THE MEANING OF SOCIAL REALITY:  
POSITIVISM VS. PHENOMENOLOGY IN  
THE SOCIAL SCIENCES

By

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ABSTRACT

Alongside the philosophical debate between phenomenology and positivism there is a parallel debate among social scientists. It concerns the respective merits of qualitative and quantitative research. Qualitative research has, as a model of society, a set of conceptual relationships, while quantitative research uses a purely causal empirical model.

Commencing with the intuition that society consists of both causal and conceptual relationships, an attempt is made to combine elements of both positivism and phenomenology in a way helpful to social science practitioners.

The two opposing models are held to be reconcilable at the level of social explanation, and a theoretical basis for this conclusion is presented. The two contrasting views of the nature of rationality are also discussed, and it is argued that both can be used in tandem as tools of mutual criticism and enlightenment.
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PREFACE

It is logical to begin an argument with the major premise. Since we are concerned with discovering the sort of explanation that ought to be given of social reality, the major premise should contain a statement as to the aim of social explanation. The aim of social explanation is to understand and predict social change and to help frame social policy. To deny that we wish to understand social change is to deny that societies and men are interested in their histories from the earliest times to the present day. In making decisions, presidents and citizens wish to know what the implications of proposed actions will be for others, and this requires them to predict what effect their actions will have. Men seek to understand social reality, but they are also a part of social reality. Their social policies, therefore, have logical implications for the description of social reality as well as effects upon social reality. With this in mind, in the widest sense of "social policy" a social explanation should contribute to the solution of problems which face social policymakers.

The positivists base their model of social explanation upon the natural sciences, whereas the phenomenologists take the understanding of intention, or meaning, as their paradigm. There is widespread agreement among
social scientists that both types are required for a complete social explanation. (An explanation is complete simply if it conforms to the desiderata stated in the premise). In practice the debate boils down to a question of emphasis, of balancing the importance of each model in explaining social reality.

The positivists attack the phenomenologists' "empathetic" explanation of society on the grounds that to describe subjective meaning is not to explain it. Furthermore, according to Hempel, the use of a descriptive concept is equivalent to the use of a general law governing that concept, and explanation by subsumption under general laws is exactly how Hempel describes social explanation. The phenomenologist emphasises the difference between physical and social explanation. He would reply to Hempel's criticism that to reduce social objects to a set of causal relationships necessarily obscures that part of social reality which consists of conceptual relationships. To describe these conceptual relationships is, in a sense, to explain them.

Despite the theoretical controversy, we are in the fortunate position of knowing a social explanation when we see one. We may not have a full theoretical justification for explanations we find acceptable, but they will be acceptable if they are complete. Implicit in the definition of explanatory completeness is the
belief that the social explanatory statement is the link between social action and social theory. Social action is based on the agent's understanding of his social situation, while social theory works toward this understanding.

Whilst it is true that few agents take explicit account of the theoretical basis of social explanation, for those that do, administrators for example, there is a practical need to balance the two approaches to social explanation that we shall be discussing. There is little doubt that both positivism and phenomenology have important contributions to make to social research and social progress. Both Husserl and Sartre have stated that the statistical method is valid\(^5\), but that the study of social meaning is indispensable to that method. In the final chapter we will state how the two theories contribute to a complete social explanation.

Finally, we do not aim at any sort of historical completeness. The debate is still in progress, and, in presenting the arguments, we will be more concerned with stating a consistent position on either side in such a way as to allow dialogue to take place between them, rather than attempting to give a full valuation to earlier accomplishments in either stream of thought.
INTRODUCTION

Theodor Adorno says that his sort of social theory,
critical theory,
"wants to raise the stone of social appearance
and expose the teeming confusion underneath,
seeing in the understanding of the latter the
only way to preserve meaning.
This impulse is resisted by factual social
research which sees disenchantment, even of the
kind accepted by Max Weber, as simply a special
kind of mystification, and regards its concern
with a latent driving force, and with the possi-
sibility of intervening in its operation, as
nothing but an unnecessary delay in the process
of changing what is already exposed to view.
In particular, what is generally known nowadays
as empirical social research has, since Comte's
positivism more or less explicitly taken the
natural sciences as its model. The two tendencies
have no common denominator. 6
The intent of this thesis is simply to show that
the two tendencies do have a common denominator, at the
level of social research and, through an examination of positivism and phenomenology, to show to what extent the two theories are compatible and can thus work together towards common goals.

At first Adorno might appear correct in his assertion. The positivists ridicule the phenomenologists, using as a criterion the method of empirical confirmation which the phenomenologists cannot accept. Meanwhile, the phenomenologists attack an ontological basis which the positivists do not believe exists. The positivists believe that, to be meaningful, theoretical speculations on society must be verified by corresponding sets of empirical data. Adorno claims that "theoretical speculations on society cannot be confirmed by precisely corresponding sets of empirical data." The positivists would agree that they cannot be precisely confirmed, but, as we shall see, they believe that social theories can be adequately confirmed empirically.

For example, the theory that "populist movements are the result of a discrepancy between the desires and the actual situation of their members", (S), can be confirmed according to the positivist, by identifying such movements and identifying the actual situation of their members, and then asking those members about their desires. Adorno would attack this claim by arguing that to identify a
populist movement requires precisely the sort of concept-
ualisation that the strict positivist cannot make without
circularity, since his verifying conditions (discrepancy
between desires and situation) become his defining
conditions.

We will argue that, at the stage of identification,
Phenomenology is needed to underpin positivism. This
gives phenomenology a major role in social research, and
it unites the two models at the level of practice.
Phenomenology will be seen to play the role of constantly
modifying the "discoveries" of positivism.

Yet Adorno says that nothing
"is to be expected from those promises of a
synthesis of theory and empiricism... which
falsely equate theory with formal unity and refuse
to acknowledge the fact that a social theory
purified of real social content puts all its
emphasis in the wrong place."8

What Adorno means by "real" social content is hard
to say. If he means the content should exhibit the same
"tensions between the possible and the actual" upon which
society, according to him, depends for its existence,
then that is exactly what is being proposed here (by
using phenomenology to criticise positivism). Furthermore,
any attempt to put phenomenology (with its "social content") onto the same continuum as positivism can perfectly well retain that social content. Indeed, by constantly modifying empirical claims for conceptual reasons, theory would be retaining the social content that Adorno mentions.

Reverting to the earlier example, S; of a social theory, it was suggested that, while positivist methods can be used to confirm an explanation derived from S, we must turn to phenomenological hermeneutics to find out exactly how to understand the words "actual situation" or "desires" (of members of populist movements). It is the explanatory statement which provides the common denominator of conceptual and causal analyses of social reality. It is not the phenomena to which the statement refers that provides the link. Eddington's famous example of the two tables, one made of brown wood, the other composed of atoms shows that different categorical frameworks yield different objects when applied to the same phenomena.

Phenomenologists claim that acceptance of the basis of their theories entails rejection of causal explanation. Similarly the positivists argue that they have no need of a phenomenological model to underpin their own causal framework. At the root of the debate lies a
different way of perceiving phenomena; we will argue that
the two theories are necessary and jointly sufficient in
order to provide a complete social explanation. Positivism
provides an explanation for what Popper called the
"unintended consequences of human interaction", and allows
the policy maker to forecast unintended consequences
before they occur. Phenomenology can provide social
researchers with a deeper understanding of the meaning of
social phenomena. It can relate the meaning of, say,
"desires" to a larger "totality of involvements".

To show that it is possible for the two theories
to work together, and that they are mutually supportive,
we will have to establish eight propositions:

1) We will show that positivism is required to
underpin the presuppositions of the phenomeno-
logical method.\textsuperscript{9}

2) Against the phenomenologists, generalisa-
tions are not confined to periods.

3) The crude intuitionist theory of truth must
be amended.

4) The crude verification theory of truth must
be amended.\textsuperscript{10}

5) We will deny that the use of unrestrictedly
Universal laws in science is legitimate.
6) Against the positivists, scientists qua scientists make value judgements.

7) Working with a weaker version of the verification theory, it will become apparent that the "reduction thesis" must also be weakened. This is because, as we will demonstrate, complex explanatory concepts often cannot be reduced to more simple terms without loss of meaning.

8) Phenomenology is required to fully explicate the concepts which the positivists take for granted in order to measure them.

In a positivist explanatory system, the social world is objectified and reduced to its constituent members. The favoured form of explanation, derived from the model of the natural sciences, is the causal explanation, subsumed under a general law and confirmed by repeated tests.

This approach is rejected by social phenomenologists, such as Alfred Schutz, whose overriding philosophical influence was the transcendental phenomenology of Edmund Husserl. This stream of thought has its ontological basis in "lived experience". The social life world, not the classificatory system of positivism, is the starting point for research. In particular, for Schutz, social
research is thought to begin with what the typical social agent takes for granted in his life. Here we find the "pre-thematic understanding" of Heidegger being cashed out in terms of hypotheses about the beliefs of social agents. At the same time the agent is said to approach his everyday world with what Heidegger calls "concern". Each object in the world is regarded "circumspectively" as part of an overall "totality of involvements". It is only by an analysis of the agents' intentions that we can discover what they take for granted, according to phenomenologists, and phenomenological social explanation is the explanation of meaning, or intention, in society.

The truth of an explanation is not verified by repeated tests, but by "seeing" to what extent the explanation contributes to an overall picture of the society which is consistent and rational. If the explanation indicates an irrational element in society it is not necessarily inaccurate. If the inconsistency is not accepted to be such by society, once it has been pointed out, the society deserves to be named "irrational".

Merleau-Ponty argues that it is part of the definition of rationality that one assimilates newly discovered contradictions into one's set of beliefs, and attempts to resolve them, rather than suppressing or ignoring them as is the procedure in the natural sciences.
It is clear that the phenomenologists have a different notion of rationality than the positivists who believe that rationality consists simply in proportioning one's beliefs to the degree of evidence in their favour. We will argue, with Habermas, that both sorts of rationality should be used, in tandem, to arrive at a complete social explanation. The success in combining the two can be regarded as one test of the plausibility of the present attempt to unite the two theories.

It was asserted that one of the aims of social explanation is to assist in the framing of social policies. This desideratum will be invoked in the final chapter as a further test of the proposed compromise that must be reached between positivist and phenomenological sociology. Adorno is aware that positivist sociology is far better suited to administrative manipulation. That is its great strength. But it should be clear in the end that positivism alone cannot arrive at a sufficiently clear description (hence explanation) of social reality, to be able to guide intelligent policy making. For that purpose both an empathetic and a causal explanation of society are required. Correspondingly, we will be attempting to frame a theory that is scientifically tough, phenomenologically sound and rationally correct. In the first chapter
we will begin by expanding our discussion of the nature of social explanation in order to show (i) that there is a continuum along which both positivism and phenomenology can be united, and (ii) that this would be a desirable union.

In the second chapter we will make a start by discussing the nature of positivism. We will begin, at the roots of positivism, with a discussion of language that will draw from the work of Rudolf Carnap and Richard Von Mises. Next we will move to an examination of the structure of physical theories. These considerations will form the groundwork for understanding the positivist view of social explanation as it is espoused by Hempel and Popper. Their "covering-law model", as amended by Dray, will be expounded as it applies to causal explanations of society.

Finally, in the discussion of positivism, we will examine the internal debate over the comparative advantages of methodological collectivism (M.C.) and methodological individualism (M.I.). This last section is important for two reasons. In the first place we require a fairly precise statement of a positivist method of research. Secondly, it will become apparent that while M.C. is open to the amendments that will be proposed to allow positivism and phenomenology to work harmoniously, M.I. is not well suited to the task. It is unusual for
a strict positivist to also be a collectivist, but it is not impossible within the positivist framework, and a new approach, in this case, requires a new departure.

During the exposition of positivism, two theses will be stated that are regarded as central to any positivist program. Thesis A deals with objectification and reduction in scientific explanation. Thesis B proposes causal explanation confirmed by replication as the correct path to an understanding of social reality.

In the following chapter a similar exposition of phenomenology will be presented. We will set the ontological stage with a discussion of Heidegger. Thesis C will assert that lived experience, rather than objectification, is the attitude from which to commence social explanation. Furthermore, such explanations should, on the phenomenological account, aim at revealing the essence of social structure through our understanding of society. We will then describe a methodology of social explanation as espoused by Gadamer, Merleau-Ponty and Habermas. This is the intentional model. Thesis D states that to discover the intention of social agents, or the meaning of social structures, is the aim of social research, and that such explanations are to be counted as confirmed if they conform to the criterion of rational agreement that will be outlined later.
The next two chapters will deal in turn with the positivist criticisms of theses C and D, and the phenomenologist criticisms of theses A and B. We will expound Hempel's argument that what he calls empathetic explanation is not open to adequate confirmation, and hence cannot be called explanation at all. A further argument of Hempel's is that this sort of "explanation" is usually no more than a redescription of the explanans using a different concept. But, for Hempel, a concept gains its meaning as a result of a stateable general law defining its domain, and it is only this that gives it any explanatory power. Since positivists advocate the use of general laws in explanation, this would count as an argument in their favour. Finally, in the attack on thesis C, we will dismiss Donal Davidson's influential argument in his article "Actions, Reasons, Causes", that explanations which proceed by giving a reason for an action (rationalisations) are simply a species of causal explanation.

These arguments are primarily attacks on thesis C. Turning to thesis D (intention), we will consider Popper's much quoted dictum that sociology is searching for explanations of the "unintended consequences of human interaction". If this were wholly true it would be a knock down argument against phenomenological sociology. We will also quote with approval Popper's argument, in
"The Poverty of Historicism" against the phenomenologist claim that generalisations are confined to periods.

The phenomenological movement emerged primarily as an attack on the spirit of the positivists' objectivist thesis A. We will show how the phenomenologist could generate a paradox in the positivist framework (by conjoining A and B) and how this can be solved by Heidegger's distinction between the present-at-hand and the ready-to-hand. It will be argued by the phenomenologist that social science cannot be value free. Furthermore, the reduction essential to positivist explanation leads it, according to Merleau Ponty, to eliminate the specifically human element in social action, namely the ambiguity of human action. This ambiguity in human action is thought to be so fundamental that Milton Friedman's arguments in defence of the lack of "realism" in social scientific models are, for the phenomenologists, inadequate.

The phenomenologists can also mount an attack on thesis B alone. This is that Hempel's boundary conditions for covering law explanation cannot be scientifically validated, but require a phenomenological basis. During the course of this debate we will try to establish the proposed amendments introduced on page 5. Propositions 1 and 2 (on p.5) are amendments to thesis C. Proposition 5 is an amendment to D. Proposition 4 is required to
avoid the paradox generated by both A and B. 5 is an amendment to thesis A alone, and 6, 7 and 8 are amendments to thesis B.

In the final chapter we will attempt to summarise the results of these arguments and counter-arguments and achieve some reconciliation between the two opposing models. It will be argued that positivism alone is, theoretically, unable even to commence social research, but that phenomenology alone is able to reach few fruitful conclusions. The aims of social explanation will again be invoked and they will be seen to imply a precise mixture of the two theories; understanding and prediction, we will argue, can only take place simultaneously, with each acting as a tool of criticism of the other. Social policy, whose aim is social progress, is best served if it can balance its predictions of the effects of social change against a model of the meaning of social change in terms of a description of the "essence" of the changing social structure.

Before opening the debate, however, it would be to our advantage to enter into a further defence of the thesis of this thesis: that the two streams of thought can work compatibly in sociology. We would also like to show how far our common sense notion of explanation, and social explanation, can take us, and how much it can tell
us, before we ask whether we can produce a theory which will conform to these common sense intuitions. An appeal to intuitions at the outset of this enquiry is dangerous because, of course, the author's intuitions may not conform to those of the readers. However, as long as we do not beg any of the questions at issue between the two sides in the debate, the proposed approach can be justified. It will give us a general framework within which to situate the succeeding arguments.
I

WHAT IS SOCIAL EXPLANATION?

In an influential, but poorly argued article, Leon Goldstein writes:

...it is possible to argue that between the phenomenological and the naturalistic conception of the social there is really no fundamental difference. Such an argument would be based upon the facts that the phenomenological social scientist does not concern himself with the merely idiosyncratic and the naturalistic social scientist does not adopt the standpoint of behaviouristic psychology. For both of them social enquiry has to do with socially meaningful action, action the entire point of which depends upon the presence of shared meanings and values. 11

Two points that we have already raised serve to highlight the weaknesses of Goldstein's remarks. We have noted Popper's dictum that sociology is concerned with the unintended consequences of human interaction. If this is so then the positivist sociologist will, at times, be forced to adopt a behaviourist standpoint: If the act
was unintended, there is no value in looking to the agent's intentions in order to discover the social meaning of the act.

Excluding the first sentence of Goldstein's remarks, even Theodor Adorno, whom we have taken as the arch critic of synthesis, between the two competing models, even Adorno would agree with Goldstein. He argues that everybody must be talking about the same phenomena (if we wish to use Kantian terminology). "The fact that they all, in one way or another, deal with social phenomena" is the only connection that Adorno admits between the various approaches to sociology, but to say as Goldstein does that "there is really no fundamental difference" between them is to ignore both their models and their methods. If the possession of different models is not seen as a fundamental difference, then look at the different practical results (behavioural therapy vs. psychoanalysis) of the use of different models.

The meaning one assigns to social reality is a function of the sort of explanation one gives of it. To explain social phenomena within a causal model is to make that the model of social reality, just as it is the model with which we understand physical reality. Similarly, a hermeneutic model, such as Gadamer's, views social reality as a set of purely conceptual relationships. The
argument in favour of a synthesis is more complicated than Goldstein makes it appear in his article because it has to produce a model that allows us to view (and explain) society as containing both causal and conceptual relationships. This is particularly difficult to do when the arguments behind both models claim that, at this time, they are mutually exclusive.

An example of a social explanation at the common sense level is the statement "The employers acceded to Union demands out of fear of a strike." (E). For positivists like Hempel this is an incomplete explanation since it contains no reference to a general law, but that is to confuse what he claims is the logical structure of an explanation with the explanation itself. For phenomenologists like Schutz\(^\text{14}\) the explanation is incomplete because it contains no typification of the ideal types of "demand" and "concession". Yet the explanation is still one that the "wide-awake" man could accept (Schutz typifies the common sensically, intelligent member of society as the wide-awake man).\(^\text{15}\) Why, then, is E an example of a social explanation?

As a first step we could say that E is a social explanation because it satisfies the criteria laid down in the preface. This is too wide a definition, however, because Darwin's theory, for example, helps us understand
and predict society, yet it is an example of biological, not social, explanation. We could modify the claim by stipulating that social explanation must refer specifically to human behaviour or its products, but reflex actions, although a part of human behaviour, can hardly be called social. We could restrict our claim still further by referring only to human action (with its element of intention) in social explanation, yet we need no reference to society to explain the action of a man reaching for a drink of water. To avoid this problem, we may stipulate that we will only include those human actions that are performed in the knowledge that the agent is related to other agents. In so doing, however, we exclude actions done for one reason which have some other, unintended, consequence (for example, turning a light on and alerting a burglar). To account for this objection we might say that social explanation is concerned with social action and its unintended consequences. Again, this does not suffice because many non-social actions have unintended social consequences. Next we will suggest that the domain of social explanation is social action and the unintended social consequences of human behaviour. Social action is human action performed in the knowledge that the agent is related to other agents, but we still have problems with the second clause in the most recent suggestion because
many natural events have social consequences (for example earthquakes or rain). As a final attempted formulation, and remembering that "social action" is elliptical for "human action performed in the knowledge that the agent is related to other agents", we suggest that the domain of social explanation is social action and the consequences upon social action of non-social action, human behaviour and natural events.

Having provisionally identified what is social about social explanation, and having noted that both conceptual and causal relationships are contained in our definition, we will now consider the nature of explanation.

Since we do not wish to beg any of the questions at issue between positivists and phenomenologists, we will outline William Dray's linguistic typology of explanation which divides all requests for an explanation into three types. (We should point out that in presenting his argument in his book, Laws and Explanation in History, Dray sees himself as challenging the assumption implicit in the positivist covering law model that any "explanation is given, or when fully stated would be given, in the form of a "because answer" to a "why" question." That is, Dray is denying the positivist claim that their model is alone sufficient to explain society. Nevertheless, we quote Dray with approval, and without fear of prejudging
the issue, because he also implicitly denies the phenomenologist's claim that their model is alone sufficient to explain society.)

Apart from "Why questions", Dray identifies "What questions" and "How questions". Questions beginning with the word "why", Dray calls "why necessarily" questions since they ask for an explanans that shows how the explanandum could have been predicted. The logical framework of answers to why questions will be expounded when we discuss Hempel's covering law model in the next chapter. For the present we can illustrate what Dray means by returning to our example, E, of an explanation, namely "the employers acceded to Union demands out of fear of a strike." The answer to the question, "why did the employers accede?" is that they were afraid of a strike, and the implication is that if, the next time the unions threatened to strike, the employers could conquer their fear, then they would not accede.

Dray argues that why questions are not the only ones we can ask; we may treat explanations as answers to "what questions". Dray quotes Ramsay Muir's observation: "it was not merely an economic change that was beginning; it was a social revolution." This explains what happened as a social revolution. It does not explain why it happened, and nor is it trying to.
("What questions" are of the sort that Schutz tries to answer with his method of social explanation ("typification by common sense constructs"). In example E, if a journalist arrived at the factory to report the continuing industrial unrest and found all the workers happily fulfilling their contracts, he might ask "What happened?" to which it would be appropriate to reply, "The employers gave in." The identification of a concession as a concession is effected by constructing an ideal type of the action pattern of "concession". This is an important task because it gives sociology a critical role within society. After all, it might be discovered that the employers had not really conceded anything at all; that they had somehow paraphrased their original offer by increasing pay while reducing staff amenities. Similarly the concept of union has an ideal type which is distinct from that of a loose trade association. By constructing a series of ideal types Schutz hoped to establish an explanatory framework that was just as systematic as the causal model.)

The third type of question, according to Dray, is "how possibly." This unites, in a sense, the two previous types of question. Having been told what happened, our journalist might want to know how it happened. He might be told that the employers made a revised offer the previous
day which the employees found acceptable. A how question is a demand for additional information that will solve a puzzle. An answer tells us how the explanandum was even possible and might put us into a position where we can continue by giving a causal explanation (that is, an answer to a why question).

If we know why something happened then we have presupposed that we know all we need to know about how it happened and about exactly what happened. If we had been told why it happened it would not make sense to ask how it happened. But if we just know what happened, it makes perfect sense to go on to ask how it happened, and from there to ask why it happened. In this way "how questions" connect "why questions" to "what questions" and they contain elements of both, for they fill in further details about what happened and put us in a position to trace why it happened.

We believe that the foregoing consideration of Dray's typology is further evidence that a combination of positivism and phenomenology is both desirable and possible. It is desirable because, before we explain why something happened we ought to be able to say what we are talking about without simply defining the object of our study so that it is amenable to the tests we wish to make on it. Our belief that positivism and phenomenology
can work together is supported by the fact that the sort of questions that each model typically asks can be compared along the same continuum: the continuum of the explanatory statement.
II

POSITIVISM

1. Introduction

The word "positivism" is used with a variety of meanings, and it would be best to begin, as does Von Mises in his book, *Positivism*, with a preliminary statement of what it is to be a positivist.

...he is a positivist who, when confronted by a problem acts in the manner in which a typical contemporary scientist deals with his problems of research.\(^{19}\)

The scientist, when confronted with a problem, attempts to formulate the solution most likely to be correct, and then to test his hypothetical solution empirically. If he finds that he has a successful hypothesis (that is that his hypothesis is empirically confirmed) the scientist accepts any assertion contained in, or derivable from, the solution as part of his set of true statements, unless and until such statements are refuted by experience.

We now add to the previous conceptual delineation of positivism the more specific but just as tentative one: It is the aim of positivist theory
to review and to sum up the stock of experience acquired by men in a uniform picture so that mutually consistent judgements are possible in all situations of life. 20

Von Mises implies that one and the same decision procedure is applicable to all problem solving whatever the subject matter: the scientific decision procedure. Von Mises expresses the importance of this belief when he argues for his criterion of connectibility. For he is searching for a unified classificatory system within which any statement is true or false exclusively. He does not find the criterion of meaning (and hence truth) to be simply empirical verification (which is reserved for protocol sentences), nor is the criterion a consistency with a set of arbitrary linguistic rules. Rather, a statement is said to be true by virtue of its connectibility with the rest of the statements in the language of which it is a part. Von Mises prefers a more modest statement of the connectibility thesis than does Carnap. He says that "we propose to call a sentence connectible if it is compatible with a certain totality of statements which regulate the use of the word and word forms appearing in it." 21 In ordinary language these rules are "not exactly defined and never explicitly formulated", but "the technical languages explicitly cancel some of these rules or change
them. Whatever is in agreement with the stock of linguistic rules thus formed is simply called "connectible as such (meaningful)". 22

In view of the stated aim of positivism to create a unified model of human experiences so that "mutually consistent judgements are possible", all true statements will, ideally, satisfy the criterion of connectibility. It should be reiterated that the connectibility thesis, though central, is more modest than analogous assertions made by most logical positivists. Although it is framed to facilitate the eventual unification of the sciences it does not make the stronger claim that the degree of mathematical formalisation is the measure of the "scientificness" of a discipline, nor that an eventual unification of disciplines will require that they all be mathematically formalised.

To formulate the first of the two major positivist theses promised earlier we will now examine in more detail the notion of a "totality of statements", their foundations and inter-relationships. We shall not examine just any totality of statements, but shall confine ourselves to the totality of scientific statements.
II.2

THE LANGUAGE OF SCIENCE

For the positivist all language is a tool. The vague language of everyday use and the more precise technical language of the sciences are created unconsciously in the former case, and consciously in the latter, by men and for their purposes. The positivists agree with Lichtenberg that "all our philosophy is improvement of language". Von Mises says "the inadequacies of ordinary language leads to the branching off of special scientific languages, resting upon conventions...". 23

The positivists hold to the "received view" theory of scientific theories. On this account every scientific theory can be formulated into an axiomatic calculus, and there is a strict division within each theory between observational and theoretical vocabulary. The received view is now under attack from other empiricists for two reasons. Firstly, that the division between observational and theoretical terms is false since all observations are "theory-laden". Secondly the received view construes scientific theories as linguistic entities, when they are no more linguistic entities than are rules.
Both rules and theories, it is now thought, are extra-
linguistic entities with a number of non equivalent lin-
guistic formulations. Nevertheless, it is the received
view of scientific theories that will now be discussed.

Rudolf Carnap distinguishes between what he calls
formal and what he calls factual sciences.\textsuperscript{24} Formal
sciences, logic and mathematics, contain only analytic
statements, while the factual sciences also contain syn-
thetic statements. With regard to their subject matter
there is a further difference between the two categories.
While physics, for example, has as its object the nature
of light and heat, "the formal sciences do not have any
objects at all; they are systems of auxiliary statements
without objects and without content."\textsuperscript{25}

In the factual sciences the positivists claim that
the first step towards a verifiable theory is the intro-
duction of a basic class, 0, of observational sentences.
Reichenbach asserts that these sentences have a direct,
or primitive, meaning which "is not under investigation
during the analysis to be performed."\textsuperscript{26} Class 0 is
sometimes called the class of protocol sentences. This
term was introduced by the Vienna circle, and in particular
by Carnap, Neurath and Schlick in the pages of Erkenntnis
no. 5. Protocol sentences, a development of Mach's elements
have as their main feature that every predicate they contain
is a thing predicate. Predicates are:

attributed to perceived things of any kind,
or to space time points...Examples of full sen-
tences of such predicates: "This spot is
quadrangular." "This space time point is warm."\textsuperscript{27}

It is by a process of induction based upon sets of proto-
col sentences that general laws are established.

The second stage in the construction of a scientific
theory is the construction of further terms and sentences
by the help of derivative relationships, D, which connect
these terms with the basis, 0. To establish the precise
nature of these derivative relationships is the aim of
inductive logic, but we need not enter into the problems
of induction and probability at this place. It will
suffice to state the function of D in a scientific theory.
D serves to connect (linguistically) protocol sentences to
universal laws. The observation that a particular stone
fell towards the ground at time t is an instance of a
general law, Newton's Law expressed in the formula

\[ F = \frac{m_1 x m_2}{r^2} \]

or, in words, every particle of matter attracts every
other particle of matter with a force (F) proportional
to the product of their masses (m) divided by the square
of the distance (r) between them. It can be seen that a
general law is a statement of "an unrestrictedly universal form. It asserts something about all instances of a class of phenomena, and the class is defined without any restrictions of time and place."\textsuperscript{28} D serves to fulfill Von Mises connectibility requirement by subsuming protocol sentences under the more general statements. To put this another way, D provides the means to reduce all general laws to sets of protocol sentences (describing attempts to confirm/falsify the general law).

There is another, different, use of the term "reduction" in positivist thinking. This use is exemplified in the statement that the aim of positivism is to reduce inherently less general sciences (for example Biology: the science of living things) to inherently more general sciences (for example Physics: the science of all nature). Such a project is, admittedly, a further implication of the connectibility thesis, but the reduction that takes place is not from laws to protocol sentences. It is from theoretical entities in one science to theoretical entities in another. The reduction of thermodynamics to mechanics, for example, established that the "temperature" of a gas is proportional to the mean "kinetic energy" of its molecules. Hempel asserts that the possibility of reducing one science to another is not a question that can be decided a priori. "The answer can be found only by... research."\textsuperscript{29}
Research, as has been implied by the foregoing discussion, consists of the framing of hypotheses, and testing them by observation.

Thesis A: Positivism is objective in that it studies only observable facts, and in that all scientific theories are reducible to sets of protocol sentences (plus predictions of future protocol sentences).
II.3

CAUSAL EXPLANATION, COVERING LAWS AND CONFIRMATION

The account of scientific objectivity in the last section was incomplete because a discussion of the criterion of confirmation of scientific hypotheses was reserved for the present section. The objectivity of scientific knowledge lies partly in its availability for intersubjective confirmation by repeated tests. Here we will describe how general laws, once stated, can be used to explain the protocol sentences from which they were inductively derived. These laws can be confirmed because, since they are unrestrictedly universal, they can be used to predict future observations. If the corresponding protocol sentences turn out to be true, then the law has been confirmed. If not, then assuming the deduction of the prediction was valid, the law has been falsified.

We regard thesis A as stating the basis of positivism. We will now expound the positivist theory of the structure of scientific explanation with the aim of social explanation in mind.

Carl Hempel introduces the paper "The logic of explanation" with the words:
To explain the phenomena of the world of our experience, to answer the question "why" rather than only the question "what" is one of the foremost objectives of rational enquiry. Hempel attacks the historicist approach to history which he characterises by its "empathetic method of understand". Explanation in history, he argues, is fundamentally of the same logical form as explanation in natural science. Hempel says that his argument accords with the two basic truths of explanation. First, there cannot be a sharp methodological distinction between the various disciplines that are trying to explain the world. Second, explanation cannot be sharply distinguished from description.

In his paper, "The function of general laws in History", Hempel first gives a model of an explanation in the natural sciences. He defines "general law" as a statement that in every case where an event of a specified kind, C, occurs at a certain place and time, an event of a specified kind E will occur at a place and time related in a specific manner to the occurrence of the first event. All scientific explanations include general laws. The function of such law is to connect events of a type C to events of type E in a way which is usually referred to as "C explains E". The structure of these, scientific, explanations according to Hempel is as follows:
(1) A set of statements asserting occurrences of \( C_1, C_2, \ldots \)

(2) A set of universal hypotheses such that
   (a) statements of both groups are reasonably well confirmed
   (b) from the two groups of statements the sentence asserting the occurrence of \( E \) can be deduced.\(^3^4\)

\( E \) and \( C \) stand not for events, but for kinds or properties of events. Presumably they stand for properties which uniquely individuate the event in question but do not account for all of its characteristics. Type one statements assert the "boundary conditions" for event \( E \). Type 1 and type 2 statements are open to empirical test, and, in the natural sciences, \( E \) follows logically from 1 and 2. The primary reason for this, according to Hempel, is that type 2 statements will be statements of statistical trends rather than fully fledged general laws.

Hempel calls historical explanations of this form "explanation sketches" to emphasise their inherent vagueness. This vagueness is absent in physical explanation, but Hempel is still certain that his covering law model of causal explanation not only could work in socio-historical explanation, but exhibits the structure of all explanation in history as actually practised.
A first response to Hempel's approach is to point out, as do Hart and Honore in "Causation and the Law"\textsuperscript{35}, that in Law and history the notion of cause has a common-sense, non-scientific meaning. Dray makes a similar point in *Laws and Explanation in History*, where he stresses the "pragmatic aspect of the meaning of 'explanation'". For Hart and Dray, "cause" refers to the 'sine qua non' of an event. It looks for some event which would not normally be expected to occur in order to explain the event in which we are interested. This, however, seems to carry the (mistaken) implication that we are usually interested in explaining at least slightly unusual events; events which are particularly important or surprising. If we say, to use an example of Hart's "The lighted cigarette end cause the fire", we ignore various other physically necessary conditions for the existence of fire. That is, we presuppose the physical sciences upon which historical explanation rests. If it is true that historical explanation rests on the sciences, Hart might argue, that does not entail that historical explanation should formally mirror physical explanation.

Hempel might reply that he has already accounted for the pragmatic aspect of historical explanation by his modest requirement of an explanation sketch in history. He admits that the general law underlying an historical
explanation is rarely explicitly stated, but that does not mean that it is not there, and he continues by giving an example where a law is explicitly stated. He states that the relevant generalisation is often enough of a truism to be taken for granted. Nevertheless it is highly instructive, in examining the adequacy of a suggested explanation, to attempt a reconstruction of the universal hypothesis on which it rests. Particularly such terms as "hence", "therefore", "consequently", "because" "naturally", "obviously", etc. are often indications of the tacit presupposition of some general law: They are used to tie up the initial conditions to be explained.

As Hempel admits, an explanation sketch is not open to the same kind, nor to the same degree of empirical confirmation as natural scientific statements. Yet some degree of confirmation is essential if the scientific objectivity of sociology is to be established, and explanation sketches do point in a certain direction and suggest specific empirical observations that would confirm both the hypothesis and the relevance of the boundary conditions that were stated. In natural science no theory can be meaningfully proposed "unless it is amenable to objective test". The tests are designed to confirm, or infirm, that the
hypothesis holds in any number of different and varied situations. But while, in the natural sciences, we can talk of a theory being refuted by a single instance of an observation contrary to a prediction deduced from the theory (unless we respond by amending the auxiliary hypotheses), in the explanation sketch, with general trends replacing universal laws, we can talk only of corroboration or discorroboration. It is partly due to this uncertainty that Popper, in Poverty of Historicism, advocates small scale, rather than wholesale, policies for social change.

We are now in a position to formulate thesis B: The explanation of any social phenomenon consists of its deduction from some general law, plus a statement of the initial, or boundary, conditions. To be objectively true or false (hence meaningful) the law must, in principle, be available for repeated tests.
II.4

METHODOLOGICAL INDIVIDUALISM VS. METHODOLOGICAL COLLECTIVISM

We will now examine the debate about how the tenets of positivist investigation should be applied to practice. The presentation is biased in favour of methodological collectivism since, as already stated in the introduction, we believe that it is more compatible with the aim of this paper. In particular we shall argue for what we call "soft" collectivism.

Methodological individualism (M.I.) is mistaken because, in its extreme form, it refuses to allow sociologist to ask all the questions which they desire to, and could usefully, ask. We can distinguish two types of M.I.: hard M.I., based on an interpretation of Weber's ideal type models of role-relationships, and soft M.I., which takes as the starting point for social research the wants, needs and desires of individuals. While soft M.I. does allow collective entities to figure in social explanation, and, indeed, become more convincing as it moves out from individual action to social interaction, it is based on the same theoretical position as hard M.I., and
can, therefore, be attacked in the same breath by restricting ourselves to that theoretical basis which will now be outlined.

In general, M.I. denies that there are such things as group properties which cannot be defined by reducing them to the properties of individual group members. As S. Lukes remarks in Methodological Individualism Reconsidered, this commits M.I. to a crude verificationist theory of meaning — the truth of "The army has low morale" is confirmed simply by examining the morale of individual members.\(^42\)

M.I.'s assertion of reductionism leads them to believe that, although holistic explanations of social events are possible, in the words of J. W. N. Watkins,

We shall not have arrived at rock bottom explanation of such large scale phenomena e.g. full employment until we have deduced an account of them from statements about the dispositions, and beliefs, resources and inter relationships of individuals.\(^43\)

In "Methodological Individualism: definition and reduction", May Brodbeck refers perjoratively to "methodological individualism and metaphysical holism\(^44\), as if to say that whereas holism is making grandiose metaphysical
claims, M.I. is restricted to purely methodological claims. There is, however, an a priori connection between methodological and metaphysical assertions. The entities constituting an explanatory framework must be justified on a metaphysical level. Brodbeck tries to avoid this conclusion by distinguishing, as the title of her paper suggests, between the definition of descriptive concepts and the reduction of explanatory statements to other (less macroscopic) explanatory statements. She claims that M.I. proper rests on the claim that there are no descriptions of social events that cannot be reduced to individual events. She argues that "the empiricist commitment to definitional M.I. does not logically imply a commitment to explanatory M.I." since sound explanatory laws of group events do, as a matter of fact, lawfully correlate with properties of individuals. Nevertheless, as we have already argued, there is an entailment relation in the opposite direction (from explanatory frameworks to ontological commitments about the entities within the frameworks). Remembering Quine's dictum, "to be is to be the value of a variable", if Watkins' "rock bottom" explanatory framework does not quantify over group properties, then he is claiming that, at rock bottom, group properties do not exist; that they are useful fictions; shorthand expressions for what can, in principle, be expanded into a
A further omission from Brodbeck's argument is that, as we noted in chapter I, to explain something is often simply to identify it as what it is. This strikes at the heart of her unsound distinction between description and explanation. The best example of explanation as identification is also a refutation of Watkins' belief that, at rock bottom, all group terms in an explanation are reducible to a conjunction of individual explanations. We re-referring to Maurice Mandelbaum's famous example of "cashing a cheque". Here a certain behaviour pattern is identified as the institutionalized act which it is, and that serves to explain (in a full sense) the behaviour pattern. Admittedly, it does not help us predict the next occasion on which a cheque will be cashed, but it is a start towards such a prediction. What is more important, Mandelbaum argues that the institutional fact of "cashing a cheque" on a particular occasion cannot be reduced to a set of psychological facts "without remainder". That is, the event cannot be wholly reduced to individual dispositions, making no reference to the banking system, "confidence" in paper money etc., without changing the meaning of the explanation. If Watkins wishes to argue that he has accounted for this criticism by including human inter relationships as part of individualist explanation then his
thesis becomes vacuously true, but it is no longer M.I.

It is no longer M.I. because of the definition of "person" to which M.I. is committed. It is committed to a psychological or a physiological definition of a person. Perry, for example, in A General theory of value, defines "person" as an "inter-mediation of interests". "Interest" is defined almost biologically as something like appetite. This ignores the ineradicably social aspect of personhood. Lukes quotes Comte as saying, "Society is no more decomposable into individuals than a geometric surface into lines".\(^{47}\) Although we quite efficiently identify a person by its outward appearance, the existence of a large number of life-like robots would soon make us change our criteria. As a part of any definition we would demand that a person be an agent that can act in the knowledge that he is affecting other agents like himself.

This is certainly the sort of definition that would be acceptable to the supporters of methodological collectivism (M.C.). As with M.I., we divide M.C. into hard collectivism and soft collectivism. We shall argue against the former and in support of the latter variety.

Hard collectivism (reminiscent of hard determinism) proceeds on the assumption that collectivism can provide a complete, comprehensive explanation of social phenomena. Malinowski says of his own brand of functionalism, "to
explain any item of culture, material or moral, means to indicate its functional place within the institution." Soft collectivism, however, admits that sociologists and historians often wish to ask questions about individuals, their wants, needs and desires. Soft M.C. may be distinguished from its counterpart, soft M.I., by its claim that to understand or explain society we commence on an institutional level; that is, by explaining the causal relations between institutions before going on to explain the relations between institutions and individuals or just between individuals.

Hard M.C., which Hayek has attacked under the name of scientism, aims at an objective science of society. It studies social institutions as a way of avoiding the irrational element in society, namely individual wants, needs and desires. Durkheim, its most noted exponent, wrote:

We regard as fruitful this idea that social life must be explained, not by the conception of it held by those who participate in it, but by profound causes which escape consciousness; and we also think that these causes must be sought chiefly in the way in which the associated individuals are grouped. We even think that it is on this.... condition alone that history can become a science and sociology in consequence exist. For in order
that collective representations should be intelligible, they must come from something, and, since they cannot form a circle closed upon itself, the source whence they derive must be found outside them. Either the "conscience collective" floats in a void like a sort of inconceivable absolute, or it is connected with the rest of the world through the intermediary of a substratum on which, in consequence, it depends. On the other hand, of what can this substratum be composed if not of the members of society as they are socially combined. 49

A causal explanation of society, however, must account for all the causal relations that exist in society. As Gellner never tires of remarking, individuals often act in response to (as a result of) irreducibly institutional facts. Therefore individuals must be included in the causal framework used to explain society. The extreme supporter of hard M.C. might retort that the individual never acts socially except from within a role that he is playing. There are two answers to this. In the first place, the individual might consider his social role in order to reject, or modify, it. Is he then considering one role (his life as a waiter; for example) from within another role (that of a "thoughtful man"). If so, what if he considers his second order role. Does he do it from within the role of a very thoughtful man or a
sociologist? Secondly, if the notion of a social role is so ubiquitous it loses all value as a tool of analysis. Erving Goffman's studies of "underlife" of mental nurses and the like, in *Asylums* relies on being able to make a distinction between the nurse appearing to conform to the norms of his profession and his behaviour when he thinks the reporter's back is turned. The recent news story of a mental nurse who was reinstated to his job after being found guilty of kicking a patient in the face, provides a startling example of the need to keep separate the (idealised) role of the mental nurse from his actions in practice.

We conclude that social facts are sometimes causally related to individual human actions, and that the latter cannot, therefore, be omitted from a causal study of society.

Durkheim was wrong to regard a social group as more basic than the awareness, and acceptance, by its members that the group exists. We believe that the two are logically equivalent (though this does not imply that group properties can be reduced to individual properties because existence is not a predicate). In "Social Objects", Quinton tries to give examples of a social group with no members (e.g. an archery club whose name is still on the list of college clubs, but whose committee positions are all listed as vacant), but they are contrived and unconvincing. For a social group to exist, the members must see themselves as members;
be seen by non members as members; see the other members as members. In the case of secret societies the second requirement is problematic, but otherwise we cannot conceive of any exception to these criteria. Hence to say, as Durkheim does, that social groups must be studied independently of our consciousness of them is basically incoherent because our consciousness of them is a criterion of their existence (perhaps any two of the three conditions are sufficient for the identification of a social group it does not seriously affect the argument for there must be some internal consciousness of the groups existence).

Hard M.C. might object that "income groups", "New York Times readers", "conspicuous consumers", or any other "group" that advertisers prey upon were bona fide social groups. They might as well argue for the existence of the "society of red headed archdeacons". The flaw in their argument results from ignoring Hart's positivist distinction between the internal and the external aspects of group-membership.\(^{51}\) It is, according to Hart, the existence of internal, rule governed behaviour that underpins social groups.

The soft M.C. being advocated, then, must accept a close connection between sociology and psychology. It rejects Durkheim's attempt to found an autonomous science of history in favour of an autonomous study of social psy-
chology. The existence of social groups is empirically verified through the intersubjective criteria outlined above. We may study postulated collections of socialised individuals who do not see themselves or others as members of the collection, and we may study individuals as purely psychological, or even neuro-physiological entities, but they can only be studied derivatively— that is, as having been abstracted from their social groups.

Applying the covering law model, an explanation of the form "Employers conceded to Union demands in order to avoid strike action", takes the form:

(1) The Unions demanded something of the employers
(2a) In certain circumstances Employers concede to Union demands in order to avoid strikes.
(2b) A statement that these circumstances are fulfilled.

A statement of boundary conditions is required; in this case 2a is a description of a capitalist theory of profit, to delimit cases where it will cost the employers less to concede than to endure a strike.

(5) Hence the Employers conceded to Union demands in order to avoid strike action.

Hence M.C. can conform to the positivist explanatory model.
II.5

AMENDMENT OF THE CRUDE VERIFICATION THEORY

The motive for the earlier distinction between the two uses of "reduction" will now be evident. The rejection of M.I. certainly makes the unification of science a more distant goal. Yet the acceptance of M.C. still calls for reduction in the weaker sense. The entities of social science might now be large scale groups, but the claim is still that general causal laws can be made and that these are tested upon "individual groups" and upon individual persons conceived primarily as social beings. We have, incidentally, established proposition (4) on page 4 which claims that the crude verification theory of truth would have to be amended. Statements about groups may still be verified by examining the behaviour of individual members, but they can also be verified by an examination of the groups themselves.

To repeat what we have taken to be the main elements of positivism: Positivism objectifies the objects of its study and tries to produce general causal laws about them. It confirms these laws by repeated tests upon the physical observations which define the entities of its theories.
III

PHENOMENOLOGY

1. Introduction

R. D. Laing is fond of the phrase "ontological insecurities," referring to the doubts people sometimes have about their own existence. When your best friend fails to recognize you in the street, you might suffer a pang of ontological insecurity. If a cause with which you identify strongly suffers a severe setback, you might be struck by a feeling that your own existence had been negated. Heidegger took this feeling to be one of the defining features of man. He said that Dasein, his name for man, is the only being that worries about its own Being. Its own existence is a problem for Dasein, both in the sense of just getting around, of functioning in the physical world, and in the deeper, more problematic sense of "entering into" its surroundings. Trapped in a world it never made, Dasein is faced with the existential choice of identifying itself with its surroundings or objectifying them and looking at them in the same frame of mind as a scientist when he is examining atoms.

Of these two existential alternatives, Heidegger
argues that it is a natural error to choose the second, and that Dasein will necessarily be saddled with feelings of ontological insecurity unless he chooses the first.

From the standpoint of the first alternative, however, it seems slightly absurd to allow our feelings to determine what exists. For the scientist, the practice of ontology consists simply in the decision to allow particular entities to figure in his explanatory framework. For physicists, what we usually call man is just a physical object. This means that the social dimension of explanation does not exist in physics which is restricted to the two dimensions of space and time. Omission of the social dimension does not logically imply an objection to or a rejection of social reality, but, Heidegger would argue, in the act of objectification that it necessary to the scientific way of thinking there is an implicit negation of man's identification with the world in which he lives. This negation does not translate immediately into feelings of ontological insecurity, but since it demands that men deliberately differentiate themselves from their world, it pushes them towards exactly the same pangs which occur if they are laid off work.

Again the positivistic answer to this line is quite simple: We cannot allow our desires about the world to determine our beliefs about the world. If it is true that physical objects exist then it is true independently of our
desires. Nor does the existence of particular physical objects depend upon our feelings. Carnap would say that once we have chosen to use the linguistic framework of physical object, property of object etc., then the answers to such questions as "do physical objects exist?" are independent of our desires, and can only admit of negative answers by interpreting the question as a request to reappraise our desires about the linguistic framework itself.\(^5\)

This appraisal is to be carried out from the haven of some timeless realm of abstraction. Heidegger coined the word "inauthentic"\(^5\) to describe the uncritical acceptance of this decision to abstract self from other. The positivist might deny that we can choose to think in any other way, but he must admit that we can choose to think that we can think in some other way.
III.2

BEING IN THE WORLD AND UNDERSTANDING

Heidegger's most fundamental contribution to phenomenology is his distinction between Being and beings. The Being of the world is its ontological structure which is independent of the world of human controllability (although not independent of the human world as such). The beings in the world exist on the ontic level except for Dasein which exists on both an ontological and an ontic level. The ontic level is what is normally referred to as our everyday physical existence, and Heidegger uses a similar term, "average everydayness", to characterise the ontic.

The structure of Heidegger's argument in "Being and Time" is very complex, and the best way to expound it is probably to outline quickly his argument in his own terminology, then explain his method, and finally explain what was meant by his argument. The primary question for Heidegger is the question of the meaning of Being, a question largely forgotten since Greek philosophers dealt with it, which has often since been mistaken for the question of what exists. Heidegger argues that to answer this question we must first look at the only beings who ask about Being. These are Dasein,
There-beings, and through his "fundamental ontology" Heidegger hopes to lay bare the ontological structure of Dasein. To the extent that Dasein conforms ontically to its ontological structure it is authentic, and we can expect to learn that if one is an ontic positivist, one is very far from mirroring one's ontological structure, and hence very inauthentic.

Dasein's basic ontological structure is "Care" (Sorge) which means, in Heidegger's terminology "ahead of itself Being already in (the world) as Being alongside (entities encountered within the world)". This definition breaks down into three parts: Existence, corresponding to "ahead of itself"; Facticity, corresponding to "already in the world"; Falling, corresponding to "Being alongside". Briefly, "Dasein is ahead of itself" means that Dasein is aware of itself as possibility. It is an issue for itself; a choice among possible ontic states. In being already in the world, Heidegger's Dasein does not need to bridge the Cartesian gap between thought and reality. "Being alongside" is the most problematic of the aspects of Dasein's ontological structure. There are not two things side by side - Dasein and the world - for without Dasein there would be no meaning, and hence no world. Dasein is not alongside the world as a hand is alongside a glove. Although it is alongside the world as the shape of the glove with the hand in it is
alongside the hand. When the hand is removed the glove might crumple up, no longer look like a glove, and become something quite meaningless. Dasein is an entity complete with a world revealed to it. Ontologically, it relates to the things in the world (on an ontic level) with "concern", which is a circumspective "looking beyond the thing to the task it can perform". When this happens the thing is said to be "ready-to-hand", but sometimes, especially if we look at a thing with the eyes of a scientist it becomes "present-at-hand". Finally, whatever is Dasein is also Mitsein (Being with others). In its capacity as Mitsein, and parallel to its "concern" for things, it is characterised by "solicitude".

Heidegger is trying to answer the question of the meaning of Being, and he turns the question on those who ask it: Dasein. Luckily "Dasein is in such a way as to be some thing which understands something like Being". 57

The theme of our analytic is to be Being-in-the-world, and accordingly the very world itself: and these are to be considered within the horizon of average everydayness – the kind of Being which is closest to Dasein. 58

Once he has established the ontological structure of Dasein, Heidegger claims he will also establish "the conditions on which the possibility of any ontological investigation depends". He will start with Dasein's average everydayness; that is Dasein's pre-thematic understanding of its own Being:
The more appropriately and primordially we have succeeded in explicating this entity, the surer we are to attain our goal in the further course of working out the problem of fundamental ontology.59

"This entity" is everyday Dasein, and its existence (the first of the three divisions of "Care") is best understood as being a member of "The They". Heidegger says that "the self of everyday Dasein is the they self".60 This is not Dasein's authentic self, but it is a part of Dasein's being, in fact that part which is closest to him and which consists of his everydayness. The They seems to embody the prevailing world view of Dasein's society and a Dasein can succumb to that world view to a greater or lesser extent. The state of being The They, because it is so ordinary, "misses itself and covers itself up".61

Dasein's facticity (the fact that it is already in the world) need not delay us, but its Falling is important for our enterprise if we wish to discover the way that phenomenology sees man relating to the world around him. Falling (or being alongside) can be split into two categories: being alongside things and being alongside others. We will confine ourselves to the way Dasein is alongside things. Ontologically, Dasein's relation with things is characterised by "concern".

We have already stated that concern is a circumspective
approach to the world which characterises Dasein, not as looking at the entities it encounters in the world, but looking beyond them to the tasks they can perform.

Our concern subordinates itself to the in order to which is constitutive to the equipment we are employing at the time. It is our purpose that endows equipment with the value it has in that our dealings with equipment focus not primarily on the tools themselves, but on the work we wish to do with them. "The work bears with it that referential totality within which the equipment is encountered".

It is when we are taking it for granted in this way that equipment is "ready-to-hand" (RTH).

The peculiarity of what is ready-to-hand is that it must, as it were, withdraw, in order to be ready-to-hand quite authentically. Now, in our concernful dealings with the world we might come across some piece of equipment that is damaged or in some way unsuitable for the task we intend to perform with it. Circumspectively using the hammer we may find that it will not perform the task we want it to. The hammer is still RTH but in a degenerate way. We no longer see it as just a tool. It becomes conspicuous in its disutility.

It shows itself as an equipmental thing which looks so and so, and which in its readiness to hand in
looking that way is also present-at-hand. It is when the RTH "stands out" from the world and becomes obtrusive that the referential totality breaks down. It is when our grasp of the world as RTH is loosened that another reality intrudes. This reality cannot be part of our everyday world since it has no place in our concernful dealings with the world. Yet it is still real, and as the present-at-hand (PAH) it is a part of the worldhood of the world.

Another way in which the PAH can make itself known to us, is when, in a deficient mode of our concern, we ignore something RTH because it is an obstacle to our plans. Then the PAHedness of the RTH makes itself known in a new way as the Being of that which still lies before us and calls for our attending to it.

In this way, Being can intrude into the world of beings. For Heidegger, when an RTH being becomes conspicuous it is showing its harsh unmanipulable Being, and in our worldly concern we are likely to ignore its Being and turn back to its equipmentality. To be authentic we must be prepared to face the PAH and give it ontological value. In this way we increase our understanding of the world, and expand our referential totality.

There is a famous metaphor of man standing in the clearing of Being. This "clearing" is understanding. It
represents man's permanent possibility of increasing his freedom by increasing his understanding, in the same way that the possession of one axe gives a man the power to cut down trees in order to make more axes etc. Yet understanding is not used solely to increase man's power to manipulate nature since that is not the only area of human endeavour. When it is directed towards other goals (for instance understanding a work of art) understanding is "oriented" (to use a word of Merleau-Ponty's) within a different referential totality. A mountain may be a quarry of rock and at the same time be beautiful. Thus, to say that something has value is, for the phenomenologist, to say that someone has constituted it through their concern as having a property by virtue of which someone may appropriately incorporate it into some valuational referential totality.

Now, we know from our previous discussion that Being is that which cannot be manipulated. It is precisely that which cannot be seen as an instrument to aid us in achieving our strategic goals, and it is not therefore a part of the world of human controllability. What, then, can Gadamer mean by his famous slogan, "Being that can be understood is language". One thing that he means is that everything that can be understood can be understood linguistically. But how can Being be understood when understanding involves manipulation. To avoid the apparent contradiction, language
must be seen as something other than a tool. Gadamer would agree with Merleau-Ponty that

Language is by no means simply an instrument or tool. For it belongs to the nature of a tool that we can master its use... (whereas)... in all our knowledge of ourselves and in all our knowledge of the world, we are already encompassed by the language which is our own. 67

The dual function of language as a tool and a fount of understanding is fundamental to Gadamer. For him and for Merleau-Ponty, it is because we are contained within language that all understanding is self understanding, and in this way hermeneutic understanding is linked by language with the articulation of an action orienting self understanding. We are now in a position to state the first of the two central theses of phenomenology.

Thesis C: Phenomenology returns to the phenomena of the life world that are most taken for granted in order to commence its investigation of Being. Furthermore, the most basic mode of existence of man in the world is that he approaches the world with the aim of understanding it.
III.3
INTERPRETATION AND AGREEMENT

The application of the ontological basis of phenomenology to the human sciences is the task of hermeneutics - the science of interpretation. Hermeneutics is always an attempt to make sense of an object of study. Gadamer regards all objects of interpretation as texts, or text analogues, and says that to come to them with the aim of understanding them (Heidegger's fore project), is to presuppose an underlying coherent meaning, that can be distinguished from the text. Yet as Charles Taylor remarks:

Without a subject, the choice of criteria of sameness and difference, the choice among the different forms of coherency which can be identified in a given pattern, among the different conceptual fields in which it can be seen is arbitrary.68

Before we can begin hermeneutics, Taylor is saying, we must establish a notion of the subject for whom the meaning is. Yet it seems phenomenologically unsound to accept a notion of the subject which allows a sharp distinction to be drawn between interpreting subject and meaningful object.
The best phenomenological attempt to solve the problem of the subject is that of Merleau-Ponty. He believes that our perception constitutes the object of perception, yet "the object once constituted appears as the reason for all the experiences of it which we have had or could have". Merleau-Ponty begins his characterisation of the perceiving subject with an analysis of our experience of our own body. He says,

If we can still speak of interpretation in relation to the perception of one's own body, we shall have to say that it interprets itself.

To say why this is the case is to attempt a partial interpretation of the body, and Merleau-Ponty does so in the following terms:

Bodily experience forces us to acknowledge an imposition of meaning which is not the work of a universal constituting consciousness, a meaning which clings to certain contents. My body is that meaningful core which behaves like a general function, and which nevertheless exists, and which is susceptible to disease. In it we learn to know that union of essence and existence which we shall find again in perception generally, and which we shall then have to describe more fully.

In finding myself in a world, says Merleau-Ponty, and with a
body (or, more correctly, as a body), I am already a subject for whom meaning exists. Namely, the meaning of my body. But what meaning can a body have. A body has certain specific meaning contents: in its being it has spatiality: "Our body is not primarily in space: it is of it." The body is also a synthesis of its senses: "The various parts of my body, its visual tactile and motor senses are not simply co-ordinated." The perception of colour is not simply a visual sensation. It also involves movement, and perhaps even tactile sensations, and to learn some new bodily function (for example, sex) is to "enrich and recast the body image."

Our body contains a core of meaning, to continue our exposition of Merleau Ponty's interpretation of the body, in that it is through our body that we orient ourselves towards the world, and in that it is through our bodies that we discover the world itself. The body has many functions, and two of its more complex functions that Merleau-Ponty discusses are its sexual function and its expressive function. Now, in "coming to sex" we orient ourselves towards sex. In coming to express ourselves we orient ourselves towards communication.

What counts for the orientation...is not my body as it in fact is, as a thing in objective space, but as a system of possible actions, a virtual body
with its phenomenal "place" defined by its task and situation. 75

We always orient ourselves within something very much like a gestalt field. Our sexual orientation consists in our "power of projecting before (ourselves) a sexual world, of putting (ourselves) in an erotic situation". 76 Of course, the body can become diseased and the anarthric, for example, cannot, by definition, orient himself in the communicative field in a normal way.

Merleau-Ponty does not mean to imply, however, that we are ever oriented within just one field. By reason of the ambiguity of human existence, sexuality, without being the object of any intended act of consciousness, can underlie and guide specified forms of my experience. Taken in this way, as an ambiguous atmosphere, sexuality is coextensive with life. In other words ambiguity is of the essence of human existence and everything we think or live has always several meanings. 77

Where the positivists put the stress on precision and univocality Merleau-Ponty highlights the ambiguity. It is in the ambiguity of perception that Merleau-Ponty locates the union of essence and existence, and it entails that all interpretation, now seen as the subject orienting himself within a field of meaning, is necessarily incomplete. This
can be validated most readily by examining the history of the interpretive disciplines: art, history and philosophy. Gadamer asks "how can the truths of art, history and philosophy be legitimated?" He starts from the point of view that philosophical, artistic and historical understanding are influenced by history, and part of his answer to his own question is that a particular truth is legitimated within the tradition of which it forms a part:

The anticipation of meaning that governs our understanding...proceeds from the communality that binds us to tradition.

No one could seriously deny, Gadamer believes, that the historian has already been influenced by history by the time he comes to study it, nor that history influences the point of view from which it is itself described and the sort of questions that are asked about it. That is why, for Gadamer, "a text is understood only if it is understood in a different way every time." We shall never know, in the sense of the natural sciences, what has produced the specific content of our present horizon, since an act of interpretation is required to discover that content. Hence we can never predict what the next interpretation of a text will be, since that requires us to know today what we will only discover tomorrow.

Gadamer's principle of effective history teaches us
that we can never throw off the chains of history; that without the chains there could be no history. Historical understanding is always an interpretation in the same way that

The interpretation that music or a play undergoes when it is performed is not basically different from the understanding of a text when you read it. History is like a play—sometimes you see it, sometimes you just read about it. Historical interpretation is much like a play interpretation, and this might discourage us from positing the historical text analogue as an object within a precise system. Merleau-Ponty has warned us that it is a natural error of man's to objectify, but it is an error because it leads us to forget the essential ambiguity of human experience. Merleau-Ponty compares the study of man to a piano player interpreting a piece of music. "Here we no longer have the positing of an object, but rather we have communication with a way of being." Musical interpretation, the translation of signs into human action, shows us that translation is the consummation of interpretation, and it shows clearly the "reciprocal relation that exists between interpreter and text." This interacting relationship is really a triadic relation between parts of the text, the interpreter and the envisioned "whole meaning" that motivates the attempt at understanding.
The anticipation of meaning in which the whole is envisaged becomes explicit understanding in that the parts, that are determined by the whole, themselves also determine the whole. Obviously the parts do not just "determine" the whole without an explicit act of interpretation, but how can a text be protected from misinterpretation. As a preliminary, we can agree with Gadamer that (i) not every interpretation is possible because not every one will be internally consistent and (ii) we come to the text prepared to listen to its meaning and not solely intent with forcing some preconceived interpretation upon it, and (iii) we are aware, to some extent, of our own bias and can take our prejudices, as Gadamer calls them, into account when appraising an interpretation which they have helped to form, and can appraise the prejudices from within the tradition which helped to form them.

It is really in tradition that Gadamer finds the legitimation of the truths of the social sciences. Tradition is seen as intersubjectivity and the legitimation of truth lies in intersubjective agreement. Agreement, then, is the aim of interpretation, and agreement here has intuitive connotations. It is the result of a coming together with the aim of understanding. The process by which intersubjective agreement is reached in hermeneutics differs from the
positivist process since the former will involve interaction or language, being studied. If two strangers eventually become friends, they will have seen each other as developing the right actions within a shared value system.

In this sense of the word, agreement is the basis of Merleau-Ponty's definition of "metaphysics in action", introduced at "the horizon of the sciences of man". Agreement becomes the rationale of interpretation, and if someone attacks the rationality of some culture because it contains mythical elements, and only because it contains them (as does Quine in "Two Dogmas of Empiricism") he is positing some absolute standard of an ideology free from contradiction. Merleau-Ponty would attack him by replying,

Metaphysics is not a construction of concepts by which we try to make our paradoxes less noticeable, but is the experience we have of these paradoxes in all situations of personal and collective history and the actions which, by assuming them, transforms them into reason. So metaphysics is the action which transforms paradoxes into reason. But how does this transformation take place? Merleau-Ponty's emphasis on the linguistics of experience (echoed by Gadamer) suggests that the transformation will be a linguistic one. Merleau-Ponty uses the example of successful dialogue to provide an answer to our question. For
successful dialogue does involve a mutual recognition of a shared value system within a shared language. That system, or language, is justified only by the recognition that successful dialogue has taken place within it.

I have no other reason to affirm this principle than my experience of certain concordances, so that in the end whatever solidity there is in my belief in the absolute is nothing but my experience of my agreement with myself and others. 88

In order to pinpoint a phenomenological method of social research we must now be more precise about the role of tradition in interpretation and the nature of agreement within tradition. It is accepted by phenomenologists that we cannot try to free ourselves from tradition in order to gain access to truth, but to what extent should we succumb to tradition? Should we start from the point of view of the free man who needs to locate himself at a fixed point within tradition, or from the point of view of the prisoner who is trying to free himself from within the stone walls of prejudice? Both are unattainable ideals, but which is to be preferred? 89

Jurgen Habermas strikes a balance between the two with his theory of "communicative competence", which will now be outlined. Habermas introduces Weber's fundamental distinction between work and interaction: Work, or purposive
rational action is "either instrumental action or rational choice or their conjunction". Instrumental action is simply the performance of mechanical tasks and, since it does not take place in the fully social realm, we will ignore it, concentrating instead upon rational choice. The latter can be referred to as strategic action since it is concerned with the strategies for rational choice between means. Strategic action aims at realising defined goals under given conditions. The other side of the distinction, interaction, refers to action which is entered into not, primarily, for personal success, but for the sake of furthering an understanding, reaching an agreement, in the non-strategic sense, whose aim is new agreement within a framework of established norms governed by principles. This is called "communicative action". Its goal is dialogue free from the constraints imposed by material wants and needs, or from distortions due to the false prejudices of one or other participant in the dialogue. This immediately gives the sociologist a critical-reflective role in society. In order to be sure that he has reached an "understanding" between himself and the object of his study he must try to identify any false prejudices he holds. In order to ensure that he has correctly identified an understanding in society, the sociologist must try to identify any false prejudices he might detect among the parties to the hypothesised understanding.
Gadamer warns of the danger that the sociologist might be too much a party to the prejudices of the society he is studying to be able even to identify them as prejudices, still less as false prejudices.

For this reason we need the "supportive ground of process in which the present is rooted". This "support" that underpins our changing experiences is "temporal distance". Shakespeare said that time serves to "unmask falsehood and bring the truth to life". More prosaically, Gadamer argues that we can be more objective about the past after a period of time (objective simply in the sense of "not biased", not in the sense of "value-free" ). The legitimation of prejudice, then, lies in the tradition of which it is a part and in temporal distance, and for Habermas, but not for Gadamer, in the "force of the better argument".

Habermas calls any attempt to state a truth of, say, history, a "criticisable validity claim". These claims have four aspects (1) the claimant is taken to be asserting the truth of the claim; (2) the claim is intelligible to a hearer; (3) it is made sincerely, and (4) it is made at the appropriate moment. Of these four conditions for successful communication, (2), (3) and (4) can be legitimated within the tradition of which they form a part. If this legitimation can occur, then the fact that it can recursively legitimates the tradition itself. If it cannot, then according to
Habermas' theory of communicative competence, some contradiction, or some arbitrary authority imposed on the framework of norms is resulting in "systematically distorted communication". As with Merleau Ponty's discussion of rationality, the contradiction must be taken up within the framework and recognised in order to free the dialogue from constraint.

In his paper, "Aspects of the rationality of action" Habermas outlined a theory of speech acts, in the Austin Searle tradition, to act as a model for empirical application of his theory of communicative competence. It is not a linguistic model, but a model of the general structure of speech situations which are produced through the making of linguistic utterances. The performance can then be situated within its tradition. The model is based on idealised cases of speech acts, and therefore is a model of an ideal society. Category 1 corresponds to category 1 on the previous page; category 2 to category 3, and category 3 corresponds to categories 2 and 4 on the previous page.

1) Constative speech acts in which elementary propositional sentences are employed. In general this model postulates a value-neutral observer taking an objectivatizing attitude towards the world.

2) Expressive speech acts in which elementary experiential sentences (in the first person) appear.
In this model the speaker's expressive attitude reveals something of his "inner nature" to his hearers.

3) Institutionally bound speech acts. In this model the speaker displays a norm-conformative attitude and, as a member of the social life world, he fulfills the generalised expectations of his social "reference group". 96

In performing a speech act says Habermas, the speaker will make it clear, ideally, according to which model he wishes his criticisable validity claim to be evaluated.

Model 1 involves testing an empirical truth claim. Models 2 and 3 involve legitimation of a claim to truthfulness or rightfulness. Habermas can now define two sorts of rationality of action. The first, positivist strategic action is judged as an empirical claim that "action X will produce state Y" is true. Then if the agent uses the right means to his end, he is rational. If he uses the wrong means he is ill informed or irrational. The second rationale of action, communicative rationality is defined by the agreement, within established norms, achieved by communicative action aimed at such an agreement. Agreement cannot be imposed, as it is in behavioural therapy, and where it has been imposed, it cannot be called agreement. Nor can full agreement take place if the communicative action is systematically distorted, as it always
is, by ideology or "neurosis". If alleged communicative action is seen to contain concealed ideological differences, we have a case of strategic action posing as communicative. An example of strategic action posing as communicative (this time the result of conscious distortion) is to be found in George Orwell's Animal Farm.

'Comrades!' he cried, 'You do not imagine, I hope, that we pigs are doing this in spirit of selfishness and privilege. Many of us actually dislike milk and apples. I dislike them myself. Our sole object in taking those things is to preserve our health... It is for your sake that we drink that milk and eat those apples. Do you know what would happen if we pigs failed in our duty. Jones would come back! Yes, Jones would come back!'...Now if there was one thing the animals were completely certain of, it was that they did not want Jones back.97

We can now state the last of the theses characterising the main elements of the two opposing theories.

Thesis D: The meaning of social reality is understood through the act of interpretation, ultimately grounded in the tradition that we are given and which we take for granted. Interpretation is ultimately confirmed by the criterion of communicative rationality whose aim is agreement.

Finally, it was asserted earlier that, if the two
different notions of rationality espoused by positivism could be shown to be workable in tandem, we would take that as evidence for our thesis. Habermas, we believe, has provided the basis for the two sorts of rationality to mutually complement each other.
IV

POSITIVIST CRITICISMS OF PHENOMENOLOGY

IV.1 The Attack on the Autonomy of Phenomenology

For Husserl and his successors, phenomenology was developed as a critique of positive science. In posing the question of the meaning of Being, Heidegger is identifying something the positivists ignore, or reject, in their research. The positivist school, however, grew out of a desire to reject, as a pseudo problem, any question that is not ultimately answerable by a factual statement, open to empirical test. Having established the basic postulates of physicalism to be protocol statements, Carnap continued, in the following edition of Erkenntnis to denounce metaphysics, but he did not denounce metaphysics because its alleged findings were false, or even uncertain; metaphysical assertions were rejected as meaningless statements.

The positivist would reject thesis C, which asserted that we are primarily concerned with understanding our life world. He would say that whether we talk of Husserl's life world or Heidegger's Being in the world, we are still talking about the same thing, namely Reality. Since the protocol
sentences for any assertion about reality in general form an infinite set, it is meaningless. The phenomenologist would reply that he did not mean to denote the sum of all protocol sentences. It is all very well to say that there are 800 billion bits of information in the universe, but how do we account for the qualitative as well as the quantitative differences between them? The positivists believe that "quality" is non-natural, but for the positivists this simply makes the word "quality" devoid of objective meaning. It is by a series of qualitative distinctions, however, that the phenomenologist unravels the meaning of Being. He says that we cannot determine the meaning of reality by discovering its specific empirical signs, since there are none. Being is covered-upness, said Heidegger; its nature has been taken for granted by the positivists who concentrate instead upon classifying its contents. The positivist replies that the phenomenologist reduction is just as much of a reduction as the positivist one. Only the systems of classification are different. The difference, as he sees it, is that phenomenology is subjective and hence meaningless.

Although subjective statements have no meaning for the positivists, reports of attributions of quality (for example, "He thinks Jones is good") are meaningful since they have a wholly factual content. They can be verified by the pro-attitude that is displayed by one who thinks Jones is
good. To the assertion that the meaning of action involves more than physical movement, Carnap would reply that a film of someone taking a pro-attitude to Jones is purely a recording of physical events. Therefore meaningful behaviour need have no overtones of intention. Up to a point the phenomenologist can accept this: A man who buys Outspan oranges, but does not know that they are Outspan, nor that the South African government is a racist regime is still describable as behaving politically since his actions are contributing to the survival of a politically isolated regime. Intention that an act means X is not a necessary condition for the act to mean X. But, they would argue, there must be a political intention in politicised behaviour as opposed to political behaviour. Not at all, Carnap would reply. Politicised behaviour is behaviour in response to the stimulus of political behaviour. The phenomenologist would deny this assertion because he would deny Carnap’s original claim that intention is a set of observable events. This is only true, the phenomenologist would say, because we are able to fit behaviour into previously observed patterns of goal-oriented actions, where the goal provides the meaning of the action because it is the reason for the action.

Donald Davidson begins his attempted proof of the claim that reasons are causes by arguing that to accept an agent’s reasons as an explanation for his actions is to
characterise him as having a pro-attitude towards actions of that kind, and being aware that this is an example of that kind of action. Taken together the attitude and the belief constitute what Davidson calls the primary reason for the action.\textsuperscript{101} He also says that

1) for us to understand how a reason of any kind rationalises an action, it is necessary and sufficient that we see at least in outline, how to construct a primary reason

2) The primary reason for an action is a cause.\textsuperscript{102}

If a man raises his arm then his action might be explained by saying that he did it because he wanted to signal to someone. This would be an adequate explanation of his action. What is the "force" of the word "because" in that explanation?\textsuperscript{103} Davidson admits that the because clause functions to place the reason into a typical pattern of reason followed by action that is called rationalisation. But the cause-effect pattern also explains events, and Davidson does not believe that there is any compelling reason to deny that reason and action are related as cause to effect, albeit of an unusually complex kind. This would debar the phenomenologist from saying all he wanted to say about rationalisation, but that, for Davidson, might not be a bad thing. The phenomenologist's best reply, suggested by Davidson himself\textsuperscript{104}, is that a cause is supposed to be physically
separable from its effect. Yet part of the meaning of an action is that it was done for a reason, and if we take the reason away we are not left with an action without a reason – we are left with mere physical behaviour. A reason is inseparable from the action it rationalises, but a cause cannot be inseparable from its effect, hence Davidson's claim that reasons are causes is rejected. This is fortunate for the brand of positivism we espoused in chapter II. Methodological collectivism relies on the claim that the meaning of group phenomena cannot be reduced to statements about the properties of their constituent individuals and their "determining relationships" without, at least, a partial loss of the meaning of the phenomena.

To continue the positivist attack on thesis C, the positivists would deny that man's "fore-project" of understanding is one of his defining features. To understand something is, for Hempel, to explain it is by means of a concept. Such an explanation is never an end in itself, but only a preparation for a causal explanation. Secondly, it is, in "empirical science, actually an explanation in terms of universal hypotheses containing that concept".

Explanations involving concepts which do not function in empirically testable hypotheses – such as "self unfolding of absolute reason" in history are mere metaphors without cognitive content, and hence meaningless. 105
This, the phenomenologist would reply, is indicative of the glibness of the positivist criterion of meaningfulness. Ontology, he would continue, is only possible as phenomenology, and since "the meaning of phenomenological description as a method lies in interpretation"\textsuperscript{106} it is only as interpretation that ontology is possible. At its most fundamental level, ontology consists in the interpretation of that which endows meaning in the world, namely the Being of Dasein. We noted, in our discussion of Heidegger's ontology, that the phenomenologist must find some way into the "hermeneutic circle", and he does this by commencing at the level of Dasein's pre-thematic understanding of his own Being. He starts at what he claims is a non-arbitrary point - Dasein's "average everydayness", and exhibits the ontological structures of everydayness, which he calls the "how"\textsuperscript{107} of Dasein's existence. And "from the kind of Being which belongs to the 'they' - the kind which is closest - everyday Dasein draws its pre-ontological way of interpreting its own Being".\textsuperscript{108} Dasein's average everydayness cannot be decided a priori, however, and nor can we allow that it remains veiled by the mists of antiquity. It is not possible to determine by phenomenological thought alone, the origins of its own study. Hence positivism is seen to play the role of defining the boundary-conditions of phenomenology, and this fulfills the first of the propositions we held to be necessary to unite the two streams of thought.
IV.2 Generalisations in History

Having grounded phenomenology in the empirical world, the positivist's next move is to criticise it for being subjective and hence an uncertain path to knowledge. This element of uncertainty is not denied by Schutz\textsuperscript{109} who can only reply that theoretical physics is open to the same criticism. Heisenberg's indeterminacy principle describes how the measurement of the velocity and position of electrons will always be an approximation since the electrons emitted to measure the electrons being measured affect the velocity and position of the latter. That effect can be quantified but not corrected. Popper agrees that this uncertainty is accepted in the scientific enterprise\textsuperscript{110}, but, he claims, it does not mean that scientific laws cannot be universalized any more than it means that generalisations must be confined to periods. Like Kepler's laws of planetary motion, general laws of society would only hold true of social structures of the same kind.\textsuperscript{111} The positivists use the notion of a group as the basis of their model of society, and the phenomenologists might ask whether Popper's argument would be so convincing in the field of comparative politics. Here the notion of a political group is the basic one. Political groups around the world are so diverse in their interests and
functions that the name "political group" masks too many differences in quality for useful general laws ever to be established. The Frankfurt school (Adorno, Marcuse, Habermas) begin with such categories as the one they are presently using: advanced industrial society.

The phenomenologist believes that the truth of generalisations in history and social science are confined to periods. We have seen that Popper can deal with one of the phenomenologist arguments in favour of their claim. The positivists might agree that the "prejudices" of researchers are mirrored in the structure of science (and Heisenberg's indeterminacy principle is an example of this). Therefore the phenomenologist cannot use the argument that the prejudices of researchers need result in the limitation of the applicability of their generalisation to the era in which they are working. The phenomenologists' other argument is that the prejudices of the society being studied must be a part of the theory about that society, and that, since these prejudices also change with time, any generalisation about a society is applicable only as long as its prejudices remain the same. To this, Popper replies:

The spectacular difference between these periods are no indication that such general laws cannot be found, anymore than the spectacular difference between Greenland and Crete can prove that there
are no physical laws which hold for both regions. On the contrary, these differences appear to be, in some cases at least, of a comparatively superficial nature. Furthermore, Popper could have added, locating the point of entry into the hermeneutic circle in "average everydayness" is a generalisation which is not confined to a particular period, although the particular content of average everydayness may change with time. Hence, we can agree with proposition 2 on page 5, that generalisations need not be confined to periods. It is an empirical matter whether or not they are confined to periods.
IV.3 The Limitations of an Intuitionist theory of Truth

The criterion of rational agreement, as outlined above, is as much of an offense to the empirical basis of positivism as is the metaphysical discussion of the meaning of Being. Whether one is honest about it, like Merleau Ponty, who talks of "the experience of certain concordances" or conceals it in Habermas' phrase "the force of the better argument", one is talking about the same thing: intuition. Up till now we have concentrated on the positivist attack on intuition as a means to knowledge, but when intuition is suggested as a criterion of rationality itself (that is, as a means to justify knowledge), their attack is redoubled.

There are two major criticisms of the thesis that "agreement" is sufficient as a condition of rationality: (i) that it assumes a consensus theory of truth, and (ii) that there is, after all, no clear cut distinction between strategic and communicative action; the positivist would assert that their languages are sufficiently interconnected to allow logical relations to exist between the criteria of adequate communicative action and the criteria of adequate strategic action.

Since the basis of the positivist system consists of sets of protocol-sentences plus rules of derivation (the
connectibility thesis), they could be said to uphold some combination of the correspondence and the coherence theories of truth. For the phenomenologists, however, "every agreement, and therefore 'truth' as well is a relation". Hence, truth is a way of Being for factual Dasein. To coin a new Heideggerian phrase, truth is a way of Being towards others, and it is founded upon agreement. This "agreement" might be an intuition that Dasein had correctly disclosed the true structure of the Being either of an entity or of another Dasein. To "correctly" disclose anything, the positivist reminds us, we must enter the hermeneutic circle at the right place. The phenomenologists, however, do not have need of a method of verification, since their theory of rationality is their theory of verification. In this way phenomenology combines fact and value. The legitimation of rationality that underlies phenomenological truth lies in agreement. Unless Dasein is suffering from a communal false prejudice, which Habermas calls systematically distorted communication, then truth can "occur". But false communal prejudices can only be eliminated by a general consensus to avoid those prejudices. Hence the need for a consensus theory of truth.

From the point of view of the correspondence theory, which separates the perceiver of truth from the truth he asserts, the consensus theory is abhorrent, since it unites
the perceiver and the "percept" into a single relation called "truth". In phenomenology, however, the fundamental ontology of Heidegger starts by assuming that man is in, and of, the world. Hence there is no perceptual "gap" to bridge between mind and body, and hence no need for a correspondence theory of truth.

In contrast to the coherence theory, the consensus theory will allow contradictory assertions to be made in the same language. The phenomenologists can claim that since the life world is full of contradictions (that is, phenomena whose description would lead to contradictions) our theories, too, should contain mirroring contradictions. Indeed, at the basis of an existential-phenomenological theory of perception, we could place Sartre's famous, contradictory slogan: "Consciousness is what it is not and is not what it is". This acceptance of contradictions does not conform to Von Mises' connectivity thesis, but, we have seen, that thesis only applies to the scientific notion of truth. It cannot be applied to a phenomenological notion of truth except to say that the latter is meaningless — which is clearly not the case.

It would be more appropriate to apply the connectivity thesis to the supposed distinction between strategic and communicative action. There can never be pure cases of communicative action, since although the agent's primary
reason for action may be to achieve an understanding, he cannot do so without a prior strategy. It is to avoid this sort of criticism that Gadamer denies, in *Truth and Method*, that he is discussing what is called "methodology". But just because he doesn't explicitly mention a methodology doesn't mean there isn't one. It is part of the positivist tradition that language is conventional; that language forms a rule-governed system. If so, then the distinction made by Habermas between truth claims and rightness claims becomes, at the least, blurred. The reason is that any truth claim implies a rightness claim that (i) the speech act has conformed to the rules of the language; (ii) the truth was arrived at according to a justifiable method. These a priori connections between the strategic and the communicative are specifically denied by Habermas, but if we also concede that we must separate what the hearer means from the effect the words may have upon his listeners, this suggests that there are a series of a priori connections between the notion of speech acts, what the speaker means, what the hearer understands and what the rules governing the linguistic elements are. Hence we can argue from a strategic evaluation to a communicative one via the system of rules and relationships mentioned above. Hence although the positivists were unsuccessful in imposing their causal-empirical analysis of rationality upon phenomenology, they can show that at
at least some measure of logical consistency is already built into the phenomenological model of social research, and hence that there is a place for lame logic within blind intuition. This entails an empiricist modification to the crude intuitionist theory of truth, as required by proposition (3) on page 5.

Finally, we should state exactly what we feel the phenomenologist must now concede to the positivist. We believe that, to arrive at an understanding of Dasein's Being, we must employ positivist methods to be able to enter the hermeneutic circle at the right place. This immediately places one empirical limitation on a purely intuitive approach to social research. A second positivist limitation on intuition is achieved by the discovery that we can argue from the empirically-based strategic rationality to the intuitively based communicative rationality, by reason of a series of a priori connections between the two. This is not to deny the value of the distinction, but it does make communicative rationality more amenable to positivist methods. The last amendment which brings phenomenological sociology slightly closer to its positivist equivalent is the denial of the assertion that generalisations need be confined to periods. They may be in individual cases, but there was no phenomenological argument that showed this was necessarily so.
V

PHENOMENOLOGIST CRITICISMS OF POSITIVISM

V.1 The use of Universal Laws in Science

We concluded the last chapter by announcing that positivism is on the fringes of Being — it defines the boundary-conditions of the study of meaning. In a sense this is an unimportant conclusion because it simply shows the limits of phenomenology, and we shall next show how phenomenology defines the limits of positivism — it defines the meaning of the boundary-conditions. Yet if this conclusion of reciprocal interaction is accepted, the consequences are not entirely trivial. They will provide an ontological basis for the proposed unification of the two at the level of social explanation. We will reach this conclusion by giving Heidegger's solution to the paradox of non-testability and then arguing against positivist reductionism by asserting the "irreducibility" of meaning.

There is a crisis in science, which Heisenberg formulated into a principle, that we cannot accurately measure the effect that scientific measuring instruments have upon scientific measurements. In other words, the scientific
enterprise does not account for human finitude. The critical
problem facing science can also be expressed in the form
of a paradox. Thesis A stated that science was objective
because it studies only physical events. All its laws are
unrestrictedly universal references to physical objects,
stating that the object will change in a certain way if
certain conditions are met. The statement that "water boils
at 100 degrees centigrade", for example, says that if water
is heated to 100 degrees it will turn to steam at sea level.
This depends on the logical possibility that water can be
heated to 100 degrees but it does not presume that the
condition has ever been met in fact. It is part of objective
reality that "water boils at 100 degrees centigrade" and
according to positivism, it does not become a part of
objective reality the first time the condition is met in
practice. For that would imply that if the condition had
accidentally not been met, then the statement loses the
truth that it would otherwise have had. Ex hypothesis,
this possibility is unrecognisable since scientific laws
are required to be universally true. Thesis B asserted that
one of the conditions of scientific objectivity was that
scientific laws must always be available for confirmation,
which they cannot in principle be if they are truly universal.
This is the paradox of non testability.

For Heidegger the paradox cannot exist since there is
no world independent of Dasein where a universal law could be true. For Heidegger, it is only in the world of Dasein that we find meaning in the form of a system of references with which to explicate the worldhood of the world. Yet there is room for the laws of science in the scheme of "Being and Time". They apply to that deficient mode of the Ready-to-Hand, the Present-at-Hand. An object is only present-at-hand when it is perceived as not within Dasein's totality of involvements. When it is perceived as within Dasein's totality of involvements it is ready-to-hand, but when it is perceived as merely a thing (in Carnap's thing language) in purely causal relationships with other things then it is present-at-hand. Hence, in Heidegger's view, scientific laws refer to the derivative, deficient mode of the present-at-hand.

Hence, in "Being and Time", there is no way to posit a truth independent of human existence, since scientific truth about the world is truth about one part of the ontological structure of Being-in-the-World. The paradox is thereby solved since a universal law which is spatio-temporally unrestricted can only refer to the space-time of human history, and is only a law (because it is only testable) as long as space and time exist; that is, as long as man exists. This does not prevent the positivist from deducing hypotheses about the pre-human past or the post-human future from
general laws that have been confirmed in the present, but for the phenomenologist these will remain strictly meaningless assertions. Here we have established proposition 5 on page 4.

Having established a purely formal limitation upon the domain of positive laws, we should continue by briefly arguing that phenomenology is needed to explicate the meaning of these laws in their actual application to society. We shall discuss this problem at the end of section V.3.
V.2 Scientific Objectivity and Value Judgements

A further concession that the positivist must make to the phenomenologist is that the scientist, qua scientist, makes value judgements. Attacks from other empiricists must already have forced positivists to concede the point: (i) Quine's attack on the analytic/synthetic distinction highlights weaknesses in Carnap's non-cognitivist inductive logic and rule of acceptance, or (ii) Kuhn's argument that somehow our having a science at all involves a value judgement; (iii) or the argument that to choose, say, among alternative hypotheses or problems, the scientist must have made a value judgement (Isaac Levi); (iv) or Rudner's argument that when deciding whether to accept a hypothesis the probability of the truth of the hypothesis which is required for acceptance varies as a function of the social importance of making a mistake; or because the scientist is a mass of human predilections, which inevitably influence his scientific attitudes.

Arguments (ii), (iii) and (iv) are the ones with which the phenomenologist would be most likely to agree, and Arthur Pap tries to meet their objections in the following way:
the distinction between logical analysis and psychology must be emphasised. As logical analysts we are interested in clarifying the nature of scientific assertions and the method by which scientific assertions are validated. This need not at all prevent us from being interested also in the psychology of scientific enquiry, the various motivating forces that impel the scientists to do what they do. However, we should not confuse these entirely different pursuits that might attract the spectator of science. It is one thing to say that the firm belief in a deterministic universe, let us say, motivated Laplace to perfect astronomy with mathematical tools. It is different to contend that the propositions of astronomy logically depend on the validity of such beliefs.\footnote{115}

Phenomenology would argue that it is precisely Laplace's belief, and everyone else's, in a deterministic universe that validates the propositions of astronomy. Pap presupposes the validity of a value-free system, which is what he is trying to prove, for he cannot debar psychological elements from the scientific method until he has defined it. His argument is an example of a normative statement posing as a positivist description. Pap's only answer is that even the great Kant succeeded only in
proving that nature must be uniform by defining "nature" as the existence of things insofar as it is determined according to universal laws. Even by the positivist criterion of truth, however, there are instances of observations that do not cohere with our model of a deterministic universe because we do not have a theory that could have predicted them (the two examples that come most readily to mind at the moment are "black holes" and "quarks"). The belief in a deterministic universe, like our belief in the existence of physical objects, is a useful fiction for the positivist, but a continuous value judgement for the phenomenologist: Even if we do accept the fiction of the ideal scientific enterprise, and ignore the inability of scientists to live up to their ideals, it cannot be denied that at any time the scientist can decide to stop being a scientist. That is the trouble with the self-vindicating argument that the scientist qua scientist doesn't make value judgements - because science is so defined as to exclude value judgements - it doesn't let the scientist into or out of the circle. When the scientist decides to stop being a scientist, is he being a scientist or a citizen? If a citizen, then what about his decision to make a decision to stop, a decision that is constantly open to him? This argument may seem rather trivial when we are just considering the scientist alone in his laboratory, but as Von Mises
pointed out, a positivist is someone who thinks like a
scientist, and Pap's analysis is supposed to be valid for all
scientific thinking, if it is valid at all. The decision in
the everyday business world to look on men as consumer units
is a particularly grim example of a typical anti-humanist
positivist presupposition, the implications of which the
positivist should always be aware. The claim that scientists
qua scientists make the value judgements is made in proposi-
tion 6 on page 4.
V.3 Scientific Reduction and Concept Formation

The considerations of the previous section lead us to continue the phenomenologist attack on positivism by turning our attention to reductionism. Friedman stoutly defends the lack of realism in science,¹¹⁷ saying that its models can be justified by the accuracy of their predictions. The phenomenological argument is that to reduce socio-economic action to a set of consumer units within a market will inadequately reflect the relationship of economic activity to other sorts of social action. The idea that, as an explanandum becomes more complex or larger, it assumes properties that are not to be identified with the sum of the properties of its constituent individuals is termed emergentism, and we will use Gadamer's discussion of the hermeneutical social sciences as an argument that avoids most of Hempel's and Oppenheim's criticism of emergentism.

As we noted earlier, hermeneutics is not first and foremost a method for Gadamer. He breaks with traditional hermeneutics in searching for a notion of "understanding" which will imply a method:

The hermeneutics developed here is not...a methodology of the human sciences, but an attempt to
understand what the human sciences truly are, beyond their methodological self consciousness, and what connects them with the totality of our experience of the world.\textsuperscript{118}

For Gadamer hermeneutics arises from within the totality of our experience of the world, and hence it can never encompass that experience. Gadamer's thesis is that we can simply not separate ourselves from the objects of our social research. Yet, given that we cannot separate ourselves, we ought not to try, since we thereby distort the truth we seek. Hence what the human sciences truly are, like everything else, is impossible to describe completely. By trying to give a complete description of social research, we are acting as if social science had come to an end. If it has not come to an end, then any description omits mention of at least one thing: namely its own place within what it is trying to describe.

Hempel refers to the "misconception that certain phenomena have a mysterious quality of unexplainability"\textsuperscript{119} but Gadamer is saying that it is not a mysterious quality and it is possessed by all phenomena. Hempel continues: emergence of a characteristic is not an ontological trait in some phenomena; rather it is indicative of the scope of our knowledge at a given time; thus it has no absolute, but a relative character; and what
is emergent with respect to our theories today may lose its emergent status tomorrow. Since, for Gadamer, every characteristic is emergent, even our theories are emergent, and we can only hope to reduce a phenomenon that is emergent along one dimension to a phenomenon that is emergent along another dimension. Hempel underestimates the extent to which Gadamer is prepared to abandon the notion of certainty. Gadamer's point is that the goal of reductionism is a fruitless one. Even if we manage to reduce one thing to another thing, we are still left with the residual meaning of the first thing, and to propose the unification of the sciences is fruitless, even as an ideal, because in moving from, say, biology to physics, we lose that which makes biology a distinct, autonomous science. In moving from the group property to the sum of individual properties we lose whatever makes the group distinctively a group. This conclusion entails the weakening of the "reduction" thesis called for in proposition 7 on page 5.

It was remarked earlier that while positivism defines the scope of the study of Being, phenomenology defines the meaning of the boundary-conditions of positivism. We have already shown once how this is so, in the discussion of the paradox of non-testability. The same argument can be applied to thesis B in a different way. Thesis B stated that social
explanation was of the same causal form as physical explanation, and is confirmed in the same manner. In the discussion of Hempelian explanation we noted that the boundary conditions have to be defined before the effect can be deduced from the cause. But what are the boundary conditions in any given case? In the example we have been using all along, these include the capitalist economy (the employers’ desire to maximise profits for example), the government’s desire to remain impartial, the past strike record of the union and so on. Only if Hempel could define all these concepts behaviourally, referring only to individuals, could he claim that he had defined the boundary conditions. The only possible way to do this would be with operational definitions (of government impartiality, profit maximisation, etc.), yet operationalism cannot even consistently define itself. Here we come upon a truth with which both Comte and Husserl were in agreement: The meaning of social statistics can only be decided by a phenomenological analysis of their key terms.

Friedman has attacked this belief on the grounds that, as long as a theory predicts what it is supposed to, we need not worry about the relationship of its non-logical terms to "reality". That the realism of a theory might be related to its predictive accuracy does not impress Friedman, but given our initial premise that social explanation should be framed so as to help social policymakers, it would be
best if the policymaker were to understand, in the phenomenological sense, the theories upon which he relies. The terms which a theory takes as primitive have a certain meaning that is wider than their logical extension. Here we return to Merleau-Ponty's insistence upon the ambiguity of human existence. Even when, as agents we orient ourselves towards economic activity, we are not solely economic agents, and hence we cannot be described solely as economic agents.

Due to the ambiguity of human existence we have established a reason for the last of our eight propositions on page 4, that phenomenology is required to underpin positivism.
If we have succeeded in establishing the eight propositions which, we said at the beginning of this paper, were needed to allow positivism and phenomenology to work together, then the time has come to tie the threads together and show how the combination would work in terms of the aim of social explanation which was stated in the preface. Our claim then was that the two camps could be united at the level of social explanation, despite their immense theoretical differences. The preceding discussion has attempted to pave the way for this reconciliation, while at the same time drawing the theories somewhat closer together than they are usually thought to be. In doing this we hope we have not deviated so completely from the two streams of thought that we could be accused of expounding other theories altogether.

There are three conclusions we wish to draw from the previous discussion. The first concerns our understanding of society; the second concerns our prediction of social events, and the third concerns the nature of social and theoretical progress.
Friedman stressed that the value of an economic model lies in the success of its predictions rather than its correspondence to our conception of reality. Disregarding the extreme failure of economics to predict economic events within society, we still need to apply the information that economists give us to the everyday world of our concerns. This means that we need to know exactly what marginal utility, for instance, means, and what it does not mean, in society. Economics defines the marginal utility of a good as the amount of satisfaction that an additional unit of the good would give to the consumer. Satisfaction is defined in terms of demand. But unless these terms "satisfaction" and "preference" are given a subjective meaning that brings into the picture the prejudices of the society and the researcher, they can tell us little about the life world from which economics originally derived. Our first conclusion is that we cannot use economics to understand what economics teaches us, and that phenomenological sociology is required to give us a firm experiential base for our social theories.

At the same time we cannot rely solely upon our understanding of phenomena in framing social policy. For one thing, large-scale changes can have unexpected side effects which our original phenomenological interpretation may not have anticipated. Another contribution of positivism is that its insistence on discovering the facts can often help us safe-
guard against false interpretation. However internally consistent an interpretation might appear, and however much agreement it had generated, if it turns out to be empirically false that can be a quick way of finding out that it is inconsistent too. Knowing exactly what the effect of a change in one part of society will be on another part of society is, in some ways, more important to the policymaker than knowing exactly what he is changing when he changes something. Phenomenology might be able to teach us general truths about the social structure, but positivism has the advantage of giving us precise information when we need it most, and, as we argued, even phenomenology can benefit from the positivist method.

Finally, both models take similar approaches to their description of the nature of progress. It is by a continual emancipation from prejudice or falsehood that progress takes place. The difference between them is that while positivism is searching for objective indicators of social progress, phenomenology is searching for subjective indicators. We have tried to present a framework that will relate the two, for an understanding of their relationship is needed if we are to frame effective policies which are tailored to the needs of those who must live with them.
FOOTNOTES

Page (vii)
1. The following social scientists and social philosophers are a selection of those who have, explicitly or implicitly, recognised the need for the sort of approach we will outline:
   Theodor Abel, "The Operation called Verstehen"
   American Journal of Sociology; Volume 54; 1948
   H. E. Cooley, Sociological Theory and Social Research
   E. Gellner, "The Entry of the Philosophers"; The Times Literary Supplement; 5 April 1968
   R. M. McIver, Social Causation, New York; American Book Company; 1942
   B. Williams, Social Research Strategy and Tactics
   New York; Macmillan; 1966
   Florian Ananiecki, The Method of Sociology, New York; Farrar & Rhinehart; 1934

Page (viii)
2. C. Hempel, "The Function of General Laws in History" in Gardiner ed. Theories of History; London; Free Press; page 352

3. Hempel. Ibid. page 350, n3

4. e.g. Merleau-Ponty writes, "Reflection slackens the intentional threads that attach us to the world and thus brings them to our notice". Phenomenology of Perception; London; Routledge, Kegan & Paul; 1st English edition 1962; page xiii

Page (ix)
5. Merleau Ponty, M., "Phenomenology and the Sciences of Man" in Natanson ed. Phenomenology and the Social Sciences; Volume 1; Evanston; Northwestern University Press; 1970; pages 65 and 70

105

7. Adorno. Ibid. page 238

8. Ibid. page 239

9. In "Being and Time" Heidegger relies, for the success of his fundamental ontology, upon assumptions about Dasein's pre thematic understanding of itself. Whether these assumptions are correct is an empirical matter.

10. The verification theory theory is, in any case, more an attitude towards research than a strict thesis of a sophisticated positivist framework, and when applied to the social sciences it disallows researchers from asking all the questions which they could reasonably ask. In particular it entails that the only way to verify statements about groups is by taking them to be equivalent to the sum of the corresponding statements about their constituent individuals.


14. A. Schutz, *Collected Papers* Volume 1; The Hague; Martinus Nijhoff; 1971

Ibid. page 213


    Ibid. pages 403-8

18. Ibid. page 404

19. R. Von Mises, *Positivism*; New York; Dover; 1951; page 2

20. Ibid. page 3

21. Ibid. page 11

22. Ibid

23. Ibid. page 73

24. R. Carnap, "Formal and Factual Sciences" in Feigl and Brodbeck eds. *Readings in the Philosophy of Science* New York; Appleton Century Crofts; 1963; pages 123-129

25. Ibid. page 128


27. R. Carnap, "Testability and Meaning" page 80 of Feigl and Brodbeck. Ibid. pages 43-92.


30. C. Hempel and P. Oppenheim, "The Logic of Explanation" page 319 of Feigl and Brodbeck. Ibid. pages 319-353


32. Ibid. page 356

33. Ibid. page 345

34. Ibid.


36. Hempel. Ibid. page 349

37. Ibid. page 351

38. C. Hempel, *The Philosophy of the Natural Sciences*; Ibid. page 30

39. K. Popper, *The Poverty of Historicism*; Ibid. pages 64-73


Page 39
43. J. W. N. Watkins reprinted in Gardiner ed. Ibid. page 505
44. Reprinted in M. Brodbeck ed. Readings in the Philosophy of the Social Sciences; New York; Macmillan; 1968 page 283

Page 40
45. Ibid. page 302

Page 41
46. M. Mandelbaum, "Societal Facts" reprinted in Ryan ed. Ibid. page 105

Page 42
47. S. Lukes. Ibid. page 1

Page 43
48. Encyclopaedia Britannica, Supplementary Volume 1. page 159

Page 44

Page 45
50. A. Quinton, "Social Objects"; PASS; 1974; pages 1 26

Page 46

Page 49
52. R. D. Laing, Self and Others; London; Pelican; 1965
54. R. Carnap, "Empiricism, Semantics and Ontology" in Revue Internationale de Philosophie 1950; pages 20-40

55. Heidegger. Ibid. page 68

56. Ibid. page 237

57. Ibid. page 38

58. Ibid. page 94

59. Ibid. page 244

60. Ibid. page 166

61. Ibid. page 168

62. Ibid. page 98

63. Ibid.

64. Ibid. page 105

65. Ibid.

66. Gadamer. Ibid. page xviii

67. Merleau-Ponty, Signs; Evanston: Northwestern University Press; 1964; page 59

68. C. Taylor, "Hermeneutics and Politics" page 153 in Connerton ed. Ibid.
69. Merleau-Ponty, *Phenomenology of Perception*; Ibid. page 67
70. Merleau-Ponty. Ibid. page 150
71. Ibid. page 147

72. Ibid. page 148
73. Ibid. page 149
74. Ibid. page 153

75. Ibid. page 250
76. Ibid. page 156
77. Ibid. page 169

78. Gadamer, *Truth and Method*; Ibid. page xviii
79. Ibid. page 261
80. Ibid. page 276

81. Ibid. page 361
82. M. Merleau-Ponty, *Sense and Non-sense*; Evanston; Northwestern University Press; 1964; page 93
83. Gadamer. Ibid. page 349

84. Ibid. page 258
85. Ibid. page 261

86. Merleau-Ponty, *Sense and Non-sense*; Ibid. page 85
87. Ibid. pages 95-6

88. Ibid. page 95
89. This question is posed by Paul Ricouer in his article, "Hermeneutics: Restoration of Meaning or Reduction of Illusion?" page 194-203 of Connerton ed. Ibid page 194
90. J. Habermas, *Towards a Rational Society*; Boston; Beacon Press; 1968; pages 91-2
91. Ibid. page 93

92. Gadamer. Ibid. page 264


94. T. A. McCarthy, "A Theory of Communicative Competence" pages 470-497 of Connerton ed. Ibid. page 484

95. Habermas presents the criteria of an ideal speech situation and this can only be approximated in reality.

96. J. Habermas; "Aspects of the Rationality of Action"; Ibid. page 22

97. George Orwell, *Animal Farm*; Middlesex; Penguin; 1968 pages 32-3


100. D. Davidson, "Actions, Reasons and Causes" reprinted in Brodbeck ed. Ibid. page 44-56 cf. page 45

101. Ibid. page 47
102. Ibid. page 46
103. Ibid. page 50
104. Ibid. pages 53-4
105. C. Hempel, "The Function of General Laws in History". Ibid. page 350. n.3
106. Heidegger. Ibid. page 61
107. Heidegger. Ibid. page 422
108. Heidegger. Ibid. page 168

109. A. Schutz. Ibid. page 210
110. K. Popper, The Poverty of Historicism; London; Routledge and Kegan Paul; 1957; pages 97-102
111. Ibid. page 101

112. Ibid.

113. Heidegger. Ibid. page 215

114. Habermas, "Aspects of the Rationality of Action"; Ibid. page 26

115. A. Pap, "Does Science have Metaphysical Presuppositions" reprinted in Feigl and Brodbeck eds. Ibid. page 25.

116. Ibid. page 53

117. M. Friedman, Positive Economics; Chicago; Phoenix Books; 1966; page 16

118. Gadamer. Ibid. page xiii
119. Hempel and Oppenheim. Ibid. page 334

120. Ibid. page 555
SELECT BIBLIOGRAPHY

Achinstein and Barker eds.  

The Legacy of Logical Positivism; Baltimore; The Johns Hopkins Press; 1969.

Ayer, A. J. ed.  

Logical Positivism; New York; Free Press; 1959

Brodbeck, M.  

Readings in the Philosophy of the Social Sciences; New York; Macmillan; 1968

Connerton, P. ed.  

Critical Sociology; Middlesex; Penguin Books; 1976

Dray, W.  

Laws and Explanation in History; Oxford; OUP; 1957

Feigl, H. and Brodbeck, M. eds.  

Readings in the Philosophy of Science; Appleton Century Crofts; 1963

Gadamer, H.-G.  

Truth and Method; New York; Seabury Press; 1975 (1st ed. 1960)  
Philosophical Hermeneutics; Berkeley; California University Press; 1976

Gardiner, P. ed.  

Theories of History; London; Free Press; 1968

Habermas, J.  

Towards a Rational Society; Boston; Beacon Press; 1968  

Heidegger, M.  

Being and Time; New York; Harper & Row; 1962 (1st ed. 1928)

Hart, H. L. A.  

The Concept of Law; Oxford; OUP; 1961
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Publisher/Location &amp; Edition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hayek, F. A.</td>
<td>The Counter Revolution of Science;</td>
<td>London; Free Press; 1955</td>
</tr>
<tr>
<td>Hempel, C.</td>
<td>The Philosophy of the Natural Sciences;</td>
<td>Englewood Cliffs; Prentice Hall; 1966</td>
</tr>
<tr>
<td>Merleau Ponty, M.</td>
<td>Phenomenology of Perception; Pantheon;</td>
<td>London; Routledge and Kegan Paul; 1st English Edition 1962.</td>
</tr>
<tr>
<td></td>
<td>Sense and Non sense; Evanston; North western University Press;</td>
<td>Evanston; Northwestern University Press; 1964</td>
</tr>
<tr>
<td>Natanson, M. ed.</td>
<td>Phenomenology and the Social Sciences;</td>
<td>Evanston; Northwestern University Press; 1973</td>
</tr>
<tr>
<td>Popper, K.</td>
<td>The Poverty of Historicism; London;</td>
<td>Routledge and Kegan Paul; 1958</td>
</tr>
<tr>
<td>Ricouer, P.</td>
<td>Conflict of Interpretation; Evanston;</td>
<td>Northwestern University Press 1974</td>
</tr>
<tr>
<td>Ryan, A.</td>
<td>The Philosophy of the Social Sciences;</td>
<td>New York; Pantheon; 1970</td>
</tr>
<tr>
<td>Schutz, A.</td>
<td>Collected Papers; volume 1; Hague;</td>
<td>Martinus Nijhoff; 1971</td>
</tr>
<tr>
<td>Von Mises, R.</td>
<td>Positivism;</td>
<td>New York; Dover; 1951</td>
</tr>
<tr>
<td>Winch, P.</td>
<td>The Idea of a Social Science; New York;</td>
<td>Humanities Press; 1971</td>
</tr>
</tbody>
</table>