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MARX, WEBER AND THE METHODOLOGY

OF SOCIAL SCIENCE

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THESIS SUBMITTED SEPTEMBER 1980, FOR THE DEGREE
OF DOCTOR IN PHILOSOPHY IN THE DEPARTMENT OF
SOCIOLOGY, UNIVERSITY OF WARWICK.

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ACKNOWLEDGEMENTS

I should like to thank all those who have read and commented on the draft of this thesis or related papers, or who have otherwise been of assistance in seminars or in critical discussion. I am particularly grateful to my supervisor, Roy Enfield, for all his support and erudite expertise which has proved invaluable for the enrichment of my ideas on philosophy and social science over four years of productive supervision. I also wish to thank Chris Hull - a friend of longstanding - for his editorial and stylistic advice and for his help in elucidating some of the technical points in the argument which I had either overlooked or been unaware of. Last but not least, I must thank my girlfriend, Sue Smith, without whose financial and emotional support, particularly over the last two years, I would have been unable to have brought this work to a satisfactory state of completeness.

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BIBLIOGRAPHICAL NOTE

Most of the primary sources referred to in the thesis are acknowledged by their original date of authorship or publication. A chronological bibliography is supplied at the end of the thesis which furnishes information about the particular edition of the work referred to. Secondary sources, on the other hand, are acknowledged in full in the "Notes to the Chapters."

SUMMARY

This thesis is primarily concerned with the relationship between realism in philosophy and in social science. I attempt to expound and defend two principal arguments; first, that a realist approach in philosophy is a precondition of understanding science as a rational activity; secondly, that only a realist approach to the understanding of social phenomena seems to offer hope for developing an account of social inquiry based on scientific principles. However, these two arguments are developed by way of a critical analysis of the realist view in relationship to some of its major rivals. Consequently, as well as my realist exposition of Marx's methodology of science outlined in chapters five and six, where I argue that only a dialectico-causal interpretation of historical materialism seems to meet the requirements of an historical science, there is a chapter on Weber's methodology (hence the title of the thesis) and a section on other approaches to social science stating my case against the attempt to found social inquiry on alternative cognitive foundations. In addition, the argument against non-realist views of social science is extended to the critique of Marxism itself especially in the context of the theories of Colletti and Althusser contained in chapter 4.

SUMMARY

This thesis is primarily concerned with the relationship between realism in philosophy and in social science. I attempt to expound and defend two principal arguments; first, that a realist approach in philosophy is a precondition of understanding science as a rational activity; secondly, that only a realist approach to the understanding of social phenomena seems to offer hope for developing an account of social inquiry based on scientific principles. However, these two arguments are developed by way of a critical analysis of the realist view in relationship to some of its major rivals. Consequently, as well as my realist exposition of Marx's methodology of science outlined in chapters five and six, where I argue that only a dialectico-causal interpretation of historical materialism seems to meet the requirements of an historical science, there is a chapter on Weber's methodology (hence the title of the thesis) and a section on other approaches to social science stating my case against the attempt to found social inquiry on alternative cognitive foundations. In addition, the argument against non-realist views of social science is extended to the critique of Marxism itself especially in the context of the theories of Colletti and Althusser contained in chapter 4.

INTRODUCTION

This thesis is an inquiry into the conceptual foundations and scientific aspirations of various schools of social science. It examines the epistemological roots of various attempts at social inquiry expressed in the Marxist tradition as well as in what is understood as classical sociological theory. However, my critical inquiry into this subject is not an "innocent" one, since I do attempt to establish what can only count as a realist thesis : I argue that a non-reductive realism is a precondition of developing an adequate understanding of science as a rational activity, and, in addition, that a non-reductive, realist attempt at social theory, expressed by a dialectico-causal interpretation of Marxism, seems to offer the best hopes of a social theory meeting the requirements of an historical science.

By adhering to a "non-reductive" realism, I eschew any attempt to provide ^{speculatively metaphysical} ~~speculative~~ or generally stipulative conditions, as to what is to count as "reality" or causality in the natural or social world in advance of the practice of the empirical sciences. This sort of philosophical realism avoids the well documented pitfalls of, for example, certain "materialist" philosophies like mechanical materialism or dialectical materialism which stipulate, in advance of the work of science, what the essential character of the world is. A non-reductive realism avoids the metaphysics of such theoretical attempts and instead merely wishes to demonstrate the cognitive foundation for assuming causality operates in the world without, however, stipulating the nature this causality must take outside of a consideration of the results of the empirical sciences. This sort of approach is essential if one is to make sense of scientific theories, which despite shared principles of inquiry,

nevertheless claim to have discovered different causal processes at work in their respective areas of research. To put this point in the context of the thesis; I argue in chapters 3, 5 and 6 that Marx's realist aims are fulfilled in a dialectico-causal approach to concept construction in social science. This sort of causality, however, does not appear to be centrally involved in the explanations of natural science. If, therefore, realists were to identify "realism" exclusively (and reductively) to a particular view of causality tied to one theory or set of theories as, for instance, sociological positivists do, then one would be forced to deny the scientificity of either historical materialism or natural science! A non-reductive realism avoids this false dilemma by recognising that while the existence of the world is a precondition of any scientific inquiry, it nevertheless remains the task of science to tell us how that world is to be understood. From this viewpoint realism is consistent with the results of science even if views as to the nature of causality in various domains differs. The link in the thesis between chapter 1 and the positive explication of a dialectico-causal science, is to show how the latter is not only consistent with a realist view, but in addition to show how realism in social science ~~logically~~ implies a commitment to a dialectico-causal view of social causality. This is a point taken up in chapters 3 and 5 where I show how a dialectico-causal interpretation of historical materialism realises Marx's realist aim of establishing an historical science capable of grasping social development in its own terms rather than by way of reference to supra-historical principles. This same theme is developed in chapter 6, where I interpret Marx's critique of political economy in terms of his commitment to a dialectico-causal methodology, and again in chapter 7 when I argue that this idea of social inquiry serves as a methodological basis for a generalising science of

history whereas Weber's methodology does not. There is one more link I should mention before proceeding to an introduction of the relevance of the other chapters to my main argument, I strengthen the claims of a dialectico-causal social science by suggesting Marx's critique of political economy can be regarded as a "revolution in science" analogous to those in natural science the form of which I describe in chapter 1.

I suggest not only that a non-reductive realism provides lines of defence for an interpretation of science as a rational activity and for a dialectico-causal social science, but also that it provides a basis for the critique of reductive theories of a distinctly non-realist character. This critique is demonstrated in chapter 1 by way of a critical rejection of positivist and conventionalist theories of scientific inquiry. These theories are rejected on account of their attempt to reduce science either to theory - an incipient idealism - or to the "world" - a reductive positivism. The same sort of reductionism is evident in the sociological counterparts of these general philosophical orientations. I argue, therefore, that Weber's methodology is a logical result of an idealist reduction of the social world to the teleology of the social actor; a reduction following logically from a neo-Kantian epistemology. Despite Weber's attempt to square his neo-Kantian sociology with the rigour of empirical analysis and causal explanation, I argue that this attempt cannot succeed so long as it is founded on the epistemological principles of a neo-Kantianism. The positivist inspired schools of social science are examined in 5.3. Again, I attempt to show how the reductive elements in this tradition prevent the construction of an adequate theory in social science. I trace these back to an implicit mechanism in the positivists' idea of causality - a mechanism leading to ahistoricity in theory.

This argument is illustrated in an analysis of Comte's law of progress and structural functionalism.

It is worth pointing out here that the positivist/conventionalist opposition expressed in social science, tends to oppose a mechanistic idea of social causality to a humanistic teleology as rival ideas as to what is basic to sociological explanation. This dualism I analyse in the thesis in a number of different guises; first, in respect to its "Kantian" formulation in chapter 2, then in its Feuerbachian form in chapter 3, and finally once more as a constitutive dualism of the Methodenstreit in German economics examined in chapter 7. I attempt to demonstrate how a dialectico-causal social science overcomes this dualism and by so doing at last formulates a methodology which seems to meet the requirements of an historical science. However, this interpretation of Marxism is not shared by either Colletti or Althusser. Both these thinkers reject Hegelian Marxism and so it seems the mechanical causality/humanistic teleology dualism discussed above. This is strikingly evident in Colletti's Marxism, since he poignantly exposes the Hegelian and mechanistic elements in the Marxist tradition both in the East and in the West. Indeed, in chapter 3 and elsewhere my ideas are partly inspired by and concur with Colletti's sparkling critique. Nevertheless, in the final analysis, both he and Althusser fall prey to an Hegel/Feuerbach problematic analysed in chapter 3, in which their Marxism is merely a composite structure of various elements borrowed from Hegel's dialectic and from mechanistic ideas of causation or humanistic teleology and indeterminism. In short, I argue that they fail to understand how Marx transformed the "estranged insights" of Hegel's philosophy into a dialectico-causal understanding of history. Consequently, I conclude that despite their great contribution to the understand-

ing of historical materialism - an understanding without which this thesis would have been inconceivable - in the last instance, Colletti's and Althusser's Marxism is based on the same problematic and composite error. I argue, in addition, this error is partly caused by their allegiance to recognisably idealist positions in epistemology. Only a realist interpretation of historical materialism, I argue, seems to be capable of grasping the scientific significance of historical materialism - something that can be comprehended only if one understands Marxism as a dialectico-causal discipline.

I conclude the thesis in a critical comparison of the methodologies of Marx and Weber, placing it in the context of the theoretical relationship between the Methodenstreit in economics and Marx's critique of political economy. I argue that whereas Marx's critique of political economy is founded on the principles of a generalising historical science, Weber's methodology merely reconstitutes the dualism between ahistorical generalisation in "social" science and an ideographic history - a dualism at the very heart of Schmoller and Menger's methodological controversies. Finally, I attempt to suggest general lines of argument for the discussion of the relationship between science and politics in respect to the interpretation of historical materialism and Weber's sociology.

Before proceeding to the arguments put forward in this thesis, I do wish to emphasise the following disclaimers. First, my chapter on the philosophy of science is far from exhaustive in what it has to say about realism. However, I do not attempt to give a full explication of realist philosophy and what commitment to it entails, rather I attempt merely to show there is nothing in a realist theory of science precluding the dialectical account of causality I argue

for in chapter 5. If I have achieved anything more than this, in chapter 1, then this should be regarded as a bonus vis à vis the major object of my argument. Secondly, although I give some space to the analysis of causality viz the positivist, dialectical and teleological ideas of causation, I do not attempt a formal exposition of these different ideas, since again my aim is merely to establish the legitimacy of dialectico-causal explanations and not to write a thesis on causation per se. Thirdly, my treatment of the classical philosophers, Kant, Hegel and Feuerbach is, to say the least, cursory and schematic. In mitigation, I claim that I seek only to establish conceptual foundations of attempts at social theory and hopefully this does not depend on a knowledge of every detail of their philosophy. Fourthly, my discussion of Weber's methodology and in particular his action theory, is not placed in the context of recent writing in the philosophy of action on the question of the relationship between reasons and causal explanations. While it may prove interesting to show that a project attempted by Weber viz reconciling "verstehende" explanations with causal explanation, has (or has not) been achieved by recent philosophers, if my argument in chapter 2 is valid, then this discussion would only have relevance for a social psychology and not a macro-sociology. However, as my inquiry is confined to an investigation of the possibility of a macro-theory of social development, it seems legitimate to omit reference to this discussion for the purposes of this thesis. Fifthly, my discussion of political economy in chapter 6, is constrained by the fact that I am writing about the subject as an "outsider", as it were, and hence I claim no special erudition in this field. I nevertheless, feel justified in writing this chapter since my aim is not to develop Marx's value-theory in some sort of substantive analysis, but rather is to clarify the methodological basis of Marx's critique of political economy and

to square the law of value with his general theory of history. Finally, I must frankly acknowledge that the "core" of this thesis, the chapter on dialectical causality, is far from being or even attempting to be the last word on the subject. On the contrary, I intend this discussion to be a basis for further reflection and refinement. But the provisional nature of my treatment should not undermine the general claims I make in the thesis in regard to the centrality of this concept of causality for the future development of an adequate methodology of social science.

Chapter 1. PHILOSOPHY AND THE EXPLICATION OF SCIENTIFIC INQUIRY

Sociologists have found increasingly attractive the idea that any theory or body of theory which aspires to the name of science should be "realistic".¹ But, it has proved difficult to say what "realism", as an articulated philosophy, is.² So, when arguing for realism the general strategy has been to shift the onus of proof onto rival approaches and then, typically convict them of reductionism or idealism. While doing so, one obtains a closer understanding and appreciation of what is involved in a commitment to realism. In this first chapter, I intend to exhibit two philosophies of science, positivism and conventionalism, in just this light. Both of these can be shown to fall short when measured against criteria indispensable to realism.

The essential weakness of both positivism and conventionalism is that neither philosophy explains scientific inquiry as a rational activity. By this claim, I do not mean that these philosophies altogether fail to lay bare the rationality of science, but rather that two crucial areas of science viz theory development and theory change, cannot be explained as rational activities by positivist or conventionalist arguments. If positivists and conventionalists fail in this key area, then there is good reason for developing an alternative philosophy which succeeds where others have failed. It is for this reason that I develop a realist alternative.

One advantage a realist theory has over its rivals, is that it recognises the central importance of causality in science. Realists attempt, therefore, to elucidate the role causality

plays in the conceptual structure of scientific explanation. However, I have no wish to get bogged down in a detailed elaboration of realism as a philosophy. Instead I intend to assume that any realism must imply a commitment to at least two principles. First, realists must accept the existence of objective causal processes in the world. Secondly, realists should view adequacy in the face of the world as being the ultimate test of scientific theories. Armed with these two assumptions, I intend to succeed where positivists and conventionalists have failed, i.e., I intend to present theory development and theory change in science as rational activities.

1.1. POSITIVISM AND CONVENTIONALISM

The positivists, following Hume, reject a notion of an independent and objective causal process.³ Empiricist or positivist criteria of cognitive significance seek always to relate the scientific content of theories to a set of "observations" or "observation statements". An objective causal process is not one that can be established inductively from such a necessarily finite set of observations. In a well-known passage, Hume argues that one can never perceive instances of causation, only two events in conjunction, nothing in our experience can count as an observation of causality.⁴ The positivists go on to conceive scientific laws as contingent generalisations based on habitual connections between events, justified by some sort of relationship to observation statements. There is no mention and, they believe, no need for an objective causal process. The relationship between a scientific theory and its supporting observations has been variously interpreted; a lengthy story from early formulations of the verification principle until

Popper's sophisticated development of methodological falsificationism.⁵ It is a familiar part of our philosophical heritage that however the relationship between theory and observation is conceived from this cognitive foundation, positivists have been unable to justify the attribution of causal processes to the world. Consequently, positivists can only end up with a regularity theory of causation. The causal laws supported by these regularities or generalisations have nothing further behind them than our experience of the conjunction of events, a conjunction that might well be accidental, so nothing significant - in a realist sense - can be revealed about causation.

Hempel typifies the positivist approach to the logic of scientific explanation. He puts forward a deductive, nomological model of explanation in which an event 'E' - the "explanandum" - is explained when it is legitimately derived from an "explanans" which consists of statements of general laws L^1 , L^2 etc., and statements of antecedent conditions C^1 , C^2 etc.⁶ The status of the explanation of 'E' depends on the status of these general laws L^1 , L^2 . Here, in the explication and justification of these universal generalisations of science, positivism meets an apparently insuperable theoretical problem - the problem of induction.⁷ Lacking a solution to this problem, positivists cannot legitimately make the inferential leap from the finite cases observed to the universal generalisations which form the explanatory core of all scientific theories. This deficiency is crucial: to explain why an event occurs it must be seen to fall under a covering law establishing necessary and sufficient conditions for its occurrence. It is evident, however that if positivism fails to provide scientific generalisations then, ipso facto, it cannot answer even the minimal claim of establishing grounds

for the attribution of necessary conditions, let alone the sufficient conditions of an event's occurrence.⁸ One can see the regularity thesis fails to account for the specifically causal character of scientific explanation; the regularities it posits cannot become law-like generalisations unless the problem of induction can be solved.

Popper attempted to solve this problem. He argued that the logic of science does not involve an inductive step. On the contrary, science is based on a deductive logic of hypothesis and falsification.⁹ Scientists formulate hypotheses, the universal generalisations of law; these they attempt to falsify by discovering "observations" which run counter to the consequences deducible from the hypotheses. Even though Popper's account of the logic of scientific method avoids inductive inference, the problem of induction re-emerges once he considers the practice of science. When scientists reject an hypothesis, - then they become entangled in an inductive step. Scientists reject an hypothesis which has been falsified only because they inductively infer its continued falsification by similar counter-instances in the future. Unless one assumes the reality of an ordered causal process, there is no reason why an hypothesis falsified today should not turn round on us and prove adequate tomorrow and on every future occasion. It would appear, therefore, that Popper's insistence that one counter-instance should be sufficient to falsify an hypothesis, is devoid of any cognitive foundation. Again, Popper allows for a comparison of theories by distinguishing those which are fairly well corroborated and those which are not.¹⁰ The corroboration criterion, however, can only be based on inductive grounds (i.e. that failures to falsify are perpetual). Popper has not solved the problem of

induction. He has merely displaced the problem from the logic of science to its actual practice.

Popper's philosophy culminates in a profound scepticism. No grounds are given for believing that an hypothesis once falsified stays falsified for good. Consequently, the criteria of cognitive significance based on the hypothesis/falsification method are somewhat impotent. The hypothesis falsified by one counter-instance is in no way cognitively inferior to one which satisfies the falsifiability requirement yet so far has escaped falsification. By the same token, Popper can not establish non-inductive criteria for comparing rival theories which are coherently formulated and satisfy the general falsifiability test. Old and new theories, so far as they are scientific, are falsifiable, and yet one believes there is a growth in explanatory power in the cases of well established revolutions in science. Popper is faced with a theoretical dilemma: either he must accept a profound scepticism in the philosophy of science, or else provide criteria for comparing hypotheses and theories and these, as I have shown must reintroduce the classical problem of induction. In the first instance, he cannot demonstrate the rational and evolutionary character of scientific inquiry; in the second, he cannot show how scientific generalisations possess cognitive significance.

Popper renounces naive positivism. He establishes an observation language through the intersubjective agreement of the scientific community, a language devoid of theory-free observations.¹¹ Once it is accepted that observations are theory-dependent, then the positivist project of founding the cognitive significance of science on a theory-neutral bedrock of episte-

mologically privileged observations, founders. To expect to establish the cognitive value of theories on the basis of observations themselves tainted by those very theories, is absurd. Yet, unless one posits a relation between theory and an extra-theoretical world, it would seem that Popper's criteria of cognitive significance must be restricted to elements entirely determined by theory. Once it admits the theory-dependency of observations, positivism must collapse into a conventionalism where criteria of scientificity are exclusively determined by intersubjective conventions.

A conventionalist theory sees science as an activity determined exclusively by scientists' assent to particular theories.¹² These theories define the object of scientific study, its experimental procedures, what is to count as an observation etc. Criteria of scientificity, apart from logical criteria of consistency and coherence, are established by and are specific to particular theories. Consequently, competing theories are essentially incommensurable.¹³ With no theory-neutral or objective element capable of settling the claims between competing theoretical claims, how can the replacement of one theory by another in a revolution in science be understood as a development in scientific knowledge? Theories are merely different from each other. Nothing more can be said!

If theories are incommensurable, one can make no sense of the continuity evident in the replacement of one theory by its successor as scientific knowledge develops.¹⁴ For the conventionalists, theory replacement or the choice between competing theories cannot be matters settled by the employment of any objective criteria. Since so much of the history of science consists of theory replacement, replacements grounded in reason,

one has no purchase on the dominant motives behind scientific research. That scientists should persistently spin out new theories is, from a conventionalist standpoint, perversely irrational and ultimately unintelligible. Conventionalists, it seems, would have no more success than positivists in developing a cognitive foundation for the defence of science as a rational activity. It is in virtue of the failure of positivism and conventionalism in this matter, that I feel it is necessary to develop a realist alternative to these logically interrelated philosophies of science.

1.2. A REALIST THEORY OF SCIENCE

I contend an objective causal process forms the foundation of a realist theory of science. An adequate realist theory must accept the absence of any theory-free access to the real. Naive realism would be as inadequate a theory as naive positivism. A realist theory must attempt to forge a link between a theory / dependent scientific activity on the one hand, and an independent or extra-theoretical object on the other. If one reduced theory to the real by assimilating it to a class of incorrigible observation statements, then one would relapse into naive positivism. If, on the other hand, one reduced the real to theory, then one would fall prey to conventionalism. A realist explication of the relation between theory and the real, should be reductive in neither sense. It must accept that there is always a dualism between theory and the real.

If there is no identity between theory and the real, then it follows that the relationship between theory and the real must always be put to the test. There is the world of difference

between a positivist test which involves a relationship between theory and "observations" and a realist test which assumes a relationship between the theories of science and real causal processes. Whereas in the first case, the idea of scientific laws which ensues from testing falls foul of the problem of induction, in the second, this problem does not arise. This does not imply realism "solves" the problem of induction - a problem which seems insuperable. Rather, one should regard realism as a philosophy of science which attempts to understand scientific inquiry in a way which does not seek an impossible justification of causality on the basis of finite observations. Instead of seeking to justify necessity in this way, it assumes the existence of causal processes as an essential precondition of scientific explanation. From this standpoint, scientific testing tells us something about causal relationships in the world, rather than about relationships of theories to observations. It would appear, therefore, that there is an inductive justification for a given theory's particular view of the causal relation once the existence of an objective causal process is presupposed. Although the positivist may object that the realist fails to justify the general attribution of causality to the world through a posteriori proof, the realist can reply that no proof of this sort would be equal to the task. The point is not to prove the unprovable, but rather is to make sense of the history of science and its accumulation of knowledge. I intend to show how realism succeeds in this quest where positivism and conventionalism clearly fail.

I must now account for the means by which science understands the real without ever reducing it to thought. During scientific inquiry and during the process of theory development, anomalies

are generated and surpassed. A scientific theory defines its conception of the real i.e., its object of knowledge; in this it states that the real is characterised by a particular set of causal relations.¹⁵ These relations are claimed to be more or less adequate to the real object. Anomalies will be generated where the theory is inadequate i.e., in circumstances where nature and the theory are at cross purposes. One should not suppose a theory's failure to generate anomalies is ipso facto a proof of its scientific adequacy. Adequacy depends entirely on the manner in which the theory has been formulated and on its range of explanatory power. Indeed, a theory might be so concocted as to be true by definition. Then, necessarily it would be free of anomaly, but this would not render it scientifically adequate. On the contrary, its lack of testability would deprive it of the power to generate anomalies. A scientific theory must in principle be capable of generating anomalies. In fact, the potential explanatory power of a theory will depend on its ability to generate and supersede anomalies in as wide an area as possible. Consequently, far from suggesting that freedom from anomaly is proof of adequacy, this account of science suggests rather that in the capacity to continue generating anomalies is the place where one can locate a scientific theory's essential adequacy and staying power. Such an account does not exclude the possibility of a scientific theory progressing to the point where anomalies cease to surface, but it does insist that such an ideal end-point of theory development cannot be predetermined in advance of research. Such a terminal position in a body of theory, if it is indeed possible, should be an outcome of an anomaly generation and supersession which increases the explanatory power of science. It should not be achieved by a form of conventionalistic caveat which would decrease the range of explanation.

The natural tendency of the scientist is to modify the body of theory in response to anomaly. Two developments are possible. First, the anomaly might be incorporated in a modified theory in which the conceptual core of the old theory is preserved. Secondly, the supersession of anomalies might be incompatible with the presentation of the old theory and may have to be achieved at the cost of a theory-change involving wholesale reconceptualisation of the object of knowledge, i.e., by a revolution in science. 16

The anomaly is, at one level, an authentic product of scientific theorisation. It is partly generated by theoretical work and the determinations of theory which constitute the object of knowledge. Only in relation to this theoretical object can an anomaly be recognised as, in any sense, anomalous. As it has been well put by Kuhn:

"Anomaly appears only against the background provided by the paradigm. The more precise and far-reaching that paradigm is, the more sensitive an indicator it provides of anomaly and hence of an occasion for paradigm change." 17

Anomaly reveals the limits of a theory. When an anomaly is detected, it should not be interpreted as a direct expression of nature unmediated by theory. But, on the other hand, anomaly is not a result of theoretical ambivalence or inconsistency. If anomalies were the product of theory alone, and if a theory were also consistent and coherent, anomalies in that theory would be impossible - not just inexplicable. Anomaly would be then more like a formal contradiction or inconsistency in an axiomatic system. If however one understood anomaly in sciences, not as a

type of logical contradiction, then one would see how they must be grounded in objective causal processes.

Certain consequences follow from the postulation of a real causal process. An anomaly expresses in the language of the theory the present limit of that theory's grasp of the real, so it follows that the theory's supersession of an anomaly represents an extension of the knowledge of the real. The anomaly loses its anomalous character in being theoretically integrated into the object of knowledge. By employing this method science progressively understands the world through the development and extension of its theories. Science develops a picture of the real; the world determines the limits of theory: anomaly is the product of friction between the two, without either one being reduced to the other. This whole activity can only be understood as a rational process, if one assumes the independence of a real causal process as the essential precondition of a theory-dependent development of scientific theorisation.

Kuhn's philosophy of science - to which much of the discussion above is obviously indebted - is founded on an internal contradiction which any realist theory of science resolves. Kuhn combines an implicit realist theory of anomaly generation with a sociological conventionalism. He accepts that anomalies are generated by the relation between theory and the real, yet he fails to use this conception of scientific method to formulate a defence of science as a progressive development of knowledge. He also fails to provide a complete account of theory growth and theory change as rational activities. Nevertheless all this is implicit in his philosophy, especially his later developments. Hence he argues that,

"Discovery commences with the awareness of anomaly, i.e. with the recognition that nature has somehow violated the paradigm expectations that govern normal science." 18

He confirms this realist side of his thinking when he discusses conditions for a paradigm change. He says,

"nature itself must first undermine professional security by making prior achievements seem problematic." 19

The ability of scientists to overcome anomalies reflects their ability to extend the depth and range of our knowledge and provides the key for objective criteria for judging between theories and accounting for scientific progress. However, instead of developing this point, Kuhn pays less attention to such cognitive criteria, but concentrates rather on sociological or psychological factors. It is one thing to emphasise the historical importance of these factors, but quite another to make them the pivot of an epistemological theory. One might well accept that political or ideological factors are historically deeply persuasive when there is a shift from one body of theory to its replacement - unavoidably, science has a social and historical context. From this, however, one must not conclude that such events in the history of science are necessarily deprived of any rational (or scientific) foundation. On the contrary, I believe more sense can be made of the scientific endeavour when theory development and scientific revolution are explicated and defended as rational and progressive activities. If Kuhn's sociological conventionalism were expressly formulated to show the absence of scientific or objective criteria in theory change, then it would contradict his own account of anomaly. My account

of anomaly, on the other hand, provides the foundation for a defence of science as a rational activity without denying its historical location or the possibility of social factors precipitating ideological distortions in the methods of science. Clearly such distortions can only be recognised if one has access to criteria of scientificity.

Anomalies generated in scientific practice express friction between theory and world. This friction precipitates theory/theory conflict expressed in terms of theory competition and theory change. In cases of development within a theory or development through theory change, science seeks to overcome the anomalies generated by its practice. It is obliged to resolve the contradiction between theory and the anomaly in favour of anomaly and not in favour of theory; refusal to do so would deprive the science of its status as a causal inquiry into the nature of things. Scientists therefore should not ignore anomaly in order to defend a theory. They should not employ a conventionalistic device which preserves a given theory at the cost of denying anomaly. Such a strategy would undermine the integrity of a theory. The denial of anomaly in order to preserve theory resolves the theory/real opposition in favour of theory. It thereby lessens the potential explanatory power of theory and, in the last analysis if anomaly were consistently ignored, one might wonder what it was that led the scientist to believe it was the world he was studying.

Philosophical contradictions are not generally contradictions between theory and the real. Usually they express contradictions between underlying philosophical assumptions. Contradictions of this kind can be resolved by opting for one or other of the competing assumptions, but not both. In a philosophical context, there

is no methodological obligation to resolve the contradiction one way rather than the other. Locke's representative theory of perception, for example, combines a realist theory of perception in which objects cause sense-impressions, with an empiricist theory of knowledge in which all ideas must be cognitively based on corresponding sense-data.²⁰ This produces an "anomaly" in the combined theory: the sensations causing material objects can not be credited with independence given the existence of empiricist criteria of cognitive significance. The "anomaly" could be resolved by developing a realist epistemology as a counterpart to the theory of perception; alternatively an empiricist theory of sensation could be developed which is consistent with the empiricist epistemology. The "anomaly" could be eradicated by a perfection of either the empiricist or realist side of Locke's thinking. Both supersessions are defensible in terms of philosophical practice because the anomaly is generated by a conflict between theories and not by a contradiction between theory and the world. In fact, it is probably correct to term these inconsistencies in philosophy logical contradictions, so as to distinguish them from the anomalies generated in scientific research. If one adopted this terminology, then one would henceforth reserve the concept of anomaly for cases where the conflict is between theory and the world and not between rival philosophical principles.

The method of science obliges the scientist to resolve the opposition between theory and the world in favour of the world. It must amend theory in response to anomaly. This does not imply, however, that to do otherwise is to act illogically. There is nothing illogical about resolving the theory/real contradiction in favour of theory. When Durkheim, for instance, denies that social conflict is "normal", in order to defend the

theoretical assumption that societies are like organisms, ordered and equilibrated, - his position is logically if not scientifically defensible. ²¹ There is nothing logically inconsistent about resolving the anomaly by taking the theory to be valid and the "anomaly" invalid. This is not, however, a scientific resolution in cases where anomaly is "genuine", because it artificially renders one set of theoretical assumptions invulnerable truths. The theory is preserved only at the cost of transforming it into an untestable metaphysical system. Science is founded on a commitment to develop theory in response to anomaly and not to deny anomaly in order to defend the theory. This unique response to anomaly fuels the dynamism of scientific inquiry.

A precondition for the successful use of the anomaly generation/supersession method is that science should be capable, in principle, of distinguishing between anomalies which genuinely bring a theory into question and anomalies which only appear to do so. The history of science is full of examples of success and failure in making this distinction. For example, the unexpected paths of the planets of the solar system were explained by Newtonian physics without amending the general law of gravity. Planetary deviation was accounted for by the postulation of the existence of planetary masses (Uranus and Neptune) which later evidence confirmed. The basic theory of gravitation which explained the planetary movements was not, therefore, brought into question by the "anomaly" but rather the "anomaly" was later enveloped by the general theory itself. But if no planetary masses had been discovered, then Newtonian physics would have been forced to amend its assumptions accordingly. With Durkheim's sociological theory, the position is reversed. The persistence and ubiquity of social conflict and disorder has no explanation in his theory.

Durkheim labels such phenomena "abnormal" - outside society. The universality of such social phenomena, demonstrates that the abnormality label is nothing more than a conventionalistic device for defending Durkheim's initial assumption of harmony and equilibrium in the social totality. Durkheim should have modified his initial assumptions to supersede those anomalies. Instead, he argues that the ordered and equilibrated characteristics of society are features implicit in every social fact. These characteristics are, for Durkheim, "given" by the supposedly self-defining properties of the social fact.²² By founding his social theory on such a dogmatic positivism, Durkheim enervates his conception of social phenomena; he believes, but mistakenly, he has somehow captured the essence of the social world. Durkheim, therefore, considers "genuine" anomalies to be "pseudo" - anomalies because he thinks his theory has already discovered the nature of society. Consequently, Durkheim abandons the method of science and ends up with just another form of metaphysics.

To compare these two examples is instructive. In the first, an anomaly which appears to contradict the theory is later adequately explained by the theory through the discovery of additional "facts". Such phenomena are only superficially anomalous - further, the anomaly was the stimulus for their discovery. In the second example, it is assumed in advance that certain oppositions between the theory and the real are "pseudo-anomalies" not fatal for the theory. When further analysis revealed however, that these "pseudo-anomalies" are, more thoughtfully considered "genuine" anomalies, the opposition can be more fruitfully resolved in favour of the anomaly. Durkheim's failure to do so signals his abandonment of the scientific enterprise.

The distinction between "pseudo-" and "genuine" anomaly, is not one which can be made a priori. For this reason, scientists should assume that all anomalies are potentially "genuine". Scientific practice reveals in the course of time which anomalies vanish and which anomalies require theory development or theory change. The nature of the anomaly, therefore, is something ultimately determined by scientists employing the method of anomaly generation and supersession.

Scientific progress is a direct result of theoretical work founded on scientific method. This progress takes place through development within a theory and, at the limit, through a revolution in science. In the first instance, anomalies are superseded by modifications within the general framework of the theory and its understanding of the object of knowledge; whereas, in the second, anomalies can only be superseded by reconceptualising the object of knowledge and therefore by theory change. Scientific revolution can, in this way be conceived as a special case of theory growth, one where the anomalies are superseded by the development of a new theory. A revolution in science can be understood retrospectively as an authentic product of the old theory. The new theory is not superior because it is "more scientific" than the old. It is precisely the scientific practice of the old theory that gives birth to the new theory. Insofar as theories adhere to this method of science, they are equally scientific, regardless of the varying degree of their explanatory power. On the other hand, it would be ridiculous to ascribe to a theory scientific status if it had no appreciable scientific scope. Science is not to be judged science by method alone, even if it can only be science insofar as it adheres to this method. The problem of demarcating science from non-science is a complex problem which will depend on a host of other factors inseparable from

the history of science. Without wishing to get entangled in this question, I would nevertheless emphasise that a realist should maintain that allegiance to the method of science is a necessary condition of a theory counting as scientific, since it is evident that the discoveries of science are not come upon accidentally. Indeed, the so-called "accidental" discoveries of science can only be recognised as legitimate discoveries once they have been integrated into a body of theory through standard scientific procedures.

There is growth in scientific knowledge which forms the content of progress in science. When anomalies are superseded in the course of the development of a body of theory, knowledge of the world increases. Scientists move from a less to a more adequate conception of the world. In scientific revolution this development assumes its most dramatic form. Not every new theory is successful in replacing the old. The new theory must do much more than explain the anomalies generated by the old theory. The areas in which the old theory is more or less adequate are re-expressed and transformed by the concepts of the new theory. The new theory generally explains how and why the theory it replaces is valid within certain limits. Kuhn states,

"the new candidate must seem to resolve some outstanding and generally recognised problem that can be met in no other way. Second, the new paradigm must promise to preserve a relatively large part of the concrete problem-solving ability that has accrued to science through its predecessors." 23

Not only do new theories extend knowledge by solving old problems and posing new ones; simultaneously, they "preserve a

great deal of the most concrete parts of past achievement." ²⁴
Scientific progress is far from discontinuous even when theories and the concepts embodying them have changed greatly. Whereas for the positivists this continuity consists of the preservation of the set of observation statements commanded by the old theory, for the realist a new theory will inherit a heritage of laws and causal connections developed by its predecessors. Again, a realist theory makes more sense of the positive gains for science achieved by old theories, while showing simultaneously the superiority of the new theory in terms of its greater explanatory power.

Scientific progress is not simply unilinear, guaranteed by some cosmic law of evolution. Besides the historical location of science at all times exercising a critical influence on its development, the complexity of its subject matter may render a simple forward march impossible. One should not suppose that a realist theory of science must involve unilinear development. ²⁵
My theory merely shows how scientific method facilitates a growth in knowledge. It thereby makes sense of the historical evidence which does confirm this development. The lifeline of scientific progress and the fate of particular theories is a matter for the history of science to sort out. Progress may well involve delays and retrogressions. In the long run, however, the continued adherence to scientific method makes possible the reality of a growth in our knowledge of the world - this seems to make maximal sense of the history of science and its progressive achievements.

1.3 THE DEFENCE OF SCIENCE AS A RATIONAL ACTIVITY

Even though justification of a philosophy of science cannot escape circularity, the circularity is not vicious.²⁶ It would be

inane to believe that the philosophical assumptions lying behind scientific practice are themselves open to scientific testing and proof. The rival claims of philosophies of science cannot be decided by an appeal to scientific evidence since the conflict here is between rival theories and not simply between theories and the world. There is an inescapably metaphysical element in every philosophy of science. This does not however, imply that all positions in the philosophy of science are equally defensible.

The kind of realism argued for here demonstrates that a deepened and enriched conception of the existence of a real causal process is required in order to understand anomaly generation and supersession. It does not, however, legislate in advance of scientific practice as to the nature of any actual causal process or predetermine the structure of reality. In this respect, it is superior to philosophies which superimpose a specific metaphysics on science which no concrete research can alter. The positivists, for example, insist on contracting the causal relation to a regularity thesis. Also, they assume the causal relation to be invariant across nature and the social world. Such an assumption prejudges the content of the concrete sciences and their accounts of causality.²⁷ A positivist philosophy of science threatens the anomaly generation/supersession method by legislating, in advance, what is to count as an acceptable account of the nature of reality and the causal relation.

A conventionalist theory of science need not predetermine the results of scientific research, but it does run into other problems. Once it accepts the theory-dependency of observations and rejects the possibility of a link between theory and an extra-theoretical world, it falls prey to a relativism which fails to exhibit the rationality of scientific practice.²⁸ My realist

theory, on the other hand, succeeds in this task and so can make sense of the historical evidence for growth in our scientific knowledge. Only a realist theory, it seems, can fully account for the method of anomaly generation and supersession. This method explains both the evolution of knowledge within a theory as well as through scientific revolutions and allows us to compare the claims of rival theories. Understanding science in this way obviously presupposes a general commitment to realism since our account of anomaly generation depends on there being a relation between theory and the world mediated by scientific practice. If it can be demonstrated that the rational element within scientific practice can be understood only by a realist, then this must surely count as a very strong defence of a realist theory of science.

Chapter 2. FROM NEO-KANTIANISM TO WEBER'S METHODOLOGY

In this chapter, I attempt to examine the links between Kant's philosophy, neo-Kantian epistemology and Weber's methodology of social science. There are two fundamental arguments. First, I argue that Weber's methodology is a logical outcome of a neo-Kantian understanding of science and social science; and secondly, that neo-Kantianism offers a theoretically inadequate foundation for a scientific understanding of history. I will lead into these criticisms by way of a summary of Kant's philosophy as expressed in his "Critique of Pure Reason" in order to specify the intellectual roots of the neo-Kantian movement and its reflections about science.

2.1 KANT'S TRANSCENDENTAL IDEALISM

Kant's "Critique of Pure Reason" is an inquiry into human understanding and the possibility and limitations of human knowledge.¹ According to Kant, our experience of the phenomenal world consists of sense impressions which are organised by the categories of the understanding viz causality, substance etc. The ideas of understanding are not, as empiricists believed, derived from sense experience, they are as the rationalists maintained, prior to all experience. No knowledge of the world can be achieved by the employment of the categories alone, any more than it can be gained by recourse to sensations unsullied by the categories. It is rather the union of the categories of the understanding - the a priori - and the content of sensation - the synthetic or a posteriori - which produces the objective world of phenomena. Without the categories, the world would lack substance, order and causality, and without sensation,

the categories would remain formal, without experiential content.

Kant maintains that the possibility of knowledge of the world depends upon a unity of the a priori and a posteriori i.e. of the unity of material provided by the faculties of understanding and sensation. There are, however, two distinct levels of sensation in the Kantian system: pure or transcendental sensation and empirical sensation. The former underlies all acts of empirical sensation since it refers to the intuition of the universal framework of space and time within which all sensations occur. The intuition of space and time as an act of pure perception is both synthetic and a priori. It is synthetic insofar as space and time are the very preconditions of all acts of empirical perception; and it is a priori in that space and time are levels of pure sensation contributed by the faculty of understanding. Kant regarded space and time, therefore, as synthetic a prioris.² Inquiry into this level of sensation accordingly must form the basis for a distinctly a priori science. This science can be clearly differentiated from empirical science, in method and content, since its subject matter would be devoid of a posteriori elements. It would be restricted to an a priori inquiry into the transcendental, that is, universal, properties of the framework of space and time in which events occur. The empirical or a posteriori sciences, on the other hand, would be involved in the causal analysis of the events taking place in this spatio-temporal framework. Consequently, they must proceed a posteriori, empirically examining causal relations between phenomena. The universality of the causal relation, which empirical science seeks to elucidate in phenomena, is, however, guaranteed in advance of inquiry by the transcendental categories of the understanding.

In my exposition of Kant's transcendental idealism, I have up to now held myself to an examination of the faculties of understanding and sensation and the phenomenal world they produce. Both these faculties and the world of phenomena have in addition noumenal presuppositions. Although in the Kantian system noumenal elements, which are apprehended by the faculty of Reason, cannot actually be known, they do still play an indispensable role in Kant's philosophy (even though it is perplexing to understand how apprehension can occur without knowledge). For instance, Kant postulates the "thing-in-itself", that which appears in phenomena, yet always in a form conditioned by the faculty of sense and understanding. Goldmann claims this expresses Kant's acceptance of the notion of absolute knowledge as a transcendental idea or aim.³ Absolute knowledge is, however, beyond realisation because the "thing-in-itself" never appears as itself i.e. independently of the world of phenomena,⁴ so it is not possible to achieve knowledge of its essential nature.

The thing-in-itself is not the only noumenal element in Kant's philosophy. Kant argues also that the transcendental deduction of the categories presupposes the transcendental unity of pure apperception.⁵ Transcendental synthesis, which furishes phenomenal experience by the application of a category to a manifold of sensation in space and time, implies the transcendental unity of the thinking and perceiving subject. Without this transcendental ego there can be no transcendental synthesis and then, obviously, no objective experience. Yet this transcendental self, is, like the "thing-in-itself", noumenal. Lying outside the phenomenal world it, too, is also unknowable. Kant terms it not just "pure", but "original apper-

ception", since without this noumenal self there could be no perception or knowledge at all. However, this noumenal self can have no knowledge of itself as itself. Hence, Kant states,

"I am conscious not of how I appear to myself or of how I am myself but only that I am." ⁶

Evidently, although Kant recognises its transcendental foundation, knowledge is limited to the realm of phenomena. Kant's philosophy has ambitions distinct from those of, for example, Hegel's, whose absolute idealism centres on an attempt to achieve absolute knowledge and a consciousness of self as absolute mind. Kant's critical philosophy, by limiting knowledge to the union of sense and understanding, attempts rather to establish a cognitive foundation for science by transcending the metaphysics of dogmatic rationalism and the scepticism of empiricism. Ironically, this manoeuvre culminates in another form of dogmatic metaphysics.

In my first chapter, I put forward a realist theory of science which explained scientific inquiry as an attempt to grasp the nature of objective causal processes, processes in some fundamental sense independent of the categories of human thought. For Kant, however, the order and causality of the phenomenal world does not exist prior to the application of the categories. On the contrary, the objective phenomenal world is fathered by the application of the categories on a supposedly incoherent content furnished by sensation. Kant's philosophy is, therefore, a transcendental idealism quite distinct from any sort of realist attempt at understanding science. A consequence of Kant's transcendental idealism is that he can only justify

the universality and objectivity of empirical science by establishing the universality of the categories and their applicability - rules. These are guaranteed insofar as they are transcendental and, therefore, invariable properties of the faculty of understanding. However, there is weighty evidence to suggest that the categories employed by Kant are underpinned by particular scientific theories. If this is the case then they should not be generalised as a priori and therefore universal conditions of the phenomenal world.

To the extent that these considerations are right, Kant's philosophy seems logically tied to a Euclidian conception of space and a Newtonian conception of the causal relation. So the natural world, through the transcendental categories, must be Newtonian and Euclidian, inescapably.⁷ By projecting the underlying concepts of these theories as if they were invariable properties of the understanding, Kant seems to suggest that they do indeed successfully accord with the essential nature of the world. What effect would alternative scientific theories have on this cornerstone of Kantian philosophy? Einstein's special theory of relativity conceives of space and time relative to specific spatio-temporal frameworks, and can serve as an excellent example. For Einstenian physics distinctly non-Euclidian and non-Newtonian forms of space, time and the causal relation follow. And it is Einstein's, not Newton's theory which is now thought to be scientifically valid. Such revolutions in science, must have implications for Kant's philosophy. Kant's attempt to bind his philosophy to a particular form of geometry and to the results of one particular scientific theory, seems to pre-judge our understanding of all scientific inquiry. If one regarded Kant's philosophy as an attempt to provide a

cognitive foundation for scientific activity, then one must criticise this confusion. This confusion being the use of one scientific theory as a lens through which all others are scrutinised. Such a procedure employs Newtonian physics as a universal condition for the existence of the phenomenal world and cannot cope with and account for theory-change in science of a type exemplified by the replacement of Newtonian by Einsteinian physics. In addition, it would appear to preclude the possibility of a non-Newtonian approach to concept formation in the other empirical sciences.

Any scientific theory placed in a Kantian philosophy, as Newtonian physics was, would be equally illegitimate, since it is the philosophical location of the theory which is at fault here, not necessarily the theory which fills the place. The apparent contradiction between relativity theory and the categories of the understanding may lead to a revision of Kant's general philosophy. Two strategies for revision seem possible. First, one could retain the principles of Kant's transcendental idealism and argue that the categories discovered by Einstein instead of the outmoded Newtonian ones, more substantially ground the transcendental categories of the understanding. However, Einsteinian categories far from being a priori, are very much a product of research - a posteriori research. This sort of revision of Kant's philosophy would merely substitute relativity theory for Newtonian physics as a transcendently guaranteed theory valid for all time. Einsteinian physics would, in this instance, cease to be only a scientific theory, but would instead suffer metaphysical deification in Kant's transcendental idealism. It cannot be assumed, however, that Einstein's theory and its categories are eternally valid, since further advances in

scientific understanding are not beyond imagination. Secondly, one could adopt a neo-Kantian point of view, which accepts Kant's account of the role of the categories in producing knowledge, but rejects his view as to their transcendental character.⁸ Once it is conceded, however, that the rules of concept formation are neither transcendental nor universally guaranteed properties of the human understanding, then there is nothing to prevent competition between rival sets of categories. The consequence would be that different sets of rules founded on diverse sets of categories would constitute essentially incommensurable objects of scientific study. A neo-Kantian exposition of the cognitive foundation of scientific inquiry would, it seems, face a philosophical relativism analogous to the conventionalist theories discussed in the previous chapter. From these considerations it can be seen that neither Kant's transcendental idealism nor a neo-Kantian revisionism succeeds in providing an adequate cognitive foundation for the explication of scientific inquiry. While this failure is damaging for Kant's attempt to combat Humean scepticism over science, it is infinitely more damaging for the neo-Kantian attempt to distinguish social science from natural science. The philosophical relativism implicit in this understanding of Kant's philosophy undermines the whole neo-Kantian enterprise, since whatever distinctions the neo-Kantians draw between natural and social science will have no validity if, as has been demonstrated, they fail to justify the objectivity and universality of scientific inquiry.

2.2 WEBER AND THE NEO-KANTIANS

The principal doctrine of the Heidelberg neo-Kantians who influenced the formation of Weber's methodological thought was

that distinct rules of concept formation should be employed in constituting the objects of social and natural science.⁹ Developing this view of social scientific inquiry, theorists like Rickert and Windelband took inspiration from Kant's procedure in his ethical as well as his general epistemological writings.¹⁰ I intend to begin with some prefatory remarks summarising the essential features of Kant's ethical theory before examining the neo-Kantian analysis of the relation between social and natural science.

Kant recognised that a moral agent cannot be responsible when he is not free.¹¹ If a man's action were governed by external factors beyond his control, then he could be neither morally free nor morally responsible. But if the category of causality applies in the social world as it does in the world of nature, then human actions must be determined by a Newtonian mechanicism. While one conceives of humanity as part of nature or of the phenomenal world (constituted by the Kantian categories of the understanding) ethics has nowhere to stand. Because of this severe difficulty, Kant adopted a different mode of inquiry in his ethical studies. He employed a noumenal rather than a phenomenal method: he assumed man to be an ethical or spiritual being freely determining the moral ends of his own actions. Kant christened this noumenal conception of moral action as "causality through freedom".¹² As long as a man succeeds in guiding his actions according to moral ends, he distinguishes himself from the phenomenal world where everything is determined by mechanical causes. Kant's philosophy roots itself, therefore in a dualism, in which a voluntaristic and noumenal conception of moral action coexists with a mechanistic notion of causality. As part of the subject matter of the empirical sciences, man can be subject to

the laws of nature, but as part of the world of morality the kingdom of ends, he is free to determine the course of his own actions. If one chose to base social science on the latter part of Kant's philosophy and not the former, one must eschew any attempt to explain human action on the basis of the causal pattern of the natural sciences. This anti-positivist thesis is indeed the major tenet of the Heidelberg neo-Kantians.¹³ I will attempt to assess now, how far these theorists succeeded in formulating an adequate conception of scientific inquiry into social phenomena after they had rejected the idea of basing the social sciences on the methods they believed were employed in natural science.

Following Kant's treatment of human duty, there have been several attempts to establish a distinction between social and natural science. I intend to concentrate on the contributions of Windelband and Rickert.¹⁴ According to Windelband, the natural sciences are characterised by a "nomothetic" or generalising method, whereas history employs an "ideographic" or individualising method.¹⁵ Windelband argues that natural scientists overcome the infinity of a chaotic extra-phenomenal "reality" through the method of generalisation which constitutes phenomena in terms of their shared characteristics as members of a universal class. Historians, on the other hand, overcome this chaotic infinity by establishing the uniqueness of an event as an individuality.¹⁶ Implicit in this formulation, is the characteristically Kantian assumption that the phenomenal world studied by science is a product of the application of the categories of human understanding. It just so happens that the categories applied to the chaotic infinity of pre-conceptual elements in social and natural science are methodologically different. The

demarcation between the sciences follows from these different rules of concept construction. Closer scrutiny, however, reveals that Windelband's methodological distinction does not correspond to the practice of the empirical sciences. Hodges points out, for instance, that,

α "There is an ideographic element in geography and astronomy, natural history and comparative psychology, as well as a search for laws; on the other hand, economics, aesthetics, philology and other Geisteswissenschaften have all a nomothetic aspect." 17

Obviously a more sophisticated theory of the demarcation between the sciences is required.

According to Rickert, the domain of the social sciences is not established by the method of generalisation characteristic of natural science, but by the principle of "Wertbeziehung" (relevance to values). 18 The "objects" which the "Geisteswissenschaften" (human or social sciences) study are not pre-existing causal processes, they are rather phenomena created by organising a set of elements into a configuration determined by their relation to a set of ethical values. The "objects" constituted by the natural sciences, on the other hand, do not enter into any sort of relation with the values of the scientist, but are organised according to the causal relevance of the elements involved. In virtue of this indifference to ethical values implicit in the method of generalisation, this mode of inquiry is inappropriate for social science. Historians, according to Rickert, should not strive to explain events in a causal sense; instead they should concentrate on establishing their cultural significance in relation to human values. This is an essentially

ideographic task in which the significance of constituted configurations is determined case by case. Insofar as the social sciences as a whole conform to Rickert's conception of history, they are "individualising" rather than generalising disciplines.

Rickert distinguishes social sciences from natural science in terms of subject-matter, method and theoretical aims. In the final analysis, all of these distinctions are reducible to the methodological role of the principle of Wertbeziehung. This principle constitutes the objects of social science, as well as providing the means whereby their individuality and cultural significance is established. The principle of "Wertbeziehung" is, however, fraught with methodological awkwardness. In the course of social events, men find themselves faced with choices between irreconcilable ethical values. Therefore social science would have to be founded on a value-relativism which, in conjunction with the methodological role of "Wertbeziehung", must culminate in a methodological relativism. Such relativism is at odds with the idea of an objective science. Rickert does recognise the theoretical importance of this problem and attempts to develop a solution. He argues that despite appearances to the contrary, humanity possesses a universal value system.¹⁹ If this were the case, then scientists would be able to agree on the domain of social science, the constitution of particular configurations and their cultural significance. "Wertbeziehung" would be a universal principle shared by all social scientists because of the underlying value-consensus in societies. Rickert's social science would achieve a universality founded not on the objectivity of its theories, but rather on the intersubjective agreement of its practitioners. This is, of course, a characteristically Kantian conception of "objectivity".

Weber renounces Rickert's idea of a universal value system by emphasising the inescapability of ethical relativism and the unignorable evidence of it in social life.²⁰ In reality, humanity is faced with a competition of ultimate values - the "war of the Gods" - vanishing only in an ossified culture. And even then, not all cultures ossify into the same stone.²¹ So a commitment to the principle of value-relevance together with implicit value-relativism in social science cannot be avoided. If social scientists proceeded according to Weber's conception of "Wertbeziehung", there could be as many attempts at theory construction as there are positions in ethics. Weber's standpoint on the methodological role of "Wertbeziehung" implies, in addition, that all of these value-based theories constitute different objects of study. Social scientific theories formulated on this foundation are incommensurable and there are no objective criteria which can be appealed to when deciding between the claims of competing value-based theories. If one accepted Weber's account of "Wertbeziehung", then one could not escape the the implication that social science is beset by an inescapable methodological relativism alien to the natural sciences. It is to Weber's credit that he embraces this relativism as a logical implication of the principle of "Wertbeziehung".²² But it remains to be seen, how far Weber can square the supposedly scientific character of social inquiry with this methodological relativism. He can no longer appeal to a value-consensus to justify the universality of social science. Instead, he appeals to causality. Social inquiry is to remain scientific even if it has the status of value-relevant science! Weber argues that although the primary aim of historical explanation is to establish the cultural significance of an event, historians cannot dispense with causal analysis. Weber states, therefore, that,

"We wish to understand, on the one hand, the relationships and the cultural significance of individual events in their contemporary manifestations and, on the other, the causes of their being historically so and not otherwise." ²³

However, once Weber, in the wake of the neo-Kantians, has abandoned the assumption that history exists as an objective, causal process, it seems impossible that he should be able to develop a genuinely causal account of social inquiry. In other words, there seems to be a prima facie contradiction between the methodological role of "Wertbeziehung" and the demands of causal explanation. This contradiction between a neo-Kantian conception of social science and the presuppositions of a causal inquiry into history will now be examined in the context of an analysis of Weber's methodology.

2.3 WERTBEZIEHUNG AND OBJECTIVITY

Weber insisted in his methodological writings that a researcher qua scientist should strictly observe the norms and values of science and not allow ethical or political values to interfere with his scientific work. ²⁴ Social scientists, Weber maintained, must adhere to the principle of value-freedom (Wertfreiheit) if they are to aspire to value-free social understanding. A value-free social science, on the other hand, should not interfere in ethical argument, but must confine itself to interventions in scientific disputes. ²⁵ According to Weber's methodology, values transcend scientific research; consequently, no amount of scientific evidence can affect the balance of argument in an ethical dilemma. Weber fully accepts the existence of a logical gap between "is" and "ought" ie. between the world of "fact"

where scientific results are decisive, and the sphere of human values where science should have no say. Although there is little evidence to suggest that Weber's methodology establishes rules which intrude into disputes in ethics, it appears from my analysis of "Wertbeziehung" that his methodological basis permits the thorough intrusion of values into science. According to Weber, the first moment in social scientific theorisation is the constitution of the object of study through the application of the methodological principle of "Wertbeziehung".²⁶ The social scientist freely chooses his value starting point and then constitutes his object of study by selecting elements from a chaotic infinity according to their relevance to his value-orientation. The object of study is openly constituted on the basis of ethical considerations rather than on neutral scientific principles. Nevertheless, Weber assumes the objectivity of social scientific theories is guaranteed by causal analysis. Even so, a causal investigation of social phenomena can only begin once the phenomena have been constituted by "Wertbeziehung." The nature and range of causal analysis is restricted from the outset by the prior application of ethical values to the material.

This is not the only limitation imposed by "Wertbeziehung", since it also acts as a principle for selecting "relevant" causal connections from a supposedly infinite number of possible relations associated with the genesis of the explanandum. Weber argues this selective role is necessary because "the number and types of causes which have influenced any given event are always infinite and there is nothing in the things themselves to set them apart as alone meriting attention."²⁷ If, however, causal analysis is subordinated to "Wertbeziehung" in this way, then it is impossible for it to function as causal analysis at all. Both

the range and the nature of causal explanations are determined by ethical rather than scientific considerations. These ethical principles are not themselves subject to any sort of scientific determination. On the contrary, values are transcendental with respect to any sort of scientific results.²⁸ Despite the fact that ethical values cannot be neutralised or modified by research they appear to govern every stage of investigation, including "scientific" testing. Value-based theories and hypotheses can only be "tested" against "facts" constituted by the same ultimate values which underly these theories. "Wertbeziehung", therefore, dictates the constitution of the object of study, the "relevant" causal relations and the "facts" against which a social scientific theory will be evaluated. Even if Weber's methodology succeeds in establishing the freedom of ethics from scientific criticism, he evidently fails to free science from the intrusion of ethics. Weber's methodology ensures that ultimate values will dominate all stages of social inquiry. The principle of "Wertbeziehung" undermines the principle of "Wertfreiheit" and in this way Weber's methodology precludes the possibility of a value-free social science.

2.4 IDEAL - TYPICAL EXPLANATION

Weber's formulation of a new type of theoretical term, the ideal-type, appears to be a response to two theoretical problems arising from a neo-Kantian conception of science. First, it is an attempt to provide general concepts for history without undermining its status as an ideographic science. Secondly, generalisation from ideal types, for Weber, seems to suggest an account of theorisation in social science which is compatible with a neo-Kantian view of concept formation.

The first problem arises from Rickert's ideographic understanding of historical science. If, as Rickert maintains, history employs concepts which are exclusively individualising, then it is no longer possible for it to achieve even its limited aim of establishing the cultural significance of events. The specification of an event as unique involves differentiating it from other types of event, and inevitably this requires general concepts. Hence, as far as Weber is concerned, history must have recourse to general concepts even if it is an individualising science.²⁹ The ideal-type concept, therefore, was created to provide historians with the means to pursue their ideographic aims. However, these general concepts are not to be used to establish theoretical generalisations interpreted in either a positivist or realist manner. The ideal-type only establishes generalisations which are consistent with a neo-Kantian view of social inquiry. Weber's formulation of the ideal-type is, it follows, an attempt to come to terms with the problem of theoretical generalisation, when his neo-Kantianism makes it impossible for the cognitive significance of scientific theories to be founded on either a relation to a set of theory-neutral observation statements (positivism), or an objective causal process (realism).

The principle of construction of Weber's ideal-types is again "Wertbeziehung" and as such the selection of its elements and relations need not be bound by scientific criteria.³⁰ An ideal-type is not intended as either a direct description of reality or as a scientific hypothesis. Weber states that the ideal-type "is no hypothesis, but it offers guidance for the construction of hypotheses. It is not a description of reality, but aims to give unambiguous means of expression to such a description."³¹ The defining feature of an ideal type is that

it should contain at least one term or relation having no direct reference to the constituted object of study. It cannot be directly observed, nor can it play an immediate role in explanation. Ideal-types, however, can serve as generalisations which help the historian fulfill his ideographic aims without transgressing neo-Kantian assumptions about the status of theory. The theoretical concepts which economics and sociology "supply" to history can be used without fear of positivist or realist reductionism because these concepts are ideal-types. This generalising component is thought to be nevertheless "theoretical" because ideal-types can be formulated as if the relations they express were universal. Theory, although founded on ideal-types, cannot be reduced to the inductivism of neo-Kantian historicism. On the other hand, Weber's conception of theory stays faithful to neo-Kantian history. The elements of the ideal-type are social and historical; and ideal-types provide the indispensable means for the establishment of the cultural significance of historical events. It remains to be seen, however, how far Weber's ideal-types can play a genuinely "theoretical" role in social inquiry.

According to Hempel, idealisations in natural science may be either explanatory or heuristic.³² They possess an explanatory power when they are located in a well corroborated theory, even though as extreme instances of a theory they are incapable of any direct form of testing. The ideal-gas in kinetic theory, for instance, is a special case of the theory in which terms are given values without any known correlates. The relation posited between the terms follows from the theory; a theory corroborated in cases where the values are known. The idealisation, as a logical extension of the general theory, will possess an explana-

tory power in direct relation to the adequacy of the theory of which it is a part. Idealisations may, alternatively perform an heuristic rather than an explanatory role. In the early stages of theory development, they may be used to suggest relations between ideal-values as a means whereby theory can proceed to the analysis of empirical relations by substituting concrete for ideal values.³³ The success of the idealisation, in this case, would be in direct proportion to its success in promoting theory development. Such value as the idealisation has, in its explanatory as in its heuristic role, depends therefore on the relation between idealisation and theory or theory development.

In the context of Weber's methodology, the ideal-type is neither heuristic nor explanatory. The social scientist cannot go beyond the elaboration of a series of value-based idealisations because there are no value-neutral elements capable of corroborating theories or serving as an objective criterion of theory development. Any descent from idealisation to theoretical generalisation is blocked. Rather than promoting the development of scientific theories, Weber's ideal-types generate ersatz - theories, where the methodology fails to provide a cognitive foundation for proper social scientific generalisation.³⁴ If ideal-types are at all conceivable and if they are to play a genuinely heuristic or explanatory role in social science, they would of necessity have to be cleared of their dependence on Weber's methodology.

2.5 "VERSTEHENDE EXPLANATION"

Weber develops the anti-positivist thesis of neo-Kantianism by expounding an essentially voluntaristic and teleological account

of social scientific explanation. According to this view, the explanation of an action consists in specifying its underlying meaning or motives. Weber calls such explanations of action verstehende explanations.³⁵ As verstehende explanations are founded on a voluntaristic theory of action, Weber's sociology evidently descends directly from the Kantian account I examined earlier, but with important changes: Kant's conception of action had obvious metaphysical underpinnings; Weber attempts to develop his theory of action in a scientific manner.

A "verstehende" explanation opens with the task of "direct understanding".³⁶ An action must be placed in an immediate context of meaning as a necessary preliminary to the isolation of the motive which precipitated the action. A "verstehende" account of action achieves adequacy at the level of meaning when it has been situated in a "typical complex of meaning."³⁷ Adequacy at the "meaning" level is obtained through a rational understanding of the action according to its relation to ideal-types. Weber distinguishes four ideal-types of rational action - instrumentally-rational (Zweckrational), value-rational, affectual and traditional.³⁸ In the first, rationality is evident in the choice of both the ends and means of action. In the second, rationality is limited to the means while the ends are determined by a belief in an ultimate value. In the third, the choice of ends and means is guided by feelings, in the last by custom. Rational types of "action", are distinguished from "behaviour" which is deemed to be brought about by external causes and so lacks any sort of intentional or teleological element. In virtue of this it is characterised as "irrational".

This typology of action is confused. In the first place, if

behaviour is non-teleological then it would be better to consider it non-rational, not irrational, since considerations of rationality or irrationality do not apply to behaviour brought about by involuntary causes. Irrational "action", could be located in a classificatory system which allowed for cases where an agent adopted either inconsistent or incoherent ends or crazy means to attain his ends. Weber, however, fails to make this fundamental distinction. It appears in addition impossible to square considerations of rationality with "actions" caused either by "feelings" (affectual action) or by customs (traditional action) since, in both cases, the actions are not motivated by rational calculation at all. Unless, of course, the agent chose to act as his feelings directed him to do, or chose to adopt a customary course of action. But in such cases the action is better subsumed under the first heading: it is a belief - a belief that feelings should be gratified or custom respected - which guides the agent.

The point of Weber's argument, is not just to lay down a typology of action, but to establish "zweckrational" action as the model for the explanation of all action.³⁹ Here, the action is determined by a rational choice of ends and means: "Zweckrational" action as a pure type of teleological action is the most "calculable" of rational actions being purged of "irrational" considerations. A "verstehende explanation", based on a means/end rationality of this sort, is nevertheless read as a "causal explanation in absolutely the same sense as the causal interpretation of any concrete natural process."⁴⁰ Weber proposes that "verstehende" explanation must be adequate causally as well as at the level of meaning. Consequently, he states that, "verification of subjective interpretation by comparison with the

concrete course of events is, as in the case of all hypotheses, indispensable." 41

It soon transpires though that Weber's "verstehende" explanations are incompatible with what look very much like positivist criteria of verification! Weber believes that a causally adequate "verstehende" explanation can be achieved through empirical observation of actions and statistical analysis arising from such observations. He states,

"Thus causal explanation depends on being able to determine that there is a probability, which in the rare ideal case can be numerically stated, but is always in some sense calculable, that a given observable event (overt or subjective) will be followed or accompanied by another event." 42

Two important points must be stressed. First no amount of observation positivists like to indulge in can confirm or contradict the attribution of motives to actions. The imputation of motive depends not on observed behaviour, but rather on a knowledge of a socio-cultural context of meaning. And again, the selection of motives is mediated by ideal-types and these theoretical constructs / quite resistant to empirical interpretation. *have* "Verstehende" explanations can never be "causally-adequate" in the Weberian sense, because they are "unverifiable" if one applies Weber's criteria of verification, or for that matter, standard experimental tests.

Other contradictions also stand out in Weber's "verstehende" account of sociological explanation. Weber insists, for instance, that "Zweckrational" actions should form the model of all

"verstehende" explanations because, uninfluenced by external causal factors, they have the status of pure teleological actions.⁴³ He nevertheless concedes that relatively few actions are of this type.⁴⁴ If most actions are not purely teleological they must be causally determined, at least in part, by features which are comprehensible only when referred to causal mechanisms. And these are altogether outside the domain of Weberian social science. For a social science to attempt to "explain" these levels of non-teleological determination, as if they were results of essentially free action, would be self-defeating. The non-teleological elements of action ought to be explained in their own terms. A move from an ideal-type of teleological action to a non-teleological theory of action would be the natural route for theory-development to take. Weber's "verstehende" pattern of explanation, however, contains a prescription against the development of such a theory by concentrating solely on the teleological factors and by insisting they must function as direct or indirect elements in all attempts at sociological explanation.

The absurdity of the absolutisation of this previous assumption is demonstrated paradoxically by Weber's own theoretical investigations. Weber concludes, in his substantive work, that bureaucratisation as the culmination of the process of rationalisation is the inevitable fate (Shicksal) of the West.⁴⁵ Bureaucratisation ensnares individuals in an iron cage from which there is apparently no escape.⁴⁶ If this process were as inevitable as Weber supposes, then it would be absurd to stand the hypothesis on the pedestal of a theory of action which was voluntaristic! If, however, Weber amended his methodology in the light of this curious result, he

would have to abandon the teleological assumption. Weber does not modify his methodology, instead he hangs on to his voluntaristic theory of action regardless. Any modification, he probably feared, would have committed him to the naturalistic positivism against which he polemicised. In the final analysis, one can conclude that Weber's "verstehende" sociology, despite its verbal concessions to positivist criteria of scientificity, depends on a neo-Kantian humanism; it is committed to a voluntaristic theory of action, despite the fact that such a conception is contradicted by the results of Weber's own research.

What must be guarded against, however, is scepticism concerning the applicability of reason or motive-explanations in social science just because there are evident weaknesses in Weber's "verstehende" sociology. Unless one adopts a dogmatic positivism, there is no reason why one should deny such factors a role in the explanation of actions. Explanations in terms of reasons and motives, however, would have to be based on adequate criteria of imputation and verification. Such criteria could not be supplied either by positivistic social science or by Weber's "verstehende" sociology. In the first instance, motives or reasons cannot, in the positivist sense, be nakedly observed; in the second, there can according to Weber be no descent from idealisation to theory or from teleology to causality. Consequently, a social science based on explanations of actions in terms of reasons and motives would be obliged to construct a methodology stepping beyond the limitation of Weber's neo-Kantianism as well as those of a dogmatic positivism.

2.6 WEBER'S METHODOLOGICAL INDIVIDUALISM

Weber's "verstehende" sociology is committed to a thorough-going methodological individualism. Macro-concepts such as the state, class etc., "must be treated as solely the resultants and modes of organisations of the particular acts of individual persons, since these alone can be treated as agents in a course of subjectively understandable action." ⁴⁷ In a letter to Liefmann, Weber leaves no doubt as to the importance he attaches to individualist methods in social science. He writes,

"If I have become a sociologist it is mainly in order to exorcise the sphere of collective conceptions which still lingers amongst us. In other words, sociology itself can only proceed from the actions of one or more separate individuals and must, therefore, adopt strictly individualist methods." ⁴⁸

"Verstehende" explanations, as has been said, must be adequate at the level of meaning. If meaning is not to be abstracted from social life, then it might be analysed in linguistic terms. Language is, however, a social phenomenon par excellence whose existence is inexplicable if one abstracts it from a community of speakers. Language contains a socio-conventional level of meaning dependent on a set of rules whose existence nature and evolution cannot be accounted for by reference to isolated homunculi. The meaning of any phrase of a language cannot be reduced to a set of speaker's intentions. A socio-conventional understanding of meaning cannot fall back on either an intentional theory of meaning or individualist concepts. Insofar as "verstehende" explanations are adequate at the level of "meaning" they depend, therefore, on an implicit or explicit reference to

socio-conventional structures of meaning which can only be understood at a macro-level.⁴⁹ If Weber's methodology were as strictly individualistic as he supposes, then the ground on which "verstehende" sociology is based would sink beneath it. Emphasis must be accorded to the point, that the much mentioned contradiction between Weber's macro-sociology and his micro-methodology, has an equally crucial and damaging counterpart in the methodology itself. It is not, simply a contradiction emerging only when Weber is engaged in substantive research, but rather one found at the very heart of his methodological programme.

There are still further shortcomings for an individualist conception of social science. Weber's "verstehende" sociology assumes the individual actor to be the real starting point for the construction of a theory of social life and social development. Any attempt to explain the actions of an agent, or ascribe motives to him which pays no attention to the enveloping social contexts, necessarily falls short of a full explanation of both what the action is and the intention behind its performance. In addition, no explanation is offered of the social contexts which limit the kind of descriptions an interpreter of the action might wish to apply to it. For example, even though the pursuit of wealth is common to many epochs, it is only when the labourer becomes separated from the means of production that the general pursuit of riches can take the form of capitalist accumulation.⁵⁰ The decisive factor from the viewpoint of a science of history is not the motivations of individual actors, but the understanding of the development of the socio-economic conditions which enabled industrial capitalism to flourish. These conditions cannot be explained as a result of the actions of individual homunculi, since they form the context of thought

and action which specifically limits the free choice of ends and means. The individual is as much a product of this social development as is the form of society in which he exists. It would be self-defeating to explain this social development by drawing on individuals and their actions alone, if these same actions could only be understood to be the actions they were in terms of the process they purport to explain. On the contrary, it would seem that social development should be explained at its own level and this implies the use of macro-concepts. Indeed, both Weber's methodology and his sociology seem to require the development of a macro-sociology. This is confirmed by Weber's implicit reference to macro-factors when elucidating the nature of social processes. Lukes, for instance, commends Weber for overriding his methodological precept in key areas of his analysis of social development. He states,

"Fortunately, Weber did not systematically follow this principle (methodological individualism) in his substantive work; consider for example his theory of stratification based on structural rather than subjective factors; his account of the decline of the Roman Empire in terms of structural changes in Roman agriculture; and his explanation of the rationalisation of the modern world in terms of such structural factors as the separation of the house-hold from the business enterprise." 51

Weber failed to remove the micro-macro contradiction, however, either from his methodology or his sociology. He did not reject methodological individualism in the light of his practice as a sociologist. That the identification of all macro-concepts with a naturalistic objectivism prevented him from conceiving of alternative theoretical possibilities, is the most likely explana-

tion for this blind spot. Weber's rejection of a macro-social science would appear to imply that while his methodology might with certain alterations, form an adequate foundation for a social psychology with the limited aim of explaining individual actions, it will remain hopelessly inadequate as a means for understanding social development.

2.7 WEBER'S METHODOLOGY AND UNIVERSAL HISTORY

I have argued throughout this chapter that Weber's methodology as a logical outcome of a neo-Kantian epistemology, is incapable of developing either a universal or a scientific understanding of history. It will be interesting to examine Mommsen's defence of Weber. Mommsen asserts that Weber's methodology does form the basis for a genuinely universal understanding of history. He puts forward three major arguments supporting this view. First, he argues that Weber's theory "rested on a specific conception of the world historical process or to use a more general phrase world history." ⁵² Consequently, Weber's studies, according to Mommsen, "always reflect the socio-cultural significance of the respective social phenomena in a truly universal historical perspective." ⁵³

Weber's specific conception of "world history", tied to value-relevance, is unfortunately partial and limited. Weber's methodology cannot present social phenomena in a truly historically universal perspective, because history itself is not conceived as an objective causal process, but is rather constituted as a series of value-relevant objects. A universal history could only be a genuine aspiration if Weber, like Rickert, asserted the dogma of a single value-system. Yet Weber's determined in-

sistence on the methodological role of "Wertbeziehung" and on the persistence of ethical relativism, straightforwardly precludes the possibility of a truly universal understanding of history.

Mommsen advances a second argument which concedes the reality of different value-frameworks, but nevertheless maintains that it is possible to "knit together" a universal conception of history out of the various value-relevant theorisations. Mommsen argues accordingly that,

"Max Weber's later work was essentially an attempt to knit a variety of "partial pictures" of culture into a general framework of ideal-types to get as close as possible to a comprehensive perception of culture." ⁵⁴

If, however, the value-premises actually constitute the object of study, then different value-relevant theories and their "objects" are essentially incommensurable and resist incorporation into a single theoretical framework. Weber could only have achieved such a universal conception of history by transcending the limits of his methodological relativism. In the absence of such a revision, Weber's idealisations would be logically tied to particular value-premises and these do not extend the possibility of developing a universal conception of history.

Finally, Mommsen suggests that Weber's sociology embodies a universal philosophy of history. ⁵⁵ There is an eternal struggle between the individual who aspires to be a free subject and the rationalisation of social life which conspires to deprive him of his freedom. Weber's sociology may well contain such a model, but if the arguments of the previous sections are justifiable, it

has no scientific credentials, it merely happens to be his Weltanschauung. The principle reasons for this failure can be traced back to the neo-Kantian insistence that "reality" is constituted by concepts of science and not an objective causal process. Once it is assumed, however, that a scientific theory constitutes the reality it studies as well as the concepts purporting to explain this "reality", it seems inevitable that science will be trapped in idealisation where its "explanations" are not subject to any determination by an extra-theoretical process. This indeed is the case with Weber's theory of concept formation and, in particular, with his notion of the ideal-type. If, in addition, it is accepted that the idealisations of theory are value-relative, as is supposed to be the case in social science, then the theories of social science are not only devoid of any sort of empirical interpretation (in virtue of their status as ideal-types), but they also suffer the extra handicap of being an expression of an implicit methodological relativism. Little wonder that once Weber had accepted the neo-Kantian rejection of the assumption that reality - the social world being just as real as nature - exists as an objective causal process, he failed (despite his persistent worrying of the topic), to develop an adequate methodology of social science.

Chapter 3. FROM REALISM TO HISTORICAL MATERIALISM

In this chapter, I intend to analyse the contribution of classical German philosophy to Marx's formulation of the general principles of historical materialism. The starting point is a critical exposition of Hegel's absolute idealism and of Feuerbach's materialism and humanism. I then attempt to trace the theoretical links between Marx's complex critique of these two philosophers and his subsequent understanding of social development. Discussion throughout the chapter is limited mainly to the original texts of Hegel and Feuerbach, and Marx's critique of classical German philosophy contained in the "Economic and Philosophical Manuscripts".

3.1 HEGEL'S DIALECTIC

In this section I intend to argue that there is a contradiction between Hegelian dialectical logic and the principles of scientific history. Hence, there is no possibility of developing a scientific view of Marxism on the basis of Hegel's philosophy; and I do this regardless of whether a quasi-Hegelian philosophy can be developed, as Colletti has shown in diamat and Soviet Marxism or the theory which takes its inspiration from Lukacs and the Frankfurt School.¹ Marx certainly regarded Hegel as the first thinker to make important discoveries by the use of a dialectical method - there being more than one method - about the nature of history; and Marx gave him due credit for this.² However, the insights Hegel elaborated, when their theoretical scaffolding is examined, are seen to rest on logical nonsense. I do my best to present this logic - but in certain important respects it almost defies presentation. Marx's development of

these insights does not depend in the least on such a "logic". Indeed, as I hope I have succeeded in demonstrating, Marx transforms them into a science.

Hegel's analysis of historical development, in "The Phenomenology of Mind", takes the form of an analysis of the development of consciousness; it is a logical outcome of his philosophical commitment to an absolute idealism. In order to analyse the relationship between Hegel's view of social development and that of Marx, it is necessary first to locate Hegel's conception of history in the context of his general philosophy.³ So my discussion of Hegel commences with an exposition and analysis of his general dialectic of nature (as elaborated in his "Science of Logic") i.e., with his most abstract formulation of "absolute idealism".

For Hegel, philosophy is identical with idealism, the doctrine which denies that the finite has any true existence "in-itself". The task of philosophy is to demonstrate this proposition. Hegel claims that,

"The idealism of philosophy consists in nothing else than in recognising that the finite has no veritable being".⁴

If philosophy is to be true to its idealist destiny, then it must renounce the materiality of the finite. Hegel states,

"A philosophy which ascribed veritable, ultimate, absolute being to finite existence as such, would not deserve the name of philosophy."⁵

The idealists categorically state that only the ideal, the infinite or in theological terms "God" is true. The infinite can only be a true infinite, however, insofar as it exists in-itself. The task of idealism is to establish a true infinite in-and-for-itself. According to Hegel, the idealist philosophers of the past have consistently failed in this task on account of their adherence to an incorrect method. They have adopted the method of the understanding (Verstand) which slavishly follows the rules of classical logic as if these rules were appropriate for idealist philosophy.⁶ These logical rules include first, the principle of non-contradiction $(\forall x) \neg (Ax \ \& \ \neg \ Ax)$ which asserts that nothing can be both A & $\neg A$; secondly, the law of identity $(\forall x) (Ax = Ax)$ which claims nothing can avoid being identical with itself; thirdly, the law of excluded middle $(\forall x) (Ax \vee \neg Ax)$ which states that everything has to be either true or false. These rules are quite evidently fundamental to scientific and philosophical inquiry. But Hegel maintains that from the point of view of idealism they are self-defeating because they are rooted in an implicit materialism. It should be noted, however, that individual principles of classical logic have been questioned by logicians. The law of excluded middle, for instance, is abandoned by intuitionist logicians who do not believe that every statement must be either true or false - some statements, those which are undecidable, fail altogether to possess truth-values.⁷ But even though doubt has, in this way, been thrown on individual logical laws, there has been no serious scepticism concerning logic as a whole. Hegel's position, on the other hand, is one in which such a wholesale rejection of logic does occur; and this paradoxically, would seem to prohibit an exposition of his philosophy. From the point of view of some philosophical schools, the collapse of logic would in fact imply the collapse of language: and this would be for them, the strongest possible reason for

rejecting Hegel's dialectical logic.⁸ To continue: the method of Verstand is stigmatised as the method of "Unphilosophie". Moreover the problem of this method for idealism is that it logically separates the finite from the infinite. It necessarily implies, "that the finite is irreconcilable with the infinite and cannot be united with it, that the finite is utterly opposed to the infinite."⁹ This leads to a fundamental inconsistency for idealist philosophy. The infinite cannot become a true infinite, because it is finitised by being one of two i.e., an infinite only in relation to the finite. The infinite is finitised and the finite is infinitised because it, in turn, "remains absolute on its own side."¹⁰ The method of "Verstand", therefore, leads idealism into the paradox of proving the finite absolute and the infinite finite. Hegel notes, therefore that,

"While thought thus believes that it has elevated itself to an infinite, just the opposite happens i.e., it attains to an infinite that is only a finite, and it retains the finite, which was to have been left behind, making it thus into an absolute."¹¹

Hegel believed it necessary to progress beyond the method of "Verstand", if idealism is to develop a method appropriate to its task. He solved this problem by developing a dialectical logic which was intended to be the method of "reason" (Vernunft). This "logic" replaces the principles of classical logic by asserting the principle of "dialectical contradiction". Hence, A is not A per se, but rather is A and -A. A and -A together constitute a unity "X" in which neither term can be defined without reference to the other. This unity, however, is not a simple unity in identity, but a unity of opposites i.e., a contradictory unity.¹² It is only within this contradictory whole, that A negates -A and vice versa. Hence, it seems that the formula for dialectical con-

tradiction should be A and -A in "X", where "X" is the unity constituted by the opposition.

Hegel applies his dialectical logic to the problem of realising a true infinite. He asserts that the "finite is ideal". The finite is, therefore, itself ("A") and not itself ("-A"). It is both finite and infinite. The finite no longer has true reality in-itself, but, on the contrary, it only has true reality in relation to the "other" - the infinite. The implications of this are crucial for the realisation of an absolute idealism. It now follows that the finite really is itself when it is not itself, but the other - the infinite and that it is not itself when it is itself i.e., the finite. Hence, by making the finite ideal, Hegel is able to demonstrate the absolute in the finite in such a way that it becomes evident that the finite and infinite together constitute the totality posited by the absolute itself.

From the viewpoint of the "other", the infinite, this is the dialectical process of its progressive coming into being in-and-for-itself. As it stands in the A and -A relation, the absolute is itself when it is not itself, and not itself when it is itself. But, through the dialectical process of the negation of the negation, i.e. the negation and supersession of the finite, it will finally exist in a form appropriate to itself i.e. in-and-for-itself as absolute.

In Hegel's philosophy, the development of nature and consciousness is understood as part of the dialectical unfolding of absolute mind as it negates forms not appropriate to its real i.e. ideal nature. The dialectical contradiction between the finite and the absolute is the principle of movement of all things. Hegel

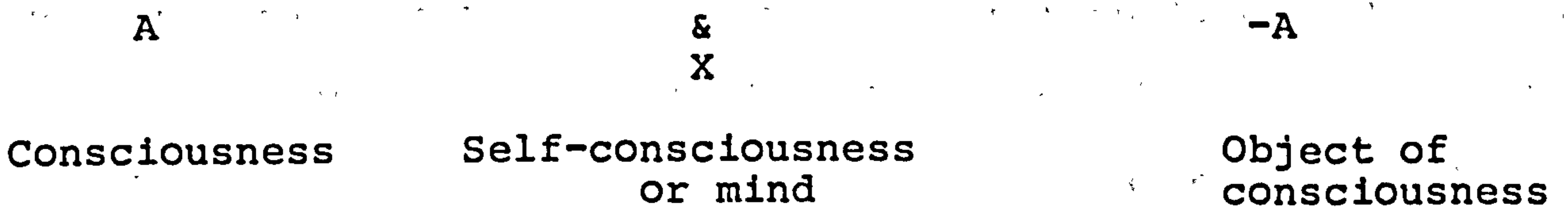
notes, therefore, that this contradiction:

..."is not to be taken merely as an abnormality which only occurs here and there, but is rather the negative as determined in the sphere of essence, the principle of all self-movement, which consists solely in an exhibition of it. External sensuous motion itself is contradiction's immediate existence. Something moves, not because at one moment it is here and at another there, but because in this "here", it at once is and is not."¹³

Philosophy must abandon the principle of non-contradiction because, "everything is inherently contradictory, and in the sense that this law in contrast to the others expresses rather the truth and the essential nature of things."¹⁴

All forms of motion and development are governed by the dialectical contradiction between the finite and infinite. This is a conception of the movement of nature and history which paradoxically recurs in the guise of a supposed materialism viz the dialectical materialism of Engels and the third international.¹⁵ For the moment, however, I wish to concentrate on the nature of Hegel's dialectic rather than on the interpretation of Marxism. The dialectical unfolding of the absolute, which culminates in the annihilation of the finite and the achievement of a true consciousness of the absolute in and-for-itself, is both a dialectically determined process of absolute mind and the concrete achievement of Hegel's own philosophy. Hegel's dialectic is simultaneously a dialectic of knowledge i.e., a logical movement as well as a dialectic of matter i.e., an ontological movement. The logic is ontological and the ontology is an embodiment of the movement of the categories of Hegel's dialectical logic.

The dialectic of knowledge as simultaneously a logical and ontological process, operates through a series of oppositions between consciousness on the one side and the object of consciousness on the other. The mediating term of this opposition is mind or self-consciousness which changes consciousness by superseding the limitations of the object of consciousness as an objectification of itself. It thereby posits a new object of consciousness more adequate to its self-conception.¹⁶ One can represent this dialectical opposition and its mediating term thus:-



Consciousness and the object of consciousness are self-distinctions of absolute mind and therefore distinctions within a dialectical unity mediated by mind itself. The supersession of the object of consciousness occurs because the object of consciousness must be recognised not as an object "in-itself", but rather as an objectification of self-consciousness or mind. Hence, Hegel notes that "only in its notion does something possess actuality and to the extent that it is distinct from its notion it ceases to be actual and is a non-entity."¹⁷ The object of consciousness must, therefore, be recognised as self-consciousness "in-and-for-itself." Hegel notes that "it is only as it is in thought that the object is truly in and for itself; in intuition or ordinary conception it is only an appearance."¹⁸

The essential truth of the finite and of matter consists in its sublation and, hence, the recognition of its true existence as absolute mind. Hegel states,

"It is the very nature of the finite to transcend itself, to negate its negation and to become infinite." 19

The process of the supersession of the finite reality of nature and forms of consciousness is simultaneously the coming-to-be of the absolute in-and-for-itself. It is the "achievement" of Hegel's absolute idealism.

16 Although I have acknowledged the possibility of a direct logical link between Hegel's dialectic and dialectical materialism as developed by Engels and the third international, one should be aware, from my exposition of Hegel's philosophy, that there is a fundamental contradiction between Hegel's dialectical logic and any form of scientific activity. Scientific practice would collapse if it relinquished the principles of classical logic. Yet from Hegel's viewpoint, these principles absolutise the finite and finitise the absolute and have to be thrown aside. In addition, the method of anomaly generation and supersession central to the process of theory development in science depends on the inter-
relation ~~and between~~ conflict between objective causal processes and the theories which endeavour to grasp their nature. A scientist cannot regard his object of study as a mere objectification of consciousness. Naturally, for Hegel, there can only be one form of "science"-that of absolute mind; so the loss of empirical science is no loss for him. Insofar as Marx was involved in developing a scientific understanding of history, there could be no connection with Hegelian idealism. Marx maintained, nevertheless, that Hegel's philosophy contained important insights into the nature of social development. Before I investigate this claim, I wish to emphasise that whatever value Hegel's philosophy may have for an historical science, it can only be utilised once his

"estranged insights" into the nature of history have been freed from their dependence on his absolute idealism.

3.2 FEUERBACH'S MATERIALISM AND HUMANISM

In the "Economic and Philosophical Manuscripts" Marx observed that the Young Hegelians or Critical School, as they were termed, "..... had not once voiced so much as a suspicion of the need for a critical debate with their progenitor, the Hegelian dialectic."²⁰ Only Feuerbach, Marx emphasised, conducted a critical debate with Hegel's dialectic.²¹ By basing his philosophy on the principles of materialism and humanism, he pressed forward a critique of Hegel's absolute idealism. As far as Feuerbach is concerned, the finite is a positive ground in-itself; it is neither a negation nor an alienation of the infinite.²² The finite is not, therefore, ideal, but material. Man too is conceived as a reality in his own right to be explained as he is in himself, as it were, rather than in terms of an incarnation of a divine being. He should be understood according to his inherent characteristics as a species-being (Gattungswesen). Feuerbach regarded his philosophy as a means whereby the self-estrangement or self-alienation of man and nature could be overcome by grounding the properties ascribed to deities and their equivalents in "natural" and "human" characteristics.

Feuerbach sought to demonstrate how Hegel's negation of the negation, which purports to bring "alienation" to an end, is in reality a reaffirmation of the estrangement of man and of nature.²³ That Hegel started from the estrangement of substance or the finite was important. For, in logical terms he began not with the finite but with the infinite. Theologically speaking this is to begin with God. Hegel then supersedes the infinite and posits

the actual or the finite. The final movement of the dialectic, the negation of the negation, is, however, the supersession of the finite and a restoration of the infinite through the self-negation of the finite. Feuerbach regards Hegel's negation of the negation as a contradiction of philosophy with itself since it supersedes the infinite in its first movement only to re-instate it in its final conclusion. If the absolute remains a self-estrangement of man and nature, as Feuerbach maintained, then Hegel's negation of the negation does not truly eradicate alienation. On the contrary, it reaffirms the self-estrangement of man and nature in its final movement, and does not trouble the existence of human alienation, which is masked by the forms of religion and of idealist philosophy. The conditions of human self-estrangement are reaffirmed in Hegel's dialectical logic. So the task of philosophy, according to Feuerbach, was to overcome this self-estrangement by returning the estranged properties expressed in religion and philosophy to the finite being of man and of nature.

Feuerbach conceives of man and nature as realities in their own right - grounded in-themselves. For Marx, precisely this, an abstract conception of nature and man, can be held responsible for Feuerbach's failure to understand how man and nature are historically related, and accordingly, Marx criticises Feuerbach's materialism for its lack of an historical dimension.²⁴ Feuerbach, Marx claims, conceives reality only "in the form of object or of contemplation."²⁵ In the "Economic and Philosophical Manuscripts", Marx argues that as far as history is concerned one should regard nature not only as a material pre-condition of "real objectification", but also as its historical result. Hence, through his development of social production, man increasingly masters nature by transforming its "estranged" form (estranged that is, from man)

so that it might become suitable for the production of objects nurtured or designed for human consumption.²⁶ Although nature still exists as an objective realm, as far as history is concerned, one should understand it as an interdependent element in historic socio-productive totalities. Feuerbach's materialism, by separating nature from human activity, fails to show in the act of social production the necessary mediation of man and nature. To isolate either man from nature or nature from man, is to abstract them both from the productive process in which they are united. If history consists, as Marx maintained, in the development of forms of social production, then the abstraction of man and nature from the productive process is bound to lead to an ahistoricity in Feuerbach's humanism as well as in his materialism. This is indeed the case. For example, Feuerbach overcomes religious alienation by resolving the religious essence back into the "human essence". But if this "human essence" is anything beyond an abstraction inherent in each individual, it must be, as Marx observes, "the ensemble of social relations."²⁷ There is, in Feuerbach's humanism, an inversion of the historical process; he explicates social development with reference to a set of human attributes which are, in reality, results of the process they purport to explain. Feuerbach's supra-historical conception of man and nature, unsurprisingly, does not possess sufficient resources for a methodologically acceptable means of understanding historical development, because it must always abstract a factor from the social totality and transform it into an immanent explanatory principle of the whole. Marx states,

"This doctrine must divide society into two parts, one of which is superior to society."²⁸

Feuerbach's humanism and his materialism remain isolated, detached principles, incapable of arriving at an historical understanding of social development. Marx argues that,

.. "as far as Feuerbach is a materialist he does not deal with history and as far as he considers history he is not a materialist, with him materialism and history diverge completely." ²⁹

Even though Feuerbach singularly failed to base the understanding of man or nature on scientific principles, his importance in the historical materialism is unquestionable, and should not be underrated. Marx only began to transform Hegel's insights into social development after he had brushed away the rubble of dialectical logic; and there is no doubt his efforts in this direction were significantly guided by the critique developed previously by Ludwig Feuerbach.

3.3 FROM REALISM TO HISTORICAL MATERIALISM

Marx's critique of the Hegelian dialectic, although superficially similar to Feuerbach's, differs fundamentally in stressing the positive contribution of Hegel's philosophy to an understanding of history. Marx concurs with Feuerbach in believing Hegelian philosophy incapable of generating a genuine criticism of reality. Marx perceived that if all of "reality" is the self-estrangement or alienation of absolute mind, then being a divine objectification, it is vindicated because it is beyond criticism. ³⁰ In addition, if the finite world is always grasped not in its own terms - the principle of realism - but rather only in relation to the "other" i.e., the infinite, the principle of idealism - then there can be no critical analysis of its development. For this reason Marx

sees a logical connection between Hegel's acritical idealism which forms the premise of his philosophy and the acritical positivism which is its necessary counterpart and result. Marx claims of the "Phenomenology of Mind" that in, "the uncritical positivism and equally uncritical idealism of Hegel's later works, the philosophical dissolution and restoration of the empirical world is already to be found in latent form, in embryo, as a potentiality and secret." 31

In order to achieve a critical understanding of history, and a genuine supersession of "alienation", it is necessary to begin by developing a method whereby one can grasp social development as a real process in-itself. In developing such a conception of history, Marx attempts to transform the "estranged" discoveries of Hegel's dialectic so as to make them compatible with the principles of scientific inquiry.

Marx emphasised two fundamental and interrelated points about Hegel's philosophy. First, it contains an estranged insight into history as the development of social production or, in the terminology of the "Manuscripts", "real objectification." Marx claims that Hegel's dialectic, " is the estranged insight into the real objectification of man, into the real appropriation of his objective being through the destruction of the estranged character of the objective world through the supersession of its estranged mode of existence." 32 Secondly, Hegel's estranged discovery of the process of real objectification conceives of this development as one characterised by dialectical contradiction. 33 This analysis, I shall argue, forshadows in certain ways Marx's own understanding of the mechanisms of social change which are conceived as operating historically through the re-

production and development of contradictions between the social forces and relations of production. Before providing textual support for my claims, I intend to demonstrate the existence of these "estranged insights" in Hegel's philosophy.

In 3.1 I analysed the general principles of Hegel's absolute idealism and tried to emphasise the logical unity of his philosophy. In this section, I intend to analyse some of the most important insights Hegel achieved into the historical process. These are, I believe, expressed principally in Hegel's analysis in the "Phenomenology of Mind", of forms of consciousness, and they are given a classical exposition in his analysis of the relationship between Herr and Knecht (variously translated master/slave, Lord/bondsman etc.)³⁴ As far as Hegel is concerned, however, the Herr/Knecht relationship is merely one stage in the development of a true self-consciousness brought about by absolute Mind's negation of forms of consciousness not appropriate to itself. The relationship is analysed, therefore, as part of the general Hegelian dialectic outlined in 3.1. Hegel's "Phenomenology of Mind", merely elucidates this dialectic with respect of the development of consciousness rather than of nature. Marx describes the movement of Hegel's dialectic in this analysis in the following terms. He states,

"Finally mind, which is thought returning to its birth place and which in anthropological, phenomenological, psychological, moral, artistic-religious mind is not valid for itself until it finally discovers and affirms itself as absolute knowledge and therefore as absolute -ie- abstract mind, receives its conscious and appropriate existence."³⁵

The "Phenomenology of Mind" is the pinnacle of Hegel's philosophy, because the dialectic outlined in the "Science of Logic" at last realises its true destiny viz absolute knowledge or a true self-consciousness. Although this is a philosophical achievement, Hegel presented it as a necessary result brought about by the dialectic of absolute mind.

One condition for the existence of self-consciousness, Hegel argues in the "Phenomenology of Mind", is recognition by another. He claims this struggle for recognition motivates a life and death contest between combatants. Hegel notes that if one party happens to eliminate the other then the survivor would fail to achieve recognition; he would be robbed of his victory in the moment of his triumph ("abstract negation").³⁶ The initial life and death struggle, to circumvent this danger, is resolved in a manner which preserves the existence of both parties. By forcing the vanquished to recognise the victor's superiority and power to determine whether he, the defeated party, should live or die, the victor attains recognition. At this point, when the victor forces the vanquished into slavery the Herr/Knecht relationship emerges.

The opposition between the Herr and the Knecht is from its inception one of dialectical contradiction. Neither the Herr nor the Knecht can be defined in isolation and yet they stand in a relationship of opposition. This relationship of opposition is double or reciprocal because any change in either term would precipitate a change in the other and vice versa. The liberation of the Knecht would not only free the Knecht but would also end masterhood and terminate the Herr/Knecht relation. Thus, the opposition forms a dialectical totality "X" which is the unity of the relationship of opposition.

According to Hegel this relationship is inherently unstable and, as such, is only a single step towards the development of a true-self consciousness. The Herr, so Hegel continued, strives to attain a consciousness of himself as an independent being, but his consciousness is limited because qua Herr he cannot attain a consciousness which does not involve a reference to the Knecht. The connection between the Herr and Knecht is, in the first instance, simply one of domination and subordination. The Herr dominates the Knecht and forces him to serve his needs through the act of service ie production. The Knecht is forced into labour by the Herr who threatens to eliminate him if he refuses to subordinate his activity to the Herr's wishes. This interpersonal relation of domination and subordination compels the slave to establish a relationship of production with nature. However, once this state of affairs is established, the reproduction of the Herr's self-consciousness depends on the Knecht's service, since the Herr can only perpetuate his existence as Herr insofar as he is able to appropriate the products of the Knecht's labour. The interpersonal relationship is, consequently, mediated by the relationship to nature, in the same way as the relationship of production is mediated by the interpersonal relationship. The Herr/Knecht opposition forms a dialectical totality in which the interpersonal relationship determines the Knecht's productive activity, but where in turn the labour of the Knecht determines the reproduction of the relation between Herr and Knecht. Interpersonal and productive relationships are indissolubly fused in the Herr/Knecht opposition. The mediation of production through the relationship and of the relationship through production takes place only in the context of the dialectical unity of the whole which explicitly prohibits a dualistic separation of the productive from the interpersonal relationship.

I have shown already how Hegel noted that one precondition for the development of a true self-consciousness is the recognition of one self-consciousness by another. But in the Herr's case the consciousness is false because although he is recognised by the Knecht, he is unaware of this recognition since he does not recognise the Knecht as a self-consciousness. The Knecht is merely a means for the production of the objects necessary for the Herr's survival. The Herr's consciousness is false because, "for recognition proper there is needed the moment when what the master does to the other he should also do for himself, and what the bondsman does to himself, he should do to the other also." ³⁷ However, the Herr cannot recognise the Knecht as an equal self-consciousness or achieve recognition himself until the Knecht ceases to be a Knecht, but in such an eventuality the Herr ceases to be a Herr. A true self-consciousness can only be achieved through the destruction of the Herr/Knecht relationship.

Hegel recognises that the Herr is doomed to false-consciousness and lacks the possibility of development. The true self-consciousness must be developed by the Knecht. It appears, at first, "outside itself", that is in the Herr/Knecht relationship which it eventually supersedes. The Knecht is forced to recognise another self-consciousness in the person of the Herr, without in turn being recognised by the Herr. The Knecht must achieve recognition, and this he can only do by dissolving the Herr/Knecht relationship.

According to Hegel, two aspects of the Herr/Knecht opposition help the Knecht realise his aspirations. The Knecht lives in fear of death because the Herr, at all times, holds the Knecht's life at his disposal. The fear of death shakes the Knecht out of his

particular, secular existence and forces him to contemplate the universal, whereas the Herr, who is comfortably assured of his existence, lacks the impetus to think beyond his everyday life. Secondly, the Knecht is forced into servitude. This thrusts him into an immediate relation with nature. The Knecht must overcome the alien nature of the objective world and transform it by his labour into an objectification of his own consciousness. Nature must be transformed and superseded by the Knecht's labour before he can satisfy his own wants as well as those of the master. Work stimulates a change in the Knecht's self-consciousness because he gradually sees, in his own objectification, a reflection of himself as a universal being. The Knecht's self-recognition complements the recognition he is compelled to give the Herr. He needs only to achieve recognition by another self-consciousness to develop a true consciousness of himself as a universal being or as absolute mind. The condition for the Knecht to achieve this consciousness is the dissolution of the Herr/Knecht relationship; he has to liberate himself from his consciousness of being Knecht and, at the same time, end masterhood and the consciousness it generates. The Knecht ceases to be a Knecht and the Herr ceases to be a Herr; they supersede the dialectical totality "X" which they previously constituted. A new relation based on mutual recognition is established. If the supersession is genuine, then it can only be founded on an interpersonal and productive relation between equals who recognise in the other a true reflection of their equality as universal beings.

The dialectical totality constituted by the Herr/Knecht relationship, in Hegelian terminology, supersedes itself in the dialectical process of the coming-to-be of absolute mind. Both the interpersonal and the productive aspects of the relationship

are essential parts of this development. Hence, fear of death, which expresses the interpersonal aspect, and service, which encompasses the productive element, are indispensable moments in the realisation of a true self-consciousness.³⁸ Without the fear of death, service would only result in a vain and futile consciousness incapacitated except in its attitude of bondage. The fear of death without the necessity of service would be merely formal and not all encompassing. Both elements are required for the dialectical supersession of the master/slave relation.

One can see in this exposition of Hegel's analysis of forms of consciousness an "estranged" discovery of history as a contradictory or dialectical development of forms of social production. It should be evident in my analysis of the Herr/Knecht relationship, that the relationship of consciousness depended on the interpersonal relationship of domination and subordination and that this, in turn, depended on the Knecht's productive relationship with nature. In addition, all these aspects of the relationship formed elements of a totality constituted by the Herr/Knecht opposition. In the context of Marx's understanding of history, such a totality, in which forms of consciousness, social relations and relations of production exist as interdependent elements, would be termed a socio-economic formation. This is, however, to run momentarily ahead of my argument. At this stage, I wish merely to emphasise that Hegel's philosophy contains not only the estranged discovery that history consists in the development of social production, but also the simultaneous insight into the mechanism of development through contradiction which governs the reproduction of socio-productive totalities and their transitions into new forms.

The purpose of Hegel's analysis, which is confined to an examination of forms of consciousness, is not to establish scientific principles for the study of history, but to explicate the process whereby absolute Mind becomes conscious of itself as the subject of the dialectical development of nature and history. The insights into history contained in Hegel's philosophy must be re-interpreted and, as they stand, cannot further the cause of a science of history. On the contrary, they merely illustrate certain aspects of Hegel's absolute idealism. It is for this reason that Marx emphasises that Hegel discovers only the speculative i.e., metaphysical expression of the movement of history and not yet its real movement. He states,

"But since he conceives the negation of the negation from the aspect of the positive relation contained within it as the true and only positive and from the aspect of the negative relation contained within it as the only true act and self-realising act of all being, Hegel has merely discovered the abstract, logical, speculative expression of the movement of history. This movement of history is not yet the real history of man as a given subject, it is simply the process of his creation, the history of his emergence." 39

It was Marx's intention, however, to achieve a critical understanding of the real movement of history. This unavoidably involved a scientific transformation of the estranged insights of Hegelian philosophy. And, indeed, I shall argue in the next chapter that just such a transformation is evident in Marx's work if one interprets historical materialism as a dialectico-causal science.

Chapter 4. COLLETTI AND ALTHUSSER ON MARXISM AND CONTRADICTION

In the last section of Chapter 3, I suggested that a dialectico-causal conception of history is a logical outcome of a scientific approach to the development of a theory of social change. I intend to substantiate this thesis in Chapter 5. In this chapter, however, I wish to demonstrate how alternative interpretations of Marx's methodology expounded by Colletti and Althusser, which begin from distinctly non-realist positions in epistemology, fail to develop a scientific interpretation of Marxism and its distinctive notion of a causal process which develops through "contradiction."

4.1 COLLETTI ON MARXISM AND CONTRADICTION

Colletti, in a recent article on the Marxist notion of contradiction, attempts to make a fundamental distinction between an Hegelian idea of dialectical opposition, which is evidently inconsistent with classical logic and science, and the Kantian notion of contrariety or real opposition which "does not violate the principles of identity and (non) - contradiction and hence is compatible with formal logic." ¹ Colletti's discussion begins with Kant's analysis of real and logical contradiction.

According to Colletti, Kant distinguished between two types of opposition. Oppositions are, "either logical, involving contradiction (durch den Widerspruch), or real ie. devoid of contradiction (ohne Widerspruch)." ² Colletti argues that Hegel's formula for dialectical contradiction is identical with the formula for logical contradiction: a compound statement which asserts one thing to be true and at the same time denies its truth

cannot be true. Colletti concludes that, since relationships of dialectical contradiction imply the truth of contradictory statements about the world, the notion of dialectical contradiction must be logically absurd.³ Dialectical contradictions are, in reality, a logical impossibility. For science to avoid such absurdities, insofar as it is involved in the study of contradictions at all, these must be instances of real rather than Hegelian dialectical opposition.⁴ It is important to be aware of the nature of real oppositions, and I will now deal with them in detail.

Colletti maintains the relation of contrariety or real opposition is expressed in the formula "A and B" where each of the opposites is "real and positive." There is no relation of dialectical contradiction involved; rather,

"Each of the opposites is real and positive. Each subsists for itself. Since, to be itself, each has no need to be referred to the other, we have here a case of a relation of mutual repulsion. This is an exclusive opposition, instead of an inclusive opposition. Thus, just as before we spoke of the attraction of opposites, here we must speak of mutual repugnance or Realrepugnanz."⁵

Real oppositions always involve relationships between positive forces which can be defined independently. If these forces through their mutual opposition annul each other, this will not be negation in the Hegelian sense. Rather Colletti maintains that,

"The negation which each exerts on the other consists only in the fact that they mutually annul their effects. Briefly, in a

real opposition or relation of contrariety (Gegenverhältnis), the extremes are both positive, even when one of them is indicated as the negative contrary of the other." ⁶

A good example of the sort of relationship Colletti has in mind would be the opposition brought about by the collision of billiard balls. In this instance of opposition, each ball could be defined in terms of its own mass and velocity prior to the collision with the other ball. The ensuing clash of billiard balls would be a case of mutual repulsion calculable in terms of the respective mass and velocity of each ball. The understanding of this sort of opposition would not depend on a notion of dialectical interdependence and opposition, since this event can be grasped entirely by a knowledge of the individual mass and velocity properties of the two balls involved in the collision. The understanding of the properties of one ball does not depend on a knowledge of the properties of the other. Clearly, relationships of real opposition do not require the conceptual interdependence suggested by a dialectical account of opposition. In the case of opposition between billiard balls, "negation" is evidently absolved of the need to refer to the supposedly "non-being" of a given object. And, hence with respect to Hegelian contradiction, Colletti can conclude,

..."there do not exist things which are negative in themselves, i.e. things which are negations in general, and hence non-being as far as their inner constitution is concerned. Whatever negates or annuls the consequences of something is itself a "positive cause". So-called negative quantities are not a negation of quantity; in other words they are not non-quantity and hence non-being or absolute nothingness. Things, objects, factual data are all

positive, i.e. existing and real, elements. The things which in mathematics are called negative quantities are, in themselves, positive quantities, even when they carry the minus sign." ⁷

In the context of such an analysis of contradiction, it is obvious that Colletti should draw the conclusion he does: that insofar as Marx is a scientist, he must study real oppositions rather than dialectical contradictions. I will discuss this interpretation of Marx's theory below, after I have clarified my criticisms of Colletti's treatment of the problem of contradiction in Marxist science.

Colletti's discussion of contradiction is theoretically constrained by his underlying Kantianism which stops him conceiving of the possibility of a notion of dialectical opposition which is neither Hegelian nor an instance of logical contradiction. I intend to call this distinct concept of contradiction dialectical opposition proper, in order to distinguish it from the Hegelian notion of contradiction and the Kantian notion of contrariety. (During the remainder of this discussion, whenever I mention dialectical opposition, I intend to refer to my concept, not Hegel's). In addition, the concept I employ refers not to logical statements asserting one thing and its contradictory, but rather to relationships between interdependent yet opposing elements or forces in the world.

The conceptual interdependence required in theory to explicate these sort of relationships occur in a variety of guises; so I need, at this point, to distinguish between them and the concept I am concentrating on here, dialectical opposition. In the first place I do not want to confuse dialectical opposition with functional interdependence, as has been worked out by structural func-

tionalists, since this is tied to an ahistorical notion of the social whole and a mechanistic idea of causality.⁸ The second distinction is less painstakingly worked through. Certain natural processes might well be best described in terms of such a conceptual opposition, as, perhaps, the relationship of germs to the healthy organism. Given that they can be so described, it could then also be asked whether or not they require explanation by a conception of causality analogous to the one I ascribe, in subsequent chapters, to Marx.⁹ However, these are further questions, which I do not intend to examine here. Be that as it may, there is no reason why such relationships, if they do exist, should not be analysed by scientists since they do not violate, as the Hegelian notion unhappily did, the principles of classical logic.

I have said already that Colletti's Kantianism prevents him from considering even the possibility of developing this sort of notion of dialectical opposition. The reasons for this are the following. In the Kantian system there can be no category of dialectical opposition because such a category apparently undermines the principle of non-contradiction and consequently the internal coherence of a system of categories based on the principles of classical logic. If the categories of the understanding play an indispensable role in producing the objective world of phenomena, then it follows that the absence of a category of dialectical contradiction necessarily implies that these dialectically opposed relationships cannot exist. From this philosophical standpoint, it would not be possible to develop a notion of dialectical opposition which did not automatically imply a commitment to a dialectical logic of the type developed by Hegel. This, as I have noted above, would involve the dissolution of Kant's epistemology. An acceptance of Kantian philosophy, therefore, necessarily implies

the rejection of the notion of dialectical opposition proper as well as the legitimately proscribed Hegelian dialectic. The same conclusion will follow from any philosophical viewpoint whose conceptual structure committed it to a mechanistic causality.¹⁰ Only the Kantian version is rigorously discussed here. It should not be assumed that dialectical oppositions fail to exist just because they are outlawed by a Kantian system of categories. The a priori exclusion of such relationships from the world only follows if it is assumed that the principles suggested by Kantian concepts for the structure of statements in argument are ipso facto correctly characteristic of the relations between things and people in the world. Given that they are, relationships of dialectical interdependence are conceptually impermissible. If, however, one rejects the a priori assimilation of conditions of existence to the combined canons of logic and conceptual scheme and, instead, allows that logical truths alone do not predetermine, in isolation from a conceptual scheme, anything substantive about the world, then one can appreciate that there is no logical reason for the exclusion of instances of interdependent yet opposing forces from being at work in either nature or history. But a discovery of such relationships in the world definitely would not involve a commitment to Hegel's dialectical logic. Hegel himself conceived of the world in terms of developmental conflicts analogous to the kind I investigate; but his most dangerous error, from the viewpoint of this thesis, was to suppose that in order to represent them he needed to decimate classical logic.

I have stressed that there is no a priori reason why relationships between interdependent yet opposing forces cannot exist in the world. On the other hand, there are good a posteriori reasons why one should claim such relationships do exist - at least with

respect to the understanding of social relationships. The existence of such a relationship of dialectical opposition was, in fact, demonstrated in our analysis of the relationship between Herr and Knecht. In this relationship neither the Herr nor the Knecht could be defined without reference to the other and yet they stood in a relationship of opposition to one another. In the circumstances, this relationship could not be explicated as one of contrariety because it would be impossible to define either the Herr or the Knecht in isolation from the other. Rather, each term in this relationship is reflected in the expression of the other. In the context of this relationship, therefore, an action by either party, as Hegel notes, "has itself the double significance of being at once its own action and the action of that other as well."¹¹ This quotation is not entirely transparent, and is in need of a little clarification. When, for instance, the Knecht is involved in labour, his actions and their motives can only be adequately descriptively identified when some reference to Herr is included within them; in the absence of such factors these actions and their motives are, in an extremely important respect, incomplete. In this sense, I think, the Knecht's actions - though not, when strictly considered, the Herr's actions too - do require mention of him before one can be said to have fully understood them.

The great weakness of Hegel's conception of the Herr/Knecht relationship rests not so much on his analysis of the relationship as one of dialectical opposition, but rather his assimilation of all such relationships to the contradiction between the finite and infinite. If one managed to separate concrete relationships of dialectical opposition from a dependence on Hegel's absolute idealism, it would be possible to expound them as relationships charac-

teristic of finite or material processes or relations. This sort of transformation is indeed one which I credited to Marx and have already briefly described. This transformation is one which Colletti is unable to effect because of his Kantian approach to the problem. Colletti believes that to attribute a dialectical interpretation to historical materialism is to succumb to logical contradiction, yet this is evidently not the case. There is no logical contradiction behind the suggestion that Marx's view of social development involves an understanding of history which is characterised by the generation and supersession of relationships of dialectical opposition between the social forces and relations of production in historic socio-economic formations. Whether or not such an interpretation of history is justified is a matter to be decided by scientific argument based on the practice of historical science and not by a priori legislation. There are no logical grounds for rejecting this conception of history so long as it is distinguished, as indeed it can be, from Hegel's dialectical logic. Rather than rejecting this interpretation of Marxism, it would be more logical to reject Colletti's a priori exclusion of the possibility of relationships of dialectical opposition.

Once Colletti has rejected a dialectical interpretation of opposition as a logical impossibility, it would seem that he must have recourse to an interpretation of Marxism based exclusively on relationships of contrariety. If one were to treat the contradiction between the forces and relations of production as an instance of contrariety, then one would be compelled to define them in isolation; and such definition would have to be individually consistent and complete. One consequence of this would be, that if either the forces or relations were determinant in the process of social development, it would have to be in virtue of their

intrinsic causal properties and not because of their relation to the social totality. Possibly one could construct a reciprocal model of causation involving relations between the social forces and relations of production and also, perhaps, the social whole; but, in the final analysis, the ultimate causal role must be attributed to one factor otherwise this interpretation would, but in an underhand way, be founded on relations of dialectical rather than real opposition. Regardless of which particular factor is given this ultimate causal role, the real opposition interpretation of Marxism would, it seems, abstract this factor from its social and historical location. This factor would then be held responsible for its own development as well as for the development of the whole. Society would, as in Feuerbach's philosophy, be divided into two parts, one of which would be supra-social and supra-historical. An interpretation of Marxism based on Kant's conception of contrariety does then seem to culminate inevitably in a crude single factor determinism founded on an essentially Newtonian idea of causation.

Colletti holds back, however, from drawing out the logical implications of his real opposition interpretation of Marx's notion of contradiction. Indeed, he rejects the idea of a total commitment to contrariety as fundamental to Marxism. While he openly declares that relationships of real opposition determine social development in pre-capitalist societies, he believes that,

"The contradictions of capitalism - from the contradiction between capital and wage-labour to all the others - are not, for Marx, "real oppositions" (as I too, following Della Volpe, believed until yesterday), i.e. objective but "non-contradictory" oppositions, but are dialectical contradictions in the full sense of the word." 12

He maintains that only positivist Marxists like Kautsky, Bernstein and Della Volpe would accept that contrariety renders the Marxist concept of contradiction exhaustively.¹³ As far as Colletti is concerned, these theorists thereby fail to come to terms with the uniqueness of capitalism as a socio-economic formation or with the subtlety of Marx's theoretical position on contradiction. Colletti develops instead a novel, if contradictory, conception of Marx's dialectic which supposedly combines a conception of real and dialectical oppositions. He argues that Marx the scientist studies social change as an undialectical process characterised by real oppositions. This leaves him with the residual problem of account for the undeniably dialectical component of Marx's theory. Colletti, to substantiate this, invents Marx the "philosopher" who studies capitalism as a totality characterised by dialectical contradictions.¹⁴ According to Colletti, Marx is not mistaken in this intellectual venture, because capitalism, unlike other socio-economic formations, is a product of fetishism and alienation, and these somehow transform real oppositions into dialectical contradictions.¹⁵ Capitalism has to be accorded special status as a society because it is "an upside down reality". It is unique in virtue of combining real and dialectical oppositions in a social totality. However, as Edgley points out, the relation between these two types of opposition must in turn be either real or dialectical.¹⁶ If this relation of opposition were ultimately "real", then Marx's account of capitalism would only appear to be dialectical. Colletti in this case would be unable to develop a logically consistent or coherent account of the dialectical element in Marx's theoretical corpus. But if this opposition were irreducibly and truly dialectical, then Marx's theory, not capitalism, would be culpably "contradictory" since Colletti elsewhere argues that

dialectical contradictions are logically impossible.

Colletti faces, therefore, a theoretical dilemma. If he continues to insist that capitalism contains dialectical oppositions, then he would, by sleight of hand, have to accept Hegel's dialectical logic, a logic he ostensibly rejects. If, alternatively he finally reduces this relation to one of real opposition, then his treatment of contradiction becomes indistinguishable from the positivist Marxism he criticises in Kautsky, Bernstein and Della Volpe. His exposition of historical materialism would then be doubly inadequate. In its own terms, it would fail to explain the apparent uniqueness of capitalism as a socio-economic formation. And he would be committing Marxism to a supra-historical theory of social change by ascribing to either the forces or relations of production, an unmediated causal effectiveness. Colletti's Kantian treatment of contradiction condemns Marxism to an unresolved dualism between a Hegelian dialectic, on the one hand, and a Newtonian mechanicism based on relations of contrariety on the other.

Colletti's failure to explicate historical materialism as a science is heavily ironic in virtue of the fact that, in the final analysis, he falls prey to the very shortcomings he exposes in his critique of positivist and Hegelian Marxism. He develops a trenchant critique of Hegelian Marxism, both that of Soviet Marxism and "diamat" and of Lukacs and the Frankfurt School.¹⁷ Yet, despite this, his conception of the dialectical contradictions of capitalism is indistinguishable from the Hegelian notion he ostensibly rejects. Again, Colletti's failure to give an adequate account of dialectical contradiction means that his idea of Marx the scientist who studies real oppositions or relations of con-

trariety, is indistinguishable from the theorists like Kautsky and Della Volpe whom he criticises.

If additional evidence of Colletti's commitment to Kantian epistemology is required, then it is provided by his early treatment of Marx's notion of social causality which predates his recent articles on contradiction. According to this interpretation, the uniqueness of Marx's account of causality is to be found in the "Theses on Feuerbach". Colletti argues that in those texts Marx discovers that "as a product of objective material causation, man is also the beginning of a new causal process opposite to the first, in which the point of departure is no longer the natural environment, but the concept, the idea of man the mental project."¹⁸

Colletti maintains, therefore, that the process of natural evolution gives rise to a new teleological or final causality in which the end or intentional goal "determines the efficient cause which in turn becomes simply the means to accomplish it."¹⁹ Final causality is uniquely social and does not abolish the efficient causality of nature, since natural causality functions as the indispensable means whereby man realises the ends of his teleological project. Colletti claims that.

... "the simultaneity of these two processes, each of which is the inversion of the other, but which together form the "umwalzende or revolutionare praxis" referred to in the Theses/Feuerbach, is the secret and key to historical materialism in its double aspect of causation (materialism) and finality (history)." ²⁰

The causality of nature and the finalism of history are supposedly linked in social production, which is both a production

of things and a production of social relationships and ideas. If, however, efficient causality were dominant, then final causality would be illusory because mechanical or naturalistic laws would ultimately determine both the ends and means of all human action. If, conversely, a truly Kantian and voluntaristic account of final causality were adopted - as Weber, for instance, advocated - then there could be no real (or in Kantian terms, phenomenal) causality involved and one would have to adopt a conception of man as an essentially free being who could choose and formulate, without any restriction whatever, the ends and means of his own action. The foundation of this freedom would not lie in a knowledge of the world; instead it would be founded on a conception of man whose essential nature had somehow transcended completely the constraints of nature and society. Colletti, when discussing revolutionary practice, does not specify in any way the conceptual links between causality and teleology and has, in fact, no satisfactory analysis of action and its relationship to history. And so his treatment of social causality merely reproduces the Kantian dualism analysed earlier, in which the causality of nature is opposed to the freedom of man as a noumenal subject.

I have shown already, in the context of Weber's methodology, how the voluntaristic assumption is neither tenable on its own ground nor, even if it were, would it be able to form the foundation for any sort of scientific inquiry into history.²¹ If, on the other hand, one were to develop the mechanistic or naturalistic side of Colletti's account of social causality, then one would encounter again the supra-historical implications of a real opposition account of the causal relationships analysed above. In short, neither the mechanistic nor the teleological side of Colletti's theory, is capable of providing a foundation for a scientific

approach to the study of social change. Thus, it is possible to regard Colletti's opposition between a naturalistic causal process on the one hand, and a humanistic voluntarism on the other, as one result of his failure to perceive how man and nature are interrelated in a unitary dialectico-causal process. It is apparent that Colletti's exposition of Marxism does no more than oppose and occasionally "combine" an essentially Hegelian notion of contradiction and a Kantianism which is sometimes based on contrariety and at other times on Kant's voluntaristic account of human duty. What Colletti patently fails to do, however, is to show how Marx transformed Hegel's idea of dialectic to the point where it became compatible with an historical science. In virtue of this symptomatic lacuna in his theory Colletti can best be classified as a theorist rooted in an essentially Hegel/Feuerbach problematic, even though his treatment of "real opposition" and teleology is mediated by his allegiance to Kantian philosophy rather than to Feuerbach's materialism and humanism.

4.2 ALTHUSSER ON MARXISM AND CONTRADICTION

Althusser's interpretation of Marxism is constrained by an epistemology which is no more realist than Colletti's Kantianism. In fact, Althusser tries to pass off a distinctly idealist position in epistemology as if it were the essence of Marx's "materialism". This can be demonstrated by a critical exposition of Althusser's attempt to specify the uniqueness of Marxist epistemology.

According to Althusser, the uniqueness of Marxist epistemology is to be found in an epistemological break which consists in the supersession of a philosophical problematic based on opposition

between empiricism and idealism.²² The empiricists, Althusser argues, do not recognise that knowledge is dependent on theory. Reducing the object of knowledge (concrete-in-thought) to the supposedly real object (concrete-real), they do not realise their understanding of the real object is merely a product of underlying philosophical assumptions. The idealists, commit the converse error of reducing the real object to the object of knowledge. They imagine that the theoretical conditions through which they construct their object of knowledge are also conditions for the existence of the real object. Where the novelty of Marx's epistemology lies is in its avoidance of either of these reductive paths: it can recognise the cognitive relationships of science to be based on a dualism between thought and reality.²³

In my realist theory of science the method of anomaly generation and supersession provides the necessary link between an independent object and a theory dependent object of knowledge.²⁴ But Althusser does not specify any such a link. He assumes science can succeed in appropriating an independent object through the "mechanism of the knowledge effect" without ever specifying the nature of this mechanism.²⁵ His account of the theoretical practice of historical materialism helps to explain why he considers it unnecessary to account for this "mechanism". Theoretical practice, the practice of a science, transforms a given raw material into a determinate product through an act of labour or transformation which employs determinate methods. The crucial moment of any practice whether economic, political, ideological or theoretical - is the labour of transformation. Althusser claims,

"In any practice thus conceived, the determinate moment (or element) is neither the raw material nor the product, but the

practice in the narrow sense: the moment of the labour of transformation itself, which sets to work, in a specific structure, men, means, and a technical method of utilising the means." 26

The specific product of theoretical practice is supposedly the knowledge-effect. In the case of historical materialism, the knowledge-effect achieves a knowledge of the society-effect which, in turn, is produced by the other practices: material production which transforms raw materials into use-values, political practice which transforms old social relations into new ones, and ideological production which transforms old into new ideas. The veracity of historical materialism is guaranteed, not by an understanding of the world through developing theories in response to anomalies, as in our theory of science, but, as Glucksmann perceives, by the homology of the logic of productions as productions.² The conditions pertaining to the construction of the objects of knowledge of the science are "quite simply" conditions which also apply to the existence of the social whole! Althusser claims,

"We can set out the "presuppositions" for the theoretical knowledge of them (productions) which are quite simply the conditions of their historical existence." 28

The correspondence between the theory of historical materialism and the real object is established therefore by the structure of the different practices as productions. Glucksmann notes that "the articulation of production determines both the order of knowledge and the order of the real." 29

The homology of productions assumption implies that the categories of theory can be projected as existential conditions

of the real-object. The supposed dualism between thought and reality dissolves into a realm which is exclusively determined by theory. Althusser's epistemology seems to be based on an implicit transcendentalism which assumes an essential homology between the order of theory and the order of the real. This assumption is partly Kantian in both its spirit and form, since it appears that production "determines" theory - "in the last instance" - only to be, in turn, reduced to a sub-category of theory. This is also a recrudescence of a form of the coherence theory of truth; and an additional source for this may well be Spinoza, whom Althusser frequently quotes and leans on with a somewhat irresponsible eclecticism; but it is not my purpose to enter this area of aetiology. Sufficient to say, many of the familiar difficulties coherence theories of truth face, must be born by this variant. Not the least being that, in an important sense, coherence theories give up all notion of reliance on a world. And this is what I endeavour to expose.

If one were to accept Althusser's account of the knowledge - effect, it is theory - and theory alone - which determines the conditions for the existence of the real object. Instead of theory being conceived as a moment in the development of history, this philosophical idealism has the consequence that history becomes a moment in the elaboration of theory! ³⁰ This is far from being the only significant consequence. Once it is accepted that the categories of theory produce historical reality as well as the theories which study it, then, if this reality is to be contradictory, the theoretical categories must include one of dialectical contradiction. One is led to a now familiar theoretical dilemma. Either the system of categories is dissolved by the category of dialectical contradiction à la Hegel, or else the categories remain

a coherent structure, but can only do so insofar as they prohibit not only an Hegelian notion of contradiction, but also the quite separate idea of dialectical opposition. It is possible to trace first one side of this dilemma and then the other in Althusser's account of the materialist dialectic and in his explication of the specificity of historical materialism.

Althusser develops his account of Marxist epistemology in his attempt to explicate the nature of the materialist dialectic.³¹ There, he distinguishes between three levels of theory: theory may be a theoretical practice of a scientific character; the theoretical system of a real science - its basic concepts; or, at the highest level of abstraction, the theory of theoretical practice. The materialist dialectic (the general theory of theoretical practice) expresses "the essence of theoretical practice in general and through it the essence of the transformations of the "development" of things in general."³²

At the level of epistemology, dialectical materialism must embody a philosophical consciousness of the break from the idealist/empiricist controversy, a break which is a supposed general condition of theoretical practice. However, it is also apparent that Althusser's exposition of the materialist dialectic has metaphysical implications. Althusser assumes reality to be "dialectical", in advance of the results of the empirical sciences. It may be the case that natural scientists, like historical scientists unearth cases of dialectical oppositions which do not contradict the law of the non-contradiction; even so there is an evident distinction here between asserting reality to be contradictory in an a priori manner - a notion leading to an Hegelian logic and the destruction of science - and pointing to the

a posteriori results of empirical science. Hence, when Althusser blandly asserts that the empirical sciences study the contradiction in the essence of every object, he seems to relapse into a Hegelian metaphysic which regards all "reality" as contradictory. In fact, Althusser's formulation of the materialist dialectic is reminiscent of Hegel's statement which claimed "everything is inherently contradictory, and in the sense that this law in contrast to the others expresses rather the truth and the essential nature of things." 33

Althusser's notion of dialectic, it seems, owes more to Hegelian idealism than it does to any of the scientific aspirations of Marxist thought. Be that as it may, having arrived at this paradoxically Hegelian interpretation of the "materialist" dialectic at the most abstract level of his supposedly materialist philosophy, Althusser proceeds to purge historical materialism of any sort of concept of development through contradiction. In fact, one encounters once again the opposition between an Hegelian dialectic - expressed here in Althusser's exposition of dialectical materialism - and a real opposition or mechanistic conception of causality - evident in Althusser's notion of "overdetermination".

Although the "materialist" dialectic supposedly defends historical materialism as a science among sciences, it does not specify the uniqueness of Marxism. Althusser claims that uniqueness of historical materialism can only be understood once one has grasped the nature of Marx's epistemological break from Hegel and Feuerbach. 34 According to Althusser, at some stage of his intellectual development Marx succeeded in distinguishing his theory from a "Feuerbachian humanism" and an "Hegelian historicism". Marx then recognised that history could neither be explained

through an abstract set of human attributes (Feuerbach), nor on the basis of a simple linear process (Hegel). Althusser maintains rather that, for Marx, "there is no history in general, but only specific structures of historicity, based in the last resort on specific structures of the different modes of production." ³⁵ The methodological task is to explain how relationships of social causality operate through specific structures of historicity in a complex totality.

Althusser attempts to expound this uniquely Marxist concept of causality by specifying a new relationship of determination between base and superstructure which supersedes the controversial crux of economic determinism and historical empiricism. He attempts to bring within the scope of his theory simultaneously the distinctness and irreducibility of the ensemble of productions to one another, and the determination of the whole, in the last instance, by the economy. Althusser seeks to specify "the type of dependence which produces relative independence and whose effects we can observe in the histories of the different "levels"."³⁶ This brings us to an analysis of Althusser's notion of contradiction in a complex totality.

Althusser distinguishes Marx's totality from Hegel's "expressive totality" in which all moments are of equal importance insofar as they are all expressions of absolute mind. The Marxist totality, Althusser argues, is rather a "complex structured in dominance".³⁷ One level in the whole is a "dominant instance". This dominant instance appears to govern the relationships between the moments of the whole. However, this appearance is deceptive because the "dominant instance" is assigned its causal role by the economy; it is the economy which is always determinant in-the-

last-instance. Althusser terms this underlying effectiveness that manifests itself in the displaced form of a "dominant instance", "overdetermination".³⁸ The contradictions of a totality are rarely if ever expressed in a simple contradiction between the forces and relations of production. On the contrary, this contradiction takes on an "overdetermined" character expressed in the complex interrelation of the moments of the whole. Althusser asserts that the contradictions which are internal to the different levels reflect this overdetermination of the whole and take on an uneven and overdetermined character. Complex and uneven relationships arise between the different productions and between the different contradictions expressed in the levels of the totality.³⁹ Nevertheless, he maintains that "determination-in-the-last-instance" remains an invariant property of the totality, even if it can only manifest itself in a hidden form through the play of variables of the superstructure which appear to govern the whole. His notion of overdetermination can thereby explain how the economy is determinant, even if this determination is not expressed openly in the complex totality.

If Althusser is to reconcile relative autonomy and determination in-the-last-instance by the economy, then he must, as Glucksmann notes, develop a concept which will testify to the existence of the structure in its effects even in cases where its presence is not phenomenally apparent. Althusser discovers such a concept in Marx's notion of the "Darstellung" (form or representation) which is "the key epistemological concept whose object is to designate the mode of presence of the structure in its effects and therefore to designate structural causality itself."⁴⁰ The "Darstellung" concept expresses the meaning of the form or representation of value which appears not directly as an expression of

social labour, but rather in the estranged form of commodity value. The "Darstellung" thereby disguises the true nature of value and the source of surplus-value in surplus labour.⁴¹ For Althusser the "Darstellung" should reveal the nature of structural causality in the complex whole. The Darstellung concept is responsible for explaining the process of the self-determination of the reproduction of the economy as well as the economy's determination of the reproduction of the whole.⁴² However, even when the economy is the dominant instance as in capitalism, it does not appear in a true form. Glucksmann notes, for instance, that Althusser's analysis of the reproduction of the economy in capitalism "refers us to the absent cause, the relations of production." But this reference is itself ambiguous for when the phenomena manifest "the effectiveness of the relations of production" they do so "in a specific distortion".⁴³

Althusser's project renders inconceivable his distinction between the true and false appearance of the economy. In pre-capitalist societies, the appearance of the economy is "false" or disguised because it does not exist as the dominant instance, and in capitalism the fetishism of commodities implies that the economy can only ever appear in a distorted form. If, however, Althusser fails to account for the self-reproduction of the economy, - a seemingly mechanistic thesis - the attempt to demonstrate the determination in-the-last-instance thesis cannot proceed. The whole problem is, in fact, caused by a deeper theoretical weakness. Althusser attempts to find a privileged causal role for the economy conceived as material production per se. It is production as a separate sphere which supposedly determines the articulation of the moments in the totality. If, however, production is always determined by its relationship to the social totality, then it is

absurd to assume it possesses some sort of privileged causal role. To do so would be to fall into a real opposition or mechanistic theory of the relationships between the moments of the whole. If, therefore, Althusser continues to attribute an ultimate causal role to production, his failure is double: the superstructures cannot be relatively autonomous since production mechanically determines the specific effectiveness of the superstructural levels; and, since superstructural levels cannot effect the sphere of production, there can be no non-mechanistic explanation of the reproduction of the economy; it stands as a supra-social sphere. Determination-in-the-last-instance collapses into a simple form of economic determinism. If, on the other hand, Althusser wishes to defend the relative autonomy of the superstructures, he can only do so by denying the determination in-the-last-instance of the base; in the absence of such a denial, the specific effectiveness of the superstructures is no more than an epiphenomenal expression of an unmediated productive base. In this context the defence of relative autonomy would ascribe to the non-productive moments an unbridled autonomy unfettered by the economy and would be akin to the historical pluralism and empiricism against which Althusser polemicised.

Althusser attempts to forge a theoretical link between relative autonomy and "determination in-the-last-instance" with his concept of structural causality. He ostensibly rejects transitive causality, which is mechanistic, and also expressive causality, which is teleological, and then claims to have discovered structural causality which somehow brings together determination-in-the-last-instance and relative autonomy.⁴⁴ The concept of structural causality is used to indicate either the presence or absence of the ultimate cause - which will be economic.

of the development of the complex whole. Designating the presence or absence of the cause, however, does not provide a foundation for reconciling "determination-in-the-last-instance" with relative autonomy. On the contrary, the concept not only does nothing to resolve this tension, but also fails to provide a foundation for any sort of empirical inquiry. Glucksmann observes, therefore, that "just because it can say everything it inaugurates no actual type of analysis; it is possible to appeal to "correspondence" or "non-correspondence", cause or absence of cause." ⁴⁵ Here Glucksmann encapsulates the fundamental theoretical weakness of Althusser's Marxism. His conceptions of overdetermination, structural causality and the complex totality do not serve as tools for any sort of scientific analysis. Their fundamental purpose is to demonstrate how in every totality the economy is ultimately determinant despite appearances to the contrary. This is a thesis that can never be established empirically; it has nothing whatsoever to do with the world. It is impossible first of all to define production in isolation from the social totality without arriving at an empty ahistorical abstraction. And then, even if one took the thesis at its face-value, historical evidence shows that other factors besides the sphere of production determine social reproduction. Althusser's thesis is entirely metaphysical and without scientific foundation.

Althusser's concept of overdetermination in the complex totality is not a dialectical account of contradiction. On the contrary, it is still founded on a relationship of real opposition between the economy and the other moments of the whole; one in which the economy as an essentially autonomous sphere determines the rank and influence of the other moments. However, it is evident that, as in Colletti's treatment of causality, this mech-

anistic conception of the causal relation rests uneasily alongside an implicit indeterminism. Whereas with Colletti this indeterminism took the form of a voluntarism of the human subject, in Althusser's Marxism, it is expressed in the polarity between a mechanical determinism of the economy and an indeterminism of the super-structures. Either the economy is wholly determinant and there is no relative autonomy, or relative autonomy supersedes the determination of the economy. In the latter case, the super-structures would be without any causal influence at all since it is ultimately the economy and only the economy which assigns the other levels their relative autonomy and causal roles. Regardless of how this theoretical dilemma is resolved, Althusser's Marxism would fail to provide an adequate theoretical foundation for a science of history.

If Althusser's work is assessed as a whole, then it seems that he, like Colletti, fails to perceive the way in which Marx transformed the estranged insights of Hegel's philosophy into an interpretation of history. Althusser offers two conceptions of dialectical contradiction which are, in fact, contradictory. Accounting for the materialist dialectic, he develops an essentially Hegelian conception of the movement of matter in which a contradiction is expressed in the essence of every object. In unresolved tension with this, is an explication of historical materialism, like Colletti's, predominantly founded on a real opposition or mechanistic interpretation of "contradiction". Such mechanical reductionism can be discovered in Althusser's notions of overdetermination, the complex totality and structural causality. One encounters yet again the gap between Hegelian dialectics and a mechanical determinism (or an indeterminism). Althusser's failure to understand how Marx transformed Hegel's philosophy, is of paramount importance,

since it is the major contention of this thesis that it is precisely this transformation which makes possible the development of an historical science.

4.3 VARIATIONS ON THE "TWO-MARX" THESES

In the two preceding sections, I have put forward the contention that the versions of Marxism offered by Colletti and Althusser are founded on an implicit contradiction between an Hegelian notion of dialectics and an essentially mechanistic idea of science. Now I intend to investigate the "two Marx" theses developed by these theorists on the basis of their respective explications of Marxism and contradiction.

Colletti's distinction between Marx the philosopher and Marx the scientist presupposes a preliminary account of scientific practice. My contention throughout this thesis has been that the Kantian philosophy, to which Colletti can be shown to adhere, actually fails to include an adequate explication of scientific inquiry. The problem with the Kantian view of science is that the categories of theory are not only responsible for explaining the nature of causal processes but must also and simultaneously be responsible for constituting reality itself! From this standpoint, the theories constitutive of science remain responsible only to themselves and their particular rules of concept construction. To develop the sort of realist account of science I favour, where the relation between theory and the world is determined by the method of generating and superseding anomalies, would lie outside the locus of such an approach. Hence, as Ruben observes of Colletti's Kantianism,

"If our recognition of reality is wholly determined by our a priori concepts (and herein is supposed to lie Marx's affinity with Kant), then we can give no description of, nor justification for, our beliefs about the other side of the supposed duality, the determination of thought by being." ⁴⁶

This sort of position in philosophy culminates in either a Kantian transcendentalism or a conventionalist relativism, depending on whether the categories are attributed a socio-conventional or transcendental status. Regardless of which position Colletti espouses here, I have shown that neither the transcendental or conventionalist variant of Kantian philosophy succeeds in rendering scientific inquiry comprehensible. An evident failure in this task will, as a matter of course, undermine any attempt by Colletti to distinguish between a scientific and unscientific Marx.

Althusser, like Colletti, attempts to distinguish between a scientific Marx viz the mature Marx and the young Marx who is yet to achieve the epistemological break from Hegelian historicism and Feuerbachian humanism. This same dichotomy between an ideological problematic based on historicism and/or humanism and a later, mature scientific Marxism is then deployed by Althusser in his exposition and defence of the scientificity of historical materialism and his exposure of "unscientific" Marxism which still works, self-consciously or unwittingly, in an ideological problematic, and does so because it fails to appreciate the significance of the epistemological break. However, the interpretive problems associated with establishing the moment at which the mature Marx emerged notwithstanding, there is the familiar and prior problem of establishing adequate criteria of scientificity. Not that I suggest, that a criterion of the scientific can be established out-

side of and prior to the practice of the empirical sciences; but from Althusser's epistemological standpoint the only criteria to emerge are no more well-founded than those to be found in conventionalist or positivist accounts. Without such indispensable criteria, Althusser would be unable to sustain his distinction between scientific and ideological practices and would not justify his conception of the epistemological break. From my analysis, one can see that Althusser's failure to account for the mechanism of the knowledge-effect by anything beyond the postulation of a transcendental unity of the structure of productions in the totality, lays at the root of his failure to account for the objectivity of scientific inquiry. Above all, he fails to develop an account of how scientific theory is subject to any limits in its theorisation by real causal processes: the material, real world is thrown away with the bathwater of empiricism. As with Colletti, theory is dominantly responsible for determining the nature of reality as well as the for the construction of theories about this constituted reality. The consequence of this essentially Kantian approach to the problem of scientific knowledge is that nowhere do adequately demarcating criteria occur sufficient to discriminate between scientific theory and philosophy or ideology.⁴⁷ All of these practices are judged cognitively equal insofar as the theories they construct are governed by rules entirely determined by these theories themselves rather than, for instance, by their capacity to generate and supersede anomalies. For this reason, Althusser, like Colletti, is unable to sustain any sort of meaningful distinction between a scientific and an unscientific Marx.

My critique of Colletti and Althusser by no means implies that an inquiry into the scientificity of Marxism and its formation is in any way invalid or inappropriate. On the contrary, one should

be alive to the fact that no new science comes into the world fully developed and that all sciences may contain elements which are ideological. Though one can say, with certainty, that there is a significant difference between a theory of the development of historical materialism which explicates Marx's success or otherwise in founding an historical science, and a theory which, because of the polarities of its own problematic, imposes an unsatisfactory dualism on Marx's theory in the guise of either a dubious distinction between "scientific" and "unscientific" Marxism or an equally dubious description of the formation of "scientific" Marxism. The "two Marx" theses developed by Althusser and Colletti impose a polarity on Marx and Marxism consisting of a dichotomy between an Hegelian idea of contradiction, on the one side, and contrariety and "real" opposition on the other. This dualism superimposed by their own treatment of Marxism, disguises and stands in the way of the discovery of any genuine duality in Marx's theoretical work. Further, if their distinction between the scientific and non-scientific rests on erroneous conceptions of epistemology, then the unavoidable and natural conclusion will be that they not only mistake the point at which Marx's studies can be said to have become rigorously scientific, but that their whole account of Marx's development will be shot through with misconceptions. Their projected polarity between an Hegelian Marx, who is a "philosopher" or "historicist", and Marx the "scientist" is one which arises from a failure to understand how Marx succeeded in transforming and recasting Hegelian insights until they became compatible with historical science. I have shown how this failure is determined, in both cases, by a commitment to distinctly non-realist positions in epistemology. I feel, therefore, that I am justified in concluding that whereas a realist position in epistemology may help to explain science and, in addition, the

scientific nature of historical materialism, the epistemological positions adopted by Colletti and Althusser fail to develop adequate theoretical accounts in either area.

Chapter 5. HISTORICAL MATERIALISM AS SCIENCE

The next stage of my argument involves a demonstration of how a dialectico-causal interpretation of historical materialism successfully realises Marx's project of understanding history in realist terms. I argue that general criteria for any scientific theory are met by historical materialism; and then I go on to suggest, what is a far stronger thesis, that only the sort of approach advocated here fully measures up to the additional and special conditions inherent in historical science. Later, I show how such a theory guides the practice of historiography; and I do this with special reference to the origins, development and demise of socio-economic formations.

The first problem is metatheoretical: historical materialism is shown to possess the form that any well-founded theory of history must have. The second problem is of a more general and practical nature; it answers the question - what are the consequences of a theory of this form for actual historical analysis? Whereas the theory might have the correct formal properties, that is to say, be the right kind of theory, it may still not be the correct theory. Only the perspective achieved through an analysis of history in the raw can be of help when answering this question: a theory of history which could not lay bare the character of its subject matter would be useless. This, of course, is a view which is quite the reverse of that taken by those who imagine the actual flesh and blood of history a contamination of historical theory.¹ Such a position, I believe, is sterile; and all the more so when it is offered in the name of Marxist historical materialism.

I close the chapter by arguing that the conditions which the science of historical materialism meets are not met by various schools of social science : viz positivism, humanism and structural functionalism.

5.1 HISTORICAL MATERIALISM AND DIALECTICAL CAUSALITY

I have argued, in the previous chapter, for a concept of dialectical opposition which cannot be reduced to Colletti's concept of "real opposition". My conception of the dialectic involved the idea of interdependence and opposition - an idea which, although emphasised by Hegel, does not need to be formulated in Hegelian terms. Indeed, it seems to be more convincing to suppose that dialectical relationships can be understood in a manner which does not violate the logical principle of non-contradiction. Notwithstanding this conclusion, the position arrived at in my critique of Althusser and Colletti was only a preliminary step on the way towards a more comprehensive account of the Marxist notion of causality.

The concept I believe to be implicit and central in Marx's theory involves more than conceptual interdependence and opposition between a pair of people or things or forces: dialectical relations must not be limited to binary relations. Such a concept of dialectic must be capable of expressing relations of interdependence and opposition within a totality - a totality which is a unity of many "moments". So in this respect the Herr/Knecht example, which I used to illustrate the central notion behind dialectical relationships, is *theoretically* incomplete from the standpoint of Marxist historical science. Historical science must - on my interpretation of Marxism - involve holistic explana-

tion, explanation in terms of the relationships which subsist between the "parts" and the "whole" in a totality; and it must also do justice to the dialectical interconnections between these parts which constitute that totality. Not only must the explanations be holistic in form, they must also be dialectical - in short, explanations must be dialectically holistic. A theory of history must satisfy both of these adequacy conditions.

At this point I must bring in an additional qualification. The holism required by a dialectico-causal science has nothing to do with attempts by "structuralists" or "functionalists" to understand causal relationships. Indeed, their conception of causal relationships between parts and whole seems to violate an important principle of dialectical holism, since they ultimately ascribe predominant causal significance to either the whole vis à vis the parts or the parts vis à vis the whole. Even though holistic requirements can be satisfied if social causality is explicated on the basis of relations of "contrariety", without relationships of dialectical opposition, holism can be reconciled with some form of mechanistic causality. This is an inadequacy I have already diagnosed in Althusser's notion of the Marxist totality - a notion which eventually succumbs to a mechanistic relationship between the economy and the whole or to an indeterminism where it is impossible to establish any causal connections at all. The same theoretical weakness can be ascribed to Godelier's Marxism, even though Godelier ostensibly claims that he can reconcile a dialectical approach to the understanding of capitalism with a structuralist method.² It will prove instructive to illustrate this theoretical shortcoming since, at the same time, the logical impossibility of combining a "structuralist" and a "dialectical" account of social change can be demonstrated.

To elucidate Marx's notion of contradiction on the basis of the structuralist assumption of a social totality atomised into social structures governed by self-subsistent laws, inevitably culminates in a "real opposition" account of social change. Godelier, however, in his account of the contradictory development of capitalism, tries to amalgamate real and dialectical opposition. As far as he is concerned, the capitalist mode of production consists of two structures, the forces of production and the relations of production. It is possessed by two contradictions; first, a contradiction internal to the relations of production structure i.e., dialectical opposition between capitalist and wage-labourer; secondly, the contradiction between the two structures constituting the mode of production.³ The contradiction between these two structures can be interpreted as one of either real or dialectical opposition. For Godelier, however, there is no doubt that only a real opposition interpretation is consistent with his structuralism, since he maintains that a necessary condition for the overcoming of the contradiction in the relations of production depends on the auto-development of the forces of production structure. He maintains:

"The relation between the contradictions thus shows that the first contradiction does not contain within itself the set of conditions for its solution. The material conditions for this solution can only exist outside it as the productive forces are a reality completely distinct from relations of production and irreducible to them, a reality which has its own internal contradictions of development and its own temporality."⁴

It is true that the initial impetus for the development of the forces is to be found in the (mechanical) causal influence of

the relations structure, but once this initial stimulus has been delivered, the forces structure develops according to its own laws of evolution and even possesses its "own temporality".⁵ The "superstructural" conditions for the transition to socialism are also generated by laws internal to their structures. Godelier argues,

"The other conditions of the solution of the contradiction in the relations of production are found at the level of the political, cultural superstructures, and these structures are equally irreducible to the relations of production and have their own modalities of development."⁶

Godelier's whole consists of parts which are essentially autonomous, where all the relations between the discrete structures must be understood on the basis of the relationships of contrariety and not dialectical opposition. This is made crystal clear when Godelier blandly asserts:

" . . . we must start from the fact that each social structure has for Marx its own content and mode of functioning and evolution."⁷

Despite the verbal concessions to Marx's dialectic, Godelier develops a mechanistic account of the relationships between parts and whole in the totality. At this stage of my argument, it will be worthwhile to re-emphasise the point made earlier about dialectico-causality: that analysis must go beyond explicating relationships of oppositions between dialectical partners and extend the range of its analysis to encompass relationships between all the parts and the whole in the totality. In the ab-

sence of such analysis relationships of dialectical opposition may occur within structures hermetically sealed, while the whole itself, the product of these structures, when combined, may be undialectically united and made subordinate to an ahistorical mechanism of the type suggested by Godelier's Marxism - a mechanicism abstracting the elements of the whole from their causal interdependence in the totality and hence from their historical context. This is reflected in structuralist method by the logical priority of "synchronic" over "diachronic" method ie., structural as opposed to historical analysis. Hence, Godelier maintains that "the study of the internal functioning of a structure must precede and illuminate the study of its genesis and evolution",⁸ as if it were possible to arrive at a satisfactory understanding of the "structure" of a socio-economic formation independently of direct historical investigation. This is an assumption I challenge later, both as an interpretation of the methodology of social science and also of historical materialism. In the first place it is not possible to claim, as Godelier does, that his structuralism has captured the essence of Marx's dialectic. Now it may well be that contradictions exist between incompatible "systems" and that social scientists should attempt to elucidate their nature. But, from a dialectical point of view, such a situation exists only in the opposition between rival socio-productive totalities as in the case of, for example, capitalism and feudalism and also, perhaps, capitalism and socialism.⁹ The purpose of Godelier's theory is not, however, to clarify the articulation and/or opposition between different socio-economic formations, but rather, is to reduce the Marxist notion of a dialectical totality to a structuralist whole - a whole characterised by mechanical relationships between its constitutive and autonomous parts. Clearly, Godelier cannot have it both ways: either rela-

tionships of dialectical causality subsist between parts and whole - in which case he subscribes to a dialectical analysis excluding structuralism; or else only mechanical relationships occur - in which case he subscribes to a pure structuralist analysis excluding dialectic. The two forms of analysis are not merely different, they are incompatible and mutually exclusive - a commitment to one implies a rejection of the other. Rather than attempting to clarify the basis for a choice between these two rival methodological programmes, Godelier attempts to structuralise the dialectic, and of course this leads to wholesale fudging of the issues. I hope that the analysis of this confusion will provide a solid foundation for a decision between structuralism and a dialectico-causal methodology and their rival approaches, in social science, to the problem of concept formation.

There is a most important implication of this last discussion: a dialectico-causal view of the totality precludes discussion of the "structure" in isolation from the historical processes which one seeks to describe and explain. One can only talk of structure in abstraction from process if one assumes it is possible to attain a description of a socio-productive whole which does not imply a reference to the historical process which determines its development. The very idea that such a description can be achieved reveals, it would seem, an implicit acceptance of the independence of the parts from the whole and vice versa; in addition it would seem possible to separate a discussion of the structure of a socio-economic formation from a discussion of its historical location and geneology. The close connections between "contrariety", structuralism and ahistoricity are, therefore, apparent. To avoid these connections, a dialectico-causal understanding of the totality must be historical; it must not separate the tota-

sence of such analysis relationships of dialectical opposition may occur within structures hermetically sealed, while the whole itself, the product of these structures, when combined, may be undialectically united and made subordinate to an ahistorical mechanism of the type suggested by Godelier's Marxism - a mechanism abstracting the elements of the whole from their causal interdependence in the totality and hence from their historical context. This is reflected in structuralist method by the logical priority of "synchronic" over "diachronic" method ie., structural as opposed to historical analysis. Hence, Godelier maintains that "the study of the internal functioning of a structure must precede and illuminate the study of its genesis and evolution", ⁸ as if it were possible to arrive at a satisfactory understanding of the "structure" of a socio-economic formation independently of direct historical investigation. This is an assumption I challenge later, both as an interpretation of the methodology of social science and also of historical materialism. In the first place it is not possible to claim, as Godelier does, that his structuralism has captured the essence of Marx's dialectic. Now it may well be that contradictions exist between incompatible "systems" and that social scientists should attempt to elucidate their nature. But, from a dialectical point of view, such a situation exists only in the opposition between rival socio-productive totalities as in the case of, for example, capitalism and feudalism and also, perhaps, capitalism and socialism. ⁹ The purpose of Godelier's theory is not, however, to clarify the articulation and/or opposition between different socio-economic formations, but rather, is to reduce the Marxist notion of a dialectical totality to a structuralist whole - a whole characterised by mechanical relationships between its constitutive and autonomous parts. Clearly, Godelier cannot have it both ways: either rela-

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lity from its process of development. Only such an approach would be likely to meet the requirements set down for dialectical holism and, by implication, for a well-founded social science.

The account of the totality, as conceived by Marx, should not only be sensitive to the conceptual interdependence of parts and whole, but should also reveal how social scientists are able to conceive the structural relationships characteristic of a totality and its developmental dynamics as two aspects of a single causal process. Such a conception must be sufficiently powerful to grasp "every historically developed social form in a fluid movement" taking into account "its transient nature no less than its momentary existence."¹⁰ In this sense a dialectico-causal view can achieve the realist aim of elucidating history in terms of its own development rather than by reference to supra-historical principles.

I may have given the impression so far in this exposition, that a dialectico-causal interpretation of Marxism seeks to elucidate relations of causality in a social totality. As it stands, such a formulation is dangerously misleading and seriously incomplete. Marx is not concerned with any totality generated by relationships between people, but with a particular type of totality - a socio-economic formation. It is illegitimate to describe productive relations in isolation from social relations or the converse, when understanding the process of social change. From a dialectico-causal point of view, it would be wrong to suggest that production or society can be understood as separable spheres each determined by self-subsistent and internally coherent laws.¹¹ The proper understanding of history has to involve a method which prohibits the dualism of economy and society; and

I have already gone into the methodological reasons why this is so. To cite economy and society as separate objects of social scientific study commits one to a dualistic understanding of history: history is, on this view, seen to consist of a disjunction of causal processes - and social scientists are faced by a seriously incomplete account of history. But the pursuit of specifically "social" and specifically "economic" laws is more deeply suspect. By dividing the socio-economic formation into separate spheres, one implicitly commits oneself to a mechanistically reductive understanding of history which will, finally, culminate in an ahistoric method. It can be added that Marx's conception of a totality as a socio-productive whole has real claims to meet the requirements of understanding social change historically - a claim which structuralists, Colletti and Althusser and all those who adhere to similar ideas of causation, seem unable to justify.

The conception of the socio-productive totality as dialectically holistic is one which Marx evidently held.¹² That the forces and relations of production are conceptually interdependent is central to Marx's project: the social relations of production, which express the relationship between producers (and appropriators) and nature in the productive process (and the process of surplus extraction), involve implicit reference to the forces of production. In the absence of such a reference the whole process of the social organisation of production and surplus appropriation organised by the social relations of production would not only be inexplicable; it would be inconceivable. The productive forces, in turn, involve implicit reference to the relations of production since the concept of the forces of production implies the existence of a social organisation of the labour process.

The organisation of the labour process, however, is itself determined by the social relations of production.

I have stressed throughout my analysis so far that a dialectico-causal interpretation of Marx's totality involves an understanding of the relationship between the parts and the whole as one of causal interdependence. Now, whatever these relationships of interdependence are methodologically and substantively established to be, they will have to be conceived as properties of a holistically interconnected socio-economic whole. The Marxist totality is fundamentally characterised by the dialectical unity of the forces and relations of production. It has to follow that an interdependent moment of this whole will only be significant from the viewpoint of Marxist science insofar as it affects the development and reproduction of the unified forces and relations. This is a major premise of Marx's materialist conception of history. It should be noted that in this regard Marx's stress on the key role of the forces and relations of production as constituting an object of social science (defined conceptually) as well as real historic socio-economic formations, implies already a specification of the central mechanism of social development; and other "factors" viz ideology, the form of the state etc., are related to this in a dialectico-causal manner. In other words, an explanation of the relationship between parts and whole and whole and parts should be such that a reference to a totality "X" involves implicit reference to its constitutive parts, just as reference to its parts involve reference to the totality "X".

It may appear at first sight that dialectico-causal explanation nullifies the claim that any particular causal claim can be

made at all; and that this might be a ground for denying that it meets a fundamental requirement of all scientific theories. As all moments of the totality are to be regarded as interdependent, it is impermissible to treat one element as if it possessed independent causal properties. Also, if the phenomena to be explained and the causal mechanism exist in a relation of causal interdependence in a dialectical totality, then, on one view of causality, a cause and its effect could not be isolated, each being mutually determining. This claim runs counter to the empiricist claim that a cause and its effect ought to be independently specifiable. In this context, however, an empiricist approach to historical analysis would culminate in a mechanismism of the type discussed above. I have argued already that there are no logical objections to the supposition that dialectical oppositions occur. And, by parity of reasoning, there seem to be no logical reasons why such relationships should not also characterise a totality. If one rejects the implicit mechanismism of the empiricist account of causality, the question as to whether a relational account of causality of this type is possible or not, does not run into any apriori objections. Indeed, I attempt to show below just how such an analysis is possible. However, to return to the empiricists' objections to dialectical causality. There would, I suppose, be some grounds for accepting the empiricists' criticisms if it could be shown that they succeed in elucidating the nature of causal explanations in natural science. But far from succeeding in this task, it can be shown how any analysis of causation proceeding on the basis of positivist or empiricist criteria of cognitive significance fails to account for causal explanation at all. This failure is underlined by the fact that the supposed independence of cause and effect does not bring understanding of causality in the natural sciences any

closer. Benton notes, for instance,

"On the classical empiricist ("Humean") conception of causality, a cause must be identifiable independently of its effect (this is supposed to follow from the contingency of causal connection). But when unobservable entities and their behaviour constitute the causal mechanism which generates observable, macro-level happenings and relationships, the unobservable entities themselves are not identifiable or even *specifiable* independently of the phenomena they are supposed to cause." ¹³

Without wishing to suggest I have solved all the problems which a dialectical account of causality might generate, I want to emphasise that if the classical empiricist account of causality cannot cope with natural scientific explanation, then there are grounds sufficient for discarding it as a possible alternative to a dialectico-causal account. Hence, if the objections are only given credence by an account which, for other reasons, one wishes to reject, then here, at least, there are no a priori reasons why dialectico-causal explanations cannot be adequate. Even if the pattern of explanation in social science differs significantly from that adopted in natural science (where objections against mechanism do not apply) this will be no reason for refusing to adopt it.

The Marxist view of causality does not suppose equal relations of causal determination between interdependent moments of a whole and between whole and parts; instead, it stresses the central importance of the linkage between the forces and relations of production; they are the key element in explanations of the development and reproduction of socio-economic formations. It

is no secret that Marx regarded dialectical oppositions between the forces and relations of production as the prime instigators of social change.¹⁴ However, there is a prima facie contradiction between asserting that relationships of dialectical causality characterise the whole and then claiming what looks like a privileged causal role for the forces and relations of production. In this regard, a dialectico-causal conception of history would, it seems, encounter objections not just from the empiricists but also from Marx himself. Certainly, the 1859 introduction to the "A Contribution to the Critique of Political Economy" might appear to contradict a dialectico-causal view by suggesting just such an overmastering causal role for "production" in the totality.¹⁵ So it is essential to discover an interpretation of the "primacy of production" which does not also reinstate the rejected mechanical conception of causality and remains in harmony with the dialectico-causal account. I intend to demonstrate both how "primacy of production" can be reconciled with dialectical causality and why the moments in the totality have always to be analysed as interdependent but causal factors in the development of social production.

The solution to this problem is not as intractable as might first appear. If material production is a dialectical moment of a totality then it can only exercise a causal influence as an interdependent factor of a single causal process and not as an autonomous event. It is nevertheless the case that material production always remains a precondition of human history. There is a reflection of this necessity in Marx's theory when he insists on the primacy of production for concept construction in social science. It would seem logical, therefore, to interpret Marx's insistence on the primacy of production in a conceptual

sense. According to this view, production is primary not because of its an autonomous causal character - but because its inclusion represents the first step towards an adequate conceptualisation of social development. It remains, however, a first step. A dialectico-causal view of history, does not ascribe "production" a privileged causal role in explaining social change; instead it recognises causal connections to be dialectically determined in the socio-productive whole. Here I wish to emphasise a point I have already made: for a dialectico-causal science the social totality is always a socio-productive totality. This represents a second sense one can give to the notion of "primacy of production." For my interpretation of Marxism, relations of dialectical causality are only conceivable in the context of a socio-productive whole which neither separates the analysis of productive relations from social relations nor vice versa. It is possible to interpret the primacy of production precisely in this sense: production is primary insofar as the object of a dialectico-causal science of history must be the reproduction and development of socio-productive totalities. In this form, however, the primacy of production is not only consistent with dialectical-causality, but, actually implies its existence.

I have mentioned already that the crucial momentum behind social development is, in Marxist science, thought to be generated by the relationship between the forces and relations of production. The key moment in this process is the extended reproduction of a socio-economic formation, which involves an extended and perhaps modified reproduction of the labour process and, of course, also of the forces and relations of production. ¹⁵ This process has to be interpreted in the dialectico-causal manner already described. In the first place production and hence the

reproduction of the productive process on an extended scale can only take place in the context of the unity formed by the relations and forces of production. The concept which expresses this unity is that of a "mode of production". Extended reproduction is only conceivable in this context. Remembering the conceptual interdependence of this whole, it is nevertheless possible to conceive of the different although related aspects of this process. The relations and forces totality will determine the reproduction of the labour process. This is the first point. Insofar as the productive process goes beyond reproduction in an identical form (simple reproduction) it will, in turn, condition the reproduction of the productive relations and forces totality. This result will then become a condition for further development. Hence, it is possible to present this movement thus: the totality formed by the forces and relations of production determines the activity, that is to say, the activity of material production; and in so doing, the activity determines the reproduction of the totality. This "extended reproduction" is conceived, therefore, as a unitary dialectico-causal process. This, though, does not deter us from scrutinising the totality's various moments in order to understand the movement of the whole. The same should apply, so it seems, to any analysis of the causal role of moments in the totality. Having arrived at this point in my analysis, it is necessary to digress and discuss the Marxist concept of contradiction before returning to my substantial analysis of dialectical holism.

I have emphasised throughout my exposition so far that a dialectico-causal interpretation of Marxism, must conceive of the relationship between the forces and relations of production as one of interdependence in a dialectical totality. In cases

where there is a relationship of antagonism or opposition between the forces and relations this totality would represent a contradictory unity, and in the absence of such an antagonistic relationship the totality would form a non-contradictory unity. The relations internal to the totality are in both instances dialectical in the sense of being interdependent, but only the former is, in addition, dialectical in the sense of expressing a dialectical contradiction.

According to this view of the dialectical relationship between the forces and relations of production, historical materialism should be capable of understanding at least three distinct types of social development: first the development of production in a non-contradictory totality, secondly the development of production within a contradictory totality, thirdly the development of production through a transition from one totality to another. All three examples assume an extended reproduction of the productive process, but only the latter two involve an understanding of development through contradiction. One can symbolise these accounts of development as follows:-

R = the social relations of production

F = the social forces of production

X = 1. the mode of production formed by R & -F

2. the productive process @ determined by 'R & -F'

X

and (b) determining the reproduction of 'R & -F'

X

In the case of simple reproduction the totality R & F would be reproduced without a change in R & F. If extended reproduction

took place in a non-contradictory totality, then R & F would be produced on an extended scale, but without generating a contradiction between the forces and relations of production. If, on the other hand, contradictions were generated by extended reproduction, or if production were determined by a dialectical opposition between R & F, then two developments would be possible. First the R & F totality may be reproduced in a modified form, but in a totality^x which preserves its integrity as a distinct mode of production ie., the relations and forces, despite modification, would still be identifiable as constitutive elements of this particular mode of production. Secondly, the extended reproduction of the R and F totality may lead to a transition to a new mode of production.

It should be noted from my exposition above that a dialectico-causal conception of history does not assume social development to be universally characterised by development through contradiction. Rather, this type of development would be prevalent only in cases of modified reproduction of a totality and in cases of transition from one mode of production to another. Although I will argue later in this section that Marx believed these two types of development to be the most significant ones from the view point of historical science, it should not be assumed that historical materialism either precludes the possibility of an empirical analysis of non-contradictory socio-economic formations (if they exist), or that it is by definition a methodology based exclusively on the idea of dialectical contradiction. On the contrary, according to my interpretation, Marx's idea of contradiction as dialectical opposition is not an a priori formulation true of all socio-economic formations by definition. Rather, Marx's idea of contradiction should be regarded as a contingent

one which applies only to those socio-productive totalities that can be shown by empirical research to embody a dialectical opposition between the forces and relations of production.

Marx's idea of development through contradiction is not an a priori notion. Rather, it is only applied to those socio-productive totalities which provide empirical evidence of relationships of contradiction between the forces and relations of production. Even where the concept of development through contradiction is applicable, the actual form of the contradictions between the forces and relations of production remains to be established, but only by historical investigation. This will be demonstrated by example later in the chapter. Marx did not require the concept of contradiction to be universally applicable prior to historical investigation; dialectically causal processes do not require the presence of contradiction before they are admissible. On this account it becomes the task of the Marxist historian to demonstrate the legitimate historical scope of the Marxist notion of contradiction; theory cannot do so in advance of research. It remains the historian's obligation to offer a dialectico-causal understanding of socio-economic forms in either case, both where contradictions are in evidence and where they are not. While explaining how the a posteriori conditions of application of the concept of contradiction works in practice, one can move in the direction of a solution to two persistent problems of Marxist historiography: the problem of the Asiatic mode of production and problem of primitive communism.

I will begin with a brief outline of the so called anomalies which beset Marxist theory in the Asiatic mode of production. ¹⁶
The principal "problem" for a Marxist approach here, is that it

appears from empirical research that these socio-productive systems fail to generate contradictory development between the forces and relations of production. It is inferred, therefore, that either Marxism is invalidated as a general theory of social change or at least that its historical range meets its limit in the understanding of what appear to be non-contradictory socio-economic formations. These conclusions would only follow, however, if it were assumed either that contradiction characterises all cases of dialectical development or alternatively that historical materialism is only capable of representing instances of social development which are contradictory. Dialectico-causal interpretations make no assumption as to the social universality of development through contradiction. On the contrary, I have shown how they are capable of understanding a dialectico-causal development of social production in a non-contradictory, but nevertheless dialectical totality based on an interdependence of the forces and relations of production. Societies characterised by the Asiatic mode of production would not cease to embody relationships of dialectical interdependence even if they failed to develop relationships of dialectical antagonism and opposition. And, if one wishes to avoid the ahistoricity of the "real opposition" interpretation of these relationships, then it would seem that one has still to elucidate the development of social production in these historic formations in a dialectico-causal manner.

There could only be a sustained objection to this procedure if it were concluded that development through contradiction is an absolute for Marxism. Such an assumption, however, contradicts Marx's own analysis of, for example, communism which he guarantees to be free of contradictions between the forces and relations of production on account of its rational and collective means of

planning the productive process.¹⁷ If one rejected the absolute demand for contradiction, and adopted a contingent interpretation, which seems to be more consistent with Marx's own view, then the existence of non-contradictory formations would be quite consistent with the claims of a dialectico-causal science. Non-contradictory socio-economic formations would remain a legitimate object for a Marxist history. Evidently, a dialectico-causal interpretation of Marxism, would be compatible with^{the} existence of non-contradictory socio-economic formations. So the existence of this type of socio-productive totality would not bring the methodology into question.

A similar problem for Marxism, which our interpretation of historical materialism helps elucidate, is that of the possible existence and dissolution of a primitive communism. Marx seems to postulate that all forms of social production have emerged from an historically prior mode of production which he termed primitive communism.¹⁸ Such a socio-productive form would be characterised by communal relations of production since the low development of the productive forces would not allow for any distinction between producers and appropriators of a surplus. Rather, all members of the commune would be involved in a common production and appropriation of subsistence products. The historical evidence for the existence of such a state of society is scant, but it seems to be a plausible way of avoiding an Hegelian account of the beginnings of social production where production only comes into existence as part of a struggle for recognition brought about by the dialectical development of absolute mind.

If primitive communism has existed then it must have been

planning the productive process. ¹⁷ If one rejected the absolute demand for contradiction, and adopted a contingent interpretation, which seems to be more consistent with Marx's own view, then the existence of non-contradictory formations would be quite consistent with the claims of a dialectico-causal science. Non-contradictory socio-economic formations would remain a legitimate object for a Marxist history. Evidently, a dialectico-causal interpretation of Marxism, would be compatible with ^{the} existence of non-contradictory socio-economic formations. So the existence of this type of socio-productive totality would not bring the methodology into question.

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a non-contradictory mode of production because of its failure to develop a surplus and distinctions between producers and appropriators. A contradiction between the forces and relations of production only emerges if the productive forces develop beyond the point where they remain compatible with the prevailing relations of production. Unless one assumes, therefore, the historical reality of an extended and hence modified reproduction of primitive communism, there can be no explanation of why such a society should disappear. In this context, extended reproduction solves a problem for Marxism by suggesting a mechanism whereby non-contradictory socio-productive wholes can in fact generate contradictions in the course of their development. This interpretation of historical materialism, therefore, is capable of solving the "problem" of primitive communism. If historical evidence confirms such a society existed, then the interpretation of its extended reproduction would be consistent with the fact of its dissolution. If, on the other hand, early forms of society were already contradictory, then even though one would reject the idea of a primitive communism on empirical grounds, one would nevertheless need access to a dialectico-causal methodology to explain the development and demise of those early modes of production. In both cases, it would not be the interpretation of history which is brought into question. Rather, it would be a matter of evaluating the empirical evidence for or against the existence of a *totality* based on Marx's idea of a primitive communism. So, regardless of whether a dialectico-causal process is contradictory or not it still lies open to explanations of the kind offered here. Having removed this potential problem I will attempt to link together my previous observations about the relationship between the parts and the whole and explicate this in more detail.

I have argued already that dialectico-causal relationships exist only in the context of a unitary causal process, such that no moment of a socio-productive totality can be abstracted from the whole in order to explain its own development or the development of the totality. Now I am in a position to draw attention to the fact that this interpretation of Marxism avoids the simplistic base/superstructure model which ascribes an independent or privileged causal role to e.g. the forces of production or an independent productive base. On the contrary, a dialectico-causal science must interpret the base/superstructure distinction as a merely conceptual differentiation of aspects of a single causal process viz the reproduction and development of socio-economic formations. Causal relationships, for this view of Marxism, are internal to a single dialectico-causal process: and this must be reflected in the conceptual interdependence of the concepts of Marxist theory.

I have noted that whereas Hegel's totality assumed all moments to be of equal significance insofar as they were all equally self-expressions of absolute mind: a dialectico-causal science requires no such assumption.¹⁹ On the contrary, some moments of the totality may be irrelevant for the explanation of the historical process, some of major importance and others of lesser significance. In the absence, however, of an a priori history, the specific role of moments in the reproduction and development of socio-economic formations must be established empirically case by case. In this sense empirical analysis on the basis of Marx's theory seems to follow the pattern of any scientific theory.

The moments of a totality viz ideology, law, the State,

science etc., play a causal role in social development as interdependent moments of a causal process. Factors relevant to the understanding of social development can be neither autonomous nor epiphenomenal for a dialectico-causal science, since both these conceptions relapse into a mechanistic view of causality based on relationships of contrariety between moments of the whole. It may be that some features of the totality do not affect historical development one way or another. If this were the case, it would not imply that such factors are in some sense autonomous, but rather that they are irrelevant insofar as the study of social change is concerned. The historically significant moments, are those which exercise all influence as interdependent moments of the dialectico-causal development of social production in socio-productive totalities and through transitions from one to another.

A dialectico-causal understanding of relationships within a socio-productive whole overcomes the oppositions evident in the Hegel/Feuerbach problematic analysed in chapter 3 and the same opposition between a dialectical logic and a mechanical determinism or voluntarism as reproduced in the Marxism of Colletti and Althusser. While it is evidently the case that a dialectico-causal view of history breaks fundamentally from Hegelian philosophy, it needs to be demonstrated how this view of causality differs from the mechanical causality/humanistic voluntarism dualism Marx discovered in Feuerbach's materialism and humanism. The treatment of Feuerbach, however, was not Marx's last word on the subject, since he tackled the methodological shortcomings of an individualistic conception of social development again at a higher theoretical level in the "Grundrisse". It should be noted, in this regard, that the opposition between Weberian humanism and Durkheimian naturalism - a central dualism of sociological

theory - is analogous to the mechanistic materialism and humanism Marx criticised in Feuerbach's philosophy.²⁰ In the former dualism, however, it is no longer nature and man who are opposed but society and the individual social actor. Despite this shifting of terms the logical character of the opposition is identical since a naturalistic objectification of society - the all-determining Durkheimian whole - is counterpoised against a social actor who seems to have escaped causal processes altogether. The difference to be appreciated in the case of Durkheim and Weber can then be specified according to whether the social whole or the social actor is given pivotal status as causal agent. However, just as Marx criticised Feuerbach's philosophy for its ahistoricity, it is appropriate to point out the same lines of argument apply to the analogous positions in subsequent social science.

In the "Grundrisse" Marx criticises the abstract individualism of the eighteenth century political economists who reduce the causal order of the social world to an expression of the free actions of atomistic individuals.²¹ Marx argues that the appearance of such apparently free individuals is in reality a result of a long historical development in which the means of production become separated from the labourer so that they can be appropriated as the individual private property of capitalists and commodity producers. It is only at this stage of social development that production appears to be the result of private decisions made by individual commodity owners. It is not the abstract individuals which explain this social development, but rather the development of social production which explains the historical appearance of private commodity producers and their corresponding social consciousness. It would be self-defeating,

from the point of view of historical science, to attempt to explain social development on the basis of abstract "homunculi" whose very characteristics are results of the historical development they are supposed to explain. It is for this reason that an individualist or voluntaristic model of explanation, cannot account for the development of social production. This does not mean that ipso facto it is inadequate for the explanation of individual actions. The explanation of social action may well involve a teleological dimension, but as far as historical science is concerned, the explanation of social change by abstract human characteristics is either circular, in that historical elements are smuggled into the abstract individuals, or else it attempts to explain social development on the basis of a supra-historical anthropology and therefore fails to understand the process at its own level. ²²

As far as a dialectico-causal science is concerned, the rejection of a voluntaristic theory of action does not imply the acceptance of a mechanical objectivism in which inexorable laws govern history. Social phenomena may not be explicable on the basis of a voluntaristic teleology, but they are not epiphenomenal either: a dialectico-causal history must transcend the autonomy/epiphenomena polarity by developing a conception of the moments of the whole consistent with a notion of dialectical causality. The moments of a socio-economic formation should be analysed with respect to their generation by social production; as such they are at once determined by and in turn determine the reproduction and development of the social totality in the manner described above.

This type of analysis can be illustrated in respect to Marx's

treatment of class formation and class conflict. Social classes are divided over the production and appropriation of a surplus. Their existence is dependent on the development of social production and cannot be reduced to an interpersonal relation of domination and subordination. Marx considered one of his most important discoveries to be that class conflict is associated with the development of social production.²³ Many other theorists stressed the historical role of class conflict in social change, but only Marx demonstrated how class conflict is generated by and in turn generates social development. In the first place, social classes are thrown up by the development of social production. Their very existence as classes leans not only on the existence of a surplus, but also on the social and political reality of the mode of its appropriation. The conflict between classes - regardless of its phenomenal expression - has as its fundamental historical foundation the struggle over the appropriation of a surplus. Once the domination of a class has been established, however, this relation which is generated by social production helps determine the future development of production, and the reproduction of the relation between the dominant and subordinate class. The development of social production is, therefore, partly determined by the class structure as expressed in a political form e.g. of a state and by the conflict between social classes. There is a double dialectic or double determination involved. The development of social production generates the conditions for the existence of classes expressed in concrete social relations of production and these social relations determine the development of the productive forces, via for instance a mechanism like the feudal lord's drive for rent and the capitalist's drive for profit.²⁴ This in turn provides a modified basis for class relations. The existence of specific relations of production of

which social classes are an example, is, therefore, both a premise and a result of the development of social production in a totality, just as the development of the productive forces is in turn a premise and a result of the relations of production generated in the course of social development.²⁵ The extended reproduction of social production is now revealed as a process which simultaneously reproduces and develops the class structure of a socio-economic formation. It follows, therefore, that class-formation and class-conflict should be understood as causally relevant and interdependent moments of a general dialectico-causal process.

A dialectico-causal conception of history reveals the objective basis for Marx's claim that class conflict plays a key role in historical development. The objective foundation for this claim is, of course, the fact that social classes are an integral element in the process of the development of social production. The importance of their historical role becomes manifest in times of social revolution where a class thrown up by the development of social production in one socio-economic formation, seeks to establish new conditions for the productive process which culminates in a transition from one mode of production to another. This sort of development, however, involves determination by other factors like ideology and political intervention in some sort of structured form of relationships of political power. So class conflict, however objective its foundation, is bound up with the consciousness of social classes vis-à-vis each other. Any adequate theory of the development of social production depends on a theory of class formation and class conflict, and a proper understanding of the latter requires a theory of ideology.

The relation between idea and idea expressed in ideology

presupposes the existence of social relations. Social relations form the essential precondition of the formation of language in general and also influence the form and content of specific ideologies. If the relation between ideas presupposes social relations then ipso facto it also presumes the existence of a productive relation to nature. Even if one began with the analysis of ideas, one would arrive, via a detour, back at Marx's methodological starting point. Marx gives this point of view its classical formulation when he argues,

"Each principle has had its own century in which to manifest itself. The principle of authority, for example, had the eleventh century, just as the principle of individualism had the eighteenth century. In other words it was the principle which made the history, and not the history which made the principle. When, consequently, in order to save principles as much as to save history, we ask ourselves why a particular principle was manifested in the eleventh or in the eighteenth century rather than in any other, we are necessarily forced to examine minutely what men were like in the eleventh century, what they were like in the eighteenth, what were their respective needs, their productive forces, their mode of production, the raw materials of their production - in short, what were the relations between man and man which resulted from these conditions of existence. To get to the bottom of all these questions - what is this but to draw up the real, profane history of men in every century and to present these men as both the authors and actors of their own drama? But the moment you present men as the actors and the authors of their own history, you arrive - by a detour - at the real starting point, because you have abandoned those eternal principles of which you spoke at the outset." 26

The correct methodological procedure, evidently, is to analyse social consciousness as a moment of a dialectico-causal process. Social existence "determines" social consciousness but not in any mechanistic sense; what is meant by this claim is the assertion that ideology should be analysed exclusively in the context of the socio-economic formation of which it is a part. According to this view the development of social production and classes generates an ideological consciousness which determines in turn the mutual relations of social classes. Class consciousness influences the development of class relations and political struggle. It thereby affects the future development of social production and class formation and the future development of class consciousness itself.

At this point it will be instructive to comment on Edgley's concept of contradiction. For Edgley, dialectical contradictions are a species of logical contradiction; he wishes to preserve their logical character and not restrict them to causal oppositions and interdependences.²⁷ The logical character of dialectical contradiction is preserved by Edgley, because people - and by extension institutions - hold and express contradictory beliefs. These contradictory beliefs are genuine contradictions of a logical character; they are real contradictions, even if - as must be the case unless logic is overthrown - they are false. While not denying that real logical contradictions are obviously possible, I think some of the implications of Edgley's position need drawing out; of course, these are not implications that Edgley would actually want in view of his avowed recognition that the Marxist dialectic is realist and not idealist. First, this conception of contradiction seems to limit dialectical contradictions to ideologies - ideologies which express contradic-

tory beliefs and the institutions founded on the basis of such ideas. However, for my dialectico-causal conception of history, contradictions are not solely characteristic of beliefs, but rather are constitutive of certain historic socio-economic formations. Secondly, if contradiction is reduced to belief in this matter, then one arrives at an idea of contradiction quite distinct from that required by Marx's materialism. For Marx, ideology must be analysed as an interdependent moment in the totality. Insofar as it contains contradictory beliefs these should be related to the class structure and contradictions between the forces and relations of production. The Marxist idea of contradiction does not need to postulate the existence of contradictory beliefs in order to understand the contradictory nature of social development. Indeed, it is conceivable that a ruling class might achieve ideological hegemony and eliminate rival conceptions. If it is successful in the matter, it might well have expunged the possibility of contradictions being expressed within that society (no social conflicts will ever be expressed) but the brute fact that there are contradictions between the relations and forces of production cannot be extirpated - unless, of course, there is a social revolution. From Edgley's point of view, however, such a society would be non-contradictory: since there are no expressions of contradiction, even private expressions, contradiction would not be a feature of such a society. This is a culpably idealist implication of his position - the idealism of theoretical humanism. If objective contradictions are possible only insofar as they are embodied in human beliefs then, ipso facto, it is these beliefs which are responsible for the instantiation of contradiction and not objective, material conditions. On the Edgley conception of contradiction, contradictory ideas expressed by human beings would be the ultimate explan-

atory principle behind the positing and supersession of contradictions in social development - a position reminiscent of Lukacs' Marxism.²⁸ This, again, is idealism; and it can be avoided if the dialectico-causal conception of contradiction is adopted where the logical character of dialectical contradiction is abandoned and only its conceptual character preserved. It is Marx's conception of ideology (in my interpretation) and not Edgley's which displays the greatest fidelity to the materialist concept of history. Edgley places what are best regarded as symptoms of social conflict - the expressions of contradiction - in the place reserved for their causal origin: he mistakes symptoms for causes. I intend now to give a brief summary of the way Marx brings together the various interdependent elements in a dialectico-causal analysis.

Marx's analysis of the struggle over the shortening of the working-day provides a fine illustration of an analysis of social development based on dialectical causality.²⁹ The development of the process of capital accumulation leads to the attempt to maximise surplus labour by, on the one hand, lengthening the hours of surplus labour, and on the other, reducing necessary labour time during which the labourer produces the value of his wages. The classes generated by capitalism become engaged in an economic and political struggle over the production and appropriation of surplus-value which takes on a concrete expression in the struggle over the length of the working-day. The working-class sought to impose a statutory limit on the hours of labour whereas the industrial bourgeoisie overall wished to exploit labour without legal interference. This conflict took on an ideological dimension in which opposing political outlooks and programmes confronted one another. Once a legal limit to the

working-day had been imposed and the working-class had - with the aid of a split between landed and industrial interests in parliament - achieved its immediate political aim, its victory affected the further development of capitalist production. The capitalists were now compelled to develop the productive forces if they wished to accumulate more surplus-value. This in turn affected the formation of classes. The development of the forces of production inevitably led to a concentration of capital and to the concentration of workers in large-scale enterprises. This rendered possible a more intense form of political struggle which became expressed in the conflict between class-based ideologies. The struggle over the working-day, an outcome of the development of social production and class conflict, thereby precipitated a future conflict.

If this modified reproduction of capitalism as a socio-economic formation is to be grasped as a causal process in-itself, then, in consequence, one is compelled to elucidate the modification of the factors of the totality-viz the forces of production, the class-structure, ideology etc., - as results of the unitary dialectico-causal development of the socio-economic formation which generates them. It would appear that social scientists should adopt this methodological starting point as if they are to explain social development as a process generated by history itself, rather than by a priori principles. However it is necessary to show how it is possible for a dialectico-causal approach to establish empirical claims when it might appear as if the content of history itself is prejudged by the formulation given to the methodology. If the content of history can be deduced from the methodology alone, then the methodology must lose all claim to science: being a priori it is a purely meta-

physical history. I intend to show how Marxism, in its attempt to grasp the causal process of social development, steers clear of this flawed conception of history; while avoiding empiricism - the converse error - it can still stay responsive to, and be held up against empirical data.

Although certain methodological implications follow from a dialectico-causal interpretation of history both for the analysis of socio-productive totalities and their constitutive moments, I have additionally argued that these are necessary implications if historians are to achieve the realist aim of understanding social development in its own terms. Even though it is correct to maintain that historical materialism prejudges, in certain respects, the content of history and only then tries to confirm its presuppositions, this circular sort of approach need prove no more vicious than, for instance, formulating the law of gravity and then confirming its workings in the various solar systems. Before embarking on any scientific study of phenomena, it is necessary to make theoretical assumptions. The "tests" of these assumptions, from the viewpoint of science, is that they lead to a scientific practice analogous to that described in my first chapter. For a theory to aspire to this level, its truth conditions should not be determined by considerations entirely circumscribed by the theory, but instead should be open to some sort of empirical testing. A scientific theory must have empirical content. Fortunately, a dialectico-causal approach to history does possess empirical content. There is nothing in its general conception of social development which furnishes in advance - in advance of empirical scrutiny of history - the content of historical socio-economic formations, their particular combinations of causally relevant elements, and the manner of

their origins, development and demise.³⁰ As has been shown by Balibar's singular failure at this juncture, it is not possible to deduce the nature of all historically possible modes of production from considerations of their abstract form.³¹ Indeed, Marx travelled even further in the opposite direction when he suggested that the nature of any socio-economic formation would be beyond comprehension abstracted from an historical analysis. True, analysis cannot be other than guided by a methodology, yet it is still the empirical investigations and not the methodological principles which add the flesh of empirical content to historical inquiry. As Marx firmly averred in the third volume of Capital:

"The specific economic form, in which unpaid surplus labour is pumped out of direct producers, determines the relationship of rulers and ruled, as it grows directly out of production itself and in turn, reacts upon it as a determining element. Upon this, however, is founded the entire formation of the economic community which grows up out of the production relations themselves, thereby simultaneously its specific political form. It is always the direct relationship of the owners of the conditions of production to the direct producers - a relationship always naturally corresponding to a definite stage in the development of the methods of labour and thereby its social productivity - which reveals the innermost secret, the hidden basis of the entire social structure, and with it the political form of the relation of sovereignty and dependence, in short, the corresponding social form of the state. This does not prevent the same economic base - the same from the standpoint of its main conditions - due to innumerable different empirical circumstances, natural environment, racial relations, external historical in-

fluences, etc., from showing infinite variations and gradations in appearance, which can be ascertained only by an analysis of the empirically given circumstances". 32

Through guidance by its theoretical conception of its "object", historical materialism proceeds in the way in which all sciences approach their object of study. The empirical details of a historical analysis of this sort, whether they be concerned with problems of classification, periodisation or whatever, are by no means reducible to the bare methodological precepts which inspired the inquiry. The historical relationship of the forces and relations of production which actually constitutes a mode of production^{is} determinable only by empirical investigation. It is important, therefore, not to confuse the conceptual exposition of Marx's theoretical framework with the historical analysis. Marx's abstract theoretical concepts may be a precondition of achieving historicity but in themselves they remain merely abstract methodological tools. It should be remembered that these theoretical concepts are not the real substance of history itself, but are simply concepts for elucidating the nature of the historical process.

The points outlined briefly above apply equally to Marx's general understanding of social development. Nothing in the general idea of history as a progressive development of social production is going to reveal specific key features historically predominant during, for example, a process of socio-economic transition. The combination of factors in the totality acting in the most crucial roles, cannot be decided outside the domain of historical investigation. The methodology will set the form of the question, and thus, by extension, the form of the answer; it

is powerless, however, to provide those answers. Empirical investigation alone can do that.

According to this interpretation of Marxism, although history may be articulated as an objective development expressed in man's increasing mastery over nature as socio-economic formations develop their productive forces, this theory of "progress" ought not to be interpreted on a unilinear model.³³ On the contrary, the course of social development may involve retrogressions as well as progressions. The historical course of social development is something to be determined by empirical investigation. A dialectico-causal interpretation expounds historical materialism as an a posteriori theory of development. While he rejected a unilinear idea of social progress, Marx nevertheless maintained that a progressive development of social production in certain socio-economic formations was not an arbitrary assumption, but an historical reality. He illustrated this thesis in an analysis of the history of Western Europe.³⁴ It is apparent from his analysis, that whatever the nature of social development may have been in the East, at least in Western Europe this process must be grasped as a dialectico-causal development operating through the generation and supersession of contradictions between the social relations and forces of production.

In the context of this analysis, Marx traced the origins of capitalism back to the dissolution of feudalism and the origins of feudalism back to the development and demise of ancient society. Even though this analysis is limited to the historical experience of Western Europe which Marx could study most comprehensively, it is a process which is evidently one of universal significance because this process produces world history as a

single interrelated process. World history qua world history, rather than as the predominantly discrete history of separate socio-economic formations appears to be brought about as a result of the contradictory development of social production, in Western Europe. ³⁵ While the elucidation of this process is of tremendous scientific value, it should not be assumed that historical materialism can not serve as a means for studying the development of social production in other contexts, since I have also suggested a dialectico-causal approach is appropriate for the study of all socio-economic formations, regardless of whether dialectical causality operates through, or fails to operate through, the generation of dialectical contradictions. A dialectico-causal interpretation of historical materialism has therefore a double claim to being a universal science of history. First it elucidates the concrete development of production which produces world history as an integrated and unitary process. Secondly, it remains the methodological means for grasping the development of production in places outside of or chronologically prior to this development in Western Europe.

If, as I have argued, the order of socio-economic formations is determined by social development itself, then it would be illegitimate to attempt to determine this order in advance of empirical investigation. It would be incorrect, for example, to insist that socio-economic formations must have a well developed capitalism before they can proceed to the establishment of socialism. Marx's comments on the possibility of a socialist or bourgeois evolution of the nineteenth century Russian agricultural commune demonstrate an acute awareness of the contingent nature of types of transition. He states,

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"The dualism within it permits of an alternative: either the property element in it will overcome the collective element, or the other way round. Everything depends on the historical environment in which it occurs." 36

However, if the basis of transition is contingent, then historical materialism cannot serve as the predictive apparatus required by some interpreters of Marx. 37 I intend to demonstrate this in Marx's discussion of the extended reproduction of capitalism and the possibility of a transition to socialism.

I noted how Marx regarded the history of social production in Western Europe to be part of a general dialectico-causal development characterised by the generation of contradictions in socio-economic formations culminating in transitions from one form of production to another. So it is not surprising that Marx should regard capitalism as yet another internally contradictory and hence transitory socio-economic formation. According to Marx, the development of the productive forces in this society is governed by the process of capital accumulation whereby capitalist enterprises strive continually to valorise their capital. Capital accumulation develops not only the total social capital in society, but also the size of the individual capital necessary for realising an average rate of profit in the cut-throat world of capitalist competition. Marx observed that,

..."the development of capitalist production makes it necessary constantly to increase the amount of capital laid out in a given industrial undertaking, and competition subordinates every individual capitalist to the immanent laws of capital production, as external and compulsive laws. It compels him to keep

extending his capital so as to preserve it, and he can only extend it by progressive accumulation." 38

The capitalists' drive for profit, like the feudal drive for rent, is a social mechanism imposed as a condition of the reproduction of the appropriating class. 39 In the course of the extended reproduction of capital in the accumulation process, however, Marx notes that capital continually sets barriers to the development of the productive forces it simultaneously promotes. This essentially contradictory character of capitalist reproduction manifests itself in a number of ways; these include the trade-cycle and the overproduction crisis. Marx noted that,

"Overproduction is specifically conditioned by the general law of the production of capital, to produce to the limit set by the productive forces, that is to say, to exploit the maximum amount of labour with the given amount of capital, without any consideration for the actual limits of the Market or the needs backed by ability to pay; and this is carried out through continuous expansion of reproduction and accumulation and therefore constant reconversion of revenue into capital, while, on the other hand, the mass of producers remain tied to the average level of needs and must remain tied to it according to the very nature of capitalist production." 40

As a result of the overproduction crisis, the less competitive capitalists are eliminated or taken over by larger or more efficient capitalist enterprises. This process is repeated from cycle to cycle and from crisis to crisis until the competition of capitals begets the formation of monopolies in the capitalist economy. Indeed, Marx argued that the progressive monopolisation

of production was the historical tendency of capitalist accumulation. ⁴¹ This process would reach its logical conclusion if and when "the entire social capital was united in the hands of either a single capitalist or single capitalist company." ⁴² In such a society, the labour process would not be regulated by the law of value through the formation of production prices (which is characteristic of the capitalist economy) but on the contrary by monopoly decision. Insofar, therefore, as capitalism is understood as a mode of production based on the operation of the law of value, it would seem that it generates a process which will culminate in its own dissolution.

Marx believed, however, that capitalist development was more likely to generate a transition to socialism than to a society based on a single monopoly. The negation by monopoly capital of the law of value would be founded on a restriction of production whereas a socialist negation would promote a progressive development of the productive forces. It seemed logical, therefore, to suggest that the restrictions imposed on the further development of production by monopoly would be superseded by a transition to a socialist organisation of production and exchange. Socialism would not impose restrictions on the development of the productive forces, but rather would liberate them from the limits imposed by capital accumulation. Henceforward, the productive forces would be developed for the benefit of the collective producers and consumers; they would be free then from their dependence on the relations of production imposed by capital.

I have repeatedly emphasised how a dialectico-causal interpretation of historical materialism strives to avoid any sort of relapse into a priori history. Marx's account of the develop-

ment of capitalism must not be interpreted as some sort of inevitable theory. On the contrary, one should seek to analyse the historical development of capitalist societies so as to grasp how their own development generates the possibility of a transition to another form of society. In order to defend this view of Marxism, it is necessary to distinguish it from any sort of a priori assertion of the inevitable collapse of capitalism as expressed in some sort of "Zusammenbruchstheorie."⁴³

Some theorists have suggested that Marx's analysis of the tendency of the rate of profit to fall guarantees, as it were, the inevitable demise of capitalism. Marx notes in Capital Volume 3 that the process of capital accumulation brings about a rise in the organic composition of capital ie., a proportionate rise of constant to variable capital ie, C to V. As profit is calculated by the relation of surplus value to C & V ie, $S/C \& V$, capital accumulation implies that the rate of profit must fall given that the rate of exploitation remains the same. If, in addition, the tendency for the organic composition of capital to rise were irreversible, then capitalism as a mode of production founded on the necessity of profit, would be doomed to an inevitable collapse.

The process of capital accumulation proceeds from the maximisation of surplus value through lengthening the hours of labour (the production of absolute surplus-value) to a maximisation based on increasing the productivity of labour through a development of the forces of production (the production of relative surplus-value).⁴⁴ This development is accompanied by a change in the "technical composition" of capital because greater quantities of the means of production are combined with labour-power in the productive process. Changes in the value-composition of

capital C to V , expressed in the relation of C to V , do not exactly parallel changes in the technical composition of capital. Rather, Marx argues that "change in the technical composition of capital - is reflected - in its value composition, but in a smaller degree." 45

There are a number of reasons for the discrepancy between rises in the technical and value composition of capital. Perhaps the most important factor modifying the rise in the value composition of capital is the relative cheapening of items of constant capital through revolutionising, for instance, the production of the means of production. The decline in the rate of profit can be modified, therefore, by a proportionate cheapening of the elements of constant capital vis à vis variable capital. It follows that if the tendency for the rate of profit to decline is to be theoretically established, then as Sayer notes,

"Marx would have to show that throughout the economy as a whole, production will rise faster in Dept II (production of the means of consumption), than in Dept. I (production of the means of production)." 46

The only way to establish the tendency of the rate of profit to fall in capitalist societies, if this kind of approach is to be adopted, will be to analyse empirically the relation between the production of the means of production, production of the means of consumption and all other relevant factors. To adopt this approach is simultaneously to abandon an inevitabilistic theory of capitalism and to concentrate instead on the concrete course of the contradictory process of capital accumulation. While inevitabilistic formulations of law are rejected, this under-

mines any predictive claims a dialectico-causal science might make. It seems that a dialectico-causal science should rather confine itself to an analysis of ex post facto processes. Insofar as it aspires to prediction at all it should merely generalise about tendencies generated in the course of the extended reproduction of socio-economic formations. The causal interdependence of factors in a dialectical totality would seem to preclude the possibility of iron laws of history which depend precisely on the abstraction of parts from whole in the totality and giving them an autonomous and illegitimately deterministic causal role. Laws of tendency, on the other hand should be analysed case by case in the context of an empirical analysis, which includes the simultaneous investigation of counteracting influences. The predictive limitation of a dialectico-causal theory, far from undermining its scientific claims should be regarded as a condition of a science of history since it avoids the single factor determinism required by any sort of Zusammenbruchstheorie or iron determinism. One is faced with the choice of giving up the search for this predictive law and remaining content with laws of tendency or else of giving up the project of a social science. While admitting frankly this approach introduces the problem of criteria of adequacy for any given explanation, this cannot be considered a problem for the theory (such that if it cannot be solved in advance of each case one must abandon the theory) but a problem within the practice theory to be solved a posteriori in each case as it occurs. Beyond the formal conditions of a dialectico-causal science which have to apply to all historical explanations within the scope of the theory, additional criteria outside those supplied by historians cannot help in determining what counts as an adequate interpretation of a given process. Marx himself stressed for instance, that the rate of profit will not necessarily

fall, only that, given his analysis of actual historical conditions as they were then available to him, it will tend to do so; and he reinforces this by proposing several possible countervailing factors, including the cheapening of elements of capital and, of course, labour-power.⁴⁷ His analysis of the tendency thereby reveals the essentially empirical foundation of his analysis. The demise of capitalism is something which can only be established scientifically on the basis of an empirical analysis of the extended reproduction of capitalism as a socio-economic formation. In reproducing itself as capital, the accumulation process reproduces the struggle of classes divided over the production and appropriation of surplus-value. It has already been shown how the moments of the totality viz the state, ideology, science etc., are involved in this extended reproduction of the socio-economic formation. If social scientists are to interpret Marx's analysis of capital accumulation in line with a dialectico-causal view of his methodology, then they must place discussion of the accumulation process in the context of an analysis of the reproduction and development of capitalism as a socio-economic formation. It is this process considered as a whole which produces the possibility of a transition to a new form of society and not the operation of any sort of supra-historical law or any inexorable decline in the rate of profit.

A dialectico-causal history would, it seems, eschew any attempt to elucidate problems of social development outside the empirical analysis of history - and in this respect the essential requirements for historical science are met. It is for this reason that I maintained in chapter 3 that a dialectico-causal interpretation of historical materialism is indeed a logical result of Marx's realist aim of explaining the historical process

in its own terms. In order to achieve this realist aim, however, I have ruled that Marx had first to transform the estranged discoveries of Hegel's dialectic into a conception of social development which was compatible with a scientific inquiry into actual history. Whereas Colletti and Althusser failed to account for this transformation, a dialectico-causal interpretation succeeds in this task. Regardless of the detail of a dialectico-causal view of history, it would appear from my analysis so far in this thesis that this sort of conception of social development would remain a precondition of achieving historicity in social theory. This does not imply, however, that this methodology is worked out to a point beyond which it can not be further developed. Both the methodology and the theories generated on its basis should be subject to modification in accordance with the method of science outlined in chapter 1.

5.2 DIALECTICAL CAUSALITY AND HISTORICAL SCIENCE

I have outlined a defence of a dialectico-causal methodology which meets the requirements of historical science. Now I wish to show, by reference to Marx and Marxist historians, how this methodology furnishes principles guiding an historical investigation of transitions from one socio-economic formation to another. I will illustrate this claim by an examination of the development ^{and} of demise of Ancient Society and feudalism.

Marx analysed Ancient Society as a socio-economic formation ⁽²⁾ founded on communal relations of production.⁴⁸ Even though it developed the city as its economic, military and political centre,

essentially, Ancient Society was rural in character, with a predominantly agricultural economy in which access to the land was conditional on citizenship of the commune. The Roman, for instance, could only become a landowner insofar as he was a legal citizen of a commune. These relations of production, however, governed not only the individual producer's access to the means of production, but also determined the extended reproduction of this society. This brings me to Marx's account of the dissolution of Ancient society.

According to Marx, war became a major economic task of Ancient Society.⁴⁹ The city communes were compelled to defend their territory from rival communes as well as to capture additional land commensurate with the demands of their growing community. The extended reproduction of the Ancient commune through military expansion provoked in the end, the development of production based on slave labour and commodity production and to the formation of new relations of production corresponding to these changes. To preserve the identity of the original commune in the face of military expansion, a majority of the members of subjugated city states or villages had to be denied citizenship of the dominant commune. In these conditions, military expansion culminated in the introduction of slavery which was "determined negatively" by the commune's attempt to reproduce itself as a socio-productive whole based on the old property relations.⁵⁰ So the introduction of slavery or enserfment eventually changed the character of the commune. The expansionist nature of the commune helped promote a socio-economic foundation for the development of exchange. Commodity production on the basis of slave labour, manufacture and mercantile trade increasingly undermined the original form of Ancient society. Marx claimed, there-

fore, that a certain stage reproduction "is at the same time necessarily new production and destruction of the old form." 51

The gradual break up of Ancient society, a break up whose seeds lay in its extended reproduction, did not culminate in social revolution. The transition to a new mode of production came about partly as a result of military invasion and destruction. This is evidently the case with, for example, the Roman Empire. However, invasion does not thoroughly explain the internal weakness of this socio-economic formation. Yet, it was the contradictory development of eg., the Roman empire as a form of social production which was responsible for its inability to withstand external threats as it had done for centuries before. One should not therefore attribute the demise of this form of society to external factors like military invasion alone, if it is apparent that the decline of Ancient Society was implicit in its own socio-economic character.

This exposition of Marx's discussion of Ancient society confirms two contentions of this thesis. First, it demonstrates how Marx employed a dialectico-causal methodology in the analysis of pre-capitalist societies and, secondly, it reveals how such a methodological approach is compatible with an intrinsically historical account of social development and the rigours of empirical analysis. It should be acknowledged, however, that Marx's analysis of Ancient Society is no more than a brief outline of its development and demise. This analysis shares the empirical incompleteness of Marx's analysis of all pre-capitalist socio-economic formations. Notwithstanding this qualification, there appears to be no methodological reason why historical research should not proceed on the lines of what is essentially a dialect-

tico-causal account of the reproduction and development of this socio-economic formation.

The progressive dissolution of Ancient society by mercantile activity, commodity production and slavery did not lead to the formation of the productive relations characteristic of industrial capitalism, where the labourer becomes separated from the means of production. The technological backwardness of a slave economy did not lend itself to such a development. As Hilton observes once the slave supply declined,

"Far from keeping the slave separate from the means of production - necessary precondition of capitalism - the slave owners solved (or tried to solve) the economic problems of late ancient society by settling their slaves on peasant holdings; in fact by creating the production relations characteristic of feudal society." 52

The demise of Ancient society eventually led to the formation of feudal relations of production and the emergence of feudalism as the dominant form of production in Western Europe. This brings us to an analysis of the development and demise of feudalism.

Under conditions of feudal production, where the individual producer was a de facto if not de jure owner of the land, the characteristic relation of production between the feudal appropriator and producer was one of personal dependence in which the labourer existed in a state of bondage to the Lord. Marx states,

"It is furthermore evident that in all forms in which the

direct labourer remains "possessor" of the means of production and labour conditions necessary for reproduction of his own means of subsistence, the property relationship must simultaneously appear as a direct relation of lordship and servitude, so that the direct producer is not free;..." 53

The peasant producer could only have been compelled to yield up a surplus to the lord if he was, in some sense, not free to dispose of his product as he pleases. The relationship of lordship and bondage almost invariably arose from military domination of direct producers and had to reproduce a form of politico-military domination because, without compulsion, there could have been no objective foundation for the appropriation of a surplus.

According to Marx, the transition from feudalism to capitalism cannot be attributed to the supposedly "intrinsic" properties of merchants' or users' capital - forms of capital which were to be found in the majority of pre-capitalist economic formations. If the existence of these forms of capital were a sufficient condition for the origins of capitalism, then, as Marx observes, "ancient Rome, Byzantine etc., would have ended their history with free labour and capital." 54 These early forms of capital remained confined to the sphere of circulation and did not radically alter the productive process. Indeed, the merchant capitalists were an organic part of feudal Europe. In Italy and Flanders their profits derived from financing trade with the middle and far East (Silk, spices etc) and from financing the wool trade and gold imports. In Italy, merchants also acted as bankers to the Papacy. Even when, as in the case of the Flemish Merchants, they organised the buying of raw materials and the sale of the goods of handicraft producers, their intervention did not revolutionise

the productive process. 55

Merchants were also involved in usury and finance. Their usurers' capital was directed at the feudal lord or serf. Usurers' capital depended on the reproduction of the relationship between lord and serf; it was the indispensable means of appropriating an interest directly from the peasant producer or indirectly via the Lord's rent. In this context, usurers' capital was not revolutionary; it did not develop the productive forces but, instead, paralysed their development by extracting its interest and leaving diminished funds for productive investment. Merchants' and usurers' capital, it is true, did assist the dissolution of certain aspects of the feudal mode of production. For example, the transformations of labour-rent into money-rent, and of land, through being priced into a commodity, were enabled by mercantile capital, and these transformations, in concert with other conditions, generated the socio-economic means for the development of direct commodity-production. Usurers' capital too, helped erode the feudal relations of production by ruining the feudal lord and dispossessing the small scale producer. In both cases, however, the dissolving effects of these forms of capital depended on changes in feudal society caused by other factors. Marx makes this clear in the case of usurers' capital when he claims,

..."only when and where the other pre-requisites of capitalist production are present does *usury* become one of the means of assisting the establishment of the new mode of production by ruining the feudal lord and small scale producer, on the one hand, and centralising the conditions of labour into capital, on the other." 56

The same applies to merchants' capital, which could only transform itself into industrial capital once the labourer had been separated from the means of production, so that both labour - power and the means of production can be bought and sold as commodities. Consequently, even though these early forms of capital may have assisted in the transition to capitalism, it would be incorrect to ascribe them a major role in the dissolution of the feudal mode of production.

It would be equally mistaken, according to Hilton, to attribute to the urban centres of feudalism the leading role in the transition.⁵⁷ Simple commodity production largely based on handicrafts did indeed become significant in the towns of Western feudalism in the thirteenth century. Once the medieval craftsmen, as Hilton notes, produced "not only for their Lord, but for others who clustered around these centres of power, and for peasants bringing their produce for sale as well as rent in kind, then we have the beginning of urban based commodity production."⁵⁸ Commodity production in these conditions, however, was hampered by feudal restrictions which prevented any sort of direct development into capitalist production. The feudal artisan was subject to exploitation and servitude which was analogous to that endured by the feudal peasant. The feudal protectorate still demanded stall fees and house fees directly in unenfranchised towns and indirectly in boroughs. Even if the urban artisans escaped this feudal domination, their activity would have been increasingly controlled by the merchant capitalists who would have conspired to inhibit direct commodity production because it represented a threat to the monopoly of trade. The power of these restrictions on urban based commodity production is expressed by the historical fact that capitalism, as Marx observed, first emerged

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outside of the feudal town.⁵⁹ In order to account for the transition to capitalism, it was necessary to discover the formation of wage-labour and private ownership of the means of production in the feudal countryside not in the feudal town. The feudal city did not play the leading role in the dissolution of feudalism, but, on the contrary, only succumbed to capitalist industry once capital became a dominant force in rural agriculture and industry.

Marx analysed the development of production in the feudal countryside via an investigation into the evolution of different forms of feudal rent.⁶⁰ The earliest and simplest rent-form was of course, labour rent in which the producer performed surplus-labour on the Lord's land. Labour rent had a number of economic disadvantages and these limited the magnitude of the surplus-product. First, production was wastefully divided in space and time which prevented continuous working of the land, and secondly, direct supervision of labour on the Lord's fields was an economic necessity. Labour rent consequently gave way to rent in kind which permitted of a more continuous application of labour. All the land became the de facto property of the producer who rendered a surplus in the form of a share of the produce. In addition, this form largely dispensed with the expense of supervision because, as Marx observes, "the direct producer is driven rather by force of circumstances than by direct coercion, through legal enactment rather than the whip."⁶¹

The highest form of feudal rent, was money-rent; instead of transferring his product, the peasant producer was now obliged to turn over "its price to the landlord."⁶² Henceforward, at least a portion of the peasants' product had to be converted into or produced directly as commodities. The appropriation of feudal

money-rent still took place in the context of the relationship of lordship and bondage, but the money-form, Marx argues, "presupposes a considerable development of commerce, of urban industry, of commodity production in general, and thereby of money circulation." ⁶³ Although the money-rent was an authentic product of feudalism its further development undermined the relation of lordship and servitude and lead in Marx's view, "either to the transformation of land into peasant's freehold, or to the form corresponding to the capitalist mode of production, i.e., rent paid by the capitalist tenant farmer." ⁶⁴

Money rent gradually transformed the peasant producer into a tenant whose rent was fixed by law. The feudal peasant might have developed into an individual commodity producer or perhaps, if he was in command of a surplus in excess of his rent, he might have become a small capitalist farmer employing wage-labour. If, however, he failed to pay his rent, then in the new economic and legal conditions attached to money rent, he might well have been expropriated from his land to join the ranks of propertyless day labourers who, at this stage of development, formed a convenient source of labour-power for the growing numbers of small capitalist farmers. Marx argued that the development of money-rent lead to the establishment of a socio-economic climate where it was possible "to expropriate more and more the old peasant producers and to substitute capitalist tenants in their stead." ⁶⁵ The landlord, who became parasitic on capitalist farming, encouraged this development insofar as it ensured him the highest possible rent. In fact, it appears that as in other socio-economic formations, the drive to maximise the surplus by the ruling class functioned as an important mechanism in the development and demise of this mode of production. Now I can

enter into a discussion of Hilton's emphasis on the role of class conflict in the transition from feudalism to capitalism.

Even though Hilton emphasises the crucial role peasant struggles against feudal impositions played in the transition to capitalism, he does not analyse the transition as a process brought about solely by the resistance of the peasants to feudal obligations. It was also promoted by the feudal Lord's drive for rent and by the manner in which he disposed of his surplus.⁶⁶ The drive for rent was imposed as a condition of political sovereignty over feudal territory and defence from rival powers. The outcome of the rent struggle determined the ability of the feudal lord to perpetuate his control over a given territory. The drive for rent should be regarded, therefore, as a social mechanism necessary for the reproduction of feudal principalities. It was precisely this underlying class struggle over the production and appropriation of feudal rent which formed the economic foundation for the well-documented power struggle between feudal dominions.

The drive for rent explains the readiness of the Lord to develop new forms of exploitation which could guarantee him a larger surplus. These changes in forms of rent helped to promote the growth of towns and of commerce. Hilton notes, therefore, that "the urban revival of the eleventh and twelfth centuries coincided with the development of new forms of serfdom."⁶⁷ An increasing portion of the Lord's surplus was realised in a cash form through taxes, fines or payments for grinding corn at the Lord's mill, and this increased the velocity of cash transactions and general commerce. In addition, towns were often founded to add to the Lord's income through the imposition of stall rents

and trade monopolies on certain important items. The development of money-rent and the growing magnitude of surpluses, is seen by Hilton as "the basis for the growth of simple commodity production, seignorial incomes in cash, international luxury trade and urbanisation." ⁶⁸ It is evident that the growth of the urban market and commerce in the towns, as well as the development of commodity and capitalist production in the countryside, is to be explained by the development of new forms of rent brought about by the class struggle between the feudal lord and serf.

The feudal lord's drive for rent does not by itself explain the development of new rent-forms. It merely explains his willingness to adapt old forms or even invent new forms as circumstances changed. The key transformation of feudal rent can only be explained, according to Hilton, by the political resistance of feudal peasants to a reimposition of old feudal duties. ⁶⁹ In order to arrive at an adequate account of the transition to capitalism, it is necessary to be aware, therefore, of both sides of the class struggle between lord and serf in the context of the reproduction and development of the feudal mode of production.

Hilton claims that the historical development of feudalism in England from the ninth to the fourteenth century confirms the importance of the class struggle over rent for the transition to capitalism. ⁷⁰ The population collapse which followed the Black Death in the fourteenth century could have led to a strengthening of serfdom. Indeed, for the two decades after 1350 this strategy was attempted, but resulted in peasant revolts in England in 1381 and in the French Jacquerie of 1359. Although, all the major rebellions were quelled, "local resistance could not be overcome." ⁷¹ This resistance to the reimposition of old forms of

servitude was the central causal factor behind the development of new rent-forms and the socio-economic conditions favourable for the development of commodity and eventually capitalist production. Hilton argues,

"But, this peasant resistance was of crucial importance in the development of rural communities, the extension of free tenure and status, the freeing of the peasant and artisan economies for the development of commodity production and eventually the emergence of the capitalist entrepreneur." 72

In Eastern Europe the feudal peasants succumbed to a second serfdom, but in Western Europe and most strikingly in England, peasant resistance prevented this outcome. 73 The resistance of the "serfs" to a reimposition of the old forms of feudal domination was of decisive importance for the emergence of widespread commodity production unhampered by feudal restriction. Hilton observes that in the wake of this political resistance,

"Rents were sufficiently low and the ability of both landowners and the state to control the free movement of peasants was so minimal in practice that, at the end of the fourteenth century, and for the greater part of the fifteenth century, the feudal restrictions on simple commodity production virtually disappeared." 74

The feudal countryside was eventually transformed by this development until the landlord/capitalist and farmer/wage-labour relations succeeded in supplanting the lord/serf relation of production. This transformation in agriculture was accompanied by the movement of craft production into the less restrictive socio-

economic climate of the countryside, away from the gild-dominated towns which prohibited the free exploitation of wage-labour. The formation of capital in agriculture and industry, therefore, progressively eroded the feudal class structure and undermined the integrity of feudalism as a mode of production.

This analysis of the transition from feudalism to capitalism is perfectly consistent with a dialectico-causal interpretation of historical materialism. The transition is explained not by external factors, but by the development of feudalism itself. Although this account is partial insofar as it has yet to integrate the contribution of the political and ideological moments of the transition, this one-sidedness does not reflect a shortcoming in methodology - rather it expresses a need to enrich the theory by engaging in further historical research. Evidently a dialectico-causal approach can and does serve as guide to the empirical analysis of the origins, development and demise of socio-economic formations. I have, therefore, established the claim I outlined earlier that this methodology not only meets the formal requirements of an historical science, but also serves as a workable tool in the hands of historians.

5.3 SOCIAL SCIENCE AND METAPHYSICS

Now I intend to develop a critique of the major sociological schools of thought from the viewpoint of a dialectico-causal account of the methodology of social science. Whereas my interpretation of historical materialism seems capable of developing a theory of social change without resorting to supra-historical abstractions or principles, the accounts of social science developed by the positivists, humanists and functionalists examined

below, fall squarely within the mechanical causality/voluntarism problematic analysed in the preceding chapters. In consequence none of these sociological "schools" or "traditions" succeeds in developing an adequate account of methodology in the social sciences.

In chapter 1, I identified positivism in the philosophy of science with the adherence to a regularity theory of causation which was founded on the assumption of an epistemologically privileged observation-language. I have also noted that sociological positivism, as initially developed by Comte, contained additional theses which were not necessary implications of a regularity theory of causation. The most important of these is the assertion that causal relations in the social world are analogous to those discovered in the world of nature. It is this assumption which ultimately justifies the sociological positivists' insistence on the unity of science. Sociology should, according to this view, employ directly the methods and concepts developed in the natural sciences. Giddens defines sociological positivism precisely in these terms. He notes that,

"Positivism in sociology may be broadly represented as depending on the assertion that the concepts and methods employed in natural sciences can be applied to form a "science of man", or a "natural science of society."⁷⁵

It is evident that sociological positivists cleave to a certain view of the ontology of social science viz the natural science analogy, in advance of the scientific investigation of that reality. While it may be acceptable to assert the unity of science abstractly, with respect to the scientific method where-

by theories are developed in response to anomaly, it is scientifically unacceptable to prejudge the results of a science in any sort of ultimate ontological sense. The positivist assertion as to the identity of the form and content of causal relations in the realms of society and nature, therefore, endangers social science by foisting an a priori view of causality onto social science in advance of its practice. This is to say nothing of the positivists' mechanistic view of causality involved in the separate specification of cause and effect. However, to return to the argument. The appropriateness of the analogy with natural science can be established only by the practice of social science and not by a priori legislation. Two outcomes are possible. Scientific practice may confirm the existence of causal relations analogous to those in nature; or this positivist assumption may generate anomalies. In the first case, the positivist thesis would be established not by a priori legislation, but by scientific practice. In the second case, the positivists would face a theoretical dilemma. They could either supersede the anomalies by abandoning their prior conception of causality or else deny the anomalies in favour of their prior assumptions. If they took the first course they would remain committed to the scientific enterprise, but only at the cost of abandoning their identity as a distinctively "positivist" school of thought. If they followed the second course they would protect their identity as a theoretical school, but only by abandoning the method of science. It is possible to find precisely this theoretical dilemma in the sociology of August Comte.

Comte's sociology theoretically fits history into a general law of progress which effects a transition from a theological to a metaphysical and then finally to a positivist society.⁷⁶ This

social evolution parallels a development in human knowledge: religious thinking is replaced by metaphysical thought only to be superseded in turn by positivist science. According to Comte, social scientists can analyse social progress in two ways. They can study the laws of co-existence of the various elements at an instant in time (social statics), or they can study the laws of succession by which each social state is seen as the product of the preceeding state (social dynamics).⁷⁷ If social scientists are interested in social dynamics, then they should use the "historical method" and engage in a comparative analysis of the various examples of human development, "so as to reveal the laws of inevitable transition from one stage to another."⁷⁸

For Comte, social evolution is the outcome of an inevitabilistic law and culminates in a positivist stage in which progress at last achieves its final social expression. This law is not formulated on the basis of the practice of social science; it is asserted as a universal principle at the outset in such a way that actual historical counter-instances can only be regarded as pseudo-anomalies which fail to bring the validity of the law into question. Durkheim argues that Comte's law is metaphysical because it is founded not on causality, but on a teleology which impells humanity to strive for progress. Durkheim states,

"One can well understand that the progress in a given period makes new fields of progress possible - But how does it pre-determine them? - one would have to admit an inherent tendency that impels humanity ceaselessly to go beyond its achievements ... and the object of sociology would be the manner in which this tendency developed. But, without harking back to the difficulties such a hypothesis implies, there could not be anything causal

about the law which expresses this development." 79

Durkheim's interpretation is, however, inconsistent with Comte's assertion that the law is modelled on the pattern of explanation of the natural sciences. The inevitability of the law could be derived from a mechanistic interpretation of social causality rather than from a theory of human nature. Comte attributes an autonomy to human knowledge which is defined as a reality in its own right and not as a moment of a general evolution. 80 He then explains social development to be a result of an evolution of human knowledge. If, however, the move to abstract human knowledge from its historical context was blocked then it could no longer be projected as an ultimate explanatory principle because it would itself be an historical result of social development. Comte faces a theoretical dilemma. He could defend the inexorability of the law of progress by ascribing a supra-historical effectivity to human knowledge. Alternatively, he could historicise human knowledge, but only at the cost of undermining the inexorability of the law of progress. In the first case, he would abandon the scientific enterprise for a metaphysical theory of development. In the second, he would remain committed to the principles of scientific inquiry only at the cost of abandoning his positivist notion of social causation. This is a dilemma which is not unique to Comtean sociology, but is one which emerges whenever a mechanistic causal analogy is applied to social science. For as long as positivist sociology insists on applying a mechanism or real opposition conception of causality to social phenomena, it will inevitably face the dilemma of abandoning this analogy or else of abandoning the possibility of social science.

Humanist sociology challenges the positivist unity of science thesis by arguing that the subject matter of social science is unique in containing a specifically voluntaristic element.⁸¹ Insofar as the humanists remain committed to the scientific enterprise, they hold the view that social scientific explanation should be founded on principles compatible with what they assume to be the nature of social or human phenomena. Weber, for instance, insisted that sociological explanation must always involve a reference to a voluntaristic element even if the social action to be explained involved a deviation from a pure type of teleological action.⁸² Two theoretical problems arise from the humanist approach to sociology. First, the humanists must show how the teleological or voluntaristic element is consistent with a scientific explanation of social phenomena. Secondly, they should attempt to vindicate the teleological assumption through the practice of science, even if this leads to a modification of their original theoretical orientation.

Weber attempts to explain social action, which forms the object of his "verstehende Soziologie", in terms of its relation to a set of rational types of which a pure form of teleological action - "Zweckrationalhandeln" - is the paradigmatic example. Here the actor's free choice of rational ends and means explain the subsequent course of his action. Behaviour determined by "external" causes is deemed to be merely reactive without relation to teleology and, therefore, beyond the realm of social action. However, in his substantive work, as I have shown, Weber concluded that bureaucratisation, as the culmination of a process of rationalisation, is the inevitable fate (Schicksal) of the West. Weber's methodology, therefore, generates a piece of sociological theorising which assumes an inevitablistic conception

of social causality, evidently in contradiction with a voluntaristic conception of social action. If bureaucratisation were truly inevitable then it would be absurd to explain it on the basis of a reference to a teleology because the inevitability of the social process precludes the free play of action which forms the starting point of the methodology. Weber, like Comte, is faced with a theoretical dilemma. Either he defends his humanist assumption and abandons science or else he remains committed to the method of science, with the consequence that he must abandon his theory of action. This theoretical dilemma locates Weber squarely in the mechanical causality/humanistic teleology problematic I have already investigated. It is apparent, therefore, that Weber's voluntaristic theory of action is contradicted by a mechanistic view of the process of rationalisation and bureaucratisation. I merely need to reiterate that neither side of this polarity succeeds in developing a scientifically adequate theory of history, simply because this polar opposition must result in a methodology which abstracts either social "laws" or man as an abstract subject from the historical process. In short, such a problematic commits social science to a supra-historical approach to the study of social change.

The structural functionalists are also trapped within this theoretical polarity. Hempel notes, for example, how structural functionalism arose originally out of a teleological tradition in social thought. He states,

"Historically speaking, functional analysis is a modification of teleological explanation, i.e., of explanation not by reference to causes which "bring out" the event in question, but by reference to ends which determine its course." 83

The later functionalists, however, have outgrown their humanistic roots and now adhere to a model of explanation which is, in principle compatible with a positivist conception of scientificity. Hempel argues that functional explanations of this type have the following logical structure: they attempt to explain an activity "I" in a system "S" by showing "S" is in a state or internal condition "C1" and in an external environment "C2", such that under these two conditions "C", "I" has effects which satisfy some functional requirement of "S", ie, a condition "N" which is necessary for the system's adequate or "normal" working order. ⁸⁴ Functional explanation involves an implicit reference to deductive-nomological laws since both the causal role of "I" and "N" can only be substantiated if they are instances of well-established lawlike regularities. However, the activity "I" cannot be derived from generalisations concerning "S" and "N" unless one regards "I" to be functionally indispensable for the system "S". If, on the other hand, the condition "N" could be fulfilled by other activities, then it would not be possible to derive the particular activity "I" from the general conditions of "S" fulfilled by "N". Functionalists generally reject the concept of functional indispensability and maintain that different activities can and do perform the same function and this position is given an overt theoretical expression in the notion of "functional equivalents". ⁸⁵ If, however, the explanandum "I" cannot be derived from the functional pattern of explanation, it follows that the attribution of "I"'s functional importance to a system "S" can only be made on ad hoc grounds which are, strictly speaking, external to functionalist theory. The functionalists must either assume functional indispensability in which case they generate the anomaly of functional equivalents which they claim characterise social systems, or else they retain the concept of functional equivalence, but

then the functional pattern of explanation fails to account for the alleged causal significance of its explanandum.

Structural functionalists should also provide objective criteria of a system's "normal" working order, because activities are supposedly explained only as they contribute to this state. If, however, societies are in a constant state of flux and development, it would seem that the search for criteria of normality, which presuppose the social totality is ordered and internally equilibrated, is an impossible task. The functionalists therefore find it impossible to account for the endemic phenomena of social conflict, crisis and disorder. Indeed, the theoretical encounter with these prima facie anomalies for the functionalist model of explanation, prompts Merton to formulate the concept of a "dysfunction".⁸⁶ It is apparent, however, that a "dysfunction" can be either functional or dysfunctional. If a dysfunction is functional, then despite its dysfunctional appearance it fulfills, in reality, a functional pre-requisite. However, in the absence of objective criteria for the ascription of functional and dysfunctional properties to social activities, it would be possible to regard all prima facie anomalies as functional without advancing social theory to an adequate account of either "functional" or "dysfunctional" phenomena. If, on the other hand, a dysfunction is genuinely dysfunctional, then ipso facto the functionalist's notion of an equilibrated social totality must be amended. However, such a modification necessarily implies an abandonment of the functionalist model of explanation because it is inextricably connected with a notion of a social whole which is in normal working order. As soon as the functionalists confront the anomalies generated by the analysis of social change, they are obliged, in the interests of science, to abandon functionalism as an

adequate form of social scientific explanation. Again, these theoretical problems are generated by an allegiance to a fundamentally mechanistic understanding of social causality. Hence, the functionalists employ an analogy from cybernetics in which relations between parts and whole are mechanically determined by their pre-allocated place in a closed system. The critical analysis above adequately demonstrates the theoretical limitations of developing social scientific theory on this foundation.

I have demonstrated how all these schools of sociological thought make prior assumptions about the object of study, theoretical assumptions which generate anomalies and internal inconsistencies. These anomalies, it seems, can only be superseded by a theory - change. Consequently, each of these schools of sociological thought face a similar dilemma. They must either accept theory-change and abandon their identities as schools of thought; or alternatively, they may retain their specific orientations, but only, at the cost of absolutising their initial theoretical assumptions. In the first case, they would remain committed to the principles of scientific inquiry, but lose their identities as distinctive schools of thought. In the second, they would retain this identity, but would abandon the principles of scientific inquiry. If these schools refused to supersede the anomalies in the required process of theory change, then it would appear that their theoretical accounts of social life would be inescapably metaphysical. They would degenerate from attempts at a social science to just another form of metaphysics. A dialectico-causal interpretation of Marx's methodology, on the other hand, is founded on a commitment to the historicity of concept construction in social science which compels it both to avoid any absolute approach to historical ontology, and to amend its

theory in the face of anomalies even if this should, in the last analysis, compromise its original conception of the methodology of social science.

Having developed a dialectico-causal interpretation of historical materialism, I intend to argue in this chapter that Marx used this idea of social causality to develop his critique of classical political economy. I present this critique as a revolution in science in the sense outlined in Chapter 1. In addition, I contend that if one understands Marx's value-theory on the basis of the principles of a dialectico-causal interpretation of capitalism as a mode of production, then it is possible to show how certain classical "problems" of Marxist political economy like the so-called transformation problem, may well be based on a misunderstanding of Marx's methodology and his theoretical aims. In order to support these arguments, however, it is necessary to expound Marx's value theory in its most general terms. The first three sections of this chapter are concerned, therefore, with a general exposition of the form and substance of value, Marx's theory of surplus value and finally with Marx's analysis of the prices of production.

6.1 THE FORM AND SUBSTANCE OF VALUE

In order to clarify the manner in which the law of value operates in the capitalist economy, it is essential to begin with a clear exposition of Marx's conceptual tools. For this reason I intend to begin with Marx's notion of the relationship between the form and substance of value before proceeding to his account of the law of value. My aim is not merely to expound Marx's political economy as it stands in his writings, but also to remove certain ambiguities in his value-theory which may inhibit an adequate account of the reproduction and development of capitalism as a mode of production.

According to Marx, the value-form is a specific form of the representation of social labour (ie labour for others) which comes into existence with the development of commodity exchange and commodity production. It is this value-form which underlies all the phenomenal expressions of value in concrete forms of value eg prices, profit, rent etc. ¹ If a product is produced or sold as a commodity, then the labour it contains cannot appear directly as labour for others. Under conditions of commodity exchange or commodity production, labour only becomes labour for others once the product has been exchanged as a commodity. Social labour can only be expressed, therefore, in the value of a product as a commodity. ² In this situation, the value-form expresses not only social labour per se, but also the social relations of production which give rise to the displaced appearance of social labour in the value of a commodity. These relations of production consist in private ownership of commodities and the means of production for producing commodities. In the context of such relations, each commodity producer cannot continue as a commodity producer unless he exchanges the commodities he produces. In the absence of commodity exchange, private commodity producers would be unable to reproduce themselves as agents of production. By facilitating commodity-exchange, therefore, the value-form plays an indispensable role, under conditions of commodity production, in determining the reproduction of the labour process.

This process is taken one step further in capitalist society. In the capitalist mode of production labour-power as well as the means of production take on the value-form and are bought and sold as commodities. ³ In this situation, it is possible for money to produce relations of production directly through purchasing the elements of production and bringing them together to

produce commodities. On the surface of capitalist society, therefore, it appears as if money and commodities are directly responsible for reproducing the labour-process. Marx termed this phenomenon "commodity fetishism".⁴ Without denying the phenomenal reality of commodity fetishism, Marx revealed how the power of money and commodities to determine the reproduction of the labour-process has historical pre-conditions. The exchange of commodities can only perform such a role where private ownership of the elements of production exists. Only in the context of the social relations of commodity production does the reproduction of the labour-process necessarily involve commodity exchange. Whereas this is only a marginal feature of societies which organise their production largely independently of commodity production, it is indispensable once the social relations of production between independent commodity producers are realised through commodity-exchange. This is the case in capitalist commodity production. Social labour, in the context of the social relations of production of capitalism, for this reason, must be expressed in the value-form of the commodity.

It should be clear from the exposition above that Marx's analysis of the value-form as an expression of social labour brought about by the social relations of commodity production, will play a key role in the understanding of the reproduction of the labour-process in societies based on generalised commodity production. Now according to Marx the reproduction of the labour-process through commodity exchange is not a random process, but one determined by the expenditure of socially necessary labour-time.⁵ For Marx, therefore, the law of value in its most general terms refers to the process whereby the prices at which products exchange in generalised commodity production ie., capitalism, are

somehow determined by the expenditure of socially necessary labour time. I have, however, run ahead of my analysis. Before it is possible to determine the movement of prices in commodity exchange according to the law of value, it is necessary to be clear as to the nature of the "labour" responsible for determining value as a magnitude. Whereas social relations of production are responsible for the form of value, the question of the magnitude of value is decided by an analysis of the quantity of "labour" expended in production. This brings us to Marx's discussion of the substance of value.

Marx began his analysis of the substance of value by noting that every labour-process involved the production of use-values. The diverse, useful aspects of products were, Marx maintained, an outcome of the expenditure of different types of concrete labour.⁶ Use-value production is the precondition of the reproduction of human life and of human history. So concrete labour has to exist in all modes of production. In pre-capitalist societies, concrete labour is also, for the most part, directly social labour; but in generalised commodity production social labour is displaced in the form of value of the product. Labour for others becomes embodied in the value of the commodity and not in its use-value. Marx concluded, therefore, that concrete labour could not be the substance of value. Consequently, even though concrete labour is a precondition of commodity production since the commodity is a unity of value and use-value, it has no direct role in the analysis of the value-form and the magnitude of value.

The labours embodied in the displaced form of the value of a commodity are expressed as labour which is qualitatively equal.⁷ Commodity exchange equalises commodities as value-products regard-

less of their multifarious characteristics as products of concrete labour. This qualitatively equal and homogeneous labour cannot be concrete labour. Once one abstracts from the concrete forms of labour, however, one is left with nothing but the abstract character of labour as an expression of the expenditure of labour-time.⁸ Marx argued, therefore, that it was this "abstract labour" which was the substance of value of a commodity. From this analysis it follows that under conditions of commodity production, labour can only become social labour insofar as it is also abstract labour which is expressed in the value-form of commodities.

Marx emphasises that abstract labour counted as value-producing labour only if it was also socially necessary labour.⁹ The proof of the social necessity of labour in generalised commodity production is accomplished by the exchange of a commodity as a value. If a commodity cannot be sold, then the abstract labour it contains is void and does not count as socially necessary or value-producing labour. This explains an alleged anomaly of the labour theory of value. It is often maintained that as products of labour, commodities which prove unsaleable have value, but no price. This "fact" is then put forward as a "proof" that there is no necessary relation between price and value in the capitalist economy. However, a condition of a commodity possessing value is that it is a product not only of abstract, but of socially necessary labour. For a commodity to have a value without a price is straightforwardly not possible since commodities have value only insofar as they are exchangeable ie., only insofar as they are products of socially necessary labour. Yet, of necessity, this implies that the value of a commodity must take on a price-form as a condition of its sale in the capitalist economy. In this

context there are no commodities which somehow possess value and yet do not express their value in the form of relative prices. The objection to the law of value outlined above can be viewed as a misunderstanding of Marx's general theory.

According to Marx's value theory, the value of a commodity is determined by "the quantity of labour necessary for its production in a given state of society, under given average social conditions with a given social average intensity and average skill of labour employed." ¹⁰ The value of a commodity is a socially relative magnitude which has no necessary relationship to a quantity of labour measured in any sort of physiological units - whatever form such units may take. ¹¹ The value of a commodity, as a social quantity, will express an aliquot portion of the total social labour expended in the production of commodities. It follows, in the context of this analysis that "every increase in the quantity of labour wanted for the production of a commodity must, augment its value, every diminution lower it." ¹²

An abstract formulation of the law of value alone does not provide the basis for an analysis of the development and reproduction of the productive process under conditions of capitalist production. It is merely the first stage in the development of an adequate value-theory. The determination of commodity prices by socially necessary labour only comes about through a whole series of deviations of prices from value. ¹³ If Marx is to explain the operation of the law of value through a series of fluctuations of prices from value, then he must begin by making a clear theoretical distinction between value as determined exclusively by socially necessary labour time, and the expression of value in the price-form. However, following the letter of

Marx's treatment of value in capital Vol. 1 , part 1, section 1., one will discover that Marx treated exchange-value as if it were directly reducible to abstract-labour! If this were the case the implication would be that an equal exchange of commodities expressed in price-terms would ipso facto represent an equal exchange in value-terms. Such a position overtly contradicts Marx's insistent claim that the law of value only operated through a deviation of prices from value.

Marx fortunately corrected his treatment of value in "section 3" of Capital part 1, where he argued that it is not possible to reduce exchange-value directly to abstract-labour, because value always mediated the relation between the expenditure of socially necessary labour time and the expression of value in exchange. The relationships, for Marx, between abstract labour and prices can only be understood through a prior determination of value in general. It is through the relationship to value that one should then understand the value-mediated relationship between abstract labour and prices in the capitalist economy. If abstract labour is only expressed mediately through value and the value-forms, then there can be no direct reduction of prices to labour quantities. Marx clarified his position when he made exchange-value dependent on value. Exchange-value is theorised as a phenomenal expression of value and not as a direct expression of abstract labour. Marx claimed, therefore, that all commodities are expressions of value and consequently possess "a value form common to them all and presenting a marked contrast with the varied bodily forms of use-value." 14

If Marx had failed to correct his early reduction of exchange-value to abstract labour, then he would have been unable to account

for price-formation in the capitalist economy since commodity prices, under conditions of capitalist production, are not direct expressions of value, but are rather determined by prices of production. Evidently, Marx's general formulation of the law of value and his conceptual distinction between the form and substance of value are merely preliminary steps towards a more adequate theory of price formation and its role in the reproduction and development of capitalism as a mode of production.

6.2 MARX'S THEORY OF SURPLUS-VALUE

On the surface of capitalist society it may appear that price-formation is determined by the law of supply and demand. On closer scrutiny it will be noted that levels of supply and demand are, in turn, regulated by prices of production.¹⁵ According to Marx, the price of production consists of the cost price of a commodity K - the price of the elements of production, and the average rate of profit - \underline{p} - allotted to individual capitals in the course of capitalist competition. Competition brings out the price of production since capital will only cease moving in or moving out of a specific branch of production once its individual rate of profit conforms to the average-rate of profit for the whole economy. Thus, the competition of capitals leads to the formation of an average rate of profit in the long term, on account of the ceaseless search for the highest rate of profit. If this tendency towards the formation of prices of production ceased to operate, then it would cause dislocation in an economy based on the profit-motive since the various branches of the economy would only continue to produce insofar as they receive something approaching the average rate of profit. It should be apparent, therefore, that the formation of production prices plays a crucial

role in the reproduction of the labour-process in capitalism. It appears to be through the formation of production prices, that the distribution of capital and therefore of social necessary labour-time is achieved in a mode of production which has no mechanism for regulating the productive process either by tradition or by social planning.

Marx noted in Volume 3 of "Capital" that the price of production was brought out by capitalist competition. He also argued that the average rate of profit was not an arbitrary phenomenon, but rather was a definite magnitude to be determined in value-terms. Marx recognised, therefore, the need to develop a theory of capitalist profit which would be consistent with the labour theory of value. This would be a precondition of developing an understanding of price-formation in the capitalist economy consistent with the law of value. For this reason Marx ascribed major importance to his theory of surplus-value - first developed in 1859 with the discovery of "labour-power." ¹⁶

Marx's discussion of capitalist profit begins with the assumption of equivalent exchange. Although Marx was aware that commodities do not exchange as equivalents in the capitalist economy except in the socially average case where prices express the price of production and the latter is a direct representation of value, he nevertheless insisted this was the correct theoretical starting point. The assumption of equivalent exchange has two important functions. First, it poses the problem of explaining profit in the sphere of production in abstraction from the sphere of exchange and the distribution of profit. Secondly, it corresponds to the reality of capitalist exchange in the socially average case. In this situation equivalents exchange and yet the average-

rate of profit is still realised. Marx was justified, so it seems, when he claimed that if you are unable to explain capitalist profit on the assumption of equivalent exchange, then "you cannot explain it at all."¹⁷

Marx's attempt to explain capitalist profit on the basis of the labour theory of value arose from a critical encounter with the theoretical inconsistencies of classical political economy. Once value is to be determined by labour-time according to the law of value, it would appear that classical political economists like Smith and Ricardo should determine profit - a value-form - as a deduction of the value-product created by labour. Marx noted, however, that the classicists believed that the magnitude of profit as a deduction of the general value-product, could only be established once political economy had determined the "value of labour".¹⁸ However, the theoretical attempt to determine the "value of labour" leads inevitably to contradictions and inconsistencies for a labour theory of value. In the first, to determine the value of labour by labour is tautologous. Marx argued, therefore, that,

"To say that the value of a ten hours working day is equal to ten hours labour, or the quantity contained in it, would be a tautological and, more over, a nonsensical expression."¹⁹

This tautology assumes, in addition, that the labourer receives the whole of the value-product. No conceptual space is left for a theory of profit founded on a labour theory of value. In this formulation, the labour theory of value as a determination of the value of commodities and the theory of capitalist profit are seemingly irreconcilable. The fundamental weakness of this

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approach consists in the fact that, as Marx observed "there exists no such thing as the value of labour in the common acceptance of the word." ²⁰ Even though labour, or to be more precise, socially necessary labour is undeniably the substance of value, labour can have no value in-itself. It is the subject of the labour-process and not its product. ²¹ The labour theory of value can only determine the value of commodities and obviously not the value of the labour which produces these commodities.

The failure of Adam Smith to realise the impossibility of determining the "value of labour" led inevitably to inconsistencies in his theory of profit. For instance, even though Smith succeeded in analysing "profit, rent and interest as deductions from the product of the workers' labour" he failed to work out an adequate theoretical foundation for this analysis. ²² His theory of profit as a deduction from the value-product created by the labourer, is inconsistent with his determination of the "value of labour" which assumes the labourer receives the whole of the value product. In fact, such is the extent of Smith's theoretical confusion, that he put forward a costs of labour theory of value as if it were also a labour theory of value. ²³ In this theory, the value of commodities is determined by the amount of wages their production cost. The existence of capitalist profit, however, reveals that their value is consistently above the value of the wages which the labourer receives. Instead of developing the labour theory of value to account for the difference between the value of the labourer's wages and the value of his product, Smith resorted to a summation theory in which the value of a commodity was analysed as a summation of three independent sources of value viz labour, capital and land. ²⁴ These three elements contribute the value of wages, profit and rent respectively. If,

however, these sources of value are independent and mutually irreducible, then it follows that a summation theory of value diverges from a labour theory which determines value exclusively by labour-time. Smith's attempt to account for capitalist profit through a prior determination of the value of labour leads, finally, to the abandonment of the labour theory of value.

Ricardo, Marx observed, attempted to improve on Smith's treatment of the problem. In the first place, he admonished Smith for confusing the "incorrect" determination of the value of a commodity by the cost of the labour involved in its production, with the "correct" determination of value by the quantity of labour a commodity contains. Ricardo claimed that,

"The value of a commodity, or the quantity of any other commodity for which it will exchange, depends on the relative quantity of labour which is necessary for its production and not on the greater or lesser compensation which is paid for that labour." 25

Ricardo, however, had still to work out a solution to the vexed problem of the "value of labour". At first, he determined the "value of labour" by the value of "the means of subsistence which in a given society, are traditionally necessary for the maintenance and reproduction of the labourer." 26 The value of the means of subsistence are determined in turn, however, by the law of supply and demand and not by the law of value. Marx noted that Ricardo "determines value here, in one of the basic propositions of the whole system, by demand and supply as Say notes with malicious pleasure." 27

But if the law of value is supposed to explain the law of supply and demand, it is evidently self-defeating for this theory of value to determine the "value of labour" by supply and demand! This procedure led Ricardo into the vicious circle where, tautologically, value is determined by value. Marx noted that in Ricardo's formulation,

"The value of labour is determined by the value of the money which is paid for it." 28

Despite this failure, Ricardo does succeed at another point of his analysis, when he determines the value of average wages consistently with the labour theory of value. Marx claimed that for Ricardo the value of average wages was to be "determined neither by the money, nor the means of subsistence which the labourer receives, but by the labour time which it costs to produce it, ie., by the quantity of labour materialised in the means of subsistence of the labour." 29

Ricardo succeeded in a correct determination of the value of average wages because he abandoned the impossible task of determining the "value of labour" and instead successfully determined the value of the means of subsistence as an expression of labour-time. Ricardo's treatment of average-wages revealed the division of the working day between the labour-time necessary to produce the means of subsistence ie., the value of average-wages, and labour-time surplus to this requirement which is the source of capitalist profit. Ricardo unwittingly determined not the "value of labour" but the value of "labour-power" ie., of the labourer's capacity to produce value as a labourer, which is inextricably bound up with the reproduction of the means of sub-

sistence. Marx developed this "estranged insight" in Ricardo's political economy to the point where he could at last reconcile the law of value with a theory of profit and explicate a single measure of value viz. Socially necessary labour-time which could be applied to determining the value of all commodities in the capitalist economy including that of labour-power.³⁰ This is the theoretical foundation of his theory of surplus-value.

A labour theory of value assumed that no new value can be created by the exchange of commodities. Value is a magnitude determined exclusively by the expenditure of labour-time. The value of products as commodities will remain the same regardless of the final pattern of distribution of that value. As Marx stated,

"If commodities are sold at their values, then the magnitude of value in the hands of buyer and seller remains unchanged. Only the form of existence is changed. If commodities are not sold at their values, then the sum of converted values remains unchanged, the plus on one side is a minus on the other."³¹

A genuine valorisation of capital refers to the process whereby an initial sum of money has augmented its value so that it can now command more products of labour than previously.³² According to a "labour theory of value", the source of this valorisation cannot be found in the sphere of exchange or the distribution of value since exchange merely re-distributes a pre-determined value magnitude. On the contrary, insofar as the augmentation of capital is conditional on the appropriation of new value rather than the distribution of value products already existing, then the source of this new value can only be discovered in the sphere of

production. The secret of capitalist profit should be revealed, therefore, in the analysis of what occurs in the process of production.

According to Marx, the circuit of industrial capital begins with money capital which is transformed into productive capital when the capitalist purchases, as commodities, the means of production and labour-power.³³ The means of production, raw materials and all other elements of the productive process except labour-power form parts of constant capital whose value is already determined by the socially necessary labour time for their production prior to their role in production.³⁴ Consequently, constant capital can only transfer onto the final product such value as it already possesses and this transference of value can only occur insofar as labour-power productively consumes the means of production in the labour-process. The wage-labourer transfers the value of constant capital C onto the product, creates the value of the wages used to purchase his labour power i.e., variable capital V and produces a "surplus-value" S over and above that portion of capital used to buy his capacity to labour.³⁵ It is the surplus-labour of the wage-labourer materialised in the value of the product which forms the source of surplus-value and of capitalist profit. This surplus-labour, as the only possible source of a real valorisation of the initial sum of money invested in the elements of capital, depends on there being a difference between the value of labour-power as bought and sold in the sphere of exchange and the value of its product. It is only possible to determine surplus-value as a magnitude, therefore, through a prior determination of the value of labour-power.

Marx determined the value of labour-power by the labour-time

socially necessary for its production and reproduction.³⁶ This means its value is determined by the labour-time socially necessary for reproducing the wage-labourer as a wage-labourer since the capacity to labour is not separable from the existence of the labourer. The value of labour-power is determined, therefore, by the labour time socially necessary to produce the means of subsistence.

Marx observed that labour-power was unique as a commodity in being inextricably linked to a class of wage-labourers. Unlike other commodities, its value contained a moral or historical element which varied according to the cultural level of the working class.³⁷ The value of the means of subsistence is therefore a socially relative magnitude. It is not pre-given, but determined by the class struggle in capitalist society. There is, even so, an upper and lower limit to the value of labour-power in the capitalist economy. The capitalist must be able to buy labour power in sufficient quality and quantity, and to buy it at a price which makes possible the valorisation of his capital. Consequently, although the value of labour-power is indeed socially relative, it oscillates between the objective limits of the minimum to reproduce the means of subsistence, and the maximum where it would erode the capitalists' source of profit.

Marx's analysis of capitalist profit sidesteps the pseudo-problem of determining the value of labour and instead correctly determines the value of labour-power. The distinction between labour and labour-power facilitates an analysis of profit which is consistent with the labour theory of value and which escapes the vicious circle which dogged Smith's and Ricardo's treatment of the problem. It is not the actual expenditure of labour-time

which the capitalist buys, but rather the labourer's capacity to labour. This is bought at its value viz the value of the means of subsistence. Labour-power, however, possesses the use-value of producing a surplus-value in excess of the amount it receives in the form of wages. It is this difference between the value of labour-power and the value of its product which is the source of all capitalist revenues: commodities can exchange as equivalents and yet the capitalist can realise a surplus-value in the form of profit. This possibility exists because the value-composition of the commodity, under capitalist conditions, consists of C - the value transformed onto the commodity by the elements of constant - capital, V - the value created by labour power as an equivalent for its wages, and S - the surplus value created by the expenditure of labour-power.³⁸ C, V and S as components of a single value-product are magnitudes determined by the labour-time socially necessary for their production. Marx's theory of surplus-value is perfectly consistent with the law of value. Value is still determined by socially necessary labour time even when, as in the capitalist mode of production it is invariably expressed as a relation between necessary labour-time devoted to the production of the means of subsistence and surplus labour-time which determines the magnitude of surplus-value shared by the capitalist appropriators.

An exact expression of the rate of surplus-value is given by the ratio of S/V.³⁹ As S and V are expressions of the ratio of surplus labour-time to necessary labour time, one can also formulate the rate of surplus value as surplus labour-time/necessary labour time. S can be calculated by subtracting V from the total value product: C can be discounted insofar as it reappears in the product. The rate of profit expresses surplus-value as a

ratio of total capital and is formulated as $S/C+V$.⁴⁰ If $S/C+V$ is taken to be an expression of total surplus value in relation to total social capital then it would express the general rate of profit in value-terms prior to its phenomenal expression and distribution among the many, competing capitals. This value determination of the general rate of profit is of fundamental importance to Marx's theory of the concrete workings of the law of value as determined by exchange at prices of production in the capitalist economy.

6.3 MARX'S THEORY OF THE PRICES OF PRODUCTION

It is now possible to explicate Marx's account of the concrete workings of the law of value which is contained in his theory of the prices of production developed in volume three of "Capital". Before Marx could elaborate his value theory in this context, however, he had first to overcome an apparent contradiction between the law of value and capitalist commodity exchange. In virtue of the formation of a general or average rate of profit in the capitalist economy, capitals yield profits not in correspondence with their own individual value rates of profit, but do so, instead, in proportion to their size. This implies, however, a prima facie contradiction for the law of value since it means that exchange at production prices necessarily involves a deviation of prices from value-magnitudes. Individual capitals would, it seems, rarely if ever receive the exact value of the product they created. Rather, a redistribution of value must take place through capitalist commodity exchange. I intend to analyse how Marx reconciles this phenomenon with his general value-theory by tracing his treatment of this problem through his critique of the theories of Adam Smith and David Ricardo.

In his "Theories of Surplus-Value" Marx criticised Ricardo for treating the long-term price at which commodities exchange in the capitalist economy as if it were a direct expression of value. Adam Smith, on the other hand, was praised by Marx for emphasising the apparent contradiction between price formation according to production prices and the abstract formulation of the law of value. Marx states,

"It is his (Smith's) theoretical strength that he feels and stresses this contradiction, just as it is his theoretical weakness that it stakes his confidence in the general law....." 41

Although Ricardo was ahead of Smith insofar as his general theory of value is concerned, Marx observed he was behind Smith in his account of commodity exchange under conditions of capitalist production. Marx states,

"But, he (Ricardo) is behind Smith in that he does not even suspect that this presents a problem, and therefore the specific development which the law of value undergoes with the formation of capital does not for a moment puzzle him or even attract his attention." 42

Marx argued that the correct reaction is neither to abandon the law of value to account for exchange at prices of production, nor to deny or ignore the regulation of exchange through the formation of an average rate of profit. Marx sought to demonstrate how, "an equal average rate of profit can and must come about, not only without a violation of the law of value, but on the very basis of it." 43

Marx's account of the formation of an average rate of profit has its theoretical foundation in an analysis of capitalism as a mode of production based on a dialectical unity of production and exchange. The necessary relationship between socially necessary labour time and prices is jointly determined by the spheres of production and exchange. In the first instance, production as the source of all value products - is also the source of capitalist profit. Regardless of the distribution of profit, the average rate of profit is always an expression of the relation of total surplus-value to the total social capital. The exchange of commodities at prices of production only affects the distribution of surplus-value and not its actual magnitude. Precisely for this reason, without a value analysis of the average rate of profit, the whole notion of a general rate of profit would be, from the outset, a vague and arbitrary construction.

Even though all capitalist revenues including profit are created in the productive process, an average rate of profit will only come about in the capitalist economy insofar as competition between capitals is freely repeated. The formation of an average rate of profit is, therefore, co-determined by the sphere of exchange in which the many capitals compete. Indeed, Marx went so far as to suggest that the law of value could only operate in the context of capitalist competition. In the "Grundrisse", he stated,

"Free competition is the relation of capital itself to another capital, ie., the real conduct of capital as capital. The inner laws of capital - which appear merely as tendencies in the preliminary stages of development - are for the first time posited as laws:-" 44

The law of value, it seems, can assert itself only through the formation of prices of production in the capitalist economy.

According to Marx, the average rate of profit can be no more nor less than a magnitude of surplus-value determined exclusively in the sphere of production and expressed as a relation to the total social capital. However, this magnitude of surplus-value is distributed among the many competing capitals not in proportion to their individual value compositions, but rather in proportion to their size. A distribution of surplus-value takes place in which, as Meek observes, "the aggregate surplus-value produced over the economy as a whole is, as it were, re-allocated among the different capitals so that they share in it not in accordance with the amount of capital they have spent on wages, but in accordance with the total amounts of capital which they have severally employed." ⁴⁵ In other words, the formation of production prices has the function of distributing the total surplus-value produced in an economy among the competing capitals.

The share of surplus-value gained from exchange with other capitals will depend on the organic composition of the individual capital in relation to the other capital and average social capital. An exact expression of the organic composition of a capital is given by the relation of constant to variable capital. ⁴⁶ A capital has a high organic composition if its proportion of constant to variable is greater than the average and a low organic composition if the converse is the case. In the economy as a whole, commodities will be sold above their value in areas with a higher organic composition, below their value in areas with a lower organic composition, and only at their value where a capital is an exact expression of the social average capital. These

deviations of production prices from value are a necessary condition of all these areas receiving the average rate of profit. This deviation of price from value is by no means an anomaly for the law of value, but, on the contrary, can only be explained by the theory. First, the law of value and theory of surplus-value explain the nature and magnitude of what is being distributed by the exchange at prices of production. Secondly, an analysis of the losses and gains in distribution presupposes a "value" explanation which refers both to the organic compositions of individual capitals and the total social capital. Hence, Marx is able to explain exchange at prices of production on the basis of the labour theory of value. The common value-product is simply divided according to the respective value-compositions of the many competing capitals. The law of value continues to operate, but is mediated by the formation of prices of production and an average rate of profit.

The movement of capital in the capitalist mode of production is determined by the search for the highest profit i.e., by the same mechanism which leads to the formation of an average rate of profit. It is this same movement which by regulating the distribution of capital in the economy determines simultaneously the distribution of socially necessary labour time. The mechanism which is responsible for price-formation according to prices of production is, therefore, at the same time, the mechanism responsible for the reproduction of the labour process in the capitalist mode of production. This helps explain the theoretical importance of a theory of price formation for a Marxist social science. By squaring the law of value with the theory of production prices, therefore, Marx is able to reveal the long term foundation for price formation and also the concrete mechanism

of the reproduction and development of the productive process in a mode of production where socially necessary labour time is regulated neither by custom nor by social planning.

Many commentators have argued that Marx puts forward two separate and irreconcilable theories of value in volumes 1 and 3 of "Capital".⁴⁷ According to this view, there is a contradiction between Marx's general theory of value and his theory of the prices of production. Böhm-Bawerk, for instance, pointed out, at the turn of the century, that the theoretical transformation of values into prices always expresses a mathematical incongruity between price and value magnitudes.⁴⁸ It appears that the formal derivation of prices from values can only be achieved, as Shaikh put it, at the cost of "severing the links between price and value-magnitudes which Marx seemed to emphasise in his own procedure."⁴⁹ If, however, there were no connection between value and price magnitudes, then there could be no link between a general theory of value and a theory of production prices. In other words, it would be impossible to account for price-formation in the capitalist mode of production on the basis of the law of value.

In order to defend Marx's value-theory against this critical onslaught, it is necessary to retain the idea of there being a necessary link between value and prices. However, this need not imply that the connection must be one which conforms to a mathematical proportionality of the type required by the formal derivation of prices from value-magnitudes. It seems to me that the attempt at such a derivation is caused by a methodological misconception. Indeed I have observed how Marx's value-theory has other methodological purposes. The necessary connection be-

tween value and prices is regarded as a social necessity for the capitalist mode of production. It is the means through which this mode of production reproduces the labour process. Obviously, therefore, the failure of this process to conform to the pattern of a simple mathematical deduction of prices from values, does not undermine its necessity as a social mechanism. There is no prima facie reason why it should be supposed that social causality should be governed by canons of mathematical proportionality any more than it should be assumed that it operates through relationships of real opposition or contrariety. Even if it were established that Marx's mathematical procedures of transforming values into prices were invalid and, in addition, that no mathematical derivation of prices from values were possible in advance of exchange, this would not undermine Marx's historical analysis of the necessity of a causal relation between socially necessary labour-time and prices as a precondition of capitalist reproduction of the productive process. The understanding of capitalism as a mode of production cannot proceed on the flimsy basis of an economic calculus or even by use of a purely "economic" method; it is to be achieved by a dialectico-causal analysis. So Marx's value-theory should be interpreted as part of his general theory of history and not be mistakenly presented as a mathematical device for calculating the price of commodities.

Marx's theory of value does not require an identity or even a relation of direct proportionality between the average rate of profit as determined in value-terms and as expressed in exchange at prices of production. The value rate of profit is expressed phenomenally in an approximate manner and then only in the long term. The law of value, as Marx repeatedly observed, only asserts itself through a whole series of fluctuations and deviations of prices from values; and this also typifies the relation between value and the prices of production.

Marx's theoretical aim is not to calculate prices in advance of exchange, but rather to understand the process whereby value is transformed into prices in the capitalist economy.

This is, by its very nature, a process accomplished by the competition of capitals in the market. It could only be calculated, in advance of exchange, therefore, by a prior knowledge of an almost unlimited number of variables affecting both production and circulation. The basis of a desire which seeks to reduce prices directly to labour time rather than to understand the historical reality of capitalist reproduction, is, I believe, to be found in a theoretical allegiance to a mechanistic account of the relationship between production and exchange. It is necessary, therefore, to challenge such mechanicism by clarifying the dialectico-causal underpinnings of Marx's value theory.

The law of value comes into operation only when the elements of the productive process viz the means of production and labour-power take on a value-form. Henceforward, the labour process can only be reproduced through the mediation of value-forms. Exchange becomes a necessary phase of production and production is accordingly mediated by commodity exchange.⁵⁰ The capitalist mode of production is, therefore, a dialectical unity of production and exchange. If production, as a moment of the productive totality determined the other moments, then it follows that it would be "itself determined by the other moments".⁵¹ Relationships of dialectical causality exist in the capitalist mode of production. Marx states,

"A distinct mode of production thus determines the specific mode of consumption, distribution, exchange, and the specific relations of these different phases to one another. Production in the narrow sense, however, is in its turn also determined by the

other aspects." 52

To conceive of production as determining all the other moments of the whole, would be to reduce the complex relationships in the dialectical whole to a simple mono-determinism. Production would be conceived as superior to the social totality and as the unmediated determinant of its development. The attempt to reduce prices directly to value is founded precisely on such a mechanistic conception of the causal relation between production and exchange. It is assumed that value-magnitudes created in production must be expressed in directly proportional magnitudes of prices in the sphere of exchange. The sphere of exchange becomes merely an epiphenomenal reflex of the sphere of production, and denied any sort of causal role in the capitalist economy. Marx's value-theory, on the other hand, recognises that the sphere of exchange is also a causally relevant factor in determining the relationship between prices. This is one of the reasons why it is impossible to determine price formation in the capitalist economy by reference to the sphere of production alone. It is equally true that the sphere of exchange cannot be the sole determinant of the relationship between prices in capitalism. Rather, according to our interpretation, price formation is the outcome of a dialectico-causal relation between production and circulation. The source and magnitude of profit is determined in production and the sphere of exchange brings out the prices of production in the long term via the competition of capitals. Marx's labour theory of value depends, therefore, on the same notion of dialectical causality which characterises his approach to the study of social development in general.

Any attempt to reduce prices to value-magnitudes in advance of

exchange, on the other hand, is founded not only on a misunderstanding of Marx's theoretical aims, but also on a mechanistic notion of causality. Insofar as theorists adopt this methodological approach in an attempt to solve the so-called "transformation problem" ie., the transformation of values into prices, they fall into a crude social mechanicism.⁵³ In fact, our dialectico-causal approach to the problem of price-formation in capitalism does imply that the attempt to calculate prices from values is based on a methodological misconception. According to our interpretation, Marx's value-theory does not aim to develop such a theory nor does it need this sort of mathematical proportionality. On the contrary, once it is realised that the relation between production and circulation is characterised by a dialectical causality, then there is no difficulty in understanding the formation of prices to be a socially necessary - if not directly calculable - moment in the reproduction of the labour process. The reality of this social necessity, which is theoretically explicated by Marx's value theory, is not in the least undermined by its failure to conform to a standard of direct proportionality no more than it is invalidated because it is not founded on a mechanistic reduction of exchange to production.

6.4 DIALECTICAL CAUSALITY AND MARX'S REVOLUTION IN SCIENCE

In this section, I intend to present Marx's supersession of the anomalies of classical political economy as a revolution in science. In the previous sections, I have explained how Marx solved the problems of reconciling capitalist profit and capitalist commodity exchange with the general principles of a labour-theory of value. These same prima facie anomalies for the law of value, however, caused fundamental inconsistencies in the theories

developed by Adam Smith and David Ricardo. I intend to discuss the theoretical problems encountered by these two pioneering thinkers before proceeding to a discussion of the methodological basis of Marx's improvement of the labour theory of value.

Smith's costs-of-labour theory of value, discussed briefly in 6.2., led directly to a summation theory of value which contradicted the law of value, once Smith encountered the problem of explaining the value of commodities under capitalist conditions of production. It is apparent, therefore, that neither capitalist profit nor ground-rent can be regarded as items of value determined by wages or the costs of labour. Smith, therefore, developed an alternative theory of value - the trinity formula - which analysed the commodity to be a summation of three independent sources of value viz labour, land and capital.⁵⁴ According to this theory, the value of wages is contributed by labour, profit or interest by fixed or money capital, and ground-rent by land. Henceforth, labour is responsible only for the determination of the value of its own wages and not for the value in general.

This analysis of the value of a commodity has a strong phenomenal foundation in the capitalist mode of production. The wage-form disguises the reality of capitalist exploitation by making it appear that the wage-labourer is paid for the expenditure of all his labour-time and not merely for that part of the working day necessary to produce the value of his means of subsistence. Consequently, to the wage-labourer, "the value or price of his labour-power, necessarily appears to him as the price or value of his labour itself."⁵⁵ In contrast to surplus-labour performed in pre-capitalist economic formations, the surplus labour-time appropriated by the capitalist is not directly visible

because it is not divided in time or space from necessary labour-time expended in the productive process. Marx argued that,

"This false appearance distinguishes wage-labour from other historical forms of labour." 56

If political economy fails to penetrate the fetishism of the wage-form, then it must invent other sources of value which explain the existence of profit and rent in a context where it appears that the wage-labourer receives all the value created by his labour.

According to the trinity formula, fixed or money capital is supposedly the source of the value of profit or interest. This conception again has a strong phenomenal foundation in the (fetishistic) appearance of capitalist production and circulation. The transformation of surplus-value into an average rate of profit makes the magnitude of profit a function of the size of individual capitals rather than their individual value compositions. It appears, therefore, that profit springs forth from all the elements of capital, rather than being the exclusive product of variable capital and labour-power. The source of profit is further obscured by the establishment of a rate of interest which functions as the price of capital as a commodity. The existence of finance-capital seems to testify to the "natural" ability of money to multiply and beget interest rather like a tree begets fruit. However, a real valorisation $M-M'$ can only take place insofar as the money which is sold as capital comes into a relation with productive capital which yields a profit through the exploitation of wage-labour. The source of the valorisation of finance capital must, despite its fetishistic appearance be the same as

the source of industrial profit. Through the lending of his capital the financial capitalists claims a part of the profit of the industrial capitalist. Interest is merely a division of profit which, in turn, is a phenomenal form of surplus-value. It is, therefore, unnecessary and inaccurate to posit either money capital or fixed capital as an independent source of value which accounts for profit on interest as value-magnitudes.

Rent, like interest, is analysed by Marx as a deduction from profit and, therefore, as a phenomenal form of surplus-value. Marx maintained that,

"Rent, interest and industrial profit are only different names for the different parts of the surplus-value of the commodity, or the unpaid labour enclosed in it, and they are derived from this source and this source alone." 57

Differential rent is a deduction from the profit of the capitalist tenant which depends for its magnitude on the difference between the individual production price of the tenant and the social price of production for the agricultural branch as a whole. 58 The social price of production for the agricultural sector will be determined by the worst land which it is necessary to cultivate in order to satisfy the social need. The worst land under cultivation will then be awarded the average rate of profit to ensure that, under capitalist conditions, it will indeed be engaged in agriculture. Land of a superior quality will, therefore, yield a super-profit in excess of the social average. It thereby creates the possibility for the landlord to pocket the difference between the super-profit and the average-rate, while still preserving the economic conditions which will guarantee

continued capitalist farming. The size of differential rent will evidently vary in direct proportion to the relative fertility of the land. This creates the illusion that "land" and not the relative magnitude of surplus labour-time creates the value of the rent. Land, as a natural phenomenon, however, cannot create value, nor can it have value in-itself. It functions rather as a means whereby the owner is able to appropriate the surplus-profit from capitalist producers. This is true both of rent in the agricultural sector and of ground rent relations throughout the capitalist economy. Marx observed that,

"Wherever natural forces can be monopolised and guarantee a surplus-profit to the industrial capitalist using them, be it waterfalls, rich mines, waters teeming with fish, or a favourably located building site, there the person who by virtue of title to a portion of the globe has become the proprietor of these natural objects will wrest this surplus profit from functioning capital in the form of rent." 59

Land has a price, despite the fact that it has no value, because its ownership represents a claim on the profit of working capital. The apparent "anomaly" of land having a price although it has no value, therefore, is one which is explained adequately by Marx's value-theory.

Marx argued that despite its phenomenal grounding bourgeois production, the trinity formula is a vulgar and inadequate theory of value. The summations it posits as elements of value are "prima facie three impossible combinations." 60 First the land-rent formulation succeeds in reducing the exchange-value of land as the price of rent to the use-value of land which resides ex-

clusively in its natural properties and has nothing to do with value. Consequently, Marx argued that, "a social relation conceived as a thing is made proportional to nature ie., two incommensurable magnitudes are supposed to stand in ratio to one another."⁶

Secondly, the capital - interest formulation is absurd because it makes capital as a value unequal to itself. Capital is both M - a certain initial sum of money and M' - the same sum of money + interest. The process of this valorisation is not explained by the trinity formula, rather it assumes the valorisation to be effected by the "natural" properties of money capital or fixed capital. Consequently, whereas the land-rent combination reduces rent as a form of value to the natural properties of land, the capital - interest formulation succeeds in reducing the social power of capital to yield interest to a supposedly naturalistic power analogous to the fruit bearing of an apple tree. Finally, the labour-wages combination not only confounds concrete labour with value-producing labour, but also fails to understand the division of the working day between necessary and surplus labour time which is the basis for production of surplus-value. No coherent analysis of value, profit, interest or rent is offered by the trinity formula.

Smith's attempt to resolve the "contradiction" between the law of value and exchange at production prices by abandoning the labour theory of value, leads to a theoretical impasse in which it is unable to account for price-formation in the capitalist economy. If, on the other hand, a strategy of eliminating the concept of value altogether were adopted and prices were related directly to labour-quantities in the manner of Ricardo, then political economy would again fail to produce a consistent theory

of price-formation. Such a theoretical attempt would need to explain the deviation of prices from the expenditure of labour-time evident in exchange at production prices by recourse to ad hoc factors independent of a labour theory of value. The average rate of profit would be transformed into an arbitrary magnitude without any necessary relation to the expenditure of labour-time. It seems that it is indeed necessary to perfect the law of value in the face of the apparent anomalies of capitalist profit and exchange, in order to develop an adequate theory of price-formation in the capitalist economy.

Marx's critique of political economy is not a wholesale rejection of classical theory, it is a development of the labour theory of value pioneered by the classicists. In this area of theory, Marx recognises that the classicists make a scientific contribution to the understanding of the capitalist economy even though they "all fall more or less into inconsistencies, half-truths, and unsolved contradictions."⁶² Despite its shortcomings, classical political economy's formulation of the law of value is a serious theoretical attempt to explain the whole phenomenon of price formation in an objective and causal manner. The classicists tried to understand price-formation scientifically, even if their analysis was constrained by a mechanistic, asocial and ahistorical account of the relationship between production and exchange. Indeed, this mechanicism spills over into their whole conception of the value-form which they fail to understand as an historical phenomenon. Marx, on the other hand, recognises both the historicity of value-forms as expressions of specific relations of production and also the historicity of the law of value itself. According to Marx's analysis, therefore, the law of value is not something characteristic of all modes of production, but

is rather a specific historical product of capitalism.⁶³ The historical precondition for the operation of the law of value is the establishment of a mode of production based on the unity of production and exchange. It is only when this has occurred that exchange becomes a necessary *phase* of production and that reproduction of the labour process must be mediated through commodity exchange. However, this situation only exists in the historical context of generalised commodity production where the elements of production themselves i.e., the means of production and labour-power, take on the value form. The law of value is, therefore, an historical result of the dialectical relationship of interdependence between production and exchange.

A dialectico-causal approach to political economy helped Marx to achieve a number of important aims. First, by adopting this intrinsically historical methodology, Marx was able to understand the forms of value as they developed in specific socio-economic formations. The forms of value are grasped historically and not naturalistically as supposedly universal and, therefore, invariant properties of all modes of production. In addition, the value-forms are analysed as dialectical moments of particular historic formations and not as phenomena which have pre-determined and set properties in themselves. It is precisely by adopting this approach that Marx was able to discover the uniqueness of the value-forms in capitalism, where labour-power and the means of production for the first time take on the form of value. This historical discovery is, of course, the foundation for Marx's theory of surplus-value and the value theory of profit. Secondly, a dialectico-causal conception of the capitalism not only facilitates an historical understanding of this mode of production, but also provides a theoretical basis for reconciling the law of

value with exchange at prices of production. Hence, I argued at the end of 6.3., that Marx's supersession of this apparent "anomaly", which simultaneously explained the mechanism for reproduction and development of social production in capitalism, depended on grasping capitalism as a dialectical unity of production and exchange. Without such a conception, the historical specificity of capitalism as a mode of production which reproduces the labour process without a mechanism of social planning would indeed remain a mystery. Marx's development of the labour theory of value is, therefore, the means whereby he succeeds in making capitalism a legitimate object of study for a dialectico-causal science of history. This implies a conception of the law of value as quite distinct from that adhered to by the classical political economists. The development and reproduction of capitalism should now be understood as a dialectico-causal process in which the other moments of the totality viz social classes, the state, ideology etc., mutually determine events in the manner described in Chapter 5. Political economy ought to become, therefore, a branch of a dialectico-causal history which studies the reproduction and development of social production in a mode of production where the labour process is "regulated" through the mediation of value-forms, according to the law of value.

Marx's critique of political economy supersedes the anomalies of the classicists in a process of theory - change entirely consistent with our account of revolutions in science in chapter one. Marx solves the two most fundamental problems of the labour theory of value viz the problem of explaining capitalist profit and exchange at production prices, while simultaneously developing certain insights of the classicists in terms of his new theory. For example, Marx develops the insights into the nature of surplus-

value achieved by Smith and Ricardo as well as using their theoretical work on the general law of value and production prices. Marx's theory of value not only resolves the principal anomalies of the law of value as evident in the work of the classicists, but also preserves "a great deal of the most concrete parts of past achievement." ⁶⁴ It is in virtue of Marx's scientific development of the theories of classicists in a process of theory change which inclines one to view Marx's critique of political economy as a revolution in science.

Chapter 7. MARX, WEBER AND THE METHODOLOGY OF SOCIAL SCIENCE

7.1 THE DEMISE OF CLASSICAL POLITICAL ECONOMY AND THE
"METHODENSTREIT".

I argued in chapter 6 that Marx's critique of political economy develops the law of value to the point where it is compatible with historical science. Political economy, I suggested, was merely a branch of a general dialectico-causal science of history. The general methodological orientation of such a science is confirmed by this conclusion since it recognises the value-form and all economic phenomena to be interdependent moments within a single causal process. This conception of the relationship between history and political economy or "economics" was not one shared, however, by the protagonists in the "Methodenstreit".¹

The "Methodenstreit", which took place between Gustav Schmoller and Carl Menger at the turn of the century, discussed the aims and methods of economics and historical science in an intellectual climate which dismissed the very idea of a labour theory of value. Despite their theoretical differences, all antagonists in this controversy agreed on a common rejection of classical political economy and the law of value which it had developed. Adey and Frisby correctly observe,

"In this controversy, it was perhaps not the relation of theory to reality which was at issue, but rather what constitutes theory in a context in which both Schmoller and Menger rejected classical political economy."²

This debate was of central importance for the whole of social science because it broadened out into controversy over the appropriate methods for the study of social phenomenon in general and not simply the economy alone. The controversy is also fundamental for understanding Weber's methodology. Indeed some commentators have suggested Weber's writings in this field put forward some sort of "cure" for the "methodological pestilence" of the "Methodenstreit".³ An analysis of Weber's methodology, in relation to the "Methodenstreit" and the demise of classical political economy, should offer, therefore, a unique opportunity to develop a theoretical foundation for the critical comparison of the methodologies of Marx and Weber.

Schmoller and the historical school of economics, interpreted the economy as an expression of a nation's norms or ideals.⁴ The historical school, as Unger pertinently observes, "emphasised the inclusion of economics in the totality of the common moral and national life."⁵ A thoroughgoing understanding of economic phenomena was to be achieved by adopting an inductive, historical approach; economics needed to proceed on the basis of what the neo-Kantians would term an ideographic method. Menger though, while accepting history to be an ideographic science, argued that economics was a generalising and theoretical discipline characterised by a different methodology and theoretical aim.⁶ For Menger the subject matter of economics prevented the use of an historical method because it was pre-eminently constituted by "transhistorical or ahistorically defined "types" or "forms" of economic phenomena."⁷ So he regarded economics, conclusively, as an "exact science" which must aspire to theoretical generalisations analogous to those developed in the natural sciences.

If one accepted the terms of the "Methodenstreit" as debated by Schmoller and Menger, then one would be trapped in a dualism between history and theory between ahistorical scientific generalisation, and history stripped of scientific generality. The dilemma they forced on themselves is obvious. When history aspires to theoretical generalisation it must cease to be ideographic and then it can no longer be regarded as an historical discipline; but if social science theory finds it necessary to retain its historical side then it cannot expect to contain scientific generalisation. This applies not just to economic theory, but to all other aspects of social science. Unless there is a wholesale rejection of the intellectual polarities at the very heart of this controversy, there will be a permanent ban against the formulation of a methodology for a generalising science of history.

Weber's methodology is a self-conscious attempt to cure this, as he believed, false antagonism. It suggests a new relation between the generalising disciplines of economics and sociology and the ideographic discipline of history which keeps faith with a neo-Kantian conception of scientific generalisation. Weber accepts Menger's argument that economics is a theoretical rather than an historical science. But the content of this theory has to be based on ideal-types and an adequate theory of action. Weber, therefore, rejects any sort of attempt by marginalist economists to reduce the problem of price-formation in the economy to a function of the intensity of consumer desire interpreted in biological or psychological terms.⁸ Price formation should neither be explained by a set of reified "norms" of national life as in the historical school, nor by an asocial theory of value as in psychologistic marginalism, but rather it should be understood as a result of the economic action of individuals.

Weber regards economic action as a species of rational action. He defines economic action as an action which is governed in its course by an economic end and one which uses specifically economic and pacific means to attain that end.⁹ Even though it is evident that economic action is socially mediated, its ends and means are still specifically economic and provide the subject matter for an independent economic science. For Weber, economics and sociology are, in consequence, separate disciplines with distinct "objects" of study. Sociology studies social action which is "other-orientated",¹⁰ whereas economics investigates the course of economic action regulated by the pursuit of specifically economic ends through economic means. Although this appears to be merely a technical division between the two disciplines, it has as its substantive premise the assumption that "economic" and "social" phenomena can and should be studied independently. Weber develops, in line with this principle, an asocial view of economics and a non-economic conception of sociology. From this standpoint, economic idealisations must abstract from the socio-historical ground of the economy just as sociological generalisation must abstract from essentially economic influences. It would appear that Weber's separation of economics and sociology, far from integrating them into a single historical science, reproduces the economics/history and theory/history dualisms of the "Methodenstreit".

This brings me to a discussion of the relation between sociology and history. According to Weber, sociology and history study the same subject matter viz social action, while being nevertheless distinct disciplines. Sociology is a generalising science with the ambition of outlining a set of ideal-typical accounts of social action, whereas history remains ideographic

and individualising.¹¹ Weber recognised, however, that history can only achieve its ideographic aims if it has recourse to general concepts. Without such concepts historians would be unable to distinguish one historical configuration from another and/or establish its uniqueness.¹² Weber, therefore, developed a new sort of theoretical term - the ideal-type - in order to present a view of social scientific generalisation which is compatible with a fundamentally neo-Kantian conception of social phenomena. However, as I pointed out in 2.4., Weber's ideal-type cannot fulfill the theoretical role required of it because it fails to provide a cognitive foundation for scientific generalisation in history, or for historicity in the generalisations of social scientific theory. To regard the ideal-type as a genuine solution to the theory/history dualism of the "Methodenstreit" would, so it seems, be a mistake.¹³

Weber's "solution" to the methodological pestilence of the "Methodenstreit" does no more than reconstitute its underlying dualisms, this time in the context of his own methodology. They are expressed in the split between an ideographic history and a generalising sociology and economics, and in the separation of economics, whose subject matter is unaffected by socio-historical influences, from history and sociology. Finally, the theory/history dualism reappears yet again in the context of the concept formation of each individual science - since the generalising component of these disciplines is ideal-typical and, therefore, constructed without regard to matters of history. What can be conceded, in the context of Weber's methodology, is that the theory/history dualism loses much of its sting because the generalisations based on his idealisations can never aspire to the status of deductive-nomological laws of the type Menger

hoped for when he conceived economics as an "exact" science. Insofar as Weber does develop a solution to the "Methodenstreit", there can be no doubt its cost is the abandonment of any viable notion of scientific generalisation so as to retain a style of concept formation consistent with his neo-Kantian characterisation of social phenomena. If this is indeed the case, then the thesis I put forward in Chapter 2, that Weber's methodology is no more nor less than a logical outcome of his neo-Kantian epistemology, can be considered strengthened and reinforced.

7.2 WEBER'S CRITIQUE OF MARXISM

Weber's attitude to Marxist theory was ambivalent. While he sought to criticise and reject mechanistic or Hegelian variants of Marxism, Weber did wish to preserve what he understood to be Marxism's scientific core.¹⁴ Weber dismissed mechanistic interpretations of historical materialism on the grounds that they culminated in a single factor determinism with either the economy or the productive forces abstracted from history and projected as the ultimate cause of all social development.¹⁵ Hegelian elements in Marxism were, of course, equally unscientific. So he objected to the teleological method which he claimed to have found in the Marxist tradition, whereby social development was regarded as a process to be explained by an "end" to history.¹⁶ Utterly unscientific, he believed, to see periods of human history as stages leading to the accomplishment of a communist society projected as the destiny of history. All this was admonished by Weber as methodologically suspect and empirically false.

Weber developed his own view of the scientific merits of

Marxism. As far as he was concerned, historical materialism had to be regarded as one value-relevant theory among others.¹⁷ It had to be understood as one theory, among theories of equal merit, which constructs ideal-types out of its specific value commitment to socialism. Weber claimed, therefore, that "all specifically Marxian "laws" and developmental constructs - insofar as they are theoretically sound - are ideal-types." ¹⁸ If one accepted this view of Marxism, then there would be no distinction between historical materialism and Weber's methodology. In other words, Weber "saves" the scientific core of Marxism by squaring it with his own conception of social science. Yet precisely in the elaboration of his conception of social science, does Weber face what appear to be insuperable methodological problems. And if Weber's methodology fails to justify its scientific pretensions, then it must follow that all attempts, on those grounds, to distinguish scientific from unscientific elements in other social theories are doomed to failure.

I have already demonstrated in Chapter 2 how Weber's methodology failed to provide an adequate cognitive foundation for a generalising social science. My own interpretation of Marxism as a dialectico-causal science of history, did appear to be more successful in this regard. However, Weber failed to offer even the possibility of a dialectico-causal interpretation of Marxism either for the works of Marx himself or his successors. It is not Weber's methodology which provides a solution to the dualisms of the "Methodenstreit", but rather the interpretation of Marxism developed here. From my argument in Chapters 5 and 6 it should be evident that a dialectico-causal understanding of history overcomes the separation of economics or political economy, on the one hand, and sociology and history, on the other.

On this view of Marxism, social science is a single activity whose various branches seek to elucidate the nature of a unitary causal process. Such a view of social development puts paid to the dualism of the "Methodenstreit" by building up history as a generalising science and by ensuring social scientific theory remains historical.

7.3 SCIENCE, POLITICS AND THE METHODOLOGY OF MARX AND WEBER

I have argued that Weber's conception of the methodological role of Wertbeziehung excludes the possibility of developing value-free theories in social science.¹⁹ Far from excluding values, Weber's methodology provides a rationale for the thorough and continuous intrusion of values into every stage of social inquiry. Strange, when seen in this light, that Weber should be consistently presented as the father of value-free sociology, when his methodology transparently precludes the very possibility of developing a value-free social science. It should be clear by now that instead of providing a scientific means for arriving at political decisions, Weber's scientific position is the result of ethical or political values. And here one can find a distinction between Weber and Marx which must be doubly underlined. For this imposition of politics and values on scientific theory is fortunately not a logical implication of a dialectico-causal view of social development. In fact, I intend to demonstrate that Marx's political stance, far from being determined by ethical or political values, is derived from a scientific analysis of social development.

In the remainder of this section, I intend to relate Marx's theory of political intervention to my conception of history.

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Such a view of political intervention seemingly, rejects the diametrically opposed positions of political voluntarism and fatalism. This is a convenient place to spell this point out in greater detail. These two positions, fatalism and voluntarism are the political counterparts of the mechanical causality/humanistic voluntarism polarity analysed elsewhere in the thesis. Hence, if the course of history were thought to be determined by supra-historical laws then ipso facto all political action would be pre-determined. The achievement of socialism could be safely left to the operation of inexorable laws-the "hidden hand" of history. A mechanistic social theory tends to lead to political fatalism. But if history were no more than the outcome of man's pure free action of the kind Weber required, then socialism would be established by the exercise of this freedom regardless of the existence of what must count as "psuedo" countervailing forces. These counteracting influences could not be causally constraining, or the voluntaristic theory of action would have to be modified.

Neither position is capable of generating a scientific basis for political intervention in social development, simply because neither arises from a scientific understanding of history. A dialectico-causal view of political intervention, however, rejects by implication the idea that socialism can be brought about by the operation of naturalistic laws or by the unconstrained freedom of man as a political subject. Rather, if socialism or any other political end is to be achieved, then it can only be by way of a practical intervention on the basis of a scientific analysis of historical (and this includes Marxist) tendencies. In other words, Marxists must theoretically appreciate their place and role in history before they can be in

a position to consciously transform it.

Marx, in his political writings, understood that scientific theory alone can not itself achieve a socio-economic transformation. Rather, a transition to socialism must depend on practical intervention in history.²⁰ Marx believed the working-class would have to be the principal agent of such a transition. There were two things he strove to do. First, he attempted to make the struggle for socialism, espoused by many elements of the proletariat, scientific. To do this he had to base the theory of the transition from capitalism to socialism on an adequate methodological basis. Historical materialism was intended as just such a scientific analysis of the reproduction and development of capitalism, one which provided theoretical understanding of the means of transforming this socio-economic formation. Secondly, Marx attempted to make his science practical or revolutionary. Hence, he sought at all times to extract political conclusions from analyses of historical events. The most conspicuous conclusion is, naturally, Marx's commitment to socialism itself. These two sides of Marx's work i.e., the desire to make science revolutionary and socialism scientific are expressed in the composite formulation of scientific socialism.²¹ It is my intention to show how Marx's position on this matter is determined by scientific considerations rather than by ethical or political values.

Marx argued that socialism was the political solution to the contradictions between the forces and relations of production engendered by the extended reproduction of the socio-economic formation known as capitalism.²² He believed socialism would present a social foundation for a continuous development of pro-

duction, unhampered by the barriers generated by the relationships of private production and appropriation characteristic of capitalism. This political conclusion, he tried to substantiate in his analysis of the contradictory development of capitalism as a mode of production contained in the three volumes of "Capital". If Marx's analysis is scientifically justified, then it would be more rational from the viewpoint of science to identify politically with the social forces that will promote the development of social production for the benefit of producers and consumers, than to align oneself politically with the forces that restrict this development in the interest of private capital accumulation. But it does need to be emphasised that these political conclusions only follow insofar as Marx does demonstrate that capitalism is less able to guarantee the future development of the forces of production, forces on which all societies have their foundation. Marx's position in politics is, obviously contingent on the success or failure of his scientific analysis.

Scientists are methodologically obliged to accept certain conclusions if it is shown that these results follow logically from a well-founded theory. The application of this principle to socialism might well seem audacious, but that is no reason for shirking its application and avoiding those conclusions. From the viewpoint of a science of history, socialism may well have a scientific foundation - hence, Marx's term, scientific socialism and this must be followed through. Evident first of all, is the thought that what may be rational from the viewpoint of an historical science, may not be rational from the viewpoint of a social class with a very real interest in preserving the status quo. The capitalist class, for instance, would be acting irrationally with respect to their class interests if they sur-

rendered their ownership of the means of production in order to establish socialism. But, Marx maintained, the class interests of the proletariat are best served by a political commitment to socialism since the establishment of such a socialist society is a precondition for overcoming social and economic exploitation and for establishing a planned development of social production. Whereas it would be irrational for the bourgeoisie to identify with a Marxist science of history, Marx believed it would be irrational for the working-class not to be so identified.

I do not wish to assert that the scientific basis of Marx's theory is the only reason why people should be committed to socialism. A decision to accept Marxist politics or even Marxist science may be determined by any number of alternative considerations. One would like to point out that the ideals of socialism are not hostile to ethics no more than ethical matters are excluded by the principles behind Marxist science. What is important is to recognise the correct location of these concerns with respect to these topics: a question as yet largely unsettled. However, it is important to remember that whatever brings a person to Marxism, the politics itself should, according to Marx, be based on a scientific appraisal of social development. Some people may take the opposite course, they accept Marx's methodology and his analysis of capitalism and yet seek to avoid or reject his political conclusions even though these conclusions follow from the theory. Such a position would again be quite irrational from the viewpoint of a science of history since it can only be generated by considerations - by reflections of class interest or whatever - which do not have any sort of scientific foundation.

If the argument of this section is correct and, of course, what I have said is far from exhaustive, then Marx's political theory is nothing more nor less than a logical implication of his scientific conclusions. The justification of Marx's politics and all other attempts at political intervention which remain true to this tradition, must depend not on the content of the politics per se; how this content has been determined is overwhelmingly important too. Weber's methodology permitted, even if it did not exactly welcome or recognise, the intrusion of ethics and politics into the domain of science; but a dialectico-causal science of history has no such deficiency. Rather, I have argued Marx sought to establish a scientific foundation for practical or political interventions into history. As Marx put it in his "Theses on Feuerbach", the point is not merely to interpret the world, but to change it. Self-conscious and successful transformations can be achieved, and here is the root of the argument, only on the basis of a scientific appraisal of their developmental possibilities. The composite formulation of scientific socialism, therefore, does justice to Marx's aim of socially transforming the world while remaining within the framework of his life-long concern with the development of a scientific theory.

NOTES TO CHAPTER 1.

1. See Keat R. Urry J. "Social Theory as Science" (Routledge, Keegan Paul 1975) and Benton T. "Philosophical Foundations of the Three Sociologies" (Routledge, Keegan Paul 1977) for recent attempts to understand realism in philosophy and in the theories of social science.
2. Much credit must go to Harré R. for developing realist theories of science in recent years. For a typical exposition of his views see Harré R. "The Philosophies of Science" (London, Oxford University Press, 1972). See also Shapere D. "Notes Towards A Post-Positivist Interpretation of Science" in Achinstein P. and Barker S.F. eds, "The Legacy of Logical Positivism" (Baltimore: John Hopkins Press 1969), for another attempt at a realist philosophy of science. Shapere regards scientific inquiry as based on a method of idealisation and approximation which progressively improves scientists' understanding of the world.

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My views of realism differ from the philosophers mentioned above, in centering on an analysis of "anomaly" as the key element in developing a realist interpretation of science. The most recent attempt at this sort of theory which postdates my work is Papineau D. "Theory and Meaning" (Clarendon Press, Oxford 1979).

3. For a sound introductory history of positivist thought see Kolakowski L. "Positivist Philosophy" (Penguin 1972). On the distinction between empiricism, logical positivism and other variants of this philosophical tradition, see Achinstein P. and Barker S.F. (eds) (1969 or CIT).
4. See Hume D. "A Treatise on Human Nature" ed. Selby-Bigge (Clarendon Press, Oxford first edition 1892) Part III sect 11-14 for Hume's classical statement of his position on the problem of causation.
5. On various attempts by positivists to link the theoretical aspects of science to observation see eg Hempel C.K. on "Empiricist criteria of cognitive significance" in "Aspects of Scientific Explanation". (New York: Free Press 1965) p.101-122; A.J. Ayer on the formulation of the verification principle in "The Central Questions of Philosophy" (London 1973) p.22-34.

See also Papineau D. (1979 OPCIT) chapter 1 on the operationalist attempt to reduce theoretical terms to observations, on the double-language model which attempts to derive the meaning of theoretical terms from an observation language and on the logical connection between empiricism, logical positivism, methodological positivism and conventionalism as theories of science based on certain variations of the theory/observation dichotomy.

On Popper's methodological falsification see Popper K. "Science: Conjectures and Refutations" (London, Routledge and Keegan Paul 1969) Popper's falsificationism is recognisably "positivist" in intent insofar as it attempts to present the logic of science as based on a relation between hypotheses and "observations". Hence, even though the observations which

are supposed to falsify hypotheses are not theory-free, Popper is still committed to a recognisably positivist project. It is for this reason that I include his methodological falsificationism as positivist despite the fact that Popper rejects the label "positivist" and secondly, that Popper's falsification culminates logically in a form of conventionalism.

See also Lakatos I, "Falsification and the Methodology of Scientific Research Programmes" in Lakatos I. and Musgrave A (eds), "Criticism and the Growth of Knowledge" (Cambridge University Press 1970), on the distinction between a naive falsificationism founded on supposedly theory-neutral observations and more sophisticated variants like Popper's which accept the theory dependency of observations.

6. See Hempel C.G. "The Function of General Laws in History". The Journal of Philosophy 39, 35-48 1942 for a classical exposition of the deductive nomological model of explanation. See also Hempel C.G. and Oppenheim P. "Studies in the Logic of Explanation", "Philosophy of Science", 15, 135-75 1948, which also considers objections to this conception of scientific explanation.

See Keat R. and Urry J. (1975 OPCIT) on an explication and analysis of this deductive-nomological model of explanation especially Chapter 1, p.9-13.

See also Harre R. "The Philosophies of Science" (London, Oxford University Press, 1972) especially pp.45-7 for a critique of the deductive-nomological model of explanation from a realist point of view.

7. For a classical exposition of the problem of induction see Hume D. (1892 OP CIT) Part III Section XIV.

See also, Kneale W. "Probability and Induction" (Oxford, 1949) especially Part II, 'The Traditional Problem of Induction' - and Black M. 'Induction' in Edwards P ed, 'The Encyclopedia of Philosophy volume 4, (New York: Macmillan and Free Press 1967) for a summary of more recent approaches to the problem.

8. See Keat R. and Urry J. (1975 OPCIT) on the failure of the deductive nomological model of explanation to provide sufficient conditions of an event's occurrence. They argue that this model "does not provide sufficient conditions for explanation, there is some important element it fails to capture" (p.11 ibid). I relate this failure to the positivists lack of success in solving the problem of induction (See 1.1 + footnote 7).

9. See Popper Karl 'The Logic of Scientific Discovery' (London 1959) especially Chapter 1 on Popper's rejection of the problem of the induction. Parts II-IV pp.85-232 deal with induction, and Popper Karl (1969, OP CIT). This work also contains an exposition of Popper's conception of the logic of science especially in "1. Science Conjectures and Refutations" which is also the general title of this collection of Popper's articles.

10. See Popper K (1969 OP CIT) p.57+ on his account of degrees of corroboration.

11. See Popper K (1969 OP CIT) on the rejection of theory neutral observations as an epistemological bedrock for a theory of science. NB also the introduction to this work in which Popper notes the empiricist project of tracing all knowledge back to sensing and observations is impossible because of the socio-conventional determinations which underly all observations. Popper states, therefore,
"This is why the programme of tracing back all knowledge to its ultimate source in observation is logically impossible to carry through; it leads to an infinite regress."
(Popper p.23 *ibid*)
12. See Kuhn T.S. "The Structure of Scientific Revolutions" (University of Chicago Press 1962 whose position, at least in this early work is similar to the interpretation of a conventionalist theory developed here. For a general discussion of recent conventionalist and Urry J. (1975 OP CIT) Chapter 3. For the logical and historical connection between Positivism and conventionalism see Shapere (1969 OP CIT)
13. The commensurability problem is also evident in Feyerabend's attempt at an anarchist theory of knowledge in his "Against Method: Outline of an Anarchist Theory of Knowledge", (New Left Books 1975). However, the relativism or anarchism which Feyerabend presents as a solution for a theory of science abandons the attempt to justify science as a rational activity. It takes refuge in relativism instead of challenging it in the way that my realist theory of science does.
14. Shapere notes this lack of a theory of continuity in the history of the development and succession of scientific theories is a serious weakness of conventionalist theories. He argues that the conventionalists "have failed to account for the fact that different theories - or different uses of the same terms or symbols - do in many cases exhibit a continuity in the development of science".
(Shapere 1969 OP CIT p.121)
15. *(and E.)* The term 'object of knowledge' is derived from Althusser's epistemology. See Althusser L./Balibar/ "Reading Capital" (New Left Books 1970 Part 1). Althusser also seems to presuppose an enduring dualism between a theory's 'object of knowledge' and a 'real object'. However, whereas my theory specifies a link between theory and reality in the process of anomaly generation and supersession, Althusser fails to show how a scientific theory succeeds in understanding real processes. In fact, Althusser is compelled to explain the 'knowledge-effect' of scientific theories not by their adherence to a scientific method, but rather by the supposed homology between the order of theory and the real (see 4.2). He thereby ends up with an idealist conception of the method of science, not unlike that of the conventionalists.
16. See Kuhn (1962 OP CIT) for the distinction between 'normal science' and 'revolutions in science'. 'Normal science' takes place within the parameters of a given theory or paradigm whereas 'scientific revolution' necessarily implies a theory change and, therefore, a reconceptualisation of the 'object of knowledge' of scientific inquiry in a given field. See below for the difference between Kuhn's conception of revolution in science and my realist alternative.

17. Kuhn (1962 p.65 ibid)
18. Kuhn (1962 p.53 ibid)
19. Kuhn (1962 p.168 ibid). This realist undercurrent in Kuhn's account of scientific inquiry is confirmed by the fact that he increasingly waters down the role of irrational factors in what I have called theory change. Instead, he stresses greater importance, in his later writings to factors like the continuing presence of unsolved problems for a theory. Such considerations enhance the tendency towards an explanation of theory change as a rational activity. On this point see, for instance, the "Postscript" to the Second edition of the "Structure of Scientific Revolutions" (op cit) and "Reflections on My Critics" in Lakatos and Musgrave (eds) (1970 OP CIT).
20. See Locke J. "An Essay Concerning Human Understanding" (Fontan 1964) p.119+
21. See Durkheim E. "The Division of Labour in Society" (Tr Simpson G, Free Press, New York, 1964) especially Book 3 Chapters 1,2,3.
On the normal/pathological distinction see Durkheim E "The Rules of Sociological Method" (ed Catlin G.E.G. Tr. Solovay S.A. and Mueller J.H. The University of Chicago Press, 1938) Ch. 111 p.47+.
See also Lukes S. "Emile Durkheim. His Life and Work" (Allen Lane The Penguin Press 1973), especially Chapter 7 p.172 on Abnormal forms and Chapter 10 on 'The Method and Subject Matter of Sociology.'
22. See Durkheim (The Rules 1938 OP CIT) Chapters 1 and 2. See also Benton T (1977 OP CIT) Chapter 5.
23. Kuhn (1962 OP CIT) p.168.
24. Kuhn (ibid) p.168.
25. This rejection of a unilinear theory of scientific progress is in many ways analogous to my rejection of an interpretation of Marx's methodology based on a unilinear conception of social progress (see 5.1 and 5.2). A unilinear theory of progress would, in both cases, foist an a priori theory of development onto the development of science and societies. This sort of theory, in respect to Knowledge and Social Change, is one which was, in fact, developed by August Comte and is criticised in 5.3 below.
26. See Ruben D.H. "Marxism and Materialism" (Harvester Press 1977) on the circularity of philosophical explications and defences of scientific inquiry, Chapter 4; especially Ruben's critique of Bhaskar's realism - see Bhaskar Roy "A Realist Theory of Science" (Leeds Books, Leeds 1975) - Ruben shows how any philosophical defence of science starts not from the 'fact of per se', but rather from the 'fact of science' as understood by prior philosophical assumptions.

27. For a classical exposition of the positivist unity of science thesis see Comte A. "The Positive Philosophy of August Comte." translated and condensed by Harriet Martineau 1853. (London, Chapman 1896). It should be noted however that the additional thesis as to the nature of causality in the social world is not one that necessarily follows from positivist criteria of cognitive significance or the regularity theory of causation discussed in 1.1. Indeed, if my critique in 1.1 is correct, then it would seem that positivists cannot justify any sort of causal element in scientific explanation. From this philosophical standpoint, it would be meaningless to speculate about the relationship between the nature of the causal relation in the natural and social world. For a more detailed exposition and critique of the positivist unity of science thesis see 5.3.

28. See Papineau D. "For Science in the Social Sciences" (Macmillan 1978) for a recent analysis of the relativist implications of the positions of Kuhn and Feyerabend in the philosophy of science - especially chapter two, 4 on 'The New Relativism' p.33+.

NOTES TO CHAPTER 2

1. On Kant's Philosophy in general see:- Kant I. "Prolegomena to any Future Metaphysic." Translated Lucas P.G. (Manchester University Press 1953).
Kant I. "Immanuel Kant's Critique of Pure Reason" Translated by Kemp Smith N. (Macmillan 1933). Commentaries used include the following:- Körner S. "Kant" (Harmondsworth, Penguin 1955).
Kemp Smith N. "A Commentary to Kant's Critique of Pure Reason". (London 1918 rev. ed 1923).
Bennet J. "Kant's Analytic and Kant's Dialectic" (Cambridge University Press 1966 and 1974).
Strawson P.F. "The Bounds of Sense" (Methuen 1966).
Goldmann L. "Immanuel Kant" Translated Black R. (NLB 1971).
2. On Kant's treatment of space and time see "Transcendental Aesthetic" p65-91 in "Immanuel Kant's Critique of Pure Reason" (OP CIT).
3. See Goldmann L. p.135+ (OP CIT)
4. See 3.1 for an illustration of how Hegel's Philosophy seeks to overcome this limit on human knowledge so as to achieve absolute knowledge.
5. See Kant I. "First Division Transcendental Analytic" - particularly Chapter 11. "The Deduction of the Pure Concepts of the Understanding" in "Immanuel Kant's Critique of Pure Reason" (OP CIT), for Kant's account of transcendental synthesis and its presuppositions.
6. Kant I. p168 (ibid).
7. Strawson notes, therefore, "He (Kant) believed without question in the finality of Euclidean geometry, Newtonian physics and Aristotelian logic, and on these beliefs he founded others, still more questionable." (p23 OP CIT 1966).
8. See Burger T, "Max Weber's Theory of Concept formation". (Duke University Press 1976). Chapter 1 and Goldmann L. OP CIT p.100-117 on the cultural relativisation of Kant's transcendental categories by Rickert and the Heidelberg neo-Kantians.
9. Discussion of neo-Kantianism is reserved to an analysis of the Heidelberg neo-Kantians. However, there were other strands of neo-Kantian's including the neo-positivist school at Marburg. For a short summary of the various schools of neo-Kantianism and their respective ideas see Beck L.A. p.468-473 "neo-Kantianism" in "The Encyclopaedia of Philosophy" ed Edwards P. (Macmillan 1967) other useful texts on the Heidelberg neo-Kantians and the general attempt to distinguish social from natural science in that period include:-
Antonio C. "From History to Sociology". Translated H.V. White (Merlin Press, London 1960).
Aron R. "German Sociology". Translated Bottomore M. and T. (Heinemann 1957).
Burger T. (OP CIT 1976) - this book contains a useful exposition and critique of Rickert's philosophy.

Lukacs G. "Die Zerstörung der Vernunft" chapter 4+ (Luchterhand 1960).

Outhwaite W. "Understanding Social Life. The Method of 'Verstehen'." (London - Allen and Unwin 1975).

Stuart Hughes H. "Consciousness and Society. The Re-orientation of European Social Thought 1890-1930" (London, Paladin 1973).

10. For a classical exposition of Kant's theory of ethics see Kant I. "The Fundamental Principles of the Metaphysics of Ethics." Tr. OTTO Manthey-Zurn (D. Appleton - Century Company Inc., New York, London 1938).
"Critique of Practical Reason and other Writings in Moral Philosophy" edited Beck L.W. (The University of Chicago Press 1949).
11. See Kant I. Third section of "The Fundamental Principles of the Metaphysics of Ethics" (OP CIT).
12. Kant observes, "The will is a kind of causality of living beings in so far as they are rational. Freedom then would be that property of such causality by which it can become operative without being dependent on foreign causes determining it whereas physical necessity is the property of the causality of all non-rational beings to be determined to activity by the influence of foreign causes." (Kant p65 *ibid*).
13. It is interesting to note the Heidelberg neo-Kantians thereby contradict Kant's idea of an historical science expressed in his "Idea for a Universal History" - see Kant I. "On History", (Indianapolis, Bobbs-Merrill, 1963). For Kant, insofar as man enters the subject matter of an historical science, he is subject to the Newtownian mechanism apparent in the world of nature. At the level of the phenomenal world, therefore, there is a distinctly positivist element in Kant's philosophy, so much so that he was capable of writing:-
"The history of mankind can be seen, in the large, as the realisation of Nature's secret plan." (Kant I p21 *ibid*).
on this important point about the relationship of Kant to the Heidelberg neo-Kantians see Hindess B. p.12+ "Philosophy and Methodology in the Social Sciences" (Harvester 1977).
14. For a classical exposition of Windelband's views on the distinction between natural and social science see Windelband W. "Geschichte and Naturwissenschaft" (Strasbourg 1894).
For Rickert's view see "Die Grenzen der Naturwissenschaftlichen Begriffsbildung" (Tubingen 1902.) and "Kulturwissenschaft und Naturwissenschaft" (Freiburg 1899) and "Science and History, a Critique of Positivist Epistemology" translated Reisman G (ed) Goddard A (New York, Van Nostrand, 1962).
Useful discussion of Windelband's and Rickert's understanding of social science is contained in: Burger T (1976 OP CIT) Outhwaite W. (1975 OP CIT) Runciman W.G. "Critique of Max Weber's Philosophy of Social Science" Part 1 (Cambridge University Press 1972).
15. On this point see Runciman W.G. p.12 (OP CIT).
16. See again Runciman W.G. p.12+ and p.39 (OP CIT).

17. Hodges H.A. p.240 "The Philosophy of William Dilthey" (RKP 1952). Chapter 8 of this book contains a useful summary of Dilthey's view of the distinction between natural and social science and his criticisms of Rickert's position.
18. See Rickert H. Chapter 4 in (1962 OP CIT) especially p.19+ Rickert claims,
 "The presence or absence of relevance to values can thus serve as a reliable criterion for distinguishing between two kinds of scientific objects." (p.19)
19. See Rickert H. Chapter 14 (ibid.,) Rickert frankly states his position thus:
 "In short, the unity and objectivity of the cultural sciences are contingent on the unity and objectivity of our concept of culture, ie on the approach to a knowledge of value based on a system of valid values." (p.140)
20. See Weber 1917 on the inescapability of ethical relativism. Weber notes:
 "It is really a question not only of alternatives but of an irreconcilable death-struggle, like that between "God" and the "Devil". Between these, neither relativization nor compromise is possible." (17-18).
 See also Weber 1904 for a similar statement, p.55+
21. Weber develops a view of social science consistent with this idea of ethical and cultural relativism. He claims,
 "Moreover, there are sciences to which eternal youth is granted, and the historical disciplines are among them - all those to which the eternally onward stream of culture perpetually brings new problems." (p.104 1904)
22. Weber acknowledges this implication of his position in the following passage:
 "In the empirical social sciences, as we have seen, the possibility of meaningful knowledge of what is essential for us in the infinite richness of events is bound up with the unremitting application of viewpoints of a specifically particularized character, which, in the last analysis, are orientated on the basis of evaluative ideas." (p.111 1904)
23. Weber p.72 1904.
24. See Weber 1917 for a classical exposition of Weber's views on value-free social science. See also Bruun H.H. Chapter 1 "Science, values and politics in Max Weber's Methodology" for a critical discussion of Weber's position on the relationship between ethics and science (Munksgaard, Copenhagen, 1972).
25. See Weber 1917 p.18+ Weber claims that as far as ethical choices are concerned:
 "There is no (rational or empirical) scientific procedure of any kind whatsoever which can provide us with a decision here." (p.19 ibid.,).
26. NB the following passage:
 "Only a small portion of existing reality is coloured by our value-conditioned interest and it alone is significant to us. It is significant because it reveals relationships which are important to us due to their connection with our values. Only because and to the extent that this is the case

is it worthwhile for us to know it in its individual features. We cannot discover, however, what is meaningful to us by means of a "presuppositionless" investigation of empirical data. Rather perception of its meaningfulness to us is the presupposition of its becoming an object of investigation." (Weber p.76 1904)

27. Weber p.78 *ibid.*

28. Weber observes that the "objectivity" of the social sciences depends "on the fact that the empirical data are always related to those evaluative ideas which alone make them worth knowing and the significance of the empirical data is derived from these evaluative ideas. But these data can never become the foundation for the empirically impossible proof of the validity of the evaluative ideas" (Weber p.111 *ibid.*).

On this point see also Rossi P. p.71-78 in Stammer O. (editor) "Max Weber and Sociology Today" (1971 Blackwell). Rossi correctly observes that "the acceptance of certain value assumptions conditions the results of research," (p.76 OP CIT) He concludes his contribution by claiming that in the light of this fact value freedom can no longer be a viable concept in Weber's methodology. He states,

"The ban on value-judgements loses its significance in the face of the recognition of the fact that even scientific research must end in evaluation." (p.77 OP CIT)

See also the contribution of Habermas in the same collection (Stammer 1971) which makes similar points about Weber's idea of causal explanation. Habermas observes,

"The value-relationships, however, as guides to method in the cultural sciences remain transcendental to research as such: they cannot be corrected by the outcome of the investigation." (p.62 OP CIT)

29. On the relationship between sociology and history see Weber Chapter 1 Section 11 p.19+ 1922.

30. On this point readers should note the following passage:

"For those phenomena which interest us as cultural phenomena are interesting to us with respect to very different kinds of evaluative ideas to which we relate them. In as much as the "points of view" from which they can become significant for us are very diverse, the most varied criteria can be applied to the selection of the traits which are to enter into the construction of an ideal-typical view of a particular culture." (Weber p.91 1904).

31. Weber p.84 1904.

32. For a good explication of the role of idealisation which this section largely follows see Hempel C.G. "Typological Methods in the Natural and Social Sciences" p.155-171 in Hempel's "Aspects of Scientific Explanation" (New York, Free Press 1965). However, it should be emphasised that while largely agreeing with Hempel's theory of idealisation in natural and social science, I do not subscribe to his positivist view of science in general. Hence, from the standpoint of this thesis, idealisations should be regarded as "explanatory" or "heuristic" not according to their relation-

ship to observation statements, but rather according to their relationship to scientific theories understood in realist terms.

See also Shapere D. p.131-149 in "Notes Towards a Post-Positivistic Interpretation of Science" in "The Legacy of Logical Positivism" edited Achinstein P. and Barker S.F. (Baltimore, The John Hopkins Press, 1969). This contains a good analysis of the various uses and changing significance of idealisations in physics from a realist point of view.

33. For a critical analysis of an attempt at the heuristic use of idealisation in economics see again Hempel OP CIT p.166+
34. See also Lukacs G "Max Weber and German Sociology" in Economy and Society I (1972) p.386-398 translated Cutler A from Lukacs G. "Die Zerstörung der Vernunft" (Lichtebrand 1960) Lukacs makes a very similar observation when he argues that Weber's methodology leads inevitably to the "substitution of analogies for causal explanation" (p.392 OP CIT) However, Lukacs critique of Weber arises from an Hegelian interpretation of Marx's method quite distinct from the realist view of historical materialism developed in Chapters 3-6. On Lukacs' Hegelianism see Colletti L. "Marxism and Hegel" translated Garner L (NLB 1973) especially Chapter 7 and Jones G.S. "The Marxism of the Early Lukacs an Evaluation" New Left Review 70 (1971).
35. See Weber 1922 Chapter 1 p.4+.
36. See Weber Chapter 1 Section 5 (ibid).
37. Weber Chapter 1 Section 7 (ibid).
38. On the types of social action see Weber Chapter 1 B Section 2 (ibid).
39. Hirst notes correctly,
"Rational teleological action (because it can be calculated through the construction of an ideal-typical course of action) is the model for the interpretation, and the calculation of all action."
See Hirst P.Q. p.408 review of Weber M. "Roscher and Knies" edited and translated Oakes G. (Free Press New York 1975) in British Journal of Sociology 1976. For Hirst's view of Weber see "Social Evolution and Sociological Categories" (London, Allen and Unwin - 1977).
40. Weber 1905-6 p.194.
41. Weber 1922 p.10.
42. See Weber 1922 p.11-12.
43. See Weber 1922 especially Chapter 1 Section 2 on the definition of the zweckrational - action and its freedom of determination from what Weber calls "irrational" factors.
44. See again Weber Chapter 1 Section 2 1922.

45. See Kolko G. p.21-36 "A critique of Max Weber's Philosophy of History" Ethics 70 (1959) for an exposition and critique of Weber's "bureaucratic determinism."
46. See Weber Volume 3 Chapter XI p.956 for his view on bureaucracy.
47. Weber quoted p.25 in Eldridge J.E.T. "Max Weber. The Interpretation of Social Reality." (London 1970).
48. Weber p.13 1922.
49. On this point Fay notes,
"These rules logically constitute the very possibility of a particular action being said to occur." (p.75)
See Fay B. Chapter 4 "Social Theory and Political Practice." (London 1975) for a critical discussion of an interpretive social science and its relationship to political practice.
50. Cf 4.2 on Marx's critique of the abstract individualism of classical political economy. See 4.3 for a discussion of the transition from feudalism to capitalism from the viewpoint of historical materialism.
51. Lukes S. (p.111 footnote 3) "Individualism" (Blackwell, 1973) Chapter 17.
See also Lukes S. p.119-129 "Methodological Individualism Reconsidered" British Journal of Sociology 19 (1968).
52. Mommsen W.J. p.3 "The Age of Bureaucracy" (Blackwell, 1975).
53. Mommsen W.J. p.xiv intro (ibid).
54. Mommsen W.J. p.11 (ibid).
55. On this see Mommsen W.J. "Max Weber's Political Sociology and his Philosophy of World History" p.23-45 "International Social Science Journal" Vol. 17 (1965) Weber's universal theme, according to this view, arises from the conflict between individual freedom and the causal process of rationalisation. Mommsen claims,
"The conflict between these two principles was in his (Weber's) view the great theme of world history." (p.45).

NOTES TO CHAPTER 3

1. For Colletti's critique of Hegel's philosophy and its re-constitution in a supposed Marxism in "diamat" and soviet Marxism and in the work of Lukacs and the Frankfurt school, see the following. On Hegel see Colletti L. "Marxism and Hegel", trans. Garner L. (NLB, 1973) especially ch's I, II, IV, V & IX. On Engels and the Young Hegelians and "diamat" and soviet Marxism see Colletti's introduction to Marx's "Early Writings" (Marx 1843-5 E.W.) ch I & III of Colletti's 1973 OP CIT, and of special interest in the development of this critique is Colletti's "Marxism and the Dialectic", New Left Review 93, 1975 p 3-29. This article will be discussed in detail in chapter 4. A Colletti-esque critique of Engels is also developed by Stedman - Jones G. in "Engels and the End of Classical German Philosophy", New Left Review 79, 1973, p17-36. On Colletti's critique of Lukacs and the Frankfurt school see ch X, "From Bergson to Lukacs" in Colletti 1973 OP CIT, "From Hegel to Marcuse in Colletti "From Rousseau to Lenin" (NLB, 1972). And, again for a Colletti-esque treatment of Lukacs see Stedman-Jones G, "The Marxism of the Early Lukacs, an Evaluation" in New Left Review 70, 1971 p.27-64.

2. It will become clear, in the course of the thesis, that there is a fundamental difference between Marx's dialectico-causal method and Hegel's dialectic. On Marx's acknowledgement of Hegel's contribution to his own theory consider the following:-

"The mystification which dialectic suffers in Hegel's hands by no means prevents him from being the first to present its general form of working in a comprehensive and conscious manner."

(Marx, p.20 "Afterword to the second German Edition of Capital" in Marx 1867 (Lawrence and Wishart)

3. On Hegel's general philosophy see Hegel W.F. "Hegel's Science of Logic" ed Lewis H.D., trans. Miller A.V. (London, 1939).

Hegel W.F. "The Phenomenology of Mind" trans. with an introduction by Baillie J.B. (London, 1977)

Marx's major critique of Hegel's philosophy is contained in the latter part of his "Economic and Philosophical Manuscripts" (1844) in Marx 1843-5 E.W. The latter collection also includes Marx's "Critique of Hegel's Doctrine of the State" (1843) and "A contribution to the Critique of Hegel's Philosophy of Right." (1844).

Useful commentaries include:

Colletti L. 1973 (OP CIT) which I follow quite closely in the first part of 3.1;

Kaufmann W. "Hegel - Reinterpretation, Texts, and Commentary." (Weidenfeld and Nicolson, 1966) This contains an extensive bibliography of secondary sources.

Marcuse H. "Reason and Revolution" (Routledge, Keagan Paul Ltd., 1955).

Taylor C. "Hegel" (Cambridge University Press, 1975)

4. Hegel "Science of logic" p.154-5 (OP CIT).
5. Hegel p.155 *ibid.*
6. For a clear elucidation of the distinction between reason (Vernunft) and understanding (Verstand) in Hegel's philosophy see Colletti (1973 OP CIT) p.9+ and also translators note p.9.
7. On this and related points see, for instance, ch 7. Dummet M. "The Foundations of Intuitionist Mathematics". (Clarendon Press, Oxford, 1977)
8. Presumably Davidson D. and his "followers" would adopt such a position vis à vis Hegel's absolute idealism. For an exposition of their views on the relationship between logic and language see e.g. Davidson D. (ed) "Semantics of Natural Language" N. Reidel Publishing Company, Holland. 1977
9. Hegel p.130 *ibid.*
10. Hegel p.130 *ibid.*
11. Hegel p.177 "The Logic" trans. from "The Encyclopaedia of the Philosophical Sciences", by Wallace W. (London, 1892 - second revised edition)
12. For an analysis of the "logical" structure of dialectical contradictions see Colletti, "Marxism and the Dialectic" (1975 OP CIT)
13. Hegel BK 2 Science of Logic (OP CIT)
14. Hegel " *ibid.*
15. On this see references cited in footnote 1 to Colletti's critique of "diamat".
16. Baillie correctly notes that in Hegel's philosophy "Mind" is, therefore, "at once a conscious unity in all its processes and the conscious source of endless differences and distinctions within itself." (Baillie J.B. introduction to Hegel's "The Phenomenology of Mind" OP CIT)
17. Hegel p.591 "Science of Logic"
18. Hegel p.585 *ibid.*
19. Hegel p.138 *ibid.*
20. See Marx p.381+ "The Economic and Philosophical Manuscripts" in Marx, (1843-5 E.W.)
21. Marx claims,
"Feuerbach is the only person who has a serious and a critical attitude to the Hegelian dialectic and who has made real discoveries in this field. He is the true conqueror of the old philosophy." (p.381 *ibid*)

22. On Feuerbach's Philosophy see "Ludwig Feuerbach Sämtliche Werke, Bolin W. and Jodl F. eds., 10 vols, Stuttgart, 1903-1910., and "The Essence of Christianity", trans. Evans M. new ed., (New York, 1957) See also "The Economic and Philosophical Manuscripts" p.381+ and "Theses on Feuerbach" both in Marx 1843-5 E.W., for Marx's view. In addition, Colletti's introduction to the latter contains some interesting observations on Feuerbach's influence on the formation of Marx's thought.
23. This paragraph is more or less a summary of Marx's view of Feuerbach's philosophy expressed on pages 381-2 of "The Economic and Philosophical Manuscripts." (OP CIT).
24. This point is expressed by Marx through the positive value he gives to Hegel's contribution to an understanding of history in the "Manuscripts" p.384+ (OP CIT) It is expressed again in a more poignant manner in the "Theses on Feuerbach" (OP CIT)
25. See Marx *ibid.*, 1, p.421 in Marx 1843-5 E.W.
26. Marx traces this historicisation of nature, as it were, to an insight in Hegel's philosophy. He notes,
"The humanising of nature and of nature as produced by history is apparent from the fact that they are products of abstract mind." (p.385 *ibid.*,)
For Marx the development of "real objectification" or production does not imply an end to the objectivity of nature, but rather merely alters the character or form of its existence. Again, he finds the source of this idea in Hegel's philosophy. He claims Hegel's dialectic, "is the estranged insight into the real objectification of man, through the destruction of the estranged character of the objective world....." (p.395 *ibid.*,)
27. Marx VI "Theses on Feuerbach" in Marx (1843-5 E.W.)
28. Marx III p.422 *ibid.*
29. Marx p.64 "The German Ideology" Marx 1845-6 G.I. (L & W)
30. See Marx especially p.392+ "Economic and Philosophical Manuscripts."
31. Marx p.385 *ibid.*
32. Marx p.395 *ibid.*
33. Cf 3.1 for an account of Hegel's dialectic with 5.1 where I develop my interpretation of Marx's dialectic.
34. On the Herr/Knecht relationship see Hegel's "The Phenomenology of Mind" (OP CIT) p.228-40.
Taylor C. Ch V (1975, OP CIT).
35. Marx p.384. 1843-5 E.W.
36. On abstract negation see Hegel p.234 "The Phenomenology".

37. Hegel p.236 ibid.
38. See Hegel p.239+ ibid., + Taylor C. p.148-50 (1975, OP CIT).
39. Marx p.382. 1843-5.

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NOTES TO CHAPTER 4

1. Colletti L. p.3 "Marxism and the Dialectic", New Left Review 93, 1975.
2. Colletti L. p.6 *ibid.*
3. Colletti L. p.3+
4. See particularly Colletti's conclusion p.29 *ibid.*, where he argues that the principle of non-contradiction excludes the existence of dialectical contradictions.
5. Colletti L. p.6 *ibid.*
6. Colletti L. p.6.
7. Colletti L. p.7.
8. See 5.3 for My Critique of the ahistoricism and mechanicism implicit in functionalist explanation and cf. the critique of Godelier's structuralist Marxism developed in the first part of 5.1.
9. See 5.1 where I distinguish between instances of dialectical opposition between things persons or forces in the world and the more embracing concept of dialectical causality - a causality involving dialectical relationships between parts and whole in a single totality.
10. Hence, an empiricist idea of causality requiring as it does a separate specification of cause and effect also excludes a dialectical notion of causality, and insofar as it develops an idea of social causality at all, it would seem that it must be confined to a mechanistic idea of causal relationships in the social world. On this see 5.1.
11. Hegel W.F. p.230 "The Phenomenology of Mind" (London, 1977 ed.)
12. Colletti L. p.23 (OP CIT)
13. Colletti L. p.23+
14. See Colletti L. p.22+ N.B. From this point of view, Colletti must now credit Hegelian "Marxists" for their discovery of Marx the "Philosopher" as much as he should credit positivist "Marxists" with their allegiance to Marx the Scientists! He can only criticise these two opposing theoretical traditions insofar as they overstate their case and claim there is only a "philosophical" or only a "scientific" element in Marx's corpus. The correct interpretation now is to recognise both elements in Marx's work and to define their respective boundaries.
15. On this point see also Edgley R. p.48+ "Dialectic : the Contradiction of Mr. Colletti" Critique 7 p.47-52 1976-7.
16. Edgley p.48+ *idid.* On Edgley's alternative idea of dialectical opposition and my critique of its limitations vis à vis what is required of a dialectico-causal view of Marxism see 5.1.

17. For references on this see again Notes to Chapter 3, (1).
18. Colletti L. p.66 "Bernstein and the Marxism of the Second International" in "From Rouseau to Lenin", (New Left Books, 1972).
19. Colletti L. p.67 ibid.
20. Colletti L. p.67 ibid.
21. See Chapter 2 especially 2.5.
22. On Althusser's Critique of empiricism and idealism see Althusser L. p.34+ "Reading Capital", Althusser L. and Balibar E, tr. Brewster B., (NLB, 1970).
23. See Althusser's Interpretation of Marx's 1857 introduction to the "Grundrisse" on this point part 1. sect. 13, "Reading Capital" OP CIT.
24. See especially 1.2 on this.
25. Benton correctly relates the problem of specifying the mechanism of the knowledge-effect with the search for criteria of cognitive adequacy of a scientific theory in Althusser's philosophy. This becomes particularly important for the demarcation of science from ideology - a demarcation required for establishing historical materialism as a science. Benton notes in this regard:

"Presumably we can just see that the "object" of a theoretical ideology is not the knowledge of the real object, whereas that of science is! But elsewhere, Althusser recognises the problem and its importance: "the problem of the relation between these two objects (the object of knowledge and the real object), a relation which constitutes the very existence of knowledge." In this text, Althusser makes it clear that the search here is not, as in classical (empiricist and rationalist) epistemology, for some "guarantee" of certainty in knowledge, for some timeless criterion by which to distinguish knowledge from mere belief. Rather, the search is for the "mechanism of the knowledge - effect." Beyond making the search sound more scientific, it has to be recognised by Althusser that this is hardly a solution." (Benton p.186) On this and related points see Benton T Ch. 9 "The Three Sociologies" (Routledge & Kegan Paul, 1977).
26. Althusser L. p.166-7 in "For Marx" trans. Brewster B. (Penguin, 1969)
27. Glucksmann A. p.74 "A Ventriloquist Structuralism", (New Left Review 72, 1972). It will become clear in the course of my argument about Althusser's Marxism how much my general claims about its metaphysical character owe to Glucksmann's excellent critique.

Benton also notes an implicit Kantianism in Althusser's "system". He observes,

"The real object as an epistemological device has the same defect as the Kantian notion of the thing-in-itself - it is something about which nothing can be said, but of which something must be said if it is to have a theoretical place in the system."

Benton T. p.186 OP CIT

28. Althusser L. p.216 "Reading Capital."
29. Glucksmann A. p.74 OP CIT.
30. This seems to be the inspiration behind Balibar's attempt to deduce the existence of "historic" modes of production for Marxist science from the general concept of a mode of production. See Part 111 Ch. 1. "Reading Capital."
31. See Althusser L. Chapter 6, "For Marx".
32. Althusser L. p.169 *ibid.*
33. Hegel W.F. Book 2 "Science of Logic". See 3.1 on Hegel's dialectic.
34. See Althusser Ch. 5, "Reading Capital" for his analysis of Marx's break from Hegelian historicism and Feuerbachian humanism.
35. Althusser L. p.108 *ibid.*
36. Althusser L. p.100 *ibid.*
37. See Althusser L. p.177-181 on the Structure of "Marx's" complex whole.
38. See Althusser L. Ch. 3 "Contradiction and Overdetermination" for a classical exposition of the concept of overdetermination. I should emphasise that I reserve my criticisms of this concept to its employment in Althusser's system and do not extend criticism to its use in psycho-analysis of which I know very little.
39. See Althusser L. Ch. 3 *ibid.*, on his notion of the complexity of contradictions in the Marxist totality.
40. Althusser L. p.188 *ibid.*
41. On this point see Marx's treatment of the form of value which I discuss in 6.2.
42. On this see Glucksmann A. p.83+ OP CIT.
43. Glucksmann A. p.86 *ibid.*
44. See Althusser p.186+ "Reading Capital" for his rejection of transitive and expressive causality.

45. Glucksmann A. p.88.
46. Ruben D.H. p.148 "Marxism and Materialism" (Harvester, 1977).
47. On the seemingly insuperable problems of demarcating science from ideology from this epistemological standpoint see Benton T. p.187-193 OP CIT. See also my suggestions on this complex problem which begin from a realist view of scientific inquiry - Chapter 1, p.18.

NOTES TO CHAPTER 5

1. For this sort of "theoretical anti-historicism", see, for example, Hindess.B and Hirst, P.Q., "Pre-Capitalist Modes of Production", (London, Routledge and Kegan Paul, 1975).
2. See, Godelier M. p.334-68 "Structure and Contradiction in Capital", in Blackburn R., "Ideology in Social Science" (Fontana/Collins, 1972).
3. See Godelier M. Sect 2. *ibid.*
4. Godelier M. p.356 *ibid.*
5. Godelier M. p.356 *ibid.*
6. Godelier M. p.356-7 *ibid.*
7. Godelier M. p.363 *ibid.*
8. Godelier M. p.343 *ibid.*
9. I must frankly admit that the study of the opposition between socio-economic formations is outside of the scope of my inquiry, and hence there is no examination as to the dialectical or undialectical nature of this type of opposition. As far as my thesis is concerned, the status of this sort of "opposition" is yet to be determined.
10. Marx p.20 "Afterword to the Second German Edition" 1867 L/W.
11. In this chapter I concentrate largely on the theoretical error of reducing a socio-economic formation to social relations per se; a reductionism implicit in much sociological theory and sometimes, as with Weber, taken one step further by the reduction of social relations to resultants of the actions of individual social actors. In Chapter 6, however, I present the opposite reductive error Marx criticised in his critique of the classical political economists - the reduction of an historic socio-economic formation viz capitalism, to production conceived naturalistically as an all determining sphere.
12. Marx notes that Proudhon attempts to reduce, à la Hegel, the movement of history to separate phases of the "idea". He rejects such an approach because "the limbs of the social system are dislocated. The different limbs of society are converted into so many separate societies, following one upon the other." (p.123-4). The correct approach does indeed seem to be dialectically holistic since Marx protests in the following terms:

"How indeed could the single logical formula of movement, of sequence, of time, explain the structure of society, in which all relations coexist simultaneously and support one another?" (124) in Marx 1846-7 L/W.

This conception is also apparent in Marx's 1857 introduction to the "Grundrisse" when he discusses the relationship between production, distribution, exchange and consumption in the capitalist mode of production. Marx argues,

"The conclusion we reach is not that production, distribution, exchange and consumption are identical, but that they all form members of a totality, distinctions within a unity. Production predominates not only over itself, in the antithetical definition of production, but over the other moments as well. The process always returns to production to begin anew. That exchange and consumption cannot be predominant is self-evident. Likewise distribution as distribution of products; while as distribution of the agents of production it is itself a moment of production. A definite production thus determines a definite consumption, distribution and exchange as well as definite relations between these different moments. Admittedly, however, in its own-sided form, production is itself determined by the other moments." (p.99 intro to Marx 1857).

NB This passage also supports a dialectico-causal view of the "primacy of production" in which production is primary only in the sense that the moments of a whole feature as interdependent parts of a socio-productive totality.

13. Benton T. p.70 "Philosophical Foundations of the Three Sociologies." (Routledge and Kegan Paul, 1977).
14. The classical text in this regard in Marx's 1859 introduction to "A Contribution to the Critique of Political Economy."
15. See particularly Marx p.20-21 1859 L/W.
16. On Marx's treatment of the Asiatic mode of production see p.459-71, 1857 in which Marx discusses this socio-economic formation in the context of a general analysis of pre-capitalist modes of production. See also Mandel E. Ch. 8, "The Formation of the Economic Thought of Karl Marx" (NLB, 1971).
17. On this see the "Manifesto of the Communist Party", Marx 1848 (Penguin).
18. This primeaval socio-productive whole is hinted at by Marx in many of his texts including the "Grundrisse" p.483+.
19. See 3.1 on Hegel's dialectic.
20. See 3.2 for this critique of Feuerbach's philosophy.
21. See Marx p.81+ 1857. Marx observes somewhat ironically that the very epoch that gives rise to the illusion that the individual determines the conditions of existence of a socio-economic formation, is and must be, the hitherto most developed socio-productive whole. He argues,

"Only in the eighteenth century, in "civil society", do the various forms of social connectedness confront the individual as a mere means towards his private purposes, as external necessity. But the epoch which produces this standpoint, that of the isolated individual, is also precisely that of the hitherto most developed social (from this standpoint, general) relations. The human being is in the most literal sense a "political animal", not merely a gregarious animal, but an animal which can individuate itself only in the midst of society." (p.84)

22. On this point see again my treatment of Weber's methodological individualism 2.6.

23. Marx claims,

"No credit is due to me for discovering the existence of classes in modern society, nor yet the struggle between them. Long before me bourgeois historians had described the historical development of this struggle of the classes, and bourgeois economists the economic anatomy of the classes. What I did that was new was to prove: (1) that the existence of classes is only bound up with particular historical phases in the development of production"

Letter to Weydemeyer, 5, March, 1852.

24. The feudal drive for rent and its role in the transition to capitalism is examined in 5.2.

25. This interpretation seems to be borne out by the following passage:-

"Like all its predecessors, the capitalist process of production proceeds under definite material conditions which are, however, simultaneously the bearers of definite social relations entered into by individuals in the process of reproducing their life. Those conditions, like these relations, are, on the one hand, prerequisites, on the other hand, results and creations of the capitalist process of production, they are produced and reproduced by it." Marx p.819, 1894 L/W.

Cf Appendix to Marx 1867 (Penguin) "Results of the Immediate Process of Production" especially sect III.

26. Marx p.128-9 1846-7.

27. See Edgley R. "Dialectic the Contradiction of Mr Colletti", Critique 7. p.47-52, 1976-7.

28. See, for instance, Jones G.S. who demonstrates how Lukacs' Marxism culminates logically in a theoretical humanism in "The Marxism of the Early Lukacs: an Evaluation," New Left Review 70, 1971.

29. See Marx Ch 10, 1867.

30. Hobsbawm observes, therefore:

"We are still left with the specific historical problems of the nature and succession of socio-economic formations, and the mechanisms of their internal development, and interaction." (p.281).

Hobsbawm E.J., "Karl Marx's Contribution to Historiography" in Blackburn (ed) (OP CIT, 1972).

31. See Balibar E. Part III, 1 in "Reading Capital" (NLB 1970) - joint authorship with Althusser L.

32. Marx p.792 1894.

33. For a good account of historical materialism as a non-unilinear theory of progress see Hobsbawm E.J. (OP CIT) and his introduction to Marx, "Pre-Capitalist Economic Formations" (L/W 1964).

34. See, for example, Marx p.471+, 1857, and Part Eight, 1867, Ch 20, Ch 36 1894, for illustrations of this thesis in Western Europe.
35. Marx is quite aware of the derivative nature of World history as a single interrelated process. He notes in his introduction to the "Grundrisse":
"World history has not always existed; history as world history a result." (p.109, 1857).
36. Marx in letter to Zasulich, March 8, 1881, in Hobsbawm p.145, "Pre-Capitalist Economic Formations" (OP CIT).
37. For a critique of this sort of theory see Colletti's devastating critique of Kautsky's "Zusammenbruchstheorie" in Colletti L. "From Rousseau to Lenin" (p.45+)
38. Marx p.739 1867 (Penguin)
39. See 5.2., for an analysis of the feudal drive for rent from this point of view.
40. Marx p.534-5, Vol 2, 1861-3.
41. On this see Marx Ch 32, 1867.
42. Marx p.627, 1857.
43. See again Colletti, p.45+ (OP CIT)
44. See Marx, Parts III and IV, 1867.
45. Marx p.122-3, 1867 see also Sayer D. p.107+, "Marx's Method" (Harvester, 1979).
46. Sayer D. p.167 ibid.
47. See Marx Ch 13, 1894.
48. See Marx p.474+, 1857.
49. Marx argues,
"War is therefore the great comprehensive task, the great communal labour which is required either to occupy the objective conditions of being there alive, or to protect and perpetuate the occupation." (p.474 ibid).
50. See also Marx p.91+ in Hobsbawm (ed), 1964.
51. Marx p.92, ibid.
52. Hilton R (ed) p.112 in "The Transition from Feudalism to Capitalism" (New Left Books 1976).
53. Marx p.790, 1894.
54. Marx p.247-8, 1857.
55. On this see Hilton p.22 (OP CIT).
56. Marx p.597, 1894.

57. Hilton p.20+ (OP CIT).
58. Hilton p.21 (OP CIT).
59. For Marx's mature views on the centrality of changes in the feudal countryside as central to the formation of capital, see especially Marx Ch 47, 1894. For a more recent statement of the same thesis, see Merrington J., "Town and Country in the transition to Capitalism" p.170-195 in Hilton R. (OP CIT).
60. See again Marx Ch 47, 1894.
61. Marx, p.795 *ibid.*
62. Marx, p.797 *ibid.*
63. Marx, p.797 *ibid.*
64. Marx, p.798 *ibid.*
65. Marx, p.798 *ibid.*
66. On this see Hilton R. p.16+ (OP CIT).
67. Hilton R. p.17-18 *ibid.*
68. Hilton R. p.27 *ibid.*
69. Hilton R. p.27 *ibid.*
70. See all of Hilton's contributions in the collection of articles on the transition which attempt to substantiate this thesis.
71. Hilton R. p.25 *ibid.*
72. Hilton R. p.27 *ibid.*
73. On this see again Hilton R. p.27+.
74. Hilton R. p.25.
75. Giddens A. (ed) p.3 introduction to "Positivism and Sociology" (Heinemann, London 1974).
76. On this aspect of Comte's theory see Keat R., Urry J. p.71+, "Social Theory as Science" (Routledge and Kegan Paul, 1974).
77. See again Keat R. and Urry J. p.74 *ibid.*
78. Keat R and Urry J. p.74 *ibid.*
79. Durkheim E. p.117-8 "The Rules of Sociological Method", ed G.E.G. Catlin, (The University of Chicago Press, 1938) The subsequent pages of this chapter contain an interesting critique of Comte from the viewpoint of Durkheimian methodology. For a critique of Durkheim's methodology see again 2.1.
80. On this see again Keat R. and Urry J p.74+.

81. See again Chapter 2 for a typical statement of "humanism" in social science as developed by Weber and the neo-Kantians.
82. See 2.5 from which this critique is taken.
83. Hempel C.G. p.303 "Aspects of Scientific Explanation" (The Free Press, New York, 1965).
84. See Hempel C.G. p.306+ (ibid) on this.
85. On functional equivalents see Hempel (ibid) p.311+.
86. Merton R.K. p.105-7 "Social Theory and Social Structure", enlarged ed (The Free Press, New York, 1968).

NOTES TO CHAPTER 6

1. NB This explains the logical priority of Marx's treatment of the value-form in general contained in part 1 of capital volume 1, and his specification of surplus-value, over the analysis of the complex concrete forms of value viz interest, profit and rent examined in volume 3 of capital.
2. See Part 1, Sect 4, Capital Vol. I "The Fetishism of Commodities and the secret thereof" - on this. Marx states, for example, that in commodity production;
 ..." the mutual relations of the producers within which the social character of their labour affirms itself, takes the form of a social relation between products."
 (Marx p.72 1867 L/W)
3. See Marx Ch VII Sect 2 (ibid) on the commodity form of labour-power and the means of production under capitalist conditions of production + Ch VI on the buying and selling of labour-power.
4. See Part 1, Sect 4 Capital Vol. I.
5. Marx observes, therefore, that "in the midst of all the accidental and ever fluctuating exchange-relations between the products, the labour-time socially necessary for their production asserts itself like an overriding law of nature"
 (Marx p.75 1867 L/W).
6. See Marx Ch VII (ibid) "The Labour Process and the Process of Producing Surplus-Value" for a good exposition of the relationship between concrete labour, abstract labour and value.
7. See Marx Ch 1 Sect 3 (ibid).
8. Marx observes that,
 "On the one hand, all labour is, speaking physiologically, an expenditure of human labour-power, and in its character of identical abstract labour, it creates and forms the value of commodities. On the other hand, all labour is the expenditure of human labour-power in a special form and with a definite aim, and in this, its character of concrete useful labour, it produces use-values." (p.46 ibid).
 This sums up the duality of "labour" under conditions of commodity production.
10. Marx p.51 ibid.
11. For a clarification of the differentiation of Marx's idea of abstract labour from any sort of physiological reductionism see Rubin II. ch 13-16, "Essays on Marx's Theory of Value" (Blackrose Books, Montreal, 1973). This is also a useful commentary on Marx's value-theory.
12. Marx p.52, 1865.

13. Marx acknowledges the deviations of prices from value as part of the workings of the law of value in many places including p.75 Vol. I quoted in note 5 above. In squaring Marx's treatment of value in sect 1. of "Capital" with the general consideration of the deviation of prices from value, I am indebted to Itoh's interpretation of Marx's theory of value contained in his paper, "A Study of Marx's Theory of Value", p.307-340 in Science and Society 40, 1976-7.
14. Marx p.47 1867 L/W.
15. On this point Marx claims,

"Hence, if supply and demand regulate the market-price, or rather the deviations from the market-value, then, in turn, the market value regulates the ratio of supply and demand or the centre around which fluctuations of supply and demand cause market prices to oscillate." Marx p.181, 1894.

See Marx ch 1, 1894 for his analysis of prices of production.
16. On the discovery of labour-power and Marx's use of the concept in developing his theory of surplus-value see Marx 1859.
17. Marx p.54 1865.
18. See Marx sect VII *ibid*.
19. Marx p.55 *ibid*.
20. Marx p.55 *ibid*.
21. Itoh observes that "the value form of labour-power lacks the substance of value as the embodiment of labour-time, because it is not the product, but the subjective force of human labour." (p.322 OP CIT).
22. See Marx p.73-4 Vol 1 1861-3.
23. On this aspect of Smith's value-theory and Ricardo's critique of it see Dobb M. p.76+, "Theories of Value and Distribution since Adam Smith - Ideology and Economic Theory" (Cambridge University Press, 1973).
24. I analyse Marx's critique of this theory of value known as "the trinity formula" in 6.4.
25. Ricardo D. quoted in Dobb M p.76 OP CIT.
26. Marx p.400 Vol II, 1861-3.
27. Marx p.400 *ibid*.
28. Marx p.403 *ibid*.
29. Marx p.404 *ibid*.
30. Sayer notes, in this regard, that socially necessary labour-time can henceforth "consistently be applied to all commodity exchanges including that between wages and labour-power" p.134 in Sayer D. "Marx's Method", (Harvester, 1979)

31. Marx p.129 1885 L/W.
32. Shaikh correctly observes, therefore, that a genuine valorisation of capital M to M' , the same sum of money plus profit, is only genuine insofar as it is "matched by an actual increment in the commodities available, and hence in materialised labour-time." See Shaikh A.p.118, "Marx's Theory of Value and the "Transformation Problem." in Schwartz J (ed.), "The Subtle Anatomy of Capitalism", (Goodyear, California, 1977).
33. See Marx Ch VII Part 2 on the circuit of industrial capital 1867 L/W.
34. See Marx Ch VIII on the determination of the value of constant capital.
35. See Marx *ibid*.
36. See Marx Ch VI *ibid*.
37. See Marx p.171+ *ibid*.
38. See Marx Ch IX Sections 1 and 2.
39. See Marx *ibid*.
40. See Marx *ibid*.
41. Marx p.87-8 Vol 1, 1861-3.
42. Marx p.87-8 *ibid*.
43. Engels p.8 in preface to Marx 1894 L/W.
44. Marx 1857 p.650.
45. Meek R.L. p.188 "Studies in the Labour Theory of Value" (Lawrence and Wishart, 1973).
46. On the organic composition of capital and its effect on the distribution of surplus-value see Engels' preface to Marx 1894 p.14+; and on treatments of the relationship between production prices and Marx's general theory of value of which my account is partly derivative see Itoh, M (OP CIT) and Rubin I.I. Ch IV (OP CIT). Rubin correctly notes the theoretical interdependence of these different levels of Marx's analysis. Rubin states,
"Thus, the theory of production prices must without fail be based on the labour theory of value. On the other hand, the labour theory of value must be further developed and completed in the theory of production prices." (p.253 *ibid*).
47. The classical critique is put forward by Böhm-Bawerk in "Karl Marx and the Close of his System" ed Sweezy P. along with Hilferding's reply (Merlin Press, 1975).
48. On this point see Shaikh A p.106 + (OP CIT) and N.B. Shaikh attempts a "solution" of the transformation problem by a theoretical recognition of the unity of production and exchange in the capitalist mode of production.

49. Shaikh A p.107 *ibid*.
50. On this crucial point see Marx Ch. 20 1894. Marx notes the limits of pre-capitalist commodity production and the determination of value-magnitudes by other factors than the law of value outside of capitalist production when he states:

"The quantitative ratio in which products are exchanged is at first quite arbitrary. They assume the form of commodities inasmuch as they are exchangeable, ie., expressions of one and the same third. Continued exchange and more regular reproduction of exchange reduces this arbitrariness more and more."

It is only in conditions of generalised commodity production where the labour-process is reproduced via commodity exchange that the law of value has its legitimate sphere of operation. Hence, Itoh claims,

"... the social inevitability of regulating value-relation according to the labour-time embodied in each commodity cannot be shown logically without considering capitalist production." (Itoh p.313 OP CIT).

51. Marx p.99 1857.
52. Marx p.205 1859.
53. This mechanism is identical to the type criticised in Chapter 4 and 5 of the thesis.
54. On the trinity formula see Marx p.814-31, 1894. A useful analysis of this text is contained in Sayer D. Chapter 3 (OP CIT).
55. Marx p.59 1865.
56. Marx p.59 1865.
57. Marx p.61 1865.
58. On this see Sayer D p.51+ (OP CIT).
59. Marx p.773 1894.
60. Marx p.817 1894.
61. Marx p.817 1894.
62. Marx p.830 1861-3.
63. On this see again note 50.
64. Kuhn S. p.168 "The Structure of Scientific Revolutions." (Chicago, 1962)

NB Although Sayer is also aware of Marx's overcoming of the anomalies of the classical political economists, his treatment of Marx's value-theory is limited by his insistence on an analogy from Kant - something I have already criticised in Colletti's "Marxism". According to this view, Marx's value-theory by reconciling the law of value with exchange at production prices, succeeds in reproducing the "phenomenal

world" on the basis of fundamental theoretical categories. It is in this sense analogous to Kantian categories - categories which again produce the objective world of phenomena. Without wishing to pursue a detailed critique of Sayer here I do wish to emphasise the following. First, Marx's philosophical commitment is realist and any considerations of his epistemology and its relationship to his methodology should, it seems, start from realism if they wish to remain true to Marx's own aims. Certainly, to begin from Kant is bound to lead to purging historical materialism of its dialectico-causal component. Secondly, why present the critique of political economy on the basis on an analogy from Kant's analytic if it can be explicated on Marx's own terms as a development of a scientific theory? The need for any sort of analogy from philosophy disappears once one recognises the scientific aspirations of Marx's critique. Sayer's interpretation of Marx's critique of political economy, on the other hand, is doubly misleading because the analogy from Kant's philosophy is not only inappropriate for explicating a development in the domain of science - not philosophy - but it is also operating with a philosophical system quite alien to Marx's realism in philosophy and in science.

NOTES TO CHAPTER 7

1. On the "Methodenstreit" see Burger T. chapter 3 section 7. "Max Weber's Theory of Concept Formation". (Duke University Press 1976)
Frisby D. introduction to "The Positivist Dispute in German Sociology" translated and edited Adey G. and Frisby D. (Heinemann, 1976)
In German useful texts include:-
Hansen R. "Der Methodenstreit in den Sozialwissenschaften zwischen Gustav Schmoller und Carl Menger" in Diener A. (editor) "Beiträge zur Entwicklung der Wissenschaftstheorie in 19. Jahrhundert" (Meisenheim, 1968)
Ritzel G "Schmoller versus Menger. Eine Analyse des Methodenstreits in Hinblick auf den Historismus in der Nationalökonomie" (Frankfurt, 1950)
2. Frisby D p.xix in Adey G and Frisby D op cit.
3. See for instance Guy Oakes Introduction to Weber 1906 and Pfister B. "Die Entwicklung zum Idealtypus" (Tubingen 1925) who argue along these lines.
4. On the views of Schmoller and the historical school of economics see the following:-
Schmoller G. "Die Volkswirtschaft, die Volkswirtschaftslehre und ihre Methode" (Frankfurt, 1949)
"Zur Methodologie der Staats und Sozialwissenschaften" in "Schmoller's Jahrbuch (Leipzig, 1883)
See also Unger J.S. p.454-) "The Historical School" in "The International Encyclopaedia of the Social Sciences" edited Sills D.L. (Macmillan, 1968).
5. Unger T.S. p.455 ibid.
6. On the views of Menger see the following:-
Menger C. "Problems of Economics and Sociology" translated F.J. Nock, ed. and introd. Schmeider L. (Urbann, 1963)
"Untersuchungen über die Methode der Sozialwissenschaften und der politischen Ökonomie insbesondere" (Leipzig, 1883)
"Irrtümer des Historismus in der deutschen Nationalökonomie", in "Kleinere Schriften zur Methode und Geschichte der Volkswirtschaftslehre (London, 1935)
7. On this aspect of Menger's economic theory see Oakes G. introduction to Weber M. 1907 from which this quote is taken (p.19) See especially p.16+.
8. NB the following passage where Weber distinguishes his concept of economic action from any sort of psychologistic reductionism. He states,
"The definition of economic action must be as general as possible and must bring out the fact that all "economic" processes and objects are characterized as such entirely by the meaning they have for human action in such roles as ends, means, obstacles and by-products. It is not, however, permissible to express this by saying, as is sometimes done, that economic action is a "psychic" phenomenon. The production

of goods, prices or even the "subjective evaluation" of goods, if they are empirical processes, are far from being merely psychic phenomena. But underlying this misleading phrase is a correct insight. It is a fact that these phenomena have a peculiar type of subjective meaning. This alone defines the unity of the corresponding processes, and this alone makes them accessible to subjective interpretation." (Weber p.64 Chapter 11 Section 2).

9. On Weber's definition and conception of economic action see Chapter 11 Section 1, 1922.
10. On Weber's definition of social action see Chapter 1 Section 1 B 1922.
11. On the relationship between sociology and history see Chapter 1 Section 1, 11. 1922.
12. Weber notes the dependence of an ideographic history on the concepts of sociology in Chapter 1 Section 1, 11, while history remains primarily concerned with establishing the cultural significance of events and personalities, sociology is given a causal role. Weber claims, for instance,

"An important consideration in the formulation of sociological concepts and generalisations is the contribution that sociology can make toward the causal explanation of some historically and culturally important phenomenon." (p.19 ibid).

However, my arguments in Chapter 2 and here deny that Weber's Sociology can play such a role.
13. Commentators taking this line include:
Burger T. Chapter 3 Section 7 (OP CIT)
Pfister B. "Die Entwicklung Zum Idealtypus." (Tubingen, 1928)
14. For a lucid exposition and critical discussion of Weber's views on Marxism see Kocka J. "Karl Marx und Max Weber in Vergleich: Sozialwissenschaften zwischen Dogmatismus und Dezisionismus" in "Geschichte und Ökonomie" edited Wehler H.U. (Koln, 1973) p.54-84.
15. On this and related points see Weber 1904 p.68+.
16. For Weber's critical attitude towards Hegelian notions of social development see also his critique of Roscher's method of historical inquiry - Weber 1903.
17. See Weber 1904 p.71+ for his views on the value-relevance and one-sidedness of the economic conception of history which he identifies with Marxism.
18. Weber 1904 p.103.
19. On this point it is perhaps pertinent to observe that, according to Marcuse, Weber's own sociology is tainted by the intrusion of values into supposedly value-free conceptions. In an excellent critique of Weber's sociology and its concept of "rationality", Marcuse argues, for instance:

"Max Weber's analysis of capitalism was not value-free enough, for he incorporated into the "pure" definition of formal rationality the specific norms and values of capitalism"

Marcuse H. p.15 "Industrialization and Capitalism" in New Left Review 70, 1965.

20. See Marx and Engels "The Communist Manifesto" for a classical statement of this position (Marx and Engels 1847-8).
21. For a classical exposition of the principles of scientific socialism see Engels, "Socialism Utopian and Scientific" (Engels 1880).
22. See 5.3 for a critical exposition of Marx's view of the possibility for a transition from capitalism to socialism.

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1a. Texts

Weber's methodological texts are collected together in his "Gesammelte Aufsätze Zur Wissenschaftslehre" ed. Winckelmann J. (J.C.B. Mohr (Paul Siebeck), Tübingen, 4th ed. 1973) These essays are translated in various places, the most important collections being the following:-

Weber M. "The Methodology of the Social Sciences", trans. and ed. by Shils E.A. and Finch H.A., (The Free Press, New York, 1949) - henceforth, referred to as "The Methodology."

"Roscher and Knies: The Logical Problems of Historical Economics", trans. with an introduction by Oakes G., (The Free Press, New York, 1975) - henceforth referred to as "Röschler and Knies".

"Critique of Stammler", trans. with an introduction by Oakes Guy, (The Free Press, New York, 1977) Henceforth, referred to as "Stammler".

"Economy and Society", ed Roth G. and Wittich C., (New York, 1968) especially Part 1. Henceforth referred to as "Ec. and Soc".

1b. Chronological Bibliography of Weber's Methodological Essays consulted in the writing of this thesis.

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- 1905 Critical Studies in the Logic of the Cultural Sciences (in the Methodology)
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- 1922 Part 1. of Economy and Society - especially ch. 1. "Basic Sociological Terms."

2. Chronological Bibliography of the Works of Marx and Engels consulted in the writing of the thesis - Author indicated by "M" for Marx and "E" for Engels.

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- 1843-4 M. A Contribution to the Critique of Hegel's
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- 1847 M. Wage Labour and Capital (Karl Marx and Frederick
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2. Lawrence and Wishart 1970
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