KARL R. POPPER

THE LOGIC OF THE SOCIAL SCIENCES

First Contribution to the Symposium*

I propose to begin my paper on the logic of the social sciences with two theses which formulate the opposition between our knowledge and our ignorance.

First thesis: We know a great deal. And we know not only many details of doubtful intellectual interest but also things which are of considerable practical significance and, what is even more important, which provide us with deep theoretical insight, and with a surprising understanding of the world.

Second thesis: Our ignorance is sobering and boundless. Indeed, it is precisely the staggering progress of the natural sciences (to which my first thesis alludes) which constantly opens our eyes anew to our ignorance, even in the field of the natural sciences themselves. This gives a new twist to the Socratic idea of ignorance. With each step forward, with each problem which we solve, we not only discover new and unsolved problems, but we also discover that where we believed that we were standing on firm and safe ground, all things are, in truth, insecure and in a state of flux.

My two theses concerning knowledge and ignorance only appear to contradict one another. The apparent contradiction is primarily due to the fact that the words 'knowledge' and 'ignorance' are not used in the two theses as exact opposites. Yet both ideas are important, and so are both theses: so much so that I propose to make this explicit in the following third thesis.

Third thesis: It is a fundamentally important task for every theory of knowledge, and perhaps even a crucial requirement, to

* This was the opening contribution to the Tübingen symposium, followed by Professor Adorno's reply. The translation was revised by the author for the present publication. A few small additions have been made. See also the last contribution to the present volume.

do justice to our first two theses by clarifying the relations between our remarkable and constantly increasing knowledge and our constantly increasing insight that we really know nothing.

If one reflects a little about it, it becomes almost obvious that the logic of knowledge has to discuss this tension between knowledge and ignorance. An important consequence of this insight is formulated in my fourth thesis. But before I present this fourth thesis, I should like to apologize for the many numbered theses which are still to come. My excuse is that it was suggested to me by the organizers of this conference that I assemble this paper in the form of numbered theses [in order to make it easier for the second symposiast to present his critical counter-theses more sharply]. I found this suggestion very useful despite the fact that this style may create the impression of dogmatism. My fourth thesis, then, is the following.

Fourth thesis: So far as one can say at all that science, or knowledge, 'starts from' something, one might say the following: Knowledge does not start from perceptions or observations or the collection of data or facts, but it starts, rather, from *problems*. One might say: No knowledge without problems; but also, no problems without knowledge. But this means that knowledge starts from the tension between knowledge and ignorance. Thus we might say not only, no problems without knowledge; but also, no problems without ignorance. For each problem arises from the discovery that something is not in order with our supposed knowledge; or, viewed logically, from the discovery of an inner contradiction between our supposed knowledge and the facts; or, stated perhaps more correctly, from the discovery of an apparent contradiction between our supposed knowledge and the supposed facts.

While my first three theses may perhaps, because of their abstract character, create the impression that they are somewhat removed from our topic—that is, the logic of the social sciences—I should like to say that with my fourth thesis we have arrived at the heart of our topic. This can be formulated in my fifth thesis, as follows.

Fifth thesis: As in all other sciences, we are, in the social sciences, either successful or unsuccessful, interesting or dull, fruitful or unfruitful, in exact proportion to the significance or interest of the problems we are concerned with; and also, of course, in exact proportion to the honesty, directness and simplicity with which

we tackle these problems. In all this we are in no way confined to theoretical problems. Serious practical problems, such as the problems of poverty, of illiteracy, of political suppression or of uncertainty concerning legal rights were important starting-points for research in the social sciences. Yet these practical problems led to speculation, to theorizing and thus to theoretical problems. In all cases, without exception, it is the character and the quality of the problem—and also of course the boldness and originality of the suggested solution—which determine the value, or the lack of value, of a scientific achievement.

The starting-point, then, is always a problem; and observation becomes something like a starting-point only if it reveals a problem; or in other words, if it surprises us, if it shows us that something is not quite in order with our knowledge, with our expectations, with our theories. An observation creates a problem only if it clashes with certain of our conscious or unconscious expectations. But what in this case constitutes the starting-point of our scientific work is not so much an observation pure and simple, but rather an observation that plays a particular role; that is, an observation which creates a problem.

I have now reached the point where I can formulate my *main thesis*, as thesis number six. It consists of the following.

Sixth thesis:

(a) The method of the social sciences, like that of the natural sciences, consists in trying out tentative solutions to certain problems: the problems from which our investigations start, and those which turn up during the investigation.

Solutions are proposed and criticized. If a proposed solution is not open to pertinent criticism, then it is excluded as unscientific, although perhaps only temporarily.

(b) If the attempted solution is open to pertinent criticism, then we attempt to refute it; for all criticism consists of attempts at refutation.

(c) If an attempted solution is refuted through our criticism we make another attempt.

(d) If it withstands criticism, we accept it temporarily; and we accept it, above all, as worthy of being further discussed and criticized.

(e) Thus the method of science is one of tentative attempts to solve our problems; by conjectures which are controlled by

severe criticism. It is a consciously critical development of the method of 'trial and error'.

(f) The so-called objectivity of science lies in the objectivity of the critical method. This means, above all, that no theory is beyond attack by criticism; and further, that the main instrument of logical criticism—the logical contradiction—is objective.

The basic idea which lies behind my central thesis might also be put in the following way.

Seventh thesis: the tension between knowledge and ignorance leads to problems and to tentative solutions. Yet the tension is never overcome. For it turns out that our knowledge always consists merely of suggestions for tentative solutions. Thus the very idea of knowledge involves, in principle, the possibility that it will turn out to have been a mistake, and therefore a case of ignorance. And the only way of 'justifying' our knowledge is itself merely provisional, for it consists in criticism or, more precisely, in an appeal to the fact that *so far* our attempted solutions appear to withstand even our most severe attempts at criticism.

There is no positive justification: no justification which goes beyond this. In particular, our tentative solutions cannot be shown to be probable (in any sense that satisfies the laws of the calculus of probability).

Perhaps one could describe this position as *the critical approach* ('critical' alludes to the fact that there is here a relation to Kant's philosophy).

In order to give a better idea of my main thesis and its significance for sociology it may be useful to confront it with certain other theses which belong to a widely accepted methodology which has often been quite unconsciously and uncritically accepted and absorbed.

There is, for instance, the misguided and erroneous methodological approach of naturalism or scientism which urges that it is high time that the social sciences learn from the natural sciences what scientific method is. This misguided naturalism establishes such demands as: begin with observations and measurements; this means, for instance, begin by collecting statistical data; proceed, next, by induction to generalizations and to the formation of theories. It is suggested that in this way you will approach

the ideal of scientific objectivity, so far as this is at all possible in the social sciences. In so doing, however, you ought to be conscious of the fact that objectivity in the social sciences is much more difficult to achieve (if it can be achieved at all) than in the natural sciences. For an objective science must be 'value-free'; that is, independent of any value judgment. But only in the rarest cases can the social scientist free himself from the value system of his own social class and so achieve even a limited degree of 'value freedom' and 'objectivity'.

Every single one of the theses which I have here attributed to this misguided naturalism is in my opinion totally mistaken: all these theses are based on a misunderstanding of the methods of the natural sciences, and actually on a myth—a myth, unfortunately all too widely accepted and all too influential. It is the myth of the inductive character of the methods of the natural sciences, and of the character of the objectivity of the natural sciences. I propose in what follows to devote a small part of the precious time at my disposal to a critique of this misguided naturalism.*

Admittedly, many social scientists will reject one or other of the theses which I have attributed to this misguided naturalism. Nevertheless this naturalism seems at present to have gained the upper hand in the social sciences, except perhaps in economics; at least in English-speaking countries. I wish to formulate the symptoms of this victory in my eighth thesis.

Eighth thesis: Before the Second World War, sociology was regarded as a general theoretical social science, comparable, perhaps, with theoretical physics, and social anthropology was regarded as a very special kind of sociology—a descriptive sociology of primitive societies. Today† this relationship has been completely reversed; a fact to which attention should be drawn. Social anthropology or ethnology has become a general social science, and sociology has resigned itself more and more to playing the part of a special kind of social anthropology: the social anthropology of the highly industrialized West European or American forms of society. Restated more briefly, the relationship

* (Note to the English edition.) What my Frankfurt opponents call positivism seems to me the same as what I here call 'misguided naturalism'. They tend to ignore my rejection of it.

† (Note to the English edition.) Since this was written in 1961, there has been a strong reaction to the tendencies here criticized.

between sociology and anthropology has been reversed. Social anthropology has been promoted from an applied descriptive discipline to a key theoretical science and the anthropologist has been elevated from a modest and somewhat short-sighted descriptive fieldworker to a far-seeing and profound social theorist and social depth-psychologist. The former theoretical sociologist however must be happy to find employment as a fieldworker and a specialist: his function is to observe and to describe the totems and taboos of the natives of the white race in Western Europe and the United States.

But one probably should not take this change in the fate of the social scientist too seriously; particularly as there is no such thing as the essence of a scientific subject. This leads me to my ninth thesis.

Ninth thesis: A so-called scientific subject is merely a conglomerate of problems and attempted solutions, demarcated in an artificial way. What really exists are problems and solutions, and scientific traditions.

Despite this ninth thesis, the complete reversal in the relations between sociology and anthropology is extremely interesting, not on account of the subjects or their titles, but because it points to the victory of a pseudo-scientific method. Thus I come to my next thesis.

Tenth thesis: The victory of anthropology is the victory of an allegedly observational, allegedly descriptive and allegedly more objective method, and thus of what is taken to be the method of the natural sciences. It is a Pyrrhic victory: another such victory and we—that is, both anthropology and sociology—are lost.

My tenth thesis may be formulated, I readily admit, a little too pointedly. I admit of course that much of interest and importance has been discovered by social anthropology, which is one of the most successful social sciences. Moreover, I readily admit that it can be fascinating and significant for us Europeans to see ourselves, for a change, through the spectacles of the social anthropologist. But although these spectacles are perhaps more coloured than others, they hardly are, for this reason, more objective. The anthropologist is not the observer from Mars which he so often believes himself to be and whose social role he often attempts to play (and not without gusto); quite apart from the fact that there is no reason to suppose that an inhabitant of Mars would see us more 'objectively' than we, for instance, see ourselves.

In this context I should like to tell a story which is admittedly extreme but in no way unique. Although it is a true story, this is immaterial in the present context: should the story seem improbable to you then, please, take it as an invention, as a freely invented illustration, designed to make clear an important point by means of crass exaggeration.

Years ago, I was a participant in a four-day conference, organized by a theologian, in which philosophers, biologists, anthropologists and physicists participated—one or two representatives from each discipline; in all eight participants were present. The topic was, I think, 'Science and Humanism'. After several initial difficulties and the elimination of an attempt to impress us by exalted depth [*'erhabene Tiefe'* is a term of Hegel's who failed to see that an exalted depth is just a platitude] the joint efforts of roughly four or five participants succeeded in the course of two days in raising the discussion to an uncommonly high level. Our conference had reached the stage—or so it appeared to me at least—at which we all had the happy feeling that we were learning something from one another. At any rate, we were all immersed in the subject of our debate when out of the blue the social anthropologist made his contribution.

'You will, perhaps, be surprised', he said, 'that I have said nothing so far in this conference. This is due to the fact that I am an observer. As an anthropologist I came to this conference not so much in order to participate in your verbal behaviour but rather to study your verbal behaviour. This is what I have succeeded in doing. Concentrating on this task, I was not always able to follow the actual content of your discussion. But someone like myself who has studied dozens of discussion groups learns in time that the topic discussed is relatively unimportant. We anthropologists learn'—this is almost verbatim (so far as I remember)—'to regard such social phenomena from the outside and from a more objective standpoint. What interests us is not the what, the topic, but rather the how: for example, the manner in which one person or another attempts to dominate the group and how his attempts are rejected by the others, either singly or through the formation of a coalition; how after various attempts of this type a hierarchical order and thus a group equilibrium develops and also a group ritual of verbalization; these things are always very similar no matter how varied the question appears to be which serves as the topic of the discussion.'

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impersonal detachment of individual scientists, and a lack of objectivity in terms of the social habitat of the scientist, completely misses the following decisive point: the fact that objectivity rests solely upon pertinent mutual criticism. What the sociology of knowledge misses is nothing less than the sociology of knowledge itself—the social aspect of scientific objectivity, and its theory. Objectivity can only be explained in terms of social ideas such as competition (both of individual scientists and of various schools); tradition (mainly the critical tradition); social institution (for instance, publication in various competing journals and through various competing publishers; discussion at congresses); the power of the state (its tolerance of free discussion).

Such minor details as, for instance, the social or ideological habitat of the researcher, tend to be eliminated in the long run; although admittedly they always play a part in the short run.

In a way similar to that in which we have solved the problem of objectivity, we can also solve the related problem of the freedom of science from involvement in value judgments ('value freedom'); and we can do so in a freer, a less dogmatic way, than is usually done.

Fourteenth thesis: In a pertinent critical discussion we may distinguish such questions as: (1) The question of the truth of an assertion; the question of its relevance, of its interest and of its significance relative to the problems in which we are interested. (2) The question of its relevance and of its interest and of its significance for various *extra-scientific problems*, for example, problems of human welfare or the quite differently structured problems of national defence; or (by contrast) of an aggressive nationalist policy; or of industrial expansion; or of the acquisition of personal wealth.

It is clearly impossible to eliminate such extra-scientific interests and to prevent them from influencing the course of scientific research. And it is just as impossible to eliminate them from research in the natural sciences—for example from research in physics—as from research in the social sciences.

What is possible and what is important and what lends science its special character is not the elimination of extra-scientific interests but rather the differentiation between the interests which do not belong to the search for truth and the purely scientific interest in truth. But although truth is our regulative

principle, our decisive scientific value, it is not our only one. Relevance, interest, and significance (the significance of statements relative to a purely scientific problem situation) are likewise scientific values of the first order; and this is also true of values like those of fruitfulness, explanatory power, simplicity, and precision.

In other words, there exist *purely* scientific values and disvalues and *extra*-scientific values and disvalues. And although it is impossible to separate scientific work from extra-scientific applications and evaluations, it is one of the tasks of scientific criticism and scientific discussion to fight against the confusion of value-spheres and, in particular, to separate extra-scientific evaluations from *questions of truth*.

This cannot, of course, be achieved once and for all, by means of a decree; yet it remains one of the enduring tasks of mutual scientific criticism. The purity of pure science is an ideal which is presumably unattainable; but it is an ideal for which we constantly fight—and should fight—by means of criticism.

In formulating this thesis I have said that it is practically impossible to achieve the elimination of extra-scientific values from scientific activity. The situation is similar with respect to objectivity: we cannot rob the scientist of his partisanship without also robbing him of his humanity, and we cannot suppress or destroy his value judgments without destroying him as a human being *and as a scientist*. Our motives and even our purely scientific ideals, including the ideal of a disinterested search for truth, are deeply anchored in extra-scientific and, in part, in religious evaluations. Thus the 'objective' or the 'value-free' scientist is hardly the ideal scientist. Without passion we can achieve nothing —certainly not in pure science. The phrase 'the passion for truth' is no mere metaphor.

It is, therefore, not just that objectivity and freedom from involvement with values ('value freedom') are unattainable in practice for the individual scientist, but rather that objectivity and freedom from such attachments are themselves *values*. And since value freedom itself is a value, the unconditional demand for freedom from any attachment to values is paradoxical. I do not regard this argument of mine as very important; but it should be noted that the paradox disappears quite of its own accord if we replace the demand for freedom from attachment to all values by the demand that it should be one of the tasks of scientific

criticism to point out confusions of value and to separate purely scientific value problems of truth, relevance, simplicity, and so forth, from extra-scientific problems.

I have so far attempted to develop briefly the thesis that the method of science consists in the choice of interesting problems and in the criticism of our always tentative and provisional attempts to solve them. And I have attempted to show further, using as my examples two much discussed questions of method in the social sciences, that this critical approach to methods (as it might be called) leads to quite reasonable methodological results. But although I have said a few words about epistemology, about the logic of knowledge, and a few critical words about the methodology of the social sciences, I have made so far only a small positive contribution to my topic, the logic of the social sciences.

I do not wish to detain you by giving reasons why I consider it important to identify scientific method, at least in first approximation, with the critical method. Instead, I should like now to move straight to some purely logical questions and theses.

Fifteenth thesis: The most important function of pure deductive logic is that of an organon of criticism.

Sixteenth thesis: Deductive logic is the theory of the validity of logical inferences or of the relation of logical consequence. A necessary and decisive condition for the validity of a logical consequence is the following: if the premisses of a valid inference are *true* then the conclusion must also be *true*.

This can also be expressed as follows. Deductive logic is the theory of the transmission of truth from the premisses to the conclusion.

Seventeenth thesis: We can say: if all the premisses are true and the inference is valid, then the conclusion *must* also be true; and if, consequently, the conclusion is false in a valid inference, then it is not possible that all the premisses are true.

This trivial but decisively important result can also be expressed in the following manner: deductive logic is not only the theory of the *transmission of truth* from the premisses to the conclusion, but it is also, at the same time, the theory of the *retransmission of falsity* from the conclusion to at least one of the premisses.

Eighteenth thesis: In this way deductive logic becomes the theory of rational criticism. For all rational criticism takes the form of an attempt to show that unacceptable conclusions can be derived from the assertion we are trying to criticize. If we are successful in deriving, logically, unacceptable conclusions from an assertion, then the assertion may be taken to be refuted.

Nineteenth thesis: In the sciences we work with theories, that is to say, with deductive systems. There are two reasons for this. First, a theory or a deductive system is an attempt at explanation, and consequently an attempt to solve a scientific problem—a problem of explanation. Secondly, a theory, that is, a deductive system, can be criticized rationally through its consequences. It is, then, a tentative solution which is subject to rational criticism.

So much for formal logic as the organon of criticism.

Two fundamental ideas which I have used here require a brief elucidation: the idea of truth and the idea of explanation.

Twentieth thesis: The concept of truth is indispensable for the critical approach developed here. What we criticize is, precisely, the claim that a theory is true. What we attempt to demonstrate as critics of a theory is, clearly, that this claim is unfounded: that it is false.

The important methodological idea that *we can learn from our mistakes* cannot be understood without the regulative idea of truth: any mistake simply consists in a failure to live up to the standard of objective truth, which is our regulative idea. We term a proposition 'true' if it corresponds to the facts, or if things are as described by the proposition. This is what is called the absolute or objective concept of truth which each of us constantly uses. The successful rehabilitation of this absolute concept of truth is one of the most important results of modern logic.

This remark hints at the fact that the concept of truth had been undermined. Indeed, this was the driving force which produced the dominant relativistic ideologies of our time.

This is the reason why I am inclined to describe the rehabilitation of the concept of truth by the logician and mathematician Alfred Tarski as the philosophically most important result of mathematical logic.

I cannot of course discuss this result here; I can merely say quite dogmatically that Tarski succeeded, in the simplest and most convincing manner, in explaining wherein the agreement of a statement with the facts lies. But this was precisely the task whose apparently hopeless difficulty led to sceptical relativism—with social consequences which I do not need to spell out here.

The second concept which I have used and which may require elucidation is the idea of explanation or, more precisely, the idea of a *causal explanation.*

A purely theoretical problem—a problem of pure science—always consists in the task of finding an explanation, the explanation of a fact or of a phenomenon or of a remarkable regularity or of a remarkable exception from a rule. That which we hope to explain can be called the explicandum. The tentative solution of the problem—that is, the explanation—always consists of a theory, a deductive system, which permits us to explain the explicandum by connecting it logically with other facts (the so-called initial conditions). A completely explicit explanation always consists in pointing out the logical derivation (or the derivability) of the explicandum from the theory strengthened by some initial conditions.

Thus the basic logical schema of every explanation consists of a (logical) deductive inference whose premisses consist of a theory and some initial conditions,* and whose conclusion is the explicandum.

This basic schema has a remarkable number of applications. One can point out with its aid, for example, the distinction between an *ad-hoc* hypothesis and an independently testable hypothesis. Further—and this might be of more interest to you—one can analyse logically, in a simple manner, the distinction between theoretical problems, historical problems, and problems of applied science. Another result is that the famous *distinction* between theoretical or nomothetic and historical or ideographic sciences can be logically justified—provided one understands here under the term 'science' not merely 'natural science' (as in English) but any attempt to solve a definite, logically distinguishable, set of problems.

So much for the elucidation of the logical concepts which I have employed so far.

The two concepts under discussion, that of truth, and that of explanation, make possible the logical analysis of further concepts which are perhaps even more important for the logic of knowledge or methodology. The first of these concepts is that of

* (Note to the English edition.) In the social sciences, the premises of the explanation usually consist of a situational model and of the so-called 'rationality principle'. These 'explanations of situational logic' are briefly discussed in my twenty-fifth and twenty-sixth theses, below.

approximation to the truth and the second that of the *explanatory power* or the *explanatory content* of a theory.

These two concepts are purely logical concepts since they may be defined with the help of the purely logical concepts of the truth of a statement and of the content of a statement—that is, the class of the logical consequences of a deductive theory.

Both are relative concepts. Although each statement is simply true or false, nevertheless *one* statement can represent a better approximation to the truth than *another* statement. This will be so, for example, if the one statement has 'more' true and 'less' false logical consequences than the other. (It is presupposed here that the true and the false sub-sets of the set of consequences of the two statements are comparable.) It can then easily be shown why we rightly assume that Newton's theory is a better approximation to the truth than Kepler's. Similarly it can be shown that the explanatory power of Newton's theory is greater than Kepler's.

Thus we analyse here logical ideas which underlie the appraisal of our theories, and which permit us to speak meaningfully of progress or regress with reference to scientific theories.

So much for the general logic of knowledge. Concerning, in particular, the logic of the social sciences, I should like to formulate some further theses.

Twenty-first thesis: There is no such thing as a purely observational science; there are only sciences in which we theorize (more or less consciously and critically). This of course also holds for the social sciences.

Twenty-second thesis: Psychology is a social science since our thoughts and actions largely depend upon social conditions. Ideas such as (a) imitation, (b) language, (c) the family, are obviously social ideas; and it is clear that the psychology of learning and thinking, and also, for instance, psychoanalysis, cannot exist without utilizing one or other of these social ideas. Thus psychology presupposes social ideas; which shows that it is impossible to explain society exclusively in psychological terms, or to reduce it to psychology. Thus we cannot look upon psychology as the basis of the social sciences.

What we cannot, in principle, explain psychologically, and what we must presuppose in every psychological explanation, is man's social environment. The task of describing this social environment (that is, with the help of explanatory theories since—as stated before—theory-free descriptions do not exist) is the funda-

mental task of social science. It might well be appropriate to allot this task to sociology. I therefore assume this in what follows.

Twenty-third thesis: Sociology is autonomous in the sense that, to a considerable extent, it can and must make itself independent of psychology. Apart from the dependence of psychology on social ideas (mentioned in my twenty-second thesis), this is due to the important fact that sociology is constantly faced with the task of explaining unintended and often undesired consequences of human action. An example: competition is a social phenomenon which is usually undesirable for the competitors, but which can and must be explained as a (usually inevitable) unintended consequence of (conscious and planned) actions of the competitors. Thus even though we may be able to explain psychologically some of the actions of the competitors, the social phenomenon of competition is a psychologically inexplicable consequence of these actions.

Twenty-fourth thesis: But sociology is also autonomous in a second sense; that is, we cannot reduce to psychology what has often been termed '*verstehende Soziologie*' (the sociology of [objective*] understanding).

Twenty-fifth thesis: The logical investigation of economics culminates in a result which can be applied to all social sciences. This result shows that there exists *a purely objective method* in the social sciences which may well be called the method of *objective* understanding, or situational logic. A social science orientated towards objective understanding or situational logic can be developed independently of all subjective or psychological ideas. Its method consists in analysing the social *situation* of acting men sufficiently to explain the action with the help of the situation, without any further help from psychology. Objective understanding consists in realizing that the action was objectively *appropriate to the situation*. In other words, the situation is analysed far enough for the elements which initially appeared to be psychological (such as wishes, motives, memories, and associations) to be transformed into elements of the situation. The man with certain wishes therefore becomes a man whose situation may be characterized by the fact that he pursues certain objective *aims*; and a man with certain memories or associations becomes a man

* (Note to the English edition.) For a fuller discussion (including some examples) of an *objective* theory of understanding, see my paper 'On the Theory of the Objective Mind', which forms chapter 4 of my book *Objective Knowledge*.

whose situation can be characterized by the fact that he is equipped objectively with certain theories or with certain information.

This enables us then to understand actions in an objective sense so that we can say: admittedly I have different aims and I hold different theories (from, say, Charlemagne): but had I been placed in his situation thus analysed—where the situation includes goals and knowledge—then I, and presumably you too, would have acted in a similar way to him. The method of situational analysis is certainly an individualistic method and yet it is certainly not a psychological one; for it excludes, in principle, all psychological elements and replaces them with objective situational elements. I usually call it the 'logic of the situation' or 'situational logic'.

Twenty-sixth thesis: The explanations of situational logic described here are rational, theoretical reconstructions. They are oversimplified and overschematized and consequently in general *false*. Nevertheless, they can possess a considerable truth content and they can, in the strictly logical sense, be good approximations to the truth, and better than certain other testable explanations. In this sense, the logical concept of approximation to the truth is indispensable for a social science using the method of situational analysis. Above all, however, situational analysis is rational, empirically criticizable, and capable of improvement. For we may, for instance, find a letter which shows that the knowledge at the disposal of Charlemagne was different from what we assumed in our analysis. By contrast, psychological or characterological hypotheses are hardly ever criticizable by rational arguments.

Twenty-seventh thesis: In general, situational logic assumes a physical world in which we act. This world contains, for example, physical resources which are at our disposal and about which we know something, and physical barriers about which we also know something (often not very much). Beyond this, situational logic must also assume a social world, populated by other people, about whose goals we know something (often not very much), and, furthermore, *social institutions*. These social institutions determine the peculiarly social character of our social environment. These social institutions consist of all the social realities of the social world, realities which to some extent correspond to the things of the physical world. A grocer's shop or a university institute or a police force or a law are, in this sense, social institutions. Church,

state, and marriage are also social institutions, as are certain coercive customs like, for instance, harakiri in Japan. But in European society suicide is not a social institution in the sense in which I use the term, and in which I assert that the category is of importance.

That is my last thesis. What follows is a suggestion and a short concluding remark.

Suggestion: We may, perhaps, accept provisionally, as the fundamental problems of a purely theoretical sociology, the general situational logic of and the theory of institutions and traditions. This would include such problems as the following:

1. Institutions do not act; rather, only individuals act, in or for or through institutions. The general situational logic of these actions will be the theory of the quasi-actions of institutions.
2. We might construct a theory of intended or unintended institutional consequences of purposive action. This could also lead to a theory of the creation and development of institutions.

Finally, a further comment. I believe that epistemology is important not only for the individual sciences but also for philosophy, and that the religious and philosophical uneasiness of our time, which surely concerns us all, is, to a considerable degree, the result of uneasiness about the philosophy of human knowledge. Nietzsche called it the European nihilism and Benda the treason of the intellectuals. I should like to characterize it as a consequence of the Socratic discovery that we know nothing; that is, that we can never justify our theories rationally. But this important discovery which has produced, amongst many other malaises, the malaise of existentialism, is only half a discovery; and nihilism can be overcome. For although we cannot justify our theories rationally and cannot even prove that they are probable, we can criticize them rationally. And we can often distinguish better from worse theories.

But this was known, even before Socrates, to Xenophanes who told us*:

> The gods did not reveal from the beginning,
> All things to us; but in the course of time,
> Through seeking we may learn, and know things better . . .

* (Note to the English edition.) Cf. my *Conjectures and Refutations*, p. 152. (The translation is mine.)

THEODOR W. ADORNO

ON THE LOGIC OF THE SOCIAL SCIENCES

Second Contribution

Generally, the discussant has to choose between behaving like a pedant or a parasite. First of all, I should like to thank Popper for freeing me from such an embarrassing situation. I can take up what he has said without having to begin with elementary matters, but also without having to adhere so closely to the text of his paper, that I would be dependent upon it. With authors of so diverse intellectual origins, this is no less astonishing than are the numerous substantive points of agreement. Often, I do not need to oppose his theses with counter-theses, but instead I can take up what he has said and attempt to reflect on it further. However, I interpret the concept of logic more broadly than Popper does. I understand this concept as the concrete mode of procedure of sociology rather than general rules of thought, of deduction. Here, I do not wish to touch upon the problems of the latter in sociology.

Instead, I shall commence with Popper's distinction between the abundance of knowledge and boundless ignorance. It is plausible enough, certainly in sociology. At any rate, the latter is continually admonished for not so far having produced a corpus of acknowledged laws comparable to that of the natural sciences. But this distinction contains a dubious potential, that of a current view which Popper surely does not have in mind. According to this view, sociology, on account of its conspicuous retardedness in relation to the exact sciences, should initially content itself with collecting facts and elucidating methods before it raises the claim to reliable and, at the same time, relevant knowledge. Theoretical reflections on society and its structure are then frequently tabooed as an impermissible anticipation of the future. But if one views sociology as beginning with Saint-Simon rather

than with its godfather Comte then it is more than 160 years old. It should no longer flirt bashfully with its youth. What appears as temporary ignorance is not to be simply replaced in progressive research and methodology by that characterized in such an awkward and inappropriate term as synthesis. Rather, reality [*die Sache*] opposes the clean, systematic unity of assembled statements. I do not have in mind the traditional distinctions between the natural and cultural sciences [*Geisteswissenschaften*], such as Rickert's distinction between the nomothetic and idiographic method, which Popper views more positively than I do. But the cognitive ideal of the consistent, preferably simple, mathematically elegant explanation falls down where reality itself, society, is neither consistent, nor simple, nor neutrally left to the discretion of categorial formulation. Rather, on the contrary, it is anticipated by its object as the categorial system of discursive logic. Society is full of contradictions and yet determinable; rational and irrational in one, a system and yet fragmented; blind nature and yet mediated by consciousness. The sociological mode of procedure must bow to this. Otherwise, out of puristic zeal to avoid contradiction, it will fall into the most fatal contradiction of all, namely, that existing between its own structure and that of its object. Society does not elude rational knowledge; in so far as its contradictions and their preconditions are intelligible, they cannot be conjured away by means of intellectual postulates abstracted from a material which is, as it were, indifferent with regard to knowledge—a material which offers no resistance to scientific activities that usually accommodate themselves to cognitive consciousness. Social-scientific activity is permanently threatened by the fact that, out of its love for clarity and exactness, it could fail to apprehend that which it intends to apprehend. Popper objects to the cliché that knowledge passes through a series of stages from observation to the ordering, processing and systematization of its materials. This cliché is so absurd in sociology because the latter does not have unqualified data at its disposal but only such data as are structured through the context of societal totality. To a large extent, the alleged sociological ignorance merely signifies the divergence between society as an object and traditional method. It can therefore hardly be outstripped by a knowledge which denies the structure of its object in deference to its own methodology. On the other hand, however—and undoubtedly Popper would also concede

this—the usual empirical asceticism with regard to theory cannot be sustained. Without the anticipation of that structural moment of the whole, which in individual observations can hardly ever be adequately realized, no individual observation would find its relative place. This is not to advocate anything similar to the tendency in cultural anthropology to superimpose upon Western civilization the centralistic and total character of some primitive societies by means of a selected co-ordinate system. One may even cherish as few illusions as I do about its gravitation towards total forms and about the decline of the individual, but the differences between a pre- and post-individual society are still decisive. In the democratically governed countries of industrial societies, totality is a category of mediation, not one of immediate domination and subjugation. This implies that in industrial market societies by no means everything pertaining to society can simply be deduced from its principle. Such societies contain within themselves countless non-capitalist enclaves. At issue here is whether, in order to perpetuate itself under the present relations of production, it necessarily needs such enclaves as that of the family. Their specific irrationality compliments, as it were, that of the structure as a whole. Societal totality does not lead a life of its own over and above that which it unites and of which it, in its turn, is composed. It produces and reproduces itself through its individual moments. Many of these moments preserve a relative independence which primitive-total societies either do not know or do not tolerate. This totality can no more be detached from life, from the co-operation and the antagonism of its elements than can an element be understood merely as it functions without insight into the whole which has its source [*Wesen*] in the motion of the individual himself. System and individual entity are reciprocal and can only be apprehended in their reciprocity. Even those enclaves, survivals from previous societies, the favourites of a sociology which desires to unburden itself of the concept of society—as it might of an all too spectacular philosopheme—become what they are only in relation to the dominant totality from which they deviate. This is presumably underestimated in the present most popular sociological conception, that of middle-range theory.

In opposition to the view held since Comte, Popper advocates the priority of problems, of the tension between knowledge and ignorance. I am in agreement with every criticism Popper makes

of the false transposition of natural scientific methods, of the 'misguided and erroneous methodological . . . naturalism or scientism'. If he accuses his social anthropologist of extracting himself from the problem of truth or falsehood by means of the allegedly greater objectivity of someone who observes social phenomena from outside, then this is surely good Hegel. In the preface to the *Phenomenology of Mind*, Hegel scorns those who only stand above things because they do not stand amidst things. I hope that König will not chide me and will not criticize the discussion with Popper for being philosophy and not sociology. It seems to me worth mentioning that a scholar, for whom dialectics is anathema, finds himself reduced to formulations which reside in dialectical thought. Moreover, the problems of social anthropology examined by Popper are presumably closely associated with a method rendered independent of reality. Like Veblen's theory of a barbaric culture, a comparison of the frictionless mores of a late capitalist society with the rights of the Trobrianders, who by now have presumably been overstudied, certainly has its merits. Yet the alleged freedom in the choice of a system of co-ordinates is transformed into a falsification of the object, since for every member of the modern state the fact that he belongs to the latter's economic system means, in real terms, far more than the finest analogies with totem and taboo.

In my agreement with Popper's critique of scientism, and with his thesis concerning the primacy of the problem, I must perhaps go further than he would approve. For the object of sociology itself, society, which keeps itself and its members alive but simultaneously threatens them with ruin, is a problem in an emphatic sense. This means, however, that the problems of sociology do not constantly arise through the discovery 'that something is not in order with our supposed knowledge; . . . from the discovery of an apparent contradiction between our supposed knowledge and the facts'. The contradiction must not, as Popper at least presumes here, be a merely 'supposed' contradiction between subject and object, which would have to be imputed to the subject alone as a deficiency of judgment. Instead, the contradiction can, in very real terms, have its place in reality and can in no way be removed by increased knowledge and clearer formulation. The oldest sociological model of such a contradiction which necessarily develops in reality is the now-famous section 243 in Hegel's *Philosophy of Right*: 'The amassing of wealth is intensified

by generalizing (a) the linkage of men by their needs, and (b) the methods of preparing and distributing the means to satisfy these needs, because it is from this double process of generalization that the largest profits are derived. That is one side of the picture. The other side is the subdivision and restriction of particular jobs. This results in the dependence and distress of the class tied to work of that sort.'[1] It would be easy to accuse me of equivocation, namely, that for Popper a problem is something merely epistemological and for me, at the same time, it is something practical—in the last instance, even a problematic condition of the world. But we are concerned here with the legitimacy of precisely this distinction. One would fetishize science if one radically separated its immanent problems from the real ones, which are weakly reflected in its formalisms. No doctrine of logical absolutism, Tarski's no more than formerly Husserl's, would be in a position to decree that the facts obey logical principles which derive their claim to validity from a purgation of all that pertains to reality. I must content myself with a reference to the critique of logical absolutism in *Metakritik der Erkenntnistheorie*[2] which is there associated with a critique of sociological relativism, in which respect I am in agreement with Popper. The conception of the contradictory nature of societal reality does not, however, sabotage knowledge of it and expose it to the merely fortuitous. Such knowledge is guaranteed by the possibility of grasping the contradiction as necessary and thus extending rationality to it.

Methods do not rest upon methodological ideals but rather upon reality. Popper implicitly acknowledges this in the thesis concerning the priority of the problem. When he establishes that the quality of social scientific achievement stands in an exact relationship to the significance or to the interest of its problems, then unquestionably one can detect here the awareness of an irrelevance to which countless sociological investigations are condemned in that they follow the primacy of the method and not that of the object. They either wish to develop methods further for their own sake or, from the outset, they so select objects that they can be treated with already available methods. When Popper talks about significance or interest one can sense the gravity of the

[1] Hegel, WW7, *Grundlinien der Philosophie des Rechts*, ed. Glockner (Stuttgart, 1927 onwards), p. 318. English trans. T. M. Knox, *Hegel's Philosophy of Right* (Oxford/New York, 1969), pp. 149–50.

[2] T. W. Adorno, *Zur Metakritik der Erkenntnistheorie* (Stuttgart, 1956).

matter to be dealt with. It would only have to be qualified by the fact that it is not always possible to judge a priori the relevance of objects. Where the categorical network is so closely woven that much of that which lies beneath is concealed by conventions of opinion, including scientific opinion, then eccentric phenomena which have not yet been incorporated by this network at times, take on an unexpected gravity. Insight into their composition also throws light upon what counts as the core domain but which often is not. This scientific-theoretical motive was surely involved in Freud's decision to concern himself with the 'fragments of the world of appearance' [*Abhub der Erscheinungswelt*]. Similarly, it proved to be fruitful in Simmel's sociology when, mistrustful of the systematic totality, he immersed himself in such social specifics as the stranger or the actor. Nor would one be able to dogmatize about the demand for problem relevancy; to a large extent, the selection of research objects is legitimated by what the sociologist can read from the object which he has selected. This should not, however, provide an excuse for the countless projects merely carried out for the good of one's academic career, in which the irrelevance of the object happily combines with the pedestrian mentality of the research technician.

I should like, however, to urge a certain caution concerning the attributes which Popper ascribes, together with the relevance of the problem, to the true method. Honesty—or, in other words, that one does not cheat, that one expresses what has been apprehended without tactical considerations—ought to be a matter of course. In the actual course of science, however, this norm is frequently terroristically misused. Completely abandoning oneself to reality then implies that one confronts reality with nothing of oneself but instead one merely reduces oneself to a piece of registering apparatus. The renunciation of fantasy or the lack of productivity is passed off as scientific ethos. One should not forget what Cantril and Allport have contributed to the critique of the ideal of sincerity in America. Even in the sciences, honesty is frequently attributed to the person who thinks what everyone thinks, devoid of the supposed vanity of desiring to perceive something special and, for this reason, prepared to bleat sheep-like with the others. Similarly, directness and simplicity are not unquestionable ideals when the matter [*Sache*] is complex. The replies of common sense derive their categories to such an extent from that which immediately exists that they tend to strengthen its

opacity instead of penetrating it. As far as the directness is concerned, the path along which one approaches knowledge can hardly be anticipated. In view of the present state of sociology, I would place, from amongst the criteria of scientific quality mentioned by Popper, the greatest emphasis upon the boldness and originality [*Eigenart*] of the suggested solution, which naturally, in its turn, has to be constantly criticized. In the last instance, the category of the problem should not be hypostatized. Anyone who checks his own work in an unbiased manner will encounter a state of affairs which only the taboos of alleged presuppositionlessness make it difficult to admit. It is not uncommon that one has solutions; something suddenly occurs to one and one subsequently constructs the question. But this is not fortuitous. The priority of society as that of something all-encompassing and consolidated above its individual manifestations is expressed in societal knowledge by means of insights which stem from the concept of society and which are only transformed into individual sociological problems through the subsequent confrontation of what was anticipated with the particular material. Expressed in more general terms, the epistemologies, as they were developed and handed down relatively independently by the great philosophical tradition since Bacon and Descartes, are conceived from above even by the empiricists. They have frequently remained inappropriate to the living tradition of knowledge; they have trimmed the latter in accordance with a conception of science, as an inductive or deductive continuum, which is alien and external to this living tradition. By no means the last of the necessary tasks of epistemology—and Bergson sensed this—would be to reflect upon the actual process of cognition instead of describing in advance the cognitive achievement in accordance with a logical or scientific model to which, in truth, productive knowledge in no way corresponds.

In Popper's categorial framework, the concept of a problem is associated with that of a solution. Solutions are to be suggested and criticized. With the key nature of criticism, a decisive point is reached in opposition to the primitive doctrine of observation, a doctrine estranged from knowledge. Sociological knowledge is, indeed, criticism. But crucial nuances are involved here, such as how the decisive distinctions between scientific positions are often more likely to be found in the nuance than they are to be expressed in grandiose concepts expressive of a view of life [*Weltanschauung*].

According to Popper, if an attempted solution is not accessible to factual criticism, then it will be excluded as unscientific for this reason even if, perhaps, only temporarily. This is, to say the least, ambiguous. If such criticism implies reduction to so-called facts, the complete redemption of thought through what is observed, then this desideratum would reduce thought to hypothesis and would rob sociology of that moment of anticipation which essentially belongs to it. There are sociological theorems which, as insights into the mechanisms of society which operate behind the façade, in principle, even for societal reasons, contradict appearances to such an extent that they cannot be adequately criticized through the latter. Criticism of them is incumbent upon systematic theory, upon further reflection but not, for instance, upon the confrontation with protocol statements. (Popper, incidentally, does not formulate it this way either.) For this reason, facts in society are not the last thing to which knowledge might attach itself, since they themselves are mediated through society. Not all theorems are hypotheses; theory is the *telos* not the vehicle of sociology.

One could also enlarge upon the equation of criticism and the attempt at refutation. Refutation is only fruitful as immanent criticism. Hegel already knew that. The second volume of the larger *Logic* provides statements on the 'judgment of the notion' which must simultaneously outweigh most of what has been proclaimed about values since then: '. . . the predicates *good, bad, true, beautiful, correct,* etc. express that the thing is *measured* against its universal *Notion* as the simply presupposed *ought-to-be* and is, or is not, in *agreement* with it.'[3] Viewed from without, everything and nothing is refutable. Scepticism is appropriate in discussion. It testifies to a confidence in organized science as an instance of truth confronted with which the sociologist should show reserve. In the face of scientific thought control, whose preconditions sociology itself names, it is particularly important that Popper grants the category of criticism a central position. The critical impulse is at one with the resistance to the rigid conformity of each dominant opinion. This motive also occurs in Popper. In his twelfth thesis, he strictly equates scientific objectivity with the critical tradition which, 'despite resistance, often makes it possible

[3] Hegel, WW5, *Wissenschaft der Logik*, part 2, ed. Glockner, loc. cit., pp. 110f. English trans. A. V. Miller, *Hegel's Science of Logic* (London/New York, 1969), pp. 657f.

to criticize a dominant dogma'. Like Dewey and previously Hegel, he appeals for open, unfixed, unreified thought. An experimental, not to say a playful, moment is unavoidable in such thought. I would hesitate, however, both to equate it simply with the concept of 'attempted solution' [*Lösungsversuch*] and even to adopt the maxim of trial and error. In the climate from which the latter stems, the phrase 'attempted solution' is ambiguous. It is precisely this phrase which carries with it natural-scientific associations and is directed against the independence of every thought which cannot be tested. But some thoughts and, in the last instance, the essential ones recoil from tests and yet they have a truth content—Popper agrees even with this. Probably no experiment could convincingly demonstrate the dependence of each social phenomenon on the totality for the whole which preforms the tangible phenomena can never itself be reduced to particular experimental arrangements. Nevertheless, the dependence of that which can be socially observed upon the total structure is, in reality, more valid than any findings which can be irrefutably verified in the particular and this dependence is anything but a mere figment of the imagination. If, in the last analysis, one does not wish to confuse sociology with natural-scientific models, then the concept of the experiment must also extend to the thought which, satiated with the force of experience, is projected beyond the latter in order to comprehend it. In sociology, in contrast to the situation in psychology, experiments in the narrower sense are, in any case, mainly unproductive. The speculative moment is not a necessity of societal knowledge but is, rather, an indispensable moment of it even though idealist philosophy, which once glorified speculation, may be a thing of the past. To the above, one might add that criticism and the solution can in no way be separated from one another. Solutions are at times primary and direct; they instigate the criticism through which they are mediated in order to advance the process of knowledge. Above all, however, the construct [*Figur*] of criticism, if it fulfils its latent possibilities, can, conversely, already imply the solution; the latter hardly ever appears from without. It was to this that the philosophical concept of determinate negation referred, a concept which is in no way alien to Popper although he is in no way enamoured of Hegel. Insofar as he identifies the objectivity of science with the critical method, he raises the latter to the organon of truth. No dialectician today would demand more.

From this, however, I would draw a consequence which is not

mentioned in Popper's paper, and I am not sure whether he would accept it. He calls his standpoint, in a very un-Kantian sense, 'the critical approach' [*Kritizistisch*]. Yet, if one takes the dependency of the method upon reality [*Sache*] as seriously as is inherent in some of Popper's definitions, such as in that of relevance and interest as measures for societal knowledge, then the critical work of sociology could not be restricted to self-criticism—to reflection upon its statements, theorems, conceptual apparatus and methods. It is, at the same time, a critique of the object upon which, in fact, all these subjectively localized moments are dependent—subjectively, that is, in the sense of subjects united for the purpose of organized science. No matter how instrumentally the moments of the mode of procedure are defined, their adequacy for the object is still always demanded, even if this is concealed. Procedures are unproductive when they are lacking in such adequacy. In the method, the object [*Sache*] must be treated in accord with its significance and importance, otherwise even the most polished method is bad. This involves no less than that, in the very form of the theory, that of the object must appear. The content of the theorem which is to be criticized, decides when the critique of sociological categories is only that of the method, and when the discrepancy between concept and object is to the latter's detriment since it claims to be that which it is not. The critical path is not merely formal but also material. If its concepts are to be true, critical sociology is, according to its own idea, necessarily also a critique of society, as Horkheimer developed it in his work on traditional and critical theory. Kant's critical philosophy also contained something of this. The arguments he advanced against scientific judgments on God, freedom and immortality were in opposition to a situation in which, long after these ideas had lost their theological binding force, people endeavoured to preserve them for rationality by surreptitious means. The Kantian term, 'subreption' confronts the apologists' lie in its intellectual error. Critical philosophy [*Kritizismus*] was militant enlightenment. The critical impulse, however, which halts before reality and is satisfied with work in itself, would, in comparison, hardly be an advanced form of enlightenment, it would itself also be retarded, as is so convincingly demonstrated by the comparison of administrative research with critical theories of societies. It is time that sociology resisted such atrophy which is entrenched behind the intangible method. For,

knowledge lives in relation to that which it is not, in relation to its other. This relation will not of itself suffice as long as it prevails merely indirectly in critical self-reflection; it must become a critique of the sociological object. If social science—and, for the moment, I do not prejudge the content of such statements—on the one hand, takes the concept of a liberal society as implying freedom and equality and, on the other hand, disputes, in principle, the truth-content of these categories under liberalism—in view of the inequality of the social power which determines the relations between people—then these are not logical contradictions which could be eliminated by means of more sophisticated definitions, nor are they subsequently emergent empirical restrictions or differentiations of a provisional definition, but rather, they are the structural constitution of society itself. Thus criticism does not merely mean the reformulation of contradictory statements for the sake of consistency in the scientific realm. Such logicity, by shifting the real substance, can become false. I should like to add that this change in approach likewise affects the conceptual means of sociological knowledge. A critical theory of society guides the permanent self-criticism of sociological knowledge into another dimension. I would simply recall what I implied about naïve trust in organized social science as a guarantor of truth.

But all this presupposes the distinction between truth and falsehood to which Popper so strictly adheres. As a critic of sceptical relativism, he argues polemically against the sociology of knowledge and, in particular, against that of Pareto and Mannheim just as sharply as I have always done. But the so-called total concept of ideology, and the elimination of the distinction between true and untrue, does not correspond to the classical doctrine of ideologies, if one might call it that. It represents a degenerate form of the latter. It allies itself with the attempt to blunt the critical edge of that doctrine and to neutralize it to a branch in the domain of science. Once ideology was called socially necessary illusion. Then the critique of ideology was under obligation to provide concrete proof of the falsehood of a theorem or of a doctrine; the mere mistrust of ideology, as Mannheim called it, was not sufficient. Marx, in keeping with Hegel, would have ridiculed it as abstract negation. The deduction of ideologies from societal necessity has not weakened judgment upon their falseness. It sought to submit their derivation from structural laws such as that of the fetish character of commodities, which denotes the πρωτον ψενδος, to

the very standard of scientific objectivity which even Popper applies. Even the now customary reference to superstructure and base renders this trite. Whilst the sociology of knowledge, which dissolves the distinction between true and false consciousness, believes that it is advancing the cause of scientific objectivity, it has, through such dissolution, reverted to a pre-Marxian conception of science—a conception which Marx understood in a fully objective sense. Only through embellishment and neologisms such as perspectivism, and not through material determinations [*sachhaltige Bestimmungen*], can the total concept of ideology distance itself from the empty rhetorical world-view of vulgar relativism. For this reason, one has the open or concealed subjectivism of the sociology of knowledge which Popper rightly denounces, and in criticizing which the great philosophical tradition is at one with concrete scientific work. The latter has never seriously allowed itself to be misled by the general stipulation of the relativity of all human knowledge. When Popper criticizes the fact that the objectivity of science is confused with the objectivity of the scientist, he seizes upon the concept of ideology which has been degraded to a total one, but does not apprehend its authentic conception. The latter implied the objective determination of false consciousness, a determination largely independent of the individual subjects, and of their much-quoted standpoints, and verifiable in the analysis of the social structure; a notion, incidentally, which dates back to Helvétius, if not to Bacon. The zealous concern for the standpoint-boundedness [*Standortgebundenheit*] of individual thinkers emanates from the powerlessness to hold fast the insight gained into the objective distortion of truth. It has little to do with the thinkers and nothing at all with their psychology. In short, I am in agreement with Popper's critique of the sociology of knowledge; but it also is the undiluted doctrine of ideology.

Popper, like Max Weber before him in his famous essay, connects the question of social-scientific objectivity with that of value freedom. It has not escaped him that this category, which has been dogmatized in the meantime and which comes to terms all too well with pragmatistic scientific activity, must be thought out anew. The disjunction between objectivity and value is not so secure as it seems in Max Weber's writings. In his texts, it is, however, more qualified than his slogan might lead one to expect. When Popper calls the demand for unconditional value freedom

paradoxical, since scientific objectivity and value freedom are themselves values, this insight is hardly as unimportant as Popper regards it. One might draw philosophical-scientific consequences from it. Popper underlines the fact that the scientist's evaluations could not be prohibited or destroyed without destroying him as a human being and also as a scientist. This, however, is to say more than merely something about the practice of knowledge; 'destroying him . . . as a scientist' involves the objective concept of science as such. The separation of evaluative and value-free behaviour is false in so far as value, and thus value freedom, are reifications; correct, in so far as the behaviour of the mind cannot extricate itself at will from the state of reification. What is referred to as the problem of value can only be constituted in a phase in which means and ends are split asunder for the sake of a frictionless domination of nature in which the rationality of means advances with a constant or, if possible, increasing irrationality of ends. Kant and Hegel did not use the concept of value already current in political economy. Presumably it first entered philosophical terminology with Lotze; Kant's distinction between dignity and price in practical reason would be incompatible with it. The concept of value is formed in the exchange relationship, a being for the other. In a society in which every relationship has become an exchange relationship, has become fungible—and the denial of truth which Popper observes reveals the same state of affairs—this 'for the other' has been magically transformed [*verhext*] into an 'in itself', into something substantial. As such, it then became false and was suited to fill the sensitive vacuum by following the caprice of dominant interests. What was subsequently sanctioned as a value does not operate externally to the object, does not oppose it χωρις, but rather is immanent to it. Reality, the object of societal knowledge, can no more be imperative-free [*Sollensfreies*] or merely existent [*Daseiendes*]—it only becomes the latter through the disections of abstraction—than can the values be nailed into a firmament of ideas. The judgment upon an entity [*Sache*], which certainly requires subjective spontaneity, is always simultaneously prescribed by the entity and is not exhausted in subjectively irrational decision, as it is in Weber's conception. Every judgment is, in the language of philosophy, a judgment of the entity upon itself; the judgment recalls the fragmentariness of the entity. It is constituted, however, in each relation to that whole which is contained in it, without being immediately given, without being

facticity; this is the intention of the statement that the entity must be measured against its concept. The whole problem of value, which sociology and other disciplines haul about with them like a ballast, is accordingly falsely posed. Scientific awareness of society, which sets itself up as value-free, fails to apprehend reality just as much as one which appeals to more or less preordained and arbitrarily established values. If one assents to the alternative, then one becomes involved in antinomies. Even positivism was not able to extricate itself from them. Durkheim, whose *chosisme* outstripped Weber in positivist sentiments—the latter himself had his *thema probandum* in the sociology of religion—did not recognize value freedom. Popper pays his tribute to the antinomy in so far as, on the one hand, he rejects the separation of value and knowledge but, on the other hand, desires that the self-reflection of knowledge become aware of its implicit values; that is, he desires that self-reflection does not falsify its truth content in order to prove something. Both desiderata are legitimate. But the awareness of this antimony should be incorporated into sociology itself. The dichotomy of what is [*Sein*] and what should be [*Sollen*] is as false as it is historically compelling and, for this reason, it cannot be ignored. It only achieves an insight into its own inevitability through societal critique. In actual fact, value-free behaviour is prohibited not merely psychologically but also substantively. Society, the knowledge of which is ultimately the aim of sociology if it is to be more than a mere technique, can only crystallize at all around a conception of the just society. The latter, however, is not to be contrasted with existing society in an abstract manner, simply as an ostensible value, but rather it arises from criticism, that is, from society's awareness of its contradictions and its necessity. When Popper says, 'For although we cannot justify our theories rationally and cannot even prove that they are probable, we can criticize them rationally', then this is no less true for society than for theories about society. The result would be a form of behaviour which neither doggedly entrenches itself in a value freedom that blinds one to the essential interest of sociology, nor permits itself to be guided by abstract and static value dogmatism.

Popper sees through the latent subjectivism of a value-free sociology of knowledge, which is especially proud of its scientistic lack of prejudice, and consequently he attacks sociological psychologism. Here too, I share his view and may perhaps draw attention to my essay in the Horkheimer Festschrift in which the

discontinuity of the two disciplines is developed, both of which are subsumed under the vague encompassing concept of the science of man. But the motives which lead Popper and myself to the same result differ. The division between man and social environment seems to me to be somewhat external, much too orientated towards the existing map of the sciences, whose hypostatization Popper basically rejects. The human subjects, whom psychology pledges itself to examine, are not merely, as it were, influenced by society but are in their innermost core formed by it. The substratum of a human being in himself who might resist the environment—and this has been resuscitated in existentialism—would remain an empty abstraction. On the contrary, the socially active environment, no matter how indirectly and imperceptibly, is produced by human beings, by organized society. Despite this, psychology may not be regarded as the basic science of the social sciences. I would simply point out that the form of socialization [*Vergesellschaftung*], in English termed 'institutions', has, on account of its immanent dynamics, made itself independent of real people and their psychology. It has confronted them as something so alien, and yet so overpowering, that reduction to primary modes of human behaviour, in the manner in which psychology studies them, cannot even be equated either with typical behaviour patterns which can be plausibly generalized or with societal processes which take place over people's heads. Nevertheless, I would not conclude from the priority of society over psychology that there is such a radical independence of the two sciences as Popper seems to believe. Society is a total process in which human beings surrounded, guided and formed by objectivity do, in turn, act back upon society; psychology, for its part, can no more be absorbed into sociology than can the individual being be absorbed into its biological species and its natural history. Certainly, fascism cannot be explained in social-psychological terms, but the 'Authoritarian Personality' has occasionally been misunderstood as just such an attempt. But if the authoritarian character type had not been so widespread for reasons which, in their turn, are sociologically intelligible, then fascism, at any rate, would not have found its mass basis, without which it would not have achieved power in a society like that of the Weimar democracy. The autonomy of social processes is itself not an 'in itself' but rather it is grounded in reification; even the processes estranged from human beings remain human. For this

reason, the boundary between the two sciences is no more absolute that that between sociology and economics, or sociology and history. Insight into society as a totality also implies that all the moments which are active in this totality, and in no way perfectly reducible one to another, must be incorporated in knowledge; it cannot permit itself to be terrorized by the academic division of labour. The priority of what is societal over what is individual is explained in reality itself, that is, that powerlessness of the individual in the face of society which for Durkheim was precisely the criterion for the *faits sociaux*. The self-reflection of sociology, however, must be on guard against its historical-scientific inheritance which induces one to overstrain the autarchy of the recent science, still not accepted in Europe as an equal by the *universitas literarum*.

In our correspondence which preceded the formulation of my reply, Popper characterized the difference in our positions by saying that he believed that we live in the best world which ever existed and that I did not believe it. As far as he is concerned, he presumably exaggerated a little for the sake of sharpening the discussion. Comparisons between the degree of badness in societies of various epochs are precarious. I find it hard to assume that no society is claimed to have been better than that which gave birth to Auschwitz and, to this extent, Popper has unquestionably given a correct characterization of my view. But I do not regard the difference as one of mere standpoint but rather as determinable. Both of us surely adopt an equally negative attitude towards a philosophy based on standpoints and, consequently, to a sociology based on standpoints. The experience of the contradictory character of societal reality is not an arbitrary starting point but rather the motive which first constitutes the possibility of sociology as such. In Popper's language, only the person who can conceptualize a different society from the existing one can experience it as a problem. Only through that which it is not, will it reveal itself as that which it is and this would presumably be fundamental in a sociology which, unlike the majority of its projects, would not be satisfied with ends laid down by public and private administration. Perhaps we find here precisely the reason why, in sociology, as the finding of an individual science, society has no place. If in Comte, the outline of a new discipline was born out of the desire to protect the productive tendencies of his age, the unleashing of productive forces,

that is, from the destructive potential which was emerging in them at that time, then subsequently nothing has altered in this original situation unless it has become more extreme, in which case sociology should take this into account. The arch-positivist Comte was aware of the antagonistic character of society as the decisive aspect which the development of later positivism desired to conjure away as metaphysical speculation. Hence the follies of his late phase which, in turn, demonstrated how much societal reality scorns the aspirations of those whose profession it is to apprehend it. In the meantime, the crisis, to which sociology must prove itself equal, is no longer that of bourgeois order alone but rather it literally threatens the physical continuance of society as a whole. In view of the nakedly emergent coercive force of relations, Comte's hope that sociology might guide social force reveals itself as naïve except when it provides plans for totalitarian rulers. Sociology's abandonment of a critical theory of society is resignatory: one no longer dares to conceive of the whole since one must despair of changing it. But if sociology then desired to commit itself to the apprehension of facts and figures in the service of that which exists, then such progress under conditions of unfreedom would increasingly detract from the detailed insights through which sociology thinks it triumphs over theory and condemn them completely to irrelevance. Popper concluded his paper with a quotation from Xenophanes which is symptomatic of the fact that neither of us is satisfied with the separation of philosophy and sociology, a separation which nowadays ensures the sociology's peace of mind. But Xenophanes too, despite his Eleatic ontology, represents the enlightenment. It is not without good reason that, even in him, one can find an idea which recurs in Anatole France, namely, that if an animal species could conceive of a deity it would be in its own image. Criticism of this type has been handed down by the entire European enlightenment from antiquity onwards. Today its inheritance has fallen to a great extent to social science. Criticism implies demythologization. This, however, is no mere theoretical concept nor one of indiscriminate iconoclasm which, with the distinction between true and untrue, would also destroy the distinction between justice and injustice. Whatever enlightenment achieves in the form of disenchantment it must necessarily desire to liberate human beings from such spells—formerly from that of the demons, nowadays from the spell which human relations exert

over them. An enlightenment which forgets this, which disinterestedly takes the spell as given and exhausts itself in the production of utilizable conceptual apparatuses sabotages itself, along with the very concept of truth with which Popper confronts the sociology of knowledge. The just organization of society is incorporated in the emphatic concept of truth without being filled out as an image of the future. The *reductio ad hominem* which inspires all critical enlightenment is substantiated in the human being who would first have to be produced in a society which was master of itself. In contemporary society, however, its sole indicator is the socially untrue.