'scientific paradigm' that was developed by Thomas Kuhn. The concept of paradigm has been used (and abused) extensively in its 30-year history. Part, at least, of the blame for the abuse can be attributed to the father of the concept himself since, as Masterman¹⁸ observes, the term is used in Kuhn's book in at least 22 different ways! In its broadest sense, which is the most useful one for the purposes of our discussion, paradigm refers to the 'entire constellation of beliefs, values, techniques and so on shared by the members of a given community'.¹⁹ Although Kuhn in his later writings,²⁰ under pressure from Popperians, Lakatos *et al.*, seems to be retreating in his definition of the scope of the paradigm concept and ends up with a narrower concept, rather similar to the Lakatosian SRP, I believe it is the broad sense that is the most original one. Anyway, this is the version that, as Blaug²¹ observes, is predominantly retained by most readers of his book. In this broad sense, the paradigm includes not only a theory, or even a set of theories, but also a world view, a way of seeing the object of study, which in turn is conditioned by the overall world view of scientists, i.e. the set of shared beliefs about the individual's relationship to the natural world and to other humans in society. Further, the concept contains a set of admissible problems to be solved, as well as the methods to achieve legitimate problem-solutions. A paradigm, in this sense, is a tradition.²² For example, the eco-Marxist paradigm differs from the liberal-environmentalist one, not just because each uses a different theory to explain the ecological problems (and therefore suggests different solutions), but also because each uses different methods (concepts, assumptions, criteria of assessing theories) — all these differences based, in the last instance, on different world views.

It is therefore obvious that the paradigm concept, in its broad sense, is

much broader than the Lakatosian SRP. This has very important implications with respect to the issue of objectivity criteria. As the very criteria for assessing the paradigm-based normal scientific activity (the Lakatosian protective belt) are part of the paradigm, any 'objective' comparison of paradigms is impossible. Thus, as Kuhn puts it:

*The choice between competing paradigms cannot be determined merely by the evaluative procedures characteristic of normal science, for these depend in part upon a particular paradigm and that paradigm is at issue.*²³

This means that any incommensurability between paradigms, as a result of differences about the list of admissible problems — due to different world views — or about the methods to solve these problems and the criteria to use in choosing between these methods, is an absolute one. People sharing different paradigms 'live in different worlds', see different things or things in a different relation to one another and can only shift from one paradigm to another in *gestalt*-switch that converts them from adherents of one way of seeing things to another. This is inevitable as soon as we accept that there are no objective criteria which are not paradigm-dependent for choosing among paradigms. Therefore, scientists (or theorists in general), by adopting a paradigm, in fact adopt a 'package deal' consisting of theories, facts that fit them, a world view *and* criteria to assess them. Thus, the paradigm notion implies the non-existence of objectivity: there are neither tradition-independent truths (a material notion of objectivity), nor tradition-independent *ways of finding* truths (a formal notion of objectivity).²⁴

In this paradigmatic view of science, the scientific 'maturity' of a discipline and the amount of 'truths' produced by the respective scientific community depend on the degree of intersubjectivity achieved among its practitioners over a specific time period. The fact, therefore, that, historically, there is a crucial difference in the degree and type of intersubjectivity that has been achieved among social and natural scientists is very important with respect to the 'status' of their respective disciplines. Furthermore, there is a very significant difference in the degree of success the two types of science have historically enjoyed in explaining their object of study, that is, social and natural phenomena, respectively. But these differences do not arise out of 'exogenous' factors; they arise from the object of study itself — a fact that has important implications for the question of whether the liberatory project can be objectivized.

To illustrate these differences, let us take the example of economics, which is considered to be the hardest 'science'²⁵ among social sciences, mainly because of its greater ability to quantify the relations it studies. For more than 100 years after the publication of *Das Capital*, two economics

paradigms, based on radically different world views and traditions, divided the economics profession: the Marxist versus the 'orthodox' paradigm. I make this division on the assumption that, despite the significant differences between the various schools of thought (especially those in the orthodox camp, i.e. neo-classicals, Ricardians, Keynesians, monetarists, etc.), still, there is a fundamental common characteristic in the respective groups of theories: all orthodox theories take the market economy system for granted, whereas all Marxist theories see capitalism as a historical phase in the evolution of human society. Out of this fundamental difference arise all other differences between orthodox and Marxist theories with respect to concepts and methods to be used in the analysis of economic phenomena.

One could possibly argue that the criteria that economic theorists used in choosing between the two main paradigms were not mainly scientific. In fact, it was social factors, that is, factors directly linked with their own object of study (economy/society), that played a crucial role in this choice. Thus, the institutional framework, within which economists functioned in connection with their own social position and career ambitions, as well as the way they perceive themselves in society, conditioned their social, political and moral preconceptions. In other words, social factors, like the ones mentioned, conditioned their world view, on the basis of which their paradigm choice was made. As regards the institutional framework in particular, it is not accidental that before the collapse of 'existing socialism', the dominant (i.e., the one most widely accepted) paradigm in the Western and Eastern scientific communities used to be the orthodox and the Marxist ones, respectively. After the collapse of these regimes, there was a massive conversion of economists all over the world to the orthodox paradigm. However, as the collapse itself has nothing to do with the Marxist paradigm's analysis of the market economy, it is clear that the present worldwide domination of the orthodox paradigm is unconnected to any scientific criteria which supposedly demonstrate its superiority over the competing Marxist paradigm, and it simply reflects the incommensurability between the two paradigms and the lack of any scientific criteria to choose objectively between them.

It is therefore obvious that the object of study plays a much more important role in social than in natural sciences, with respect to determining the choice of a paradigm. This is due to the fact that the social theorist's world view cannot possibly be separated from his object of study — society. Furthermore, given the social divisions characterizing a hierarchical (or heteronomous) society, there is an inevitable division among social theorists, particularly with respect to the fundamental question of whether they should take for granted the existing social system in their theoretical work.

The fact that no similar inevitable division could arise among natural scientists, combined with the possibility of experiment that is available in the natural sciences, could go a long way towards explaining the much higher degree of intersubjectivity that natural sciences have traditionally enjoyed over social sciences in interpreting their object of study. Finally, the above facts could easily explain why natural sciences are characterized as more mature than social sciences. It is obvious that this is related to the higher degree of intersubjectivity that can *actually* be achieved at a given time and place among natural scientists compared to the relatively lower degree of intersubjectivity that can *potentially* be achieved among social scientists.

The myth of objectivity: dialectical Objectivity'

As is obvious from the above discussion, the orthodox philosophy of science has been unable to solve what has been called the 'problem of method', that is, the problem of establishing objective criteria in assessing theories. Still, for those adopting the dialectical method of analysis, the problem is non-existent, since, for them, 'techniques' for thinking out a process cannot be separated from the process itself. A useful way of introducing the dialectical approach would perhaps be to start with Kant's contribution that exerted significant influence on it.

Although the Kantian system was intended to supersede both continental rationalism and British empiricism, history did not vindicate this intention. Nevertheless, Kantianism can be considered as a synthesis (in the Hegelian sense) of the other two traditions, that is, as an original system subsuming both of them. In the Kantian system, knowledge is seen as founded not just on pure reason, nor simply on sense-data, but on both. Thus, the truth of propositions can only be assessed with reference to the categories we use, which are methodical rules of an entirely a priori nature, that is, independent of experience. The categories, therefore, are the conditions of knowledge; although by themselves they give no knowledge of objects, they serve to make empirical knowledge possible. Things cannot be known except through the medium of categories which, created by the mind, assume the function of synthesizing the sense-data.

The importance, however, of Kant in the alternative philosophy of science is that, for the first time, a philosopher attains in his system of knowledge one of the most important dialectical oppositions: between empiricism and totality, between form and content, a theme that was later expanded by Hegel and Marx. This is achieved, according to Goldmann,²⁶ through the development of the idea of totality. Thus, we may distinguish three philosophical traditions with respect to their world views about the fundamental category of human existence:

- First, the individualist/atomist tradition (Descartes, Leibniz, Locke, Hume, Vienna Circle *et al.*), where the world view adopted sees the *individual* as the principal category of human existence. Society, according to this view, is a set of interactions among autonomous individuals.
- Second, the holistic tradition (Schelling, Bergson, Heidegger *et al.*), where the world view adopted sees the *whole* as the fundamental category of human existence. The part here exists only as a necessary means for the existence of the whole, and the autonomous individual becomes the exception within the system (the leader, the hero, etc.).
- Finally, the tradition which uses as its principal category the concept of *totality* in its two main forms of the universe and the human community. The totality differs from the whole of the holistic world view because the former is a contradictory whole. Thus, as Goldmann puts it:

The parts [of the totality] presuppose for their possibility their union in the whole; the autonomy of the parts and the reality of the whole are not only reconciled but constitute reciprocal conditions; in place therefore of the partial and one-sided solutions of the individual or the collective, there appears the only total solution, that of the person and the human community.²⁷

The concept of totality is a fundamental category of the dialectical method because, according to dialectical philosophers, it not only allows us to see a number of important contradictions in knowledge and social reality, but it may also be used to resolve the contradictions between theory and practice, the individual and the community. Thus, using the concept of totality in its two main forms, we may see the following dialectical contradictions:

- The contradiction between the parts and the whole in knowledge: the parts can only be seen through the whole which envelops them, whereas the whole can only be seen through factual knowledge of the parts.
- The contradiction between individuals and society: individuals can only be seen through society, whereas society can only be seen through knowledge of individuals. The motor of change is contradiction between parts whose tension transforms the totality itself. Society, therefore, cannot be seen as a set of interactions among autonomous individuals. In fact, it is exactly because empiricists/positivists deny the existence of any totality (theoretical or practical) and concentrate instead on atomic propositions that they cannot unite the whole with the individual. Thus, by assuming that knowledge is constructed by factual connections, they rule out a theoretical totality. Also, by adopting the fact/value dichotomy which implies that 'what is' — the positive element

- has always to be distinguished from 'what should be' - the normative element — they exclude a practical totality.
- The dialectical contradiction between the real given and the possible: a contradiction arising out of the conception of reality as a goal, something to be achieved by action. As such, totality unites theory and practice, the individual and the community. This is in contrast not only to empiricism/positivism but, also, to rationalism, which is equally dualistic and creates an artificial division between subject and object, theory and practice.

The dialectical conception of objectivity

However, the contradiction between the real given and the possible does not just refer to the conception of reality as a goal. In fact, if we use a broader understanding of this particular contradiction, we may see clearly the fundamental differences between the orthodox and the dialectical conceptions of 'objectivity'. As dialectical philosophers argue, the contradiction between the real given and the possible adds two important dimensions in the way we see reality: the historical and the ethical dimension.

Thus, unlike positivism, which, lacking any historical dimension, focuses on appearances, the dialectical approach, seeing the potentiality as historical possibility, may examine the hidden causes of empirical phenomena, the essence behind the appearances. Furthermore, the dialectical approach can be used to derive an 'objective' ethics. Thus, whereas for empiricists reality is 'what is', for dialecticians reality is 'what should be', given the potentialities latent in development. So, 'what is' should always be assessed in terms of what it could potentially become. This implies that while reality for empiricists is factual and structural, for dialectical philosophers it is processual. The very meaning of a 'fact' is therefore very different in the dialectical method, since it consists not just of a set of immutable boundaries but, instead, of a set of fluid boundaries *and* its mode of becoming; in other words, it includes the past, the present and its future.

Therefore, the concept of objectivity in dialectics takes on a very different meaning from the traditional notion of objectivity in empiricism/positivism. What is 'objectively true' is not what corresponds to facts/what can be verified or, alternatively, what cannot be falsified/rejected, on the basis of an appeal to sense-data, which, anyway, can only give information about 'what is'. Instead, what is 'objectively true' in dialectics is, as Bookchin puts it, 'the very process of becoming - including what a phenomenon has been, what it is and what, given the logic of its potentialities, it will be, if its potentialities are actualized'.²⁸ In this sense,

the dialectical 'real' is even more 'real' than the empiricist one; it expresses the logical implications of the potential - it is the realization of the potential, the rational. As a consequence of the fundamental differences between the orthodox and the dialectical conceptions of objectivity, the criteria of assessing the truth value of the theories derived from the use of the respective methods are, also, very different. Thus, as Bookchin stresses: "The kind of verification that validates or invalidates the soundness of dialectical reasoning, in turn, must be *developmental*, not relatively static or for that matter "fluctuating" kinds of phenomena."²⁹

The dialectical method's historical and ethical dimensions introduce a high degree of compatibility between it and radical analyses proposing an alternative form of social organization. The dialectical approach, by distinguishing between the real 'given' and what 'should be', offers itself as an 'objective' justification of a liberatory project, both from the historical and the ethical points of view. It is not surprising therefore that the dialectical approach has been used by radical philosophers, from Marx to Bookchin, to justify 'objectively' the need for an alternative society, a socialist or an ecological society, respectively. By the same token, the orthodox philosophy of science provides a concept of objectivity that can be used in an 'objective' justification of the status quo. Thus, empiricism/positivism, especially when used in the analysis of social phenomena, may offer an 'objective' justification of 'what is', simply by draining social development off its historical or moral content.

Needless to add that the incommensurability between the orthodox and the dialectical conceptions of objectivity implies a corresponding incommensurability between the orthodox paradigms in social sciences and the ones based on the dialectical method. As Murray Bookchin puts it: "For analytical logic, the premises of dialectical logic are nonsense; for dialectical logic, the premises of analytical logic ossify facticity into hardened, immutable logical "atoms" ".³⁰

However, the dialectical approach is also unable to solve the problem of 'objectivity', as the following discussion will attempt to show. Mainly, this is because for reality to be assimilated by dialectical thought, the condition is that it should be dialectical in form and evolution and therefore rational. This means that a dialectic has to *postulate* the rationality of the world and of history at the very moment when this rationality is a theoretical, as well as a practical, problem.³¹ As Castoriadis puts it:

The operative postulate that there is a total and 'rational' (and therefore 'meaningful') order in the world, along with the necessary implication that there is an order of human affairs linked to the order of the world — what one could call unitary ontology - has plagued political philosophy from Plato,

*through liberalism and Marxism. The postulate conceals the fundamental fact that human history is creation — without which there would be no genuine question of judging and choosing, either 'Objectively' or 'subjectively'*³²

In fact, the dialectical approach suffers no less than the orthodox approach from what Hindess and Hirst³³ call the 'epistemological fallacy', that is, the construction of an a priori core of concepts, *assuming* their own conditions of validity. This is, of course, a position which easily brings to mind the Kuhnian position that a paradigm contains its own criteria of validity. But, let us examine first the Marxist version of dialectical objectivity, which shows clearly the problems of dialectical 'objectivity'.

Marxist Objectivity' and dialectics

The Marxist conception of objectivity is, of course, different from the one used by orthodox philosophers of science as it is qualified by a 'social' element, namely, that concepts and theories are conditioned by social (class) interests, and a 'historical' element, in other words, that concepts and theories are, also, conditioned by time. Still, these qualifications do not aim to deny the supposed 'objective' and 'scientific' character of Marxist analysis.

Thus, Marx, on the basis of changes in the 'economic sphere' (i.e. the sphere that was mainly responsible for the transformation of society at a specific place and time — Europe in the transition to capitalism), attempted to provide a universal interpretation of all human history and render the socialist transformation of society historically necessary. Marx had no doubts about the 'scientific' character of his economic laws, which he viewed as 'iron' laws yielding inevitable results, or about the 'objective' character of his conception, which he paralleled to a natural history process:

*It is a question of these laws themselves, of these tendencies working with iron necessity towards inevitable results . . . My standpoint, from which the evolution of the economic formation of society is viewed as a process of natural history . . . ,*³⁴

As regards Lenin, he was even more explicit:

*[Materialism provided an absolutely objective criterion [my emphasis] by singling out the 'relations of production' as the structure of society . . . creating the possibility of a strictly scientific approach to historical and social problems.]*³⁵

The Marxist claim for 'objectivity', inevitably, led to methodological debates among Marxists, which were very similar to the ones that have taken place in the orthodox camp between positivists and rationalists/neo-

Kantians. The debates concerned what has been called 'the problem of knowledge', that is, the problem of the criteria by which a body of knowledge can be assessed and, in particular, whether and how a theory's correspondence to reality can be judged and demonstrated.

I would classify the variety of Marxist tendencies with respect to the problem of knowledge as follows.

First, there is what I would call the 'philosophical tendency', a tendency within which Practice is given priority over Theory. It is the tendency which is inspired by what Castoriadis³⁶ identifies as the revolutionary element in Marx, that is, the element declaring the end of philosophy as a closed system, which is expressed in the famous Eleventh Thesis of Marx on Feuerbach: 'The philosophers have only interpreted the world in various ways, the point however is to change it.'³⁷ Within the context of this tendency, no problem of knowledge arises. But then, as we shall see below, the belief in a Marxist science based on objective truths also becomes untenable, given the implicit or explicit relativism that characterizes this tendency.

Second, there is what I would call the 'scientific' tendency, where a reversal of emphasis takes place, that is, the theoretical or scientific element is given priority. This is the element that eventually dominated Marx's work and Marxism thereafter, and it is what Castoriadis calls the traditional element in Marxism. In fact, for an important school of modern Marxism, that is, Althusser's structuralist Marxism, an *epistemological break* (a leap from a pre-scientific to a scientific world view) should describe Marx's shift from his early philosophical/humanist writings to his late (post-1845) scientific ones.³⁸ It is due to this 'scientific' element that Marxism ends up as just another theory, another closed system to explain the essence of society, and, in this sense, it faces exactly the same problem as other scientific theories do about the guarantee of truth. The common feature of all the currents belonging to this tendency is that they explicitly adopt the desirability and feasibility of a neutral 'scientific' explanation of external (social) reality.

Starting with the *philosophical tendency*, I will have to clarify, first, that what I call the 'philosophical tendency' does not have much to do with dialectical materialism, the view of *Marxism-as-philosophy*. Philosophy in dialectical materialism is in fact a science, or, better, *the science of history and society*, and as such belongs to the scientific tendency we shall consider next. McLennan, for example, is clear about it: 'The role of philosophy, not as metaphysics but as generalizations from science and its concepts, takes on a "scientific" aspect that stands or falls not with ideology, but with science itself.'³⁹ Such a view, however, of Marxism-as-

philosophy also suffers (for the reasons mentioned above) from the 'epistemological fallacy' that Hindess and Hirst emphasize.

An alternative to the Marxism-as-philosophy view, more relevant to the philosophical tendency, is the *Marxism-as-method* view. Lukacs, for instance, argues that even if research disproved all Marxist theses *in toto* this should not worry orthodox Marxists because 'orthodoxy refers exclusively to method'.⁴⁰ This view, however, can be criticized on several grounds. First, as McLennan points out,⁴¹ the idea that Marxism is no more than a methodological tool is not only strange, but also as philosophical as the Marxism-as-philosophy view. Second, as Castoriadis emphasizes,⁴² method and content are inseparable, the one creating the other, and Marxist categories are themselves historical. A similar position was also taken by Karl Korsh, who argued that Marxism, like all theories, has historical conditions of existence, to which it alone is relevant.⁴³

The view commonly supported by the writers in the philosophical tendency (Karl Korsh, George Lukacs (with some qualifications), Peter Binns, Derek Sayer, Phillip Corridan and others) is that the starting point in knowledge is neither pure self-awareness, as in rationalism, nor sense-data, as in empiricism. The former creates an artificial duality between subject and object, theory and reality, while the latter not only is dualistic but also identifies essence with appearances. Instead, the starting point in knowledge is considered to be human beings' active contact with society and the natural world. Science, therefore, is the unity of Theory and Practice, which not only interprets reality but also becomes part of the force changing it, a part of praxis, that is, the conscious determinate shaping of history. Thus, scientific laws are not predictive - not even in a probabilistic sense, as Lukacs⁴⁴ points out; instead, they only constitute a framework within which theoretically informed and therefore effective social practice is possible.

The fact that social practice is the source, the test and the aim of knowledge is, of course, a commonplace among Marxists. The real issue, therefore, is whether practice should be seen as the *creator of truth* and knowledge or, alternatively, as a *criterion of verifiability* of knowledge. For the philosophical tendency, practice creates knowledge within the context of an empirically open-ended system. As Peter Binns puts it: 'Objective truths are not uncovered so much as created; it is in the act of creating them that they become revealed.'⁴⁵ Therefore, the only criterion of validity here is life, action, struggle.⁴⁶ On the other hand, for the scientific tendency, knowledge constitutes in effect a closed theoretical system, and practice functions as a criterion of its verifiability. It is therefore obvious that no problem of criteria and of scientificity could arise within the philosophical tendency, as such a problem presupposes a distinction made

between subject and object, between theory and reality, a distinction explicitly denied by this tendency. By the same token, one can explain the ultimate cause of the problem of knowledge. The problem arises because in the orthodox philosophy of science the criterion of validity is external, outside the social being of those holding the ideas: it is located either somewhere in an autonomous and a-social realm of reason (rationalism) or in experience (positivism).

The price, however, to be paid in order to overcome the problem of knowledge in this way is heavy: Marxism cannot claim any longer that it has a scientific status based on objective truths, as Marxist critics of the above thesis were quick to point out. Obviously, if we accept that theory is based on practice, by which it is meant the class practice of the proletariat, we are going to end up not with a science based on objective truths, but with a *class science*. The Marxist argument that the proletariat expresses the general interest of society in abolishing class society does not make the scientific claim of Marxism any more valid because the superiority of Marxist theory still depends on its unique ability, as potential working-class consciousness, to abolish the class system. This is why Marxist critics of the scientific tendency, like Collier,⁴⁷ argue that the above view of Marxism transforms it into theology and that practice should be seen not as *creating* truth but as merely *ascertaining* its occurrence, a position that Kolakowski,⁴⁸ rightly, characterizes as 'Marxism of a positivistic orientation'. In this light, one may observe that it is no accident that Marx himself, as Castoriadis⁴⁹ has shown, had to abstract from the class struggle in deriving his 'laws' of motion of capitalism, because only in that way could he develop a scientific theory of socialism. The class struggle is absent in deriving his scientific laws and reappears again only at a different level of analysis, namely, in bringing down a system whose essential nature has been demonstrated by abstracting from it.

Therefore, the 'solution' to the problem of knowledge that was provided by the philosophical tendency is vacuous. As orthodox social science could, also, be seen as a class science to serve the dominant class's interests, we end up with two class sciences, in other words, two incommensurable paradigms, and no possibility of developing an objective science of society. Furthermore, the view, sometimes expressed by Marxist writers,⁵⁰ that the class character of Marxian economics does not call into question its scientific validity, on the grounds that this validity depends entirely on its ability to explain reality, obviously begs the question, as there is no 'objective' way to decide which paradigm better explains reality.

However, the basic thesis of the philosophical tendency, that dialectical materialism is not only distinct from, but also a safeguard against, orthodox epistemology and, further, that method can be separated from content, is

not universally accepted among Marxists,⁵¹ and particularly not by those emphasizing the scientific nature of Marxism (scientistic tendency). The common elements shared by Marxists in this tendency are, first, that reality is independent of theory (though the reverse is not true); second, that theory is independent of its subject, and, finally, that the truth of a theory is found in its ability to 'appropriate' or reproduce reality in thought. But, as there are several ways to establish that a theory corresponds to, or adequately reflects, reality, the main division among orthodox philosophers of science (rationalists versus empiricists/positivists) is, inevitably, reproduced within the Marxist scientistic tendency.

Thus, as regards, first, the empiricist tendency within Marxism, it originated in the late writings of Engels⁵² and was further developed by Plechanov, Bucharin and Lenin.⁵³ In modern times, this tendency has dominated Anglo-American Marxism, reflecting, one could suspect, the traditional dominance of empiricism/positivism in this part of the world. The problem of knowledge does exist in this tendency, and the solution to it is given in terms of empiricist criteria that could establish the adequacy of the theory with respect to its correspondence to reality.

So, although the exact testing procedures are not specified, it is clear that a correspondence theory of truth is involved here. Still, it should be stressed that, notwithstanding the fact that experience is the ultimate criterion of truth in both orthodox and Marxist positivism, the methodological individualism of the former is explicitly rejected by the latter. Sense-data therefore are not considered to be the starting point of knowledge; nor does reality have to be reduced to atomic components to be understood scientifically. Furthermore, the aim remains the discovery of the essence behind appearances. However, since the ultimate aim of empiricist Marxism is the raising of the socialist project from a Utopian ideal to a science of the economy/society, all those elements of Marxist dialectics - principally the class struggle - that could not be built into the scientific laws of the economy have to be abstracted from and transferred to a different level of abstraction.

In my view, empiricist Marxism not only is not in a position to solve the problems orthodox empiricists/positivists face (non-existence of 'brute' facts, lack of non-vacuous standards to assess rival theories, etc.), but it also adds some extra problems due to its vagueness. For instance, how the adequacy of a theory with respect to experience should be assessed: through a verification/falsification procedure, through success in social practice or through some other criterion? Let us examine the problem with a concrete example. As is well known, the Marxist theory of value does not meet the positivist/falsificationist requirements of a scientific hypothesis. That is why some Marxists attempted to solve the problem by

suggesting (on the basis of Marx's spare writings on methodology) that value, as well as 'all specifically Marxian laws and developmental constructs', should be treated as Weberian ideal-types.⁵⁴ However, as Weber points out,⁵⁵ the function of an ideal-type is always the comparison with empirical reality; therefore, the problem of the guarantee of the ideal-type's truth still remains unresolved.⁵⁶

Furthermore, the question remains as to how the distinction between the praxis of the social subject and his awareness of that praxis can be removed; in other words, how empiricism could be reconciled with Marxist dialectics.⁵⁷ Finally, the fundamental question still remains: how can we be sure that we have discovered the essence behind appearances, especially when the essence is contradicted by phenomena?

The second major current in the scientific tendency is the rationalist one. The starting point here is the necessity for the conceptualization of reality, prior to the possibility of science. This implies a denial of the empiricist position that beliefs/propositions about reality could be derived from a world experienced, but not yet conceptualized. The French Marxist structuralist school might be classified in this current of Marxism, although Marxist structuralists themselves might deny their classification as rationalists in the above sense. However, their affinities to rationalism are much more significant than those to any other tendency/current in Marxism.⁵⁸

For structuralist-Marxists, the problem of knowledge is an ideological problem,⁵⁹ as ideological as all traditional epistemology. The real issue for them is not one of criteria of scientificity, but of *mechanisms* producing a knowledge effect. The criteria of knowledge are defined within the science itself, by its scientificity, its axiomatics. As Althusser puts it:

*Theoretical Practice is indeed its own criterion and contains in itself definite protocols with which to validate the quality of its products, i.e., the criteria of the scientificity of the products of scientific practice.*⁶⁰

In fact, Marxism, according to structural-Marxists, is not only a science but a superior science, the science of all sciences, given its ability to synthesize the various special sciences. Marxism therefore becomes the general theory of Theoretical Practice and 'the key to and judge of what counts as genuine knowledge'.⁶¹

However, Althusser's operation to do away with the philosophy of guarantees is also a failure. As several (Marxist) critics have pointed out, Althusserians base their theory of Theoretical Practice on a coherence theory of truth, where the criterion of truth is simply comprehensiveness and lack of contradictions with respect to the thought structure of Marxism.⁶² Therefore, Althusserian Marxism can only claim superiority

over other sciences (which might be equally comprehensive and non-contradictory) if one accepts a priori the world view embodied in the structuralist paradigm. As Binns points out:

Not only are the parameters in terms of which the world is to be examined structure-specific, but so too are the very conceptualizations of the world they are used to explain. The very incommensurability of these world-syntheses effectively prevents any demonstration of the superiority of any of them. To accord any of these the honorific description of being scientific in these circumstances, as does structuralist Marxism, seems quite gratuitously and pompously misleading.⁶³

Althusserian Marxism is, therefore, a clear example of objectivist rationalism, where, as Castoriadis puts it, 'Past history is rational ... future history is rational ... the connection between the past and the present is rational.'⁶⁴ The implication of such a view of history is that, as the same author points out: 'Marxism does not transcend the philosophy of history, it is just another philosophy of history; the rationality which Marxism supposedly induces from the facts is, in fact, imposed on them',⁶⁵ so that, in the end, 'Marxism is not any more, in its essence, but a scientific objectivism, supplemented by a rationalist philosophy.'⁶⁶ But then, as was effectively shown,⁶⁷ the creative and imaginary element in history plays a very limited role, namely one that is consistent with the Althusserian view, according to which the true subjects and real protagonists of history are not biological men but the relations of production. Men, in this context (which nobody who wishes to call himself a believer in Marxist dialectical and historical materialism can discard), are only the 'supports' (*Trager*) or bearers of the functions assigned to them by the relations of production.⁶⁸

Finally, the latest development in Marxist epistemology is 'realist Marxism', which can be seen as an attempt at a dialectical synthesis of modern empiricism/positivism on the one hand and rationalism/Kantianism on the other. In fact, some recent Marxist work considers the realist epistemology as a way to overcome the present crisis of Marxist theory, in the sense that it avoids the pitfalls of both the dialectical approach (essentialism, teleology) and of empiricism/relativism (a-theoretical character).⁶⁹

The object of scientific knowledge, according to realist philosophers of science, is neither atomistic events and phenomena (as in empiricism/positivism), nor models, that is, human constructs imposed on phenomena (as in rationalism/Kantianism). Instead, the object of scientific knowledge is structures and *mechanisms* that generate phenomena, which operate independently of our knowledge and experience. Science, as defined by a

realist philosopher, is 'the systematic attempt to express in thought the structures and ways of acting on things that exist and act independently of thought'.⁷⁰

The realist definition of science is based on three fundamental assumptions: first, that the world is structured (so that science is possible); second, that the world is an open system (i.e. a system where no constant conjunction of events prevails) consisting of enduring and non-empirically active natural mechanisms; and third, that the ontological order is completely independent from the epistemological order. The last assumption implies that philosophical ontology (Is the world structured/differentiated?) should not be confused with epistemological ontology (Which are the particular structures contained in the world?). The only link between the two orders can be provided by experimental activity, which can give us access to the enduring and active mechanisms that constitute the real world, through the creation of close conditions that make the confirmation/falsification of a theory possible.

Therefore, an open system cannot be adequately grasped in terms of the constant conjunction of observed phenomena (as empiricists attempt to do) because perception gives access only to *things*, not to *structures* that exist independently of us. Thus, the empiricist causal laws are only expressing tendencies of things, not conjunctions of events, and are tied up to closed systems. The inadequacy of the empiricist/positivist criteria of confirmation/falsification is due to the fact that they are based on the assumption that a closed system is the rule, rather than the artificially generated exception. Although, therefore, realists do not reject the general relativity of knowledge that Kuhn, Feyerabend and others emphasize, and according to which descriptions of the world are always theoretically determined and not just neutral reflections of it, still, they argue that, provided that we can create closed conditions, we can get access to the structures of the world. This has the important implication that a criterion of choosing among incommensurable theories is possible. Thus, as Bhaskar puts it:

A theory T_a is preferable to theory T_b , even if in the terminology of Kuhn and Feyerabend it is incommensurable with it, if theory T_a can explain under its descriptions almost all the phenomena p_1, \dots, p_n that T_b can explain under its descriptions Bp_1, \dots, Bp_n plus some significant phenomena that T_b cannot explain.⁷¹

However, the applicability of this criterion crucially depends on the possibility of experimental activity, a fact that turns any idea of methodological monism into a fantasy; the realist safety valve to preclude relativism cannot, by definition, work with social sciences. This is so because,

although society may be an open system - as realists assume — it is impossible to create artificially closed conditions in order to confirm/falsify our theories about it.

Realist philosophers of science are, of course, well aware of the problem and make a determined effort to 'solve' it, or, at least, bypass it. McLennan, for instance, argues that social theory is necessarily historical, given the constitutive role that agency and thought play with respect to its object of study. However, the procedures he suggests, so that the lack of experimental activity in social sciences does not play a decisive role in differentiating them from natural sciences, are obviously inadequate. Thus, the criteria that he mentions, in his attempt to support the 'objectivity' of social inquiry (theoretical abstraction, systematic and coherent theoretical explanations at a number of levels, explanation of concrete phenomena by causal and other sets of propositions),⁷² do not provide any effective solution to the problem. For instance, two paradigmatic theories, the neo-classical and the Marxist theories of value, can perfectly satisfy all the above criteria, without - in the absence of experimental activity - providing any solution to the problem of choosing between them.

The inescapable conclusion is that the problem of choosing among incommensurable theories in the social sciences and — by implication — the problem of scientifying or objectivizing the liberatory project, have not been solved by realist philosophers either.⁷³

Dialectical naturalism: an objective ethics?

However, if the project for a future society cannot be justified on the basis of a teleological conception, either a teleological view of social evolution (as Marxists attempted to do) or a teleological view of natural evolution (as some deep ecologists suggest today),⁷⁴ the question remains whether such a project may be justified on the basis of a non-teleological view of natural and social evolution, which, however, is objectively rational. This is the case of Murray Bookchin's⁷⁵ dialectical naturalism, which, although it assumes a directionality towards a democratic ecological society - a society that may never be actualized because of 'fortuitous events' — is an explicitly non-teleological conception. Thus, as Bookchin stresses:

*Dialectical naturalism does not terminate in a Hegelian Absolute at the end of a cosmic developmental path, but rather advances the vision of an ever-increasing wholeness, fullness, and richness of differentiation and subjectivity.*⁷⁶

The attempt to establish a directionality towards an ecological society depends on two crucial hypotheses:

- (a) That there is a directionality in natural change, which yields a clearly

discernible evolutionary development towards more complex forms of life, greater subjectivity and self-awareness, growing mutuality, i.e. a development towards an 'ever-greater differentiation or wholeness insofar as potentiality is realized in its full actuality'.⁷⁷ Thus, Bookchin, differentiating his process of 'participatory evolution' from the prevalent neo-Darwinian synthesis, sees 'a natural *tendency* toward greater complexity and subjectivity in first (biological) nature, arising from the very interactivity of matter, indeed a *nisus* toward self-consciousness'.⁷⁸

- (b) That there is a graded evolutionary continuum between our first nature and our second (social and cultural nature, so that 'every social evolution is virtually an extension of natural evolution into a distinctly human realm'.⁷⁹ Although, of course, it is explicitly acknowledged that social evolution is profoundly different from organic evolution, still, social change is characterized by a process of progress, defined as 'the self-directive activity of History and Civilization towards increasing rationality, freedom'.⁸⁰ Thus, 'second nature', namely, the evolution of society, 'develops both in continuity with first nature and as its antithesis, until the two are sublated into "free nature", or "nature" rendered self-conscious, in a rational and ecological society'.⁸¹

Let us therefore assess in more detail these two hypotheses. As regards, first, the hypothesis about the existence of a rational process of natural evolution, Castoriadis points out that although the fact of evolution itself is incontestable, biologists have never developed a *genuine* theory of evolution, which means that the neo-Darwinian synthesis is in fact a theory of species differentiation, not of the evolution of species, and that therefore nothing in this theoretical scheme implies that differentiation occurs in the direction of increasing complexity.⁸² However, one may counter-argue here that the results of recent biological research support the hypothesis of increasing complexity. Thus, modern developments in biophysics, in terms of the self-organization theory, introduce into biology a type of 'law of increasing complexity' which is consistent with dialectical naturalism.⁸³

But, although the hypothesis about a rational process of natural evolution is not groundless, the hypothesis about the existence of a rational process of social evolution is, to my mind, both undesirable and untenable. It is undesirable, not only because it creates unintentional links with heteronomy, but also because it may easily lead to inadvertent affinities with intrinsically anti-democratic eco-philosophies. And it is untenable because history does not justify the existence of progress towards a free society, in the sense of a form of social organization which secures the

highest degree of individual and social autonomy at the political, the economic and the social levels, what we defined in Chapter 5 as an inclusive democracy.

Thus, as regards, first, the undesirability of the social directionality hypothesis, one may point out that the postulate according to which there is a 'rational' order in the world and a corresponding order of human affairs linked to the order of the world not only is essentially linked to heteronomy (because it conceals the fundamental fact that history is creation), but also conceals or eliminates the question of responsibility.⁸⁴ Therefore, unless we underplay the significance of the imaginary element in human history, as Marxists do, we have to conclude that it is impossible to establish any sort of social evolution towards a particular form of society:

History does not happen to society: history is the self-deployment of society. By this affirmation, we contradict the entire spectrum of existing tenets: history as the product of the will of God; history as the result of the action of ('natural' or 'historical') laws; history as a 'subjectless process'; history as a purely random process . . . we posit history in itself as 'creation and destruction'.⁸⁵

Furthermore, the attempt to establish a directionality in society might easily create undesirable affinities with deep ecology. Although such affinities are utterly repugnant to social ecologists, still, they are implicit in the fact that both deep ecologists and social ecologists adopt a process of evolutionary unfolding and self-realization and ground their ethics in scientific observations about the natural world, in natural 'tendencies' or directionalities. This fact could go a long way to explain the various hybridized approaches developing at the moment among John Clark, an ex-social ecologist whose anti-democratic views we considered in Chapter 5, Peter Marshall⁸⁶ and others. The inevitable outcome of such affinities is that the debate on what form of society meets the demands for autonomy and ecological balance becomes not a matter of conscious choice, but a matter of interpretation of what natural change really means with respect to society. However, as it is not possible to establish any 'authentic' interpretation about the meaning of natural change, we may easily end up not just with liberatory interpretations, like the ones offered by social ecology, but also with interpretations which are consistent with any form of heteronomy and repression, from eco-fascism to mysticism and irrationalism.

Second, as regards the untenability of the social directionality hypothesis it should be made clear that society is not 'alien' to a self-organizing Nature and that Bookchin's contribution in demolishing the nature-society dualism is of paramount importance. But, although one may have no

reservations in adopting the hypothesis that self-consciousness and self-reflection have their own history in the natural world and are not *sui generis*, 'the product of a rupture with the whole of development so unprecedented and unique that it contradicts the gradedness of all phenomena',⁸⁷ still, it would be a big jump to adopt a similar hypothesis about progress towards a free society. In other words, even if one accepts the hypothesis that self-consciousness and self-reflection, in very broad terms, are part of a dialectical unfolding in Nature and do not just represent a rupture with the past, this does not imply that there is a similar dialectical unfolding towards a free society, i.e., an inclusive democracy. Such a view is incompatible with historical evidence which clearly shows that the historical attempts at a free society have always been the result of a rupture with the instituted heteronomy which has been dominant in the past, rather than a sort of processual 'product'.

The fact that societies, almost always and everywhere, have lived in a state of *instituted heteronomy* (namely a state of non-questioning of existing laws, traditions and beliefs that guarantee the concentration of political and economic power in the hands of elites), with no trace of an 'evolution' towards democratic forms of organization securing individual and social autonomy, clearly vitiates any hypothesis of a directionality towards a free society. In fact, if there is any continuity in history, it is a continuity in heteronomy interrupted by usually sudden and temporary leaps into 'autonomous' forms of organization. Thus, an autonomous form of political organization (direct democracy) has always been the rare exception and even rarer have been the cases of autonomous forms of economic and social organization (economic democracy and 'democracy in the social realm'). It is only, therefore, with respect to social change in a broad sense, which includes the accumulation of scientific and technological knowledge, as well as improvements with respect to gender relations, human rights, etc., that we may perhaps speak of some sort of progress. However, these changes in no way justify the hypothesis of a directionality towards a free society, an inclusive democracy.

Thus, as regards scientific and technological change, few would argue today, particularly after the experience of this century, that there is some sort of correlation between progress in these fields and the degree of autonomy achieved in society at the political and economic levels. Furthermore, several writers have noted the increasing vulnerability of the human species because of the worldwide reliance on the same technology and the fact that increasing technological complexity is accompanied by an increasing lack of flexibility and adaptive capacity.⁸⁸ However, if one accepts the non-neutrality of technology thesis,⁸⁹ one may counter-argue here that the homogenization of technology is not an 'independent

variable' but just the inevitable outcome of the marketization of the economy.

As regards the alleged improvements in gender, race, ethnic relations, human rights in general, they hardly justify the hypothesis of directionality towards a free society, in the sense of an inclusive democracy. The improvements in social relations and structures have not been matched by a corresponding progress in political and economic relations and structures towards political and economic democracy. The widening and deepening of women's rights, minorities' rights, etc., may have improved the social position of the members of the respective communities. But, from the democratic viewpoint, this process simply has led to the expansion of the ruling political and economic elites to include representatives of these communities. Furthermore, these improvements do not imply any significant changes with respect to democracy in the workplace, the education place, etc. Even as regards the human rights record one may raise serious doubts about the progress achieved. Torture, for instance, after tapering off with the Enlightenment in Europe in the seventeenth century to the extent that it had almost disappeared, came back with a vengeance this century. According to a very recent report, torture practised by governments around the world increased dramatically this century, especially in Europe, to the extent that the twentieth century may become known as 'the torturer's century'.⁹⁰

At the cultural level, as Polanyi⁹¹ has persuasively shown, the establishment of the market economy implied sweeping aside traditional cultures and values. This process, as we have seen in Chapter 3, was accelerated in the twentieth century with the spreading of the market economy and the implied growth economy all over the world and the inevitable elimination of all cultures not based on the system of the market economy. As a result, today, there is an intensive process of cultural homogenization at work, which not only rules out any directionality towards more complexity, but in effect is making culture simpler, with cities becoming more and more alike, people all over the world listening to the same music, watching the same soap operas on TV, buying the same brands of consumer goods, etc.

Finally, as regards ethical progress, i.e. the evolution towards moral 'improvement' (in terms of mutuality, solidarity, etc.), it is indicative that even social democrats like Habermas and Bobbio, who have an obvious vested political interest in the idea of progress and social evolution, do admit that it is not possible to assert the existence of ethical progress, despite the acknowledged rapid technological progress of the last 100 years or so. Thus, Habermas, countering the pessimism of the Frankfurt School about progress, argues that the error in the Marxist and other optimistic

theories of social evolution lies in the presumption that progress on the system's level (which attends to the material reproduction of society) would automatically entail an improvement on the level of moral-practical conscience.⁹² So, one may argue that the unmistakable trend, at least in the past two to three centuries, has been for growing selfishness and growing competition, rather than for enhanced mutuality and solidarity. Similarly, it is at least doubtful whether there has been an ethical progress in terms of environmental values.⁹³

But let us look in more detail at the historical appearance of the autonomy tradition and assess the case of evolution towards a free society. Following Castoriadis's⁹⁴ periodization, the autonomy project emerged in classical Athens, where, for the first time in human history, the institution of society was questioned both at the institutional and the imaginary level. This was in contrast to the state of heteronomy, which characterized all societies up to then and almost all societies since then, where 'a society, despite the fact that it is always a self-creation which creates its own institutions, still, in order to protect these institutions it imagines and legislates that they are not a human creation but an extra-social creation: a creation of God, or of the laws of Nature, History or Reason, which therefore we can not change'.⁹⁵ The autonomy project, which reached its peak in classical Athens, was eclipsed for almost 15 centuries, a period during which heteronomy was dominant.

The autonomy project reappeared again in the twelfth century AD, in the medieval free cities of Europe, but soon came into conflict with the new statist forms of heteronomy which, in the end, destroyed the attempts at local self-government and federalism.⁹⁶ In the period 1750-1950, a fierce political, social and ideological conflict developed between the two traditions. The heteronomy tradition is expressed by the spreading of the market economy and of new social forms of hierarchical organization. These forms embodied a new 'social imaginary signification' (adopted by the socialist movement): the boundless spreading of 'rational domination', which identifies progress with the development of productive forces and the idea of dominating Nature. During the same period, the autonomy project, under the influence of the Enlightenment's ideas, was radicalized at the intellectual, social and political levels (e.g. Parisian Sections of the early 1790s, collectives in the Spanish Civil War, etc.)

Finally, in the present era (1950 onwards), both traditions have entered a period of serious crisis. Thus, although the spreading of the market economy's rational domination is accelerating, the system itself is in a deep crisis, a crisis not in the Marxist sense of the capitalist relations of production hindering the further development of forces of production, but in the sense, as we have seen in previous chapters, first, of the market

economy's dismal failure to create a successful growth economy in the South (where the vast majority of the earth's population lives); and second, of the growing ecological destruction that not only degrades the quality of life but threatens life itself on the planet. Paradoxically, at the same time, the autonomy tradition, after its brief explosion in the late 1960s, is also in a state of 'total eclipse', a fact illustrated by the lack of social, political and ideological conflicts.

The issue that arises therefore is whether changes in the historical forms of social organization reveal some kind of directionality towards a free society, which would represent the graded actualization of unfolding human potentialities (in the dialectical sense of the word) for freedom (as dialectical naturalism maintains), or whether, instead, they do not reveal any form of directionality, since the form society takes each time just represents social creations conditioned (but not determined) by time and space constraints, as well as by institutional and cultural factors. The former view sees history as a process of progress, the unfolding of reason, and assumes that there is an evolution going on towards autonomous or democratic forms of political, economic and social organization, a view which, to my mind, is not supported by history. The latter view sees the autonomous society as a rupture, a break in the historical continuity that the heteronomous society has historically established.

Of course, 'autonomy/heteronomy' is not an ironclad distinction. Autonomous and heteronomous forms of social organization historically interact with each other, and elements of both may coexist within the boundaries of the same society. For instance, as we have seen in Chapter 5, the Athenian democracy was a form of society that embodied strong elements of autonomy (direct democracy — as regards free citizens) and heteronomy (economic inequality, gender inequality, slavery — as regards the rest). Furthermore, in today's sophisticated heteronomous societies, there are several elements of autonomy, remnants, usually, of past conflicts between the autonomy and the heteronomy tradition. Taking, therefore, for granted the interaction between autonomy and heteronomy, in other words, explicitly assuming that the two traditions change themselves and, to some extent, each other over time, the real issues are, first, whether the two traditions are qualitatively different and, second, assuming they are, whether any evolutionary pattern may be established towards the autonomous form of social organization.

As regards the first question, I think few would disagree with the thesis that autonomy and heteronomy are not just quantitatively but qualitatively different. Historically, the autonomy and heteronomy traditions are expressed in various forms of social organization: the former in the form of the Athenian democracy, the Swiss cantons, the French revolutionary

sections, to mention just a few examples; and the latter, in the form of absolute monarchies, constitutional monarchies, parliamentary 'democracies' and state socialism. The common characteristic of autonomous forms of social organization is that they are all based on the fundamental principle of the equality in the distribution of power, whereas the opposite is true for all heteronomous forms. It is therefore obvious that the differences between the various types of heteronomous (as well as types of autonomous) forms of social organization are quantitative, whereas the differences between the autonomous and heteronomous forms themselves are qualitative. Autonomy and heteronomy are two fundamentally different traditions expressing completely different 'paradigms' about social living; they are incommensurable. The question therefore here is whether, as the famous Hegelian 'law' maintains, quantitative differences beyond a certain point are transformed into qualitative changes, or whether, instead, there is no possibility of establishing any sort of evolutionary process between the autonomy and the heteronomy traditions.

This brings us to the second question I raised above. According to dialectical naturalism, 'between [autonomy and heteronomy] is a dialectic that has to be unravelled in all its complexity, involving interrelationships as well as antagonisms',⁹⁷ whereas, according to the view presented here, despite the development *within* each tradition and the possible interaction, still, no development *between* them may be established. For instance, one may support the case that although constitutional monarchy did express a more sophisticated form of heteronomy than absolute monarchy and, by the same token, parliamentary 'democracy' does represent the most sophisticated form of oligarchy in history, still, the differences between the political regimes involved refer to the size and the composition of the ruling elites, not to the fundamental distinction itself between ruling elites and the rest of the population - a distinction that excludes the vast majority of the population from any effective political decision-taking. Similarly, the Parisian Sections of the early 1790s,⁹⁸ where women had an equal share in the distribution of political power, did express a more complete form of democracy than the Athenian assemblies. Finally, the Spanish collectives in the Civil War,⁹⁹ which contained a significant element of economic democracy, did express a more complete form of autonomy than both the Athenian and the Parisian assemblies.

Also, although it is recognized that the break with the heteronomy tradition takes place in a specific time and place and that therefore history, tradition, and culture certainly condition the form that society takes, institutional and historical factors never determine when and where this break will take place, or even the specific form the autonomous organization of society will take. An autonomous form of social organization has

always been a *creation* expressing a break with past development. The rare historical cases of relatively free forms of social organization came about as a result of the fact that at certain historical moments, for reasons that only partly refer to the concrete historical circumstances, social imaginary significations expressing the autonomy project had become hegemonic and led to a rupture of the dominant social paradigm of heteronomy.¹⁰⁰ That such ruptures do not fit in any unfolding dialectical pattern of history, and cannot even be considered as 'reactions' to heteronomous forms of organization, becomes obvious by the fact that repeatedly in history similar, if not identical, institutional and historical circumstances led to very different forms of social organization. As a rule, they led to heteronomous forms of social organization and only very exceptionally to attempts at autonomy.

The classical Athenian democracy is a characteristic example. There is no doubt that the movement from tribal blood ties to civic ties represents a form of development. The question is whether this development is a development within the heteronomous tradition or, alternatively, one between the two traditions. I would argue that although elements of autonomous organization may be found in tribal societies (e.g. tribal assemblies), still, the movement from tribes to cities represents a development predominantly *within* the heteronomous form of social organization and only in one exceptional case (Athenian democracy) towards a new form of autonomous organization. This fact, in turn, illustrates the significance of the imaginary or creative element in history, rather than of any kind of an evolutionary pattern in political organization. As Castoriadis puts it:

Democracy and philosophy are not the outcome of natural or spontaneous tendencies of society and history. They are themselves creations and they entail a radical break with the previously instituted state of affairs. Both are aspects of the project of autonomy . . . the Greeks [discovered] in the sixth and fifth centuries that institutions and representations belong to nomos and not to physis, that they are human creations and not 'God-given' or 'nature-given'.¹⁰¹

A view of history based on an evolutionary pattern could not explain why a similar movement from tribes to cities in many parts of the world, even in classical Greece itself, has led on the one hand to the classical Athenian democracy and on the other to a variety of oligarchic, if not despotic, forms of political organization. Of course, few would deny that specific 'objective' factors (geography, climate, etc.) may have played a significant, but never a decisive, role on each historical occasion. What is disputable is whether there has been a long-term pattern of social evolu-

tion that led to classical Athenian democracy - an experiment that, in its full democratic form, was not repeated elsewhere at the time and which re-emerged hundreds of years later.

Parliamentary 'democracy' is another example. As we have seen in Chapter 5, parliamentary democracy is not a form of political democracy; as it has developed in the West, it may better be described as a form of liberal oligarchy. Furthermore, parliamentary democracy can in no way be seen as a stage in the development of democracy. This is obvious not only from the fact that direct democracy historically preceded parliamentary 'democracy' but also because, as the experience of the past two centuries or so has shown, parliamentary democracy, if it evolves into something, evolves into a further concentration of political power in the hands of professional politicians' elites, at national or supra-national levels. Social development, in terms of political organization, is not 'cumulative', i.e. one leading from various forms of 'democracy' which reflect quantitative differences (constitutional monarchy, parliamentary democracy, etc.), towards direct democracy - which is clearly a qualitative change.

By the same token, the market economy is neither a relative (even a poor one) to economic democracy, nor does it constitute a kind of stage in the development of economic democracy. Instead, as I tried to show in Chapter 1, today's market economy represents a definite step backwards in comparison to the socially controlled economies of the medieval free cities. Furthermore, if the market economy evolves into something it evolves towards further concentration of economic power, and there is no prospect whatsoever that a market economy will ever lead, through cumulative quantitative changes, to the qualitative change of economic democracy.

Finally, the various attempts at 'democracy in the social realm', particularly workplace democracy (workers' councils, Soviets), and for democracy in educational institutions have always been associated with historical 'moments' of insurrection and as soon as 'order' has been restored, either by the institutionalization of a 'revolutionary' new regime of heteronomy (e.g., the Soviet Union) or the continuation of the old one, the democratic forms have been replaced by forms of pseudo-democracy at the workplace, the university, etc.

So, it is not possible to derive any sort of evolutionary process towards a free society, what we called an inclusive democracy. The historical attempts to establish autonomous forms of political, social and economic democracy, although, of course, they did not appear *ab novo*, cannot be fitted into any grand evolutionary process. This is clearly indicated by the fact that such attempts took place in specific times and places and as a break with past development, rather than in several societies at the same stage of

development and as a continuation of it. Therefore, although the ideals of freedom may have expanded over time, the last 25 years or so notwithstanding, this expansion has not been matched by a corresponding evolution towards an autonomous society, in the sense of greater participation of citizens in decision-taking. In fact, the undermining of communities, which was intensified by the emergence of the market economy 200 years ago and has been accelerated by the development of the present internationalized market economy, as well as the growing privacy and self-interest of individuals encouraged by the consumer society, are clear indications of a trend towards more heteronomous forms of society rather than the other way round. Therefore, if we accept the view that I tried to develop in Chapter 1, i.e. that the present internationalized market economy marks a new, higher phase in the marketization process, then all the signs are that we have entered a new period where the '40 per cent' societies of the North will be based on sophisticated forms of heteronomy, whereas the miserable societies of the South will rely on various forms of brutal authoritarianism.

So, one may assume that if inclusive democracy ever replaces the present heteronomous forms of political and economic organization, this will represent not the actualization of unfolding potentialities for freedom but simply the conscious choice among two social possibilities, which schematically may be described as the possibility for autonomy versus the possibility for heteronomy. In other words, to my mind, the dialectical idea of unfolding objective potentialities, i.e. of real latent possibilities which may (or may not) be actualized, is not applicable at all in the case of social change. To talk about any particular being that, in developing itself, actualizes what at first was only a latent possibility and in this way attains its own truth, we have to assume that there is a specific possibility in the first place and not a choice of different possibilities. Therefore, whereas it is true that an acorn has the potentiality to become an oak tree and a human embryo to become a fully mature and creative adult, we cannot extend the analogy to human society and assume that the potentiality of society to become free 'is equivalent'¹⁰² to these natural potentialities. The obvious difference between the potentialities of acorns and human embryos to become oak trees and adults, respectively, and those of society to become free is that the former represent single possibilities whereas the latter is just one possibility out of two broad possibilities: for autonomy or heteronomy. In other words, if we take into account that 'the very history of the Greco-Western world can be viewed as the history of the struggle between autonomy and heteronomy',¹⁰³ it is obvious that the heteronomous forms of society which have dominated history cannot just be considered as 'fortuitous events', similar to those that may not allow an

acorn to become an oak tree. So, to assume that the possibility for autonomy is an unfolding and therefore rational *potentiality* (in the dialectical sense of the word) and conversely to assume away the possibility for heteronomy as just a *capacity* for irrationality¹⁰⁴ may easily be seen as a deliberate objectivization of one possibility at the expense of the other, in order to conceal our choice for the autonomy tradition under the cover of dialectical 'objectivity'.

From this viewpoint, one may have serious reservations with respect to the classical Marxist and anarchist views adopting the idea of dialectical progress in history. Thus, it should not be forgotten that the adoption of the idea of progress implies also the endorsement of such conclusions as the Marxist one about the 'progressive' role of colonialism,¹⁰⁵ or the corresponding anarchist one that the state is a 'socially necessary evil'.¹⁰⁶ However, if we adopt the view that there is no unilinear or dialectical process of progress nor a corresponding evolutionary process towards forms of social organization grounded on autonomy and we assume, instead, that the historical attempts at democracy represent a break with the past, then, forms of social organization like colonialism and the state can be seen as just 'social evils', with nothing 'necessary' about them, either as regards their emergence in the past, or the form that social change has taken since, or will take in the future.

One might conclude therefore that the logic of society's development does not show that it is constituted to become autonomous, in the sense of the actualization of a latent potentiality for freedom. But, if the hypothesis of directionality in social change and of a rational historical process is untenable, then the question arises whether it is still possible to develop an 'objective' ethics which assesses forms of social organization as 'good' or 'bad' on the basis of the degree according to which they represent the actualization of the latent potentialities for freedom. The obvious criticism, which is implied by the above analysis, is that any attempt to develop an objective ethics based on the assumption of a process of social evolution is little more than an effort to mask a conscious choice among the autonomy and the heteronomy tradition, the democratic and the non-democratic society.

Therefore, although Murray Bookchin is, of course, right in insisting that in developing a democratic ethics we should adopt a non-hierarchical interpretation of nature,¹⁰⁷ it should not be forgotten that this is just one possible form of interpretation of Nature that we consciously have *chosen* because it is compatible with our choice for autonomy in the first place. This is obviously very different from assuming that a non-hierarchical interpretation of nature is an 'objective' one and that, as a consequence, a democratic society will be the product of a cumulative development, a

rational process of realization of the potentiality for freedom. To my mind, social ecology's attempt to develop an objective ethics not only undermines its democratic credentials but also gives an easy target to statist and irrationalists of various sorts, as is indicated by the fact that most attacks against social ecology focus on its philosophy.¹⁰⁸

A democratic society will simply be a social creation, which can only be grounded on our own conscious selection of those forms of social organization which are conducive to individual and social autonomy. An important side effect of this approach is that it avoids falling into the trap of grounding the free society on 'certain' truths at the very moment when most certainties, not only in social sciences but even in natural sciences, are collapsing.

However, the fact that a democratic society represents a conscious choice does not mean that this is just an arbitrary choice. This is clearly implied by the very fact that the autonomy project turns up in history again and again, particularly in periods of crisis of the heteronomous society. Furthermore, the fact that heteronomous society has been the dominant form of social organization in the past is not indicative of its intrinsic superiority over an autonomous society. Heteronomous societies have always been created and maintained by privileged elites, which aimed at the institutionalization of inequality in the distribution of power, through violence (military, economic) and/or indirect forms of control (religion, ideology, mass media).

Finally, the grounding of a free society on a conscious choice does not deprive us of an ethical criterion with which to assess the various forms of social organization. In fact, the degree to which a form of social organization secures an equal distribution of political, economic and social power is a powerful criterion with which to assess it. But this is a criterion chosen by us and not implied by some sort of evolutionary process. In other words, it is a criterion which is consistent with the view that I will develop in the next section, that the project for a democratic society can neither be grounded on scientism and objectivism nor on utopianism and irrationalism.

Beyond 'objectivism', irrationalism and relativism

The conclusions one can derive from the above analysis may be classified as follows:

- (a) Paradigms about social reality on which a liberatory project can be founded may be incommensurable in the Kuhnian sense. In particular, to the extent that the formulation of such paradigms is crucially related to the question of whether the present social system should be

taken for granted or not, incommensurability between them is inevitable. The incommensurability, for instance, between the orthodox and the Marxist paradigms on the mode of operation of the market economy, or between social ecology and deep ecology on the causes of the ecological crisis,¹⁰⁹ is an absolute one, in the sense that it implies deep differences, not just in world views, but also in the criteria/methods for assessing theories. As Feyerabend points out:

*Scientific theories ... use different (and occasionally incommensurable) concepts and evaluate events in different ways. What counts as evidence, or as an important result, or as 'sound scientific procedure' depends on attitudes and judgements that change with time, professions and occasionally even from one research group to the next.*¹¹⁰

- (b) In case of incommensurability, there are no objective criteria with which to choose among competing paradigms, a fact which implies that the only way to switch from one 'way of seeing things' to another is through a process of conversion rather than through a process of producing extra evidence, rational argument, etc., which are paradigm-dependent methods of establishing the 'truth' of a theory.

However, it is not only the objectivity of the liberatory project that is, at least, doubtful. The desirability of grounding it on an objective basis is also under question. The essence of democracy, as we have seen in Chapter 5, is not just its institutions but the fact that it is a constant *process* of debating and deciding institutions and traditions.¹¹¹ In this sense, one could argue that to the extent that the socialist project is 'scientified' it becomes part of the heteronomy tradition. A clear illustration of this process is the case of 'existing socialism'. It was exactly the Marxist conversion of the socialist project into an 'objective' science that contributed significantly to the establishment of new hierarchical structures, initially in the socialist movement and, later, in society at large. The basis of the new hierarchical structures was the social division created between, on the one hand, the avant-garde, that was alone in an objective position to lead the movement (because of its knowledge of the scientific truth that Marxism embodied) and, on the other, the 'masses'. Thus, it is a well-known historical fact that in the pre-revolutionary Marxist movements, as well as in the post-revolutionary governments, the justification of the concentration of power in the hands of the party elite was based on the 'fact' that they alone 'knew' how to interpret history and take appropriate action in order to accelerate the historical process towards socialism. As Marcuse pointed out, 'A straight road seems to lead from Lenin's "consciousness from without" and his notion of the centralized authoritarian

party to Stalinism'.¹¹² This is so, not only because, according to Lenin, workers are not able, on their own, to develop a scientific theory of socialism, a task which historically has been left to the intellectuals,¹¹³ but also because the custodians of the scientific orthodoxy, 'the party, or rather the party leadership, appears as the historical repository of the "true" interests of the proletariat and above the proletariat'.¹¹⁴

Similarly, in the case of capitalist societies, it is the mystification of the 'expert' that allows technocrats to present their 'solutions' to economic or social problems as if based on an 'objective' theory founded on 'scientific' premises. In fact, their theory is very much based on assumptions that presuppose the existing status quo of the market economy system and all that this implies in terms of inequality in the distribution of resources, income and wealth. Thus, the separation of society from the state and the economy has converted politics and the running of the economy into an 'art' and a 'science', respectively, where 'experts' (professional politicians, economists, etc.) play a crucial role in decision-taking. In contrast, a basic principle on which the Athenian democracy (where there was no separation of society from the state) was founded was that in politics there is no science but only the citizens' opinion. Thus, as Castoriadis stresses, it was the ancient Greeks who introduced the idea that

on political affairs there is no science, in other words a systematic knowledge based on evidence, specialized training, etc., but doxa, i.e. the opinion of men, which should of course be trained as well, and which improves by experience, but which is not science."¹¹⁵

What is the foundation of freedom and democracy?

Although, as I pointed out in Chapter 5, the connection between freedom/autonomy on the one hand and democracy on the other can be taken for granted, the question still remains about the foundations of democracy, indeed freedom itself. Traditionally, most libertarians, from Godwin to Bakunin and Kropotkin, based their ethics and politics, freedom itself, on a fixed human nature governed by 'necessary and universal laws', by which — in contrast to Marxists who emphasized economic 'laws' — they usually meant natural laws. This reflected the same nineteenth-century incentive which led Marx to develop his 'scientific' economic laws, namely, the incentive to make the liberatory project look 'scientific' or, at least, 'objective'. However, this approach is not tenable any more, since it is not possible today to continue talking about objectivity, at least as far as the interpretation of social phenomena is concerned.

It is not therefore accidental that some libertarians today (Benello, Brown, Marshall *et al.*) question the traditional grounding of freedom on a

fixed human nature, or on 'scientific' laws and 'objective' tendencies. However, several of those libertarians usually link this questioning with liberal individualistic assumptions about society. I think that such linking is anything but necessary. If we adopt a definition of freedom in terms of individual and collective autonomy, as we did in Chapter 5, then it is possible to avoid the trap of objectivism without succumbing to liberal individualism.

Furthermore, by defining freedom in terms of autonomy it is possible to see democracy not just as a *structure* institutionalizing the equal sharing of power, but, also, as a *process of social self-institution*, in the context of which politics constitutes an expression of both collective and individual autonomy. Thus, as an expression of collective autonomy, politics takes the form of calling into question the existing institutions and of changing them through deliberate collective action. Also, as an expression of individual autonomy, 'The polis secures more than human survival. Politics makes possible man's development as a creature capable of genuine autonomy, freedom and excellence.'¹¹⁶ This is important if we take particularly into account the fact that a common error in libertarian discussions on democracy is to characterize various types of past societies, or communities, as democracies, just because they involved democratic forms of decision-taking (popular assemblies) or economic equality.

Democracy, as a process of social self-institution, implies a society which is open ideologically, namely, which is not grounded on any closed system of beliefs, dogmas or ideas. 'Democracy', as Castoriadis puts it, 'is the project of breaking the closure at the collective level.'¹¹⁷ Therefore, in a democratic society, dogmas and closed systems of ideas cannot constitute parts of the dominant social paradigm, although, of course, individuals can have whatever beliefs they wish, as long as they are committed to uphold the democratic principle, namely the principle according to which society is autonomous, institutionalized as inclusive democracy.

It is indicative that even in classical Athens, 2500 years ago, a clear distinction was made between religion and democracy. As Hansen points out, 'there is no doubt that religion figured prominently in the life of a Greek *polis* just as in an Italian *citta* or a German *Reichsstadt*, but in none of them did the state have its root or centre in religion'.¹¹⁸ Similarly, Castoriadis stresses that all the laws approved by the *ecclesia* started with the clause 'εδοξε τη Βουλή και τω Δημῳ' (i.e. this is the opinion of the *Demos*), with no reference to God. This is in sharp contrast to the Judeo-Christian tradition, where, as the same author points out, the source of the laws in the Old Testament is divine: Jehovah gives the laws to Moses.¹¹⁹ So, although Bookchin is right in stating that 'the city's festivals intermingled secular with religious themes, just as trade fairs in Mayan city-

states accompanied religious fairs',¹²⁰ it is important not to forget the fact, which Hannah Arendt stressed (quoting Herodotus), that whereas in other religions God is transcendent, beyond time and life and the universe, the Greek gods are *anthropophyeis*, i.e. they have the same nature, not simply the same shape, as man.¹²¹

So, the democratic principle is not grounded on any divine, natural or social 'laws' or tendencies, but in our own conscious and self-reflective choice between the two main historical traditions: the tradition of heteronomy which has been historically dominant, and the tradition of autonomy. The choice of autonomy implies that the institution of society is not based on any kind of irrationalism (faith in God, mystical beliefs, etc.), as well as on 'objective truths' about social evolution grounded on social or natural 'laws'. This is so because any system of religious or mystical beliefs (as well as any closed system of ideas), by definition, excludes the questioning of some fundamental beliefs or ideas and, therefore, is incompatible with citizens setting their own laws. In fact, the principle of 'non-questioning' some fundamental beliefs is common in every religion or set of metaphysical and mystical beliefs, from Christianity to Taoism. Thus, as far as Christianity is concerned, it is rightly pointed out that 'Jesus' ethics are theologically based: they are not autonomous, i.e. derived from the needs of human individuals or society'.¹²² Similarly, Taoism (adored by some anarchists today!) also explicitly condemns reasoning and argumentation ('Disputation is a proof of not seeing clearly' declares Chuang Tzu).¹²³

Therefore, the fundamental element of autonomy is the creation of our own truth, something that social individuals can only achieve through direct democracy, that is, the process through which they continually question any institution, tradition or 'truth'. In a democracy, there are simply no given truths. The practice of individual and collective autonomy presupposes autonomy in thought, in other words, the constant questioning of institutions and truths. This could also explain why in classical Greece it was not just democracy that flourished, but, also, philosophy, in the sense of questioning any 'truths' given by custom, tradition or previous thought. In fact, questioning was the common root of both philosophy and democracy. While popular assemblies, as a form of decision-taking, existed both before and after the Athenian *ecclesia* (usually having their roots in tribal assemblies), still, the differentiating characteristic of the Athenian *ecclesia* is the fact that it was not grounded on religion or tradition but on citizens' *doxa* (opinion).

From this point of view, the practice of several modern libertarians of characterizing some European Christian movements or Eastern mystery religions as democratic is obviously out of place. For instance, George

Woodcock's references to 'mystery religions that emerged from the East', or to the Christian Catharist movement of the eleventh century are completely irrelevant to the democratic tradition.¹²⁴ Similarly out of place is Peter Marshall's focusing on those philosophical currents which emphasized natural law (Cynics, Stoics, etc.) and his understating of the significance of the *polis* as a form of social self-instituting and equal sharing of power among citizens.¹²⁵ No wonder that the same author, as well as many anarchists today, stress the significance of mysticist and spiritualist 'philosophical' currents of the East (Taoism, Buddhism, etc.). But these currents, as Bookchin, Castoriadis and others have stressed, have nothing to do with democracy and collective freedom, let alone philosophy, which always consisted in the questioning of any type of law (natural or man-made) rather than in interpreting the teachings of the masters. No wonder, also, that in the non-democratic societies of the East, where the spiritualist philosophies have flourished, the attachment to tradition meant that 'new ideas were often offered as the rediscovery, or the correct interpretation, of earlier lore . . . the focus was on how to perfect a given system, not how to justify any system by the pure dictates of reason'.¹²⁶

But, if it is neither feasible nor desirable to ground the demand for democracy on 'scientific' or 'objective' 'laws' or 'tendencies' which direct social 'evolution' towards the fulfilment of objective potentialities, then this demand can only be founded on a liberatory *project*. Such a liberatory project today can only constitute a synthesis of the democratic, the socialist, the libertarian and radical Green and feminist traditions. In other words, it can only be a project for an inclusive democracy, in the sense of political, economic, 'social' and ecological democracy.

Still, the fact that the project of autonomy is not objectively grounded does not mean that 'anything goes' and that it is therefore impossible to derive any definable body of principles to assess social and political changes, or to develop a set of ethical values to assess human behaviour. Reason is still necessary in a process of deriving the principles and values which are consistent with the project of autonomy and, in this sense, are rational. Therefore, the principles and values derived within such a process do not just express personal tastes and desires and in fact, they are much more 'objective' than the principles and values that are derived from disputable interpretations of natural and social evolution. The logical consistency of the former with the project of autonomy could be assessed in an indisputable way, unlike the contestable 'objectivity' of the latter.

Neither 'scientism' nor 'utopianism'

The fact that the liberatory project cannot be 'scientified' or 'objectivized' does not mean that it is just a Utopia (or, in its ecological version, an eco-

topia) in the negative sense of the word. A liberatory project is not a utopia if it is based on today's reality. And today's reality is summed up by an unprecedented crisis of the 'growth economy', a crisis which engulfs all societal realms (political, economic, social, cultural) as well as the Society-Nature relationship. Furthermore, a liberatory project is not a utopia, if it expresses the discontent of significant social sectors and their, explicit or implicit, contesting of existing society. Today, the main political, economic and social institutions on which the present concentration of power is founded are increasingly contested. Thus, not only are basic political institutions contested in various ways, as we have seen in Chapter 4, but also fundamental economic institutions, like private property, are challenged in a massive way. The explosion of crime against property in the last quarter of a century (in Britain, for instance, burglary has increased by 160 per cent and theft from vehicles by nearly 200 per cent since 1979),¹²⁷ despite the drastic enhancement of private and public security, is not just a cultural or temporary phenomenon. It should be seen, instead, as a long-term trend reflecting the creation of massive unemployment and the massive abuse of drugs (which are also systemic phenomena) as well as the growing discontent with the rising inequality in the distribution of income and wealth — an inequality which, within the context of the present consumer society, becomes unbearable.

The rejection of the view which sees the liberatory project as a 'scientific' project, or, alternatively, as a utopia, has very important implications, as far as political organization is concerned. First, it rules out the traditional form of hierarchical radical organization ('those who know' and therefore have an automatic right to lead, and those who do not). Second, it rules out the various lifestyle strategies which explicitly exclude direct involvement in the political process. In this context, a useful distinction could be drawn between, on the one hand, a scientific *project* and a *programme* and, on the other, between *politics* and *technique*.

As far as the programme is concerned, it is obvious that although we do need a programme, in the sense of a 'provisional and fragmentary concretization of the projects' goals',¹²⁸ we definitely do not need, for the reasons stated above, a 'scientific' project. Supporters of 'scientific' projects in politics (as well as 'eco-topians') are, in fact, against democratic politics, as we defined it in Chapter 5. The reason for this hostility is the usual inability to draw a clear distinction between politics and technique. This inability, in fact, constitutes a common characteristic of any hierarchical conception of politics, as the following crude representation of Marxist politics clearly indicates:

If for more complex items like aircraft, bridges and the like we need one or

*more sciences, then to produce a new society, different from the one we suffer, we need the most elaborate and advanced science of all, since it must deal with the most complex organism with the most complex material, structures and functions.*¹²⁹

The implicit assumption in the above extract is that as engineering, making use of the scientific laws of physics or chemistry, produces today's marvels of technology, in exactly the same way we could use the 'scientific' laws of Marxism to produce another society! Apart, therefore, from the very disputable fact we already considered about the feasibility of developing such a science of social change, Marxist or otherwise, it is obvious that this view implies a conception of politics which is utterly incompatible with individual or social autonomy.

In this context, Castoriadis's¹³⁰ distinction between *politics as a technique* and *politics as praxis* is very useful. A technique is a 'purely rational' activity which relies on exhaustive (or practically exhaustive) knowledge of its domain. As, therefore, the same author puts it, 'to demand that the revolutionary project is founded on a complete theory is in fact to equate politics with a technique'. But politics, in the word's original Greek meaning, belongs to a different domain, the domain of praxis 'which sees the development of autonomy as an end and uses autonomy as a means to this end . . . where the others are seen as autonomous beings and as the essential factors for the development of their own autonomy'.¹³¹ So, although praxis is a conscious activity, it can only rely on a *fractional* knowledge, because there can never be an exhaustive knowledge of humans and their history, and a *provisional* knowledge, because the praxis itself leads to the continuous emergence of new knowledge. If, therefore, the aim of politics is not, as at present, the manipulation of the electorate and 'statecraft' but, instead, is the autonomous activity of autonomous individuals in managing their own affairs, then what is needed is a programme, and not a Marxist or any other 'science', with its 'iron' laws and the implied 'engineering-view' of politics.

Neither general relativism nor irrationalism

However, discarding scientism (Marxist or otherwise) should not push us to the alternative trap of general relativism and irrationalism. As regards relativism, first, we should make an important distinction between *political* and *democratic relativism* on the one hand and *philosophical relativism* on the other. It is obvious that *democratic relativism*,¹³² i.e. that all traditions, theories, ideas, etc. are debated and decided upon by all citizens, is an essential element of democracy. The same applies to political relativism, i.e. that all traditions have equal rights. Still, a strong case can be made

against *philosophical relativism*, i.e. that all traditions have equal truth value, in the sense of all being accepted as equally true or false. This is particularly the case when philosophical relativism contradicts democratic relativism.¹³³

Thus, although one may accept the post-modernist view that history cannot be seen as a linear (Kant *et al.*) or dialectical (Hegel, Marx) process of progress that embodies reason, this does not imply that we should assign equal value to all historical forms of social organization: from classical Athens, the Swiss cantons and the Parisian sections, to the present 'democratic' regimes. This type of general relativism, which is adopted by post-modernism, simply expresses the latter's abandonment of any critique of the institutionalized social reality and a general retreat to conformism, as Castoriadis¹³⁴ rightly points out.

In other words, one cannot assign equal value to the autonomy and the heteronomy traditions, as the adoption of the latter precludes democratic relativism itself. The very possibility of instituting democratic relativism depends on the rejection of philosophical relativism: a conscious choice has therefore to be made between these two traditions and the implied conceptions of politics. It is only in this way that one may avoid the pitfalls of scientism/objectivism, without falling into the post-modernist trap of a general relativism that will assign equal value to all traditions.

But, once we have made a choice among the main traditions, in other words, once we have defined the content of the liberatory project in terms of the autonomy tradition, certain important implications follow at the ethical level, as we have seen above, as well as at the interpretational level. For instance, in interpreting the ecological crisis, its causes and the implied solutions, it is impossible to accept the peculiar pluralism that, for example, Naess¹³⁵ proposes, since the very choice of the autonomy tradition implies that only a specific set of interpretations is compatible with it. Irrespective, therefore, of whether we choose the orthodox or the dialectical method, or no method at all, our choice of the autonomy world view constrains us to see the roots of the ecological crisis in terms of the hierarchical social relations and structures which have been dominant for so long (as social ecology does) and not in terms of the relationship between an undifferentiated 'society' and nature (as environmentalists, deep ecologists and others do). For the same reason, environmentalist (liberal or social-democratic), mystical and metaphysical 'solutions' to the ecological problem should be rejected, not because they are not compatible with supposedly 'objective', social or natural, processes at work, but because they could be shown to be incompatible with social and individual autonomy, that is, incompatible with freedom itself. The problem today, therefore, is not *either* to adopt general relativism, a stand that may lead to

a post-modern conformism *or*, alternatively, to adopt some kind of 'objectivism'. What is lacking today is not a new 'objective' justification of the liberatory project, but the political will to define it and take part in its realization!

Another important issue that arises once scientism/objectivism is rejected is how we can avoid the retreat to the various types of irrationalism that currently abound in the Green movement (e.g. deep ecology), the feminist movement (some versions of eco-feminism) and so on. As is well known, versions of irrationalism and spiritualism are frequently adopted widely both in the North (revival of the old religions, adoption of some spiritualist 'fruits' from the East, like Taoism, which influence several Anglo-Saxon anarchists, etc.) and in the South (Muslim fundamentalism).

In my view, the stand on relativism that was suggested above, combined with the conscious choice of the autonomy tradition, which is implied by democratic relativism, rules out all forms of irrationalism. This is so because the common characteristic that the various forms of irrationalism share is that they all lie outside the field of *logon didonai* (rendering account and reason), which, as Castoriadis puts it, 'in itself entails the recognition of the value of autonomy in the sphere of thinking'¹³⁶ that is synonymous with reason itself. In this sense, science, properly understood, is a form of *logon didonai*. From the democratic viewpoint, the essence of science lies not in its content, although of course natural sciences, by fostering a secular approach to reality, played a significant liberatory role in subverting religious and metaphysical beliefs; the essence of science lies in the constant questioning of truths, i.e. in the procedures it uses to derive its truths. Therefore, science, although from the point of view of its content (as well as its technological applications) it may enhance either autonomy or heteronomy (mainly the latter, given the usual heteronomous institution of society which conditions the development of science), from the point of view of the procedures used, it has historically been an expression of autonomy. This is because of the crucial difference regarding the procedures used by scientists in deriving scientific 'truths', versus the methods used by prophets, church fathers and gurus of various sorts to create beliefs, dogmas, mystical 'truths', etc. The very fact that the scientific procedures of finding and assessing 'truths' have so drastically changed over time is a clear indication of the autonomous nature of the scientific method. Scientific 'truths', as well as the procedures used to derive them, unlike mystical, intuitional and irrational 'truths' and procedures in general, are subject to constant questioning and critical assessment.

By the same token, the fact that autonomy is not an 'individual' affair

and it is 'decisively conditioned by the institution of society'¹³⁷ implies that the project of autonomy can only be realized through the autonomous activity of the people, within a process of creating social institutions, which make autonomous thinking possible, and not through some kind of spiritual process of 'self-realization', as deep ecologists,¹³⁸ for instance, suggest. In fact, such a process of self-realization could only enhance privacy and the withdrawal from the social process that institutes society. A hierarchical society based on the domination of human over human could perfectly survive the self-transformation (usually of its middle classes) in the form of Mahayana Buddhism's enlightenment, or reborn Christianity. It is not accidental, anyway, that self-transformation of millions of Americans and West Europeans along these lines, in the past decade, was fully compatible with one of the most vicious attacks by the ruling elites that took the form of neoliberal policies (Reaganomics, Thatcherism, etc.).

Conclusion: towards a democratic rationalism

To conclude, neither 'objectivism' nor irrationalism have any role to play in the process that will move us towards an inclusive democracy. As I tried to show in this chapter, democracy is incompatible with 'objectivist' types of rationalism, similar to the ones we inherited from the Enlightenment. Furthermore, democracy is even less compatible with irrational systems claiming esoteric knowledge, whether from mystical experience, intuition, or revelation. Democracy is only compatible with a democratic rationalism, namely, a rationalism founded in democracy as a structure and a process of social self-institution, as we defined it above.

Therefore, if our aim is to reach a synthesis of the autonomous-democratic, libertarian socialist and radical Green and feminist traditions, I think that our starting point should be the fact that the social imaginary or creative element plays a crucial role with respect to social change. This implies that the project for democracy may be grounded only on our own conscious choice between the heteronomous and the autonomous tradition.

I think that this way of thinking avoids the traps of both objectivism and relativism. Thus, it does not fall into objectivism because the liberatory project is not 'objectivized': democracy is justified not by an appeal to objective tendencies with respect to natural or social evolution, but by an appeal to reason in terms of *logon didonai*, which explicitly denies the idea of any directionality as regards social change. Furthermore, it avoids relativism because it explicitly denies the view that all traditions, as in this case the autonomy and heteronomy ones, have equal truth values. In other words, taking for granted that autonomy and democracy cannot be

'proved' but only postulated, *we* value autonomy and democracy more than heteronomy because, although both traditions are true, still, it is autonomy and democracy which *we* identify with freedom and *we assess freedom as the highest human objective*.

Notes

1. Cornelius Castoriadis, 'The era of generalized conformism', lecture given at Boston University on 19 September 1989 in a symposium under the general title 'A metaphor for our times'.
2. Paul Feyerabend, *Farewell to Reason* (London: Verso, 1987), p. 306.
3. For a definition of the liberatory project in terms of social and individual autonomy, see Cornelius Castoriadis, *L'Institution Imaginaire de la Societe* (Paris: Seuil, 1975), Ch. 2 (English translation: *The Imaginary Institution of Society* (Cambridge, MA: MIT Press, 1987)).
4. Murray Bookchin, *The Philosophy of Social Ecology, Essays on Dialectical Naturalism* (Montreal: Black Rose Books, 1995), p. 129.
5. See D. W. Hamlyn, *The Theory of Knowledge* (London: Macmillan, 1970), and Frederick Copleston, *A History of Philosophy* (London: Search Press, 1976).
6. Frederick Copleston, *A History of Philosophy*, Vol. IV, p. 17.
7. D. W. Hamlyn, *The Theory of Knowledge*, pp. 132-6.
8. Thomas Kuhn, *The Structure of Scientific Revolutions* (University of Chicago Press, 1970), pp. 191-8.
9. M. Bookchin, *The Philosophy of Social Ecology*, pp. 114, 130.
10. See I. Lakatos's 'Falsification and the methodology of scientific research programmes' in *Criticism and the Growth of Knowledge*, Lakatos and Musgrave (Cambridge: Cambridge University Press, 1970), pp. 93-103.
11. H. Katouzian, *Ideology and Method in Economics* (London: Macmillan, 1980), p. 53.
12. Lakatos and Musgrave, *The Growth of Knowledge*, p. 100.
13. Lakatos and Musgrave, *The Growth of Knowledge*, p. 103.
14. P. Feyerabend, 'Consolations for the specialist' in *The Growth of Knowledge*, Lakatos and Musgrave, pp. 197-231.
15. P. Feyerabend, 'Consolations for the specialist', p. 215.
16. P. Feyerabend, *Farewell to Reason*, p. 9.
17. D. W. Hamlyn, *The Theory of Knowledge*, p. 140.
18. M. Masterman, 'The nature of a paradigm' in *The Growth of Knowledge*, Lakatos and Musgrave, pp. 59-91.
19. T. Kuhn, *The Structure of Scientific Revolutions*, p. 175.
20. See, e.g. Kuhn's postscript in later editions of *The Structure of Scientific Revolutions* and also his contribution in *The Growth of Knowledge*, Lakatos and Musgrave.
21. M. Blaug, *The Methodology of Economics* (Cambridge: Cambridge University Press, 1980), p. 30.
22. P. Feyerabend, *Science in a Free Society* (London: Verso, 1978), p. 66.
23. T. Kuhn, *The Structure of Scientific Revolutions*, p. 94.
24. P. Feyerabend, *Farewell to Reason*, p. 8.
25. For a discussion of the 'scientific' character of economics see, e.g., T. W. Hutchison, *Knowledge and Ignorance in Economics* (Oxford: Basil Blackwell, 1977); Daniel Bell and Irving Kristol, *The Crisis in Economic Theory* (New

- York: Basic Books, 1981); Homa Katouzian, *Ideology and Method in Economics* (London: Macmillan, 1980); Warren J. Samuels (ed.) *The Methodology of Economic Thought* (New Brunswick and London: Transaction Books, 1980).
26. Lucien Goldmann, *Immanuel Kant* (London: New Left Books, 1971), p. 19.
 27. L. Goldmann, *Immanuel Kant*, p. 53.
 28. Murray Bookchin, 'Recovering evolution: a reply to Eckersley and Fox', *Environmental Ethics*, Vol. 12 (1990), p. 2.
 29. Murray Bookchin, *The Philosophy of Social Ecology*, p. 129.
 30. M. Bookchin, *The Philosophy of Social Ecology*, p. 25.
 31. C. Castoriadis, *L'Institution Imaginaire*, pp. 49–50.
 32. C. Castoriadis, *Philosophy, Politics, Autonomy* (Oxford: Oxford University Press, 1991), pp. 104-5.
 33. Barry Hindess and Paul Q. Hirst, *Pre-Capitalist Modes of Production* (London: Routledge & Kegan Paul, 1975), pp. 313-23. See also Antony Cuder, Barry Hindess et al., *Marx's Capital and Capitalism Today* (London: Routledge & Kegan Paul, 1977), Ch. 4.
 34. Karl Marx, Preface to the first German edition of *Das Capital* (Moscow: Progress Publishers/Lawrence & Wishart, 1965), pp. 8-10.
 35. Vladimir Lenin, 'What the friends of the people are', in *Reader in Marxist Philosophy*, H. Selsam and H. Martel (eds) (New York: International Publishers, 1963), pp. 196-7.
 36. C. Castoriadis, *L'Institution Imaginaire*, pp.76—84.
 37. Karl Marx, *Theses on Feuerbach*, in Karl Marx and Friedrich Engels, *The German Ideology* (Moscow: Progress Publishers, 1968), p. 667.
 38. Louis Althusser, *Reading Capital* (London: New Left Books, 1970).
 39. Gregor McLennan, *Marxism and the Methodologies of History* (London: New Left Books, 1981/1987), p. 22.
 40. George Lukacs, *History and Class Consciousness* (London: Merlin Press, 1971), p. 1.
 41. G. McLennan, *Marxism and the Methodologies of History*, p. 15.
 42. C. Castoriadis, *L'Institution Imaginaire*, pp. 13-20.
 43. Quoted in G. McLennan, *Marxism and the Methodologies of History*, p. 167.
 44. George Lukacs, 'Technology and social relations', *New Left Review*, No. 39 (1966), p. 33.
 45. Peter Binns, 'The Marxist theory of truth', *Radical Philosophy*, No. 4 (Spring 1973), p. 5.
 46. P. Binns, 'The Marxist theory of truth', p. 8.
 47. Anthony Collier, 'Truth and practice', *Radical Philosophy* (Summer 1973), p. 10.
 48. Leszek Kolakowski, *Marxism and Beyond*, p. 59, quoted in 'Truth and practice', A. Collier, p. 10.
 49. C. Castoriadis, *L'Institution Imaginaire*, pp. 40-5.
 50. See, e.g. Paul Sweezy, 'Toward a critique of economics' in his *Modern Capitalism and Other Essays* (New York: Monthly Review Press, 1972).
 51. For a critique of this position, see G. McLennan, *Marxism and the Methodologies of History*, p. 15.
 52. See Leszek Kolakowski, *Main Currents of Marxism* (Oxford: Oxford University Press, 1981), Vol. 1, p. 181.

53. In Lenin's *Materialism and Empiriocriticism*, the account of knowledge given by the author is too close to simple empiricism, as G. McLennan points out in *Marxism and the Methodologies of History*, p. 11.
54. See Michio Morishima and George Catephores, *Value, Exploitation and Growth* (London: McGraw-Hill, 1978), p. 297.
55. Max Weber, *The Methodology of Social Sciences* (Illinois: Glance, 1949), Ch. 1.
56. For a further critique of this solution, from a different viewpoint, see Leszek Kolakowski, *Main Currents of Marxism*, Vol. 1, pp. 315-16.
57. Leszek Kolakowski, *Main Currents of Marxism*, Vol. 1, pp. 322-4.
58. G. McLennan, also, agrees with this classification: 'As it affects substantive issues in historical materialism Althusser's project can be described as "rationalism"'; G. McLennan, *Marxism and the Methodologies of History*, p. 28.
59. L. Althusser, *Reading Capital*, pp. 52-6.
60. L. Althusser, *Reading Capital*, p. 59.
61. G. McLennan, *Marxism and the Methodologies of History*, p. 27.
62. G. McLennan, *Marxism and the Methodologies of History*. See also P. Binns, 'The Marxist theory of truth'.
63. P. Binns, 'The Marxist theory of truth', p. 8.
64. C. Castoriadis, *L'Institution Imaginaire*, pp. 57-8.
65. C. Castoriadis, *L'Institution Imaginaire*, pp. 72-3.
66. C. Castoriadis, *L'Institution Imaginaire*, p. 90.
67. C. Castoriadis, *L'Institution Imaginaire*, pp. 184-90.
68. Louis Althusser and Etienne Balibar, *Reading Capital* (London: NLB, 1970), p. 180.
69. See Roy Bhaskar, *A Realist Theory of Science* (Leeds: Leeds Books, 1975); Gregor McLennan, *Marxism and the Methodologies of History*; and for a post-Marxist critique of this approach, see Nikos Mouzelis, *Post-Marxist Alternatives, The Construction of Social Orders* (London: Macmillan, 1990).
70. R. Bhaskar, *A Realist Theory of Science*, p. 250.
71. R. Bhaskar, *A Realist Theory of Science*, p. 248.
72. G. McLennan, *Marxism and the Methodologies of History*, p. 32.
73. Mouzelis, criticizing realist Marxism from a different perspective, argues that Marxist theory is unable to overcome the dilemma 'essentialism or empiricism' irrespective of the epistemological position adopted; N. Mouzelis, *Post-Marxist Alternatives*, p. 29.
74. See, for instance, Albert Bergesen, 'Deep ecology and moral community' in *Rethinking Materialism*, Robert Wuthnow (ed.) (New York: Erdmanns, 1995).
75. See M. Bookchin, *The Philosophy of Social Ecology*.
76. M. Bookchin, *The Philosophy of Social Ecology*, p. 20.
77. M. Bookchin, *The Philosophy of Social Ecology*, p. 17.
78. M. Bookchin, *The Philosophy of Social Ecology*, p. 31.
79. M. Bookchin, *Remaking Society* (Montreal: Black Rose Books, 1989), p. 25.
80. M. Bookchin, *The Philosophy of Social Ecology*, p. xii.
81. M. Bookchin, *The Philosophy of Social Ecology*, p. xi.
82. C. Castoriadis, *Philosophy, Politics, Autonomy*, pp. 268-9.
83. See, e.g. Stuart A. Kaufmann, *The Origins of Order: Self-organization and Selection in Evolution* (Oxford: Oxford University Press, 1993).

84. C. Castoriadis, *Philosophy, Politics, Autonomy*, pp. 104-5.
85. C. Castoriadis, *Philosophy, Politics, Autonomy*, p. 34.
86. Peter Marshall, *Nature's Web* (London: Simon & Schuster, 1992), p. 426.
87. M. Bookchin, *The Philosophy of Social Ecology*, p. 79.
88. See for instance, John M. Gowdy, 'Progress and environmental sustainability', *Environmental Ethics*, Vol. 16, No. 1 (Spring 1994).
89. For the non-neutrality of technology, see Frances Stewart, *Technology and Underdevelopment* (London: Macmillan, 1978).
90. Amnesty International, *A Glimpse of Hell* (London: Cassell/Amnesty International UK, 1996).
91. Karl Polanyi, *The Great Transformation* (Boston: Beacon Press, 1957), Chs 14-15.
92. Konstantinos Kavoulakos, 'The relationship of realism and utopianism in the theories of democracy of Jurgen Habermas and Cornelius Castoriadis', *Society and Nature*, Vol. 2, No. 3 (1994), p. 74. See also N. Bobbio, 'Science, power and freedom', *Eleftherotypia*, 18 Sept. 1995.
93. See J. Gowdy, 'Progress and environmental sustainability'.
94. See C. Castoriadis, 'The era of generalized conformism'.
95. Cornelius Castoriadis, 'The West and the Third World', lecture in Heraklion (Crete), March 1991, in *The Broken World*, Cornelius Castoriadis (Athens: Upsilon Books, 1992), p. 79.
96. For a classic description of the medieval free cities, see Petr Kropotkin, *Mutual Aid* (London, 1902) CBS. V & V.
97. Murray Bookchin, personal communication to author (24/2/1994).
98. Murray Bookchin, *From Urbanization to Cities* (London: Cassell, 1995), pp. 111-16.
99. See Sam Dolgoff (ed.) *The Anarchist Collectives: Workers' Self-management in the Spanish Revolution 1936-39* (New York: Free Life Editions, 1974).
100. This should not be misunderstood, as some deep ecologists do at the moment, to mean that society will change just by changing our values, or 'imaginary significations' at the individual level. The change in values has a social significance, as far as radical social transformation is concerned, if it is the outcome of a collective struggle, as part of a comprehensive political programme that explicitly questions the institutional framework and the dominant social paradigm.
101. C. Castoriadis, *Philosophy, Politics, Autonomy*, pp. 36-8.
102. 'What is potential in an acorn that yields an oak tree or in a human embryo that yields a mature, creative adult is equivalent to what is potential in nature that yields society and what is potential in society that yields freedom, selfhood, and consciousness', Murray Bookchin, *The Modern Crisis* (Montreal: Black Rose Books, 1987), p. 13.
103. C. Castoriadis, *Philosophy, Politics, Autonomy*, p. 88.
104. M. Bookchin, *The Philosophy of Social Ecology*, pp. 157-70.
105. See, e.g., Shlomo Avineri (ed.) *Karl Marx on Colonialism and Modernization* (New York: Anchor Books, 1969), p. 13; and Anthony Brewer, *Marxist Theories of Imperialism* (London: Routledge & Kegan Paul, 1980), p. 18.
106. See G.P. Maximoff (ed.) *The Political Philosophy of Bakunin* (New York: The Free Press, 1953), p. 145. See also M. Bookchin, *The Philosophy of Social Ecology*, p. xvi.

107. M. Bookchin, *Ecology of Freedom* (Montreal: Black Rose Books, 1991), p. 274.
108. See, for instance, the criticisms raised against dialectical naturalism by eco-socialists such as David Pepper (David Pepper, *Eco-Socialism: From Deep Ecology to Social Justice* (London: Routledge, 1993), p. 165); and Andrew Light (Andrew Light, 'Rereading Bookchin and Marcuse as environmental materialists', *Capitalism, Nature, Socialism*, No. 3 (March 1993), and Andrew Light, 'Which side are you on? A rejoinder to Murray Bookchin', *Capitalism, Nature, Socialism*, No. 14 (June 1993)). See also the criticisms raised by deep ecologists like Robyn Eckersley (Robyn Eckersley, 'Divining evolution: the ecological ethics of Murray Bookchin', *Environmental Ethics*, Vol. 11, No. 2 (Summer 1989)).
109. The debate between Bookchin and Fox/Eckersley is a clear example of incommensurability. See R. Eckersley, 'Divining evolution: the ecological ethics of Murray Bookchin'; and M. Bookchin, 'Recovering evolution: a reply to Eckersley and Fox'.
110. P. Feyerabend, *Farewell to Reason*, p. 75.
111. Cornelius Castoriadis, 'The end of philosophy?' in *The Talks in Greece* (Athens: Upsilon, 1990), p. 23.
112. Herbert Marcuse, *Soviet Marxism* (London: Routledge, 1958), p. 145.
113. Vladimir Lenin, *What Is to Be Done?* (Moscow: Progress Publishers, 1967): cf. pp. 30-2.
114. H. Marcuse, *Soviet Marxism*, p. 147.
115. C. Castoriadis, *The Talks in Greece*, p. 126.
116. Cynthia Farrar, referring to the thought of the sophist philosopher Protagoras. See her article, 'Ancient Greek political theory as a response to democracy' in *Democracy, the Unfinished Journey, 508 BC to AD 1993* John Dunn (ed.) (Oxford: Oxford University Press, 1992), p. 24.
117. C. Castoriadis, *Philosophy, Politics, Autonomy*, p. 21.
118. Mogens Herman Hansen, *The Athenian Democracy in the Age of Demosthenes* (Oxford: Blackwell, 1991) p. 64.
119. Cornelius Castoriadis, 'The problem of democracy today', *Democracy and Nature*, Vol. 3, No. 2 (1996), p. 23.
120. Murray Bookchin, *Re-enchanting Humanity* (London: Cassell, 1995), p. 249.
121. Hannah Arendt, *The Human Condition* (Chicago: The University of Chicago Press, 1958), p. 18.
122. Paul J. Achtemeier (ed.) *Harper's Bible Dictionary* (San Francisco: Harper & Row, 1985), p. 481.
123. Quoted in Fritjof Capra, *The Tao of Physics* (London: Fontana, 1983), p. 126.
124. 'It may well be, however, that the tradition of democracy in the post-Greek world had its obscure roots among the Catharists': George Woodcock, 'Democracy, heretical and radical', *Our Generation*, Vol. 22, Nos 1-2 (Fall 1990-Spring 1991), pp. 115-16.
125. Peter Marshall, erroneously identifying *Nomos* (i.e. the laws of the *polis*) with custom and convention, points out that 'The Cynics of the third century came even closer to anarchism . . . they alone rejected *Nomos* in favour of *Physis*; they wished to live purely "according to Nature" . . . since the Greek *Polis* was based on the rule of custom or convention, by rejecting *Nomos*, the

- Cynics denied the right of established authority to prescribe the limits of their actions': Peter Marshall, *Demanding the Impossible* (London: HarperCollins, 1992), p. 68.
126. G.E.R. Lloyd, 'Democracy, philosophy and science in Ancient Greece' in *Democracy*, John Dunn (ed.) p. 55.
 127. John Prescott, Labour deputy leader, to Michael Heseltine in the Commons, 29 Jan. 1996 (*The Guardian*, 30 Jan. 1996).
 128. C. Castoriadis, *L'Institution Imaginaire*, p. 106.
 129. Thanasis Kalomalos, 'The crisis of Left politics and Karl Marx', *Society and Nature*, Vol. 2, No. 1 (1993), p. 175.
 130. C. Castoriadis, *L'Institution Imaginaire*, pp. 97-109.
 131. C. Castoriadis, *L'Institution Imaginaire*, p. 103.
 132. P. Feyerabend, *Farewell to Reason*, p. 59.
 133. Even Feyerabend, a strong supporter of relativism, does not go as far as to adopt philosophical relativism; P. Feyerabend, *Science in a Free Society*, pp. 82-3.
 134. C. Castoriadis, 'The era of generalized conformism'.
 135. Arne Naess, 'Deep ecology and ultimate premises', *The Ecologist*, Vol. 18, Nos 4/5 (1988).
 136. C. Castoriadis, 'The crisis of Marxism and the crisis of politics', *Society and Nature*, Vol. 1, No. 2 (1992), p. 209.
 137. C. Castoriadis, 'The crisis of Marxism and the crisis of politics', p. 209.
 138. According to Naess, the father of deep ecology, 'The higher the self-realization attained by anyone the broader and deeper the identification with others', Arne Naess, *Ecology, Community and Lifestyle* (Cambridge: Cambridge University Press, 1989), p. 196.