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Occasional Paper No. 15

ON THE SCIENTIFIC STUDY OF POLITICS : A REVIEW OF THE POSITIVIST METHOD

PARTHA CHATTERJEE



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Partha Chatterjee

October 1977

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## ON THE SCIENTIFIC STUDY OF POLITICS: A REVIEW OF THE POSITIVIST METHOD

I

A mild flurry of excitement has been created in academic circles in India on the question of the proper methodology for the social sciences. This excitement is largely in response to the various innovations in methods and techniques which the social sciences have recently produced in the West. In certain disciplines, a consensus of sorts seems to have been established. For the more empirically-minded researchers, whether in economics, sociology, psychology or anthropology, this consensus represents a total devotion of attention to problems of technique - observation, classification or measurement - and a tacit avoidance of all fundamental issues concerning method. Among those who claim to be concerned with "theory", many economists are completely lost in the labyrinth of increasingly complex, increasingly abstract and increasingly unreal mathematical analysis. How the social status of academicians plus the international structure of an academic discipline can confound completely the objectives and rationale of scientific inquiry is shown vividly by the recent development of economic theory, but that is a story that cannot be told here. Of the other disciplines, political scientists in India are only now beginning to feel the shock waves of a debate that recked American academia two decades ago. The diehard traditionalists seem at last to have been left by the wayside. The dominant cry now is for "a synthesis between the old and the new". "a bridge between the traditional and the modern". In the haste to escape from the horns of the dilemma, none has asked himself whether such a synthesis is even logically possible. let alone how it is to be achieved. And the historians, still bedevilled by the ruinous influence of British historicgraphy, are largely not even aware of the possibility of "theory" in history: even E.H. Carr's What Is Bistory? is regarded in most Indian universities as a piece of intriguing nevelty to be

inspected with some curiosity and then kept back on the shelf.

Most curious of all has been the response to all this of many practitioners of social science who are professedly, in varying degrees, of a "leftist" or "socialist" persuasion. Some of them have contended that the methods of the natural sciences are in principle not applicable to social phenomena, and that, the efore, any efforts to make the study of society scientific in this sense are misleading and, in any case, doomed to failure. Others have been horrified by the ignominy of being counted and coded and registered on a computer tape, and have condemned this "dehumanising" method of carrying on scientific inquiry. The more scphisticated have taken refuge behind what they construe to be the "dialectical method" and, on the basis of a "necessary", though unexamined and unelucidated, contradiction between this and the methods of "bourgeois social science", have peremptorily rejected the latter. The more naive have been engnared by diabolical "imperialist plots" to delude the truth-seekers of the third world and keep them in perpetual ignorance. There has been little serious effort to confront the issues raised by recent methodological discussions in the West and to attempt a thorough critique of the methodological assumptions of the Western social sciences.

It seems to me important that the issues raised by recent discussions on the methodological foundations of liberal (i.e., bourgeois) political theory be studied seriously by all political scientists who are confronted by the intellectual task of understanding, and seeking, even if only in theoretical terms, a direction toward the solution of the problems of change and development in post-colonial societies such as curs. It will, in fact, be the argument of this review that a renewed discussion on method is vitally necessary if political science

in India is to grow out of the state of complete confusion in which it has found itself ever since the "behavioral revolution" (minus the 'u') was imported into our universities.

For the purposes of this discussion, I propose to examine the basic premises of the positivist method which, explicitly or otherwise, comprise the methodological foundations of liberal political theory currently used in the West. Since much of teaching and research in political science in India is influenced by what is being written in the West on the theory of democracy and electoral competition, on political participation and electoral behaviour, on leadership, organisations and the entire theory of political development, it is important to consider critically the methodological principles which underlie these writings. Let me add that this review does not deal with all aspects of the voluminous, and exceedingly complex and sophisticated, literature on the positivist method; it attempts to discuss only the central propositions of this philosophical position as reflected in contemporary political science in the West.

II

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What perhaps emerges as the most striking assertion in the classical Marxist discussion on epistemological questions is the essential unity of scientific knowledge, and hence, of the scientific method. This is established, for instance, in Engels's discussion of the testability of scientific propositions in the natural and human sciences, his consideration of the role of hypotheses in the generation of theoretical laws, and above all, the historical nature of all scientific thought,

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whether physical or social. Interestingly enough, this very fact has been the chief bone of contention in most of the debate in the West regarding scientific method and the social sciences: the positivists have maintained that there is only one kind of knowledge - the scientific - and therefore, only one necessary method for obtaining it, while others have disputed this. Realising, however, that the classical Marxists had engaged in bitter polemics with many positivists (such as Mach or, in sociology, Comte), and keeping in mind the recent criticisms by many Marxists of neo-positivism and empiricism, we must be very careful to examine the precise implications of this apparent similarity in the positivist and Marxist positions.

The discussion will be facilitated if we take a representative expression of the current methodological position in the Western social sciences. I will take as an example perhaps the most sophisticated, and at the same time the clearest, explication of the positivist methodological premises of political science to appear recently in the West,

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Frederick Engels, Dialectics of Nature (Moscow: Progress Publishers, 1972), pp. 40-49 and 222-42. Also, Engels, Anti-Duhring (Moscow: Foreign Languages Publishing House, 1962), pp.118-32; Marx, Grundrisse, tr. Martin Nicolaus (Harmondsworth: Penguin, 1973), pp. 100-8; Marx to L. Kugelmann, July 11, 1868, in Marx and Engels, Selected Correspondence (Moscow: FLPH, 1953), pp. 250-3. In the first version of The German Ideology there was a passage which ran: "We know only a single science, the science of history. One can look at history from two sides and divide it into the history of nature and the history of men. The two sides are, however, inseparable ... " See Karl Marx and Frederick Engels, The German Ideology (Moscow: Progress Publishers. 1976), p. 34n. It must be pointed out that in the discussion in Anti-Duhring, the only instance Engels finds of the existence of "eternal truths" are mathematical laws; as we shall indicate very soon, these "truths" are mly syntactic truths, i.e., they are true by definition, and, therefore, do not add anything to our knowledge of the world.

Engels was apparently unaware of the distinction between syntactic and empirical truths. The confusion, however, persists in Lamin's criticism of Bogdanov in Materialism and Empirio-Criticism (Moscow: FLPH, 1947), pp. 130-6.

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James Greger's Introduction to Metapolitics. 2

What, according to Gregor, is the scientific method? \_t refers to "those procedures, which, as a metter of historic fact, have provided a systematically articulated and comprehensive body of maximally reliable knowledge claims that afford men survival and adaptive advantage by affording explanatory and predictive leverage". The important thing to note here is that no one procedure is essential to the scientific method. There may be a variety of procedures depending upon the phenomena to be studied. It is often said, for instance, that the human sciences can never be truly scientific because there is little scope for experimentation. Yet, experiments are in no way germane to the scientific method: the science of astronomy, for instance, has developed with virtually no opportunity for conducting experiments. The question of measurement, again, is similar. There is no essential reason why things must be measured: until quite recently, botanists, for instance, had very few instruments for measurement. These are questions of technique, and appropriate techniques can only be developed according to the demands of the phenomena being studied. There is no single invariant set of techniques that goes with the scientific method.

The crucial question is the <u>reliability</u> of scientific knowledge. Here, we have to make a distinction between two kinds of truth claims - one, purely formal or analytical, the other, descriptive or empirical.

<sup>2.</sup> A. James Gregor, An Introduction to Metapolitics (New York: Free Press, 1971).

<sup>3.</sup> Ibid., p.21. A substantially similar definition is given in another standard statement of the rositivist method of social science, Richard S. Rudner, Philosophy of Scial Sciences (Englewood Cliffs, N.J.: Prentice-Hall, 1966).

The first refers to the propositions of formal logic, or as a special case, of mathematics. These propositions follow as deductions from a sot of axions, and consequently are implied by these axions. They do not assert anything regarding the empirical world. The proposition that two plus two is four follows from the definition of natural numbers and the operation of addition. To establish the truth of this statement one does not have to go around counting apples or oranges or anything else, because it does not assert anything about them. The theorem that two sides of a triangle are together greater them the third side, again, is not a descriptive statement at all; it is formal and its truth is established according to the rules of Euclidean geometry. The thing to note here is that these formal truth claims must be absolutely reliable; they must follow with complete certainty from the original axioms. This also implies that once established, these "truths" are not corrigible within the given set of axioms.

Formal truths, however, do not add anything to our knowledge of the world. To know something about the world, we must have <u>descriptive</u> statements which assert about empirical categories that something is or is not the case. Thus, we might say that a political party is the organized expression of class interest. If this statement is true, it adds something to our knowledge of social organizations. The truth status of this statement, however, is not of the same order as "two plus two equals four". For to determine the validity of this statement, we cannot rely on a purely formal deduction from a set of axioms. We

<sup>4.</sup> It should, of course, be pointed out that in many instances the distinction between analytic and synthetic statements is not very clear. This point was argued very forcefully by Friedrich Waismann. I do not, however, think that the conceptual distinction, and the corresponding differences in the criteria of validation, are necessarily impaired by this.

have to examine political parties and class interests and corroborate empirically the hypothesised relationship between the two. Now, here, one cannot have absolute reliability. All one can expect is maximal reliability, which is a statistical criterion. This means that any descriptive statement is accepted because it is more reliable than all others currently available. In principle, however, it remains corrigible; that is, it can be supplanted by another assertion which demonstrates itself to be more reliable. Statistically, this means that we must accept that proposition relating two or more empirical categories (variables) which explains the largest proportion of the variance. This holds equally for all scientific propositions, whether relating to physical or social phenomena.

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Any scientific theory makes assertions which are claimed to be true both in an analytical as well as empirical sense. A theory is a deductively connected set of assertions: the primary assertions are axioms, the others are logically implied by the axioms. The truth of these axioms are not self-evident. They are inductive generalisations; sometimes they are completely imaginary logical artifacts. Their acceptability depends sometimes upon the empirical reliability of the deductions that are made from them. A scientific theory, in other words, is an axiom system from which certain descriptive assertions about the empirical world can be deduced; it is, in other words, a "hypothetico-deductive" system. A scientific theory, consequently, must consist of certain conceptual constructs with formal connections between them and with rules of correspondence with the empirical world. The formal

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<sup>5.</sup> Ernest Nagel, The Structure of Science (New York: Harcourt, Brace & World, 1961); Carl G. Hempel, Aspects of Scientific Explanation (New York: Free Press, 1965).

connections and the rules of correspondence represent the operational definitions of the theory; their reliability, maximal for the empirical connections and complete for the formal, determines its scientific validity.

Although the structure of a scientific theory is represented in this fashion, the actual process of constructing theory cannot be attributed to any simple method such as deduction or induction. It is always a mixture of both, plus that creative use of scientific imagination which Aristotle called "retroduction". One is reminded here of Einstein's comment: "I think that theory cannot be fabricated out of the results of observation, but that it can only be invented".

This also clarifies the question about the need for abstraction in the construction of theories. In order to clarify the formal or empirical connections between conceptual categories or descriptive variables, it is often necessary to consider certain factors or relationships in isolation from others. It is fashionable these days to talk about "models", although the isomorphism between the real thing and its model is absent in almost every social science "model" that I know of. It also means that in order to handle the logical connections more conveniently and effectively, the use of mathematical reasoning will be

See Arthur S. Goldberg, "Political Science as Science" in Nelson W. Polsby et al., eds., <u>Folitics and Social Life</u> (Boston: Houghton Mifflin, 1964). Also, C. Wright Mills, <u>The Social Control of </u>

<sup>7.</sup> The term "model" has a very definite meaning in the physical sciences, particularly in atomic physics; in the social sciences the term is used with incredible looseness. See May Brodbeck, "Models, Meanings and Theories" in Llewellyn Gress, ed., Symposium on Sociological Theory (New York: Harper & Row, 1959), pp. 373-403.

helpful. This will produce greater clarity and consistency of thought as well as the development of a relatively unproblematic and consistent language. It is also true that it is much easier to make inductive inforences out of mathematical models. Of course, different kinds of mathematics must be developed according to the subject being studied:

an indiscriminate adoption of the techniques of mathematical physics does not necessarily lead to an enrichment of social theory. The crucial question here, of course, relates to the rules of correspondence between the conceptual and the empirical categories, that is to say, the operational definitions by which we can translate the statements of the model into assertions about the empirical world. The element of abstraction is obviously necessary in theory-construction. But whatever level of abstraction one may need to go to, the validity of a theory must

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<sup>8.</sup> See Kenneth J. Arrow, "Mathematical Models in the Social Sciences" in D.E. Lerner and H.J. Lasswell, eds., <u>The Policy Sciences</u> (Stanford: Stanford University Press, 1951).

This has been the bane of modern economics. Again, this point can only be established with much more detailed arguments, but a few comments from an emir.ent mathematician and cybernetist may not be out of place. "Just as primitive peoples adopt the Western modes of denationalized clothing and of parliamentarism out of a vague feeling that these magic rites and vestments will at once put them abreast of modern culture and technique, so the economists have developed the habit of dressing up their rather imprecise ideas in the language of the infinitesimal calculus ... The mathematics that the social scientists employ and the mathematical physics that they use as their model are the mathematics and the mathematical physics of 1850 ... Very few econometricians are aware that if they are to imitate the procedure of modern physics and not its more appearances. a mathematical economics must begin with a critical account of these quantitative notions and the means adopted for collecting and measuring them". Norbert Wiener, God and Golem, Inc. (Camoridge, Mass.: MIT Press, 1969), pp.89-90. the law is arking the term of the specient alerty

ultimately be decided on the descriptive assertions it makes about the real world and the reliability of those assertions.

We now come to the crux of the matter: what constitutes reliability? The reliability of an assertion, according to Gregor, means "minimally, that intersubjective confirmation of some specific observations is forthcoming". 10 The validity of a descriptive assertion involves its confirmation on the basis of intersubjective evidence. This has been a fundamental contention of logical positivists, although all of them are not agreed on exactly what the process of confirmation amounts to. 11 The earlier positivists suggested that all scientific assertions should be verifiable. Later, Popper argued that the criterion should be "refutability" rather than "verifiability". 12 Thus, all descriptive assertions which are meaningful must be, in principle, refutable by demonstration, and must, therefore, remain for ever corrigible.

Assertions such as Locke's, that the "Law of nature... obliges everyone...that no one ought to harm another in his life, health, liberty, or possessions", or Rousseau's, that "the general will is always right and tends to the public advantage", do not admit of any empirical testing, because concepts such as "the law of nature" or "general will" do not have accepted operational referents which may be used to confirm or

<sup>10.</sup> Op.cit., p.53. Italics mine.

<sup>11.</sup> For a brief description of these arguments, see John Passmore, A Hundred Years of Philosophy (Harmondsworth: Penguin, 1968), pp.367-423. A historical introduction to the positivist methodology is Leszek Kolakowski, Positivist Philosophy from Humo to the Vienna Circle, tr. Norbert Guterman (Harmondsworth: Penguin, 1972).

<sup>12.</sup> Karl R. Popper, The Logic of Scientific Discovery (New York: Basic Books, 1959).

disconfirm the statements. These assertions, whether or not we believe in them, are not scientific propositions and cannot, in principle, add to our scientific knowledge of the world. However, many assertions found in classical political philosophy such as the one by Thrasymachus in Plato's Republic, "In every case the laws are made by the ruling party in its own interest", or by Herbert Spencer, that "the quality of society is physically lowered by the artificial preservation of its feeblest members", can be seen as descriptive statements which may be confirmed or refuted by reference to the empirical world once concepts such as "the interest of the ruling party" or "the physical quality of society" can be given an operational meaning.

Popper's criterion, however, logically leads to an uncomfortable position. If every meaningful assertion is, in principle, refutable, then we can question the definition (the "meaning") of every term used in that assertion. This would require that we define the terms in the form of a different set of prior concepts, which, in turn, can be questioned. There is thus the possibility of infinite regress. If we take our earlier assertion regarding political parties and class interests, we may ask for the meaning of the term "class". This could be defined, let us say, in terms of "the relations of production". This again might be a problematic definition and some prior concepts explaining the meaning of "relations of production" would become necessary. And this can go on ad infinitum. Analytic philosophers have replied here that there exists in every scientific language a set of basic unproblematic primary terms ("protocol sentences", as Carmap and Neurath originally called them) on whose meaning there is universal agreement. These sentences are unproblematic no because there are no prior assumptions attached to them, for that there must be : it is impossible to avoid theoretical assumptions, even

in our ordinary language, as Feyerabend of modern epistemologists has argued so forcefully. It is rether that the assumptions are universally considered as acceptable. It is, indeed, obvious that unless there are a set of basic meanings on which there is agreement, no communication is possible. Protocol sentences, therefore, are the basic definitions on which there is intersubjective agreement.

This, interestingly, elucidates the question of "objectivity" and "adherence to facts" in science, and in turn reveals the falsehood of the "fact-value dichotomy" on which empiricism and positivism has traditionally rested. "Facts" are never "value-free", for every assertion of a fact involves a generalisation over an infinite number of smaller facts, and therefore, a prior set of assumptions. Take a simple fact of modern Indian history. 13 "On 15 August 1947, India achieved her independence". On the face of it, this appears a simple enough fact. Yet is it all that "simple"? Why, for instance, do we choose the date 15 August 1947, and not 26 January 1930 when the Indian National Congress observed Purna Swaraj Day, or 21 October 1943 when the Provisional Government of Free India was proclaimed in Singapore, or 2 September 1946 when the first central executive manned by Indians took office, or 26 January 1950 when the republican constitution of India was first Obviously, when we accept the above statement as a "fact", proclaimed? we have in mind certain criteria by which we pick and choose and generalise over an entire period of India's political history and then select the events of a particular date as symbolising in a sense a certain landmark.

<sup>13.</sup> The classic discussion of the problem of "facts" in history still remains Carl L. Becker, "What are Historical Facts?", reprinted in Hans Meyerhoff, ed., The Philosophy of History in Our Time (Garden City, N.Y.: Doubleday, 1959), pp.120-37.

In other words, the above statement of "fact" is a generalisation over innumerable other facts comprising the history of India's independence. Secondly, the criteria on the basis of which we make this generalisation are dependent on certain prior assumptions - theoretical or ideological, but nonetheless assumptions - about what we mean by "independence". Thus we accept 15 August 1947 as the date of India's independence, and reject the other dates, because we hold a certain idea of "independence", which in turn is related to our concepts or notions of such things as "nation", "nation-state", "colonialism", "imperialism", and so on. And these concepts, we all recognise, are not entirely unproblematical in the domain of political theories. Consequently, when we accept this "simple" statement as a statement of fact, we accept it in relation to certain larger theoretical or ideological conceptions. And if we differ on these conceptions, even in our acceptance of the fact we perhaps mean different things by it.

The point is that there are no "facts" (and again there is no difference here between physical and social phenomena) which are not generalisations based upon certain assumptions. The only facts are those which are generally agreed upon by virtue of certain reasonable criteria of intersubjective confirmation. And these facts change. What was accepted as eminently reasonable in one century may not be acceptable as a fact in another. To medieval political philosophers of Europe the existence of a natural law was obvious; no one required any evidence or proof of its existence - it was a primary category whose meaning was accepted. Sixteenth century thinkers, however, called such an assumption into question. Not only does fresh evidence disconfirm old facts, but even the criteria of reasonableness change. This is where the sociology of knowledge impinges on epistemology. One of the main contentions of

historical materialism is that there is no knowledge which is eternally valid, that knowledge itself changes as the material bases of society change. Indeed, the agreement on basic assumptions or concepts or facts on which scientific knowledge must be based itself changes with changes in socio-historical conditions. The basic assumptions upon which our knowledge is built rests upon a certain consensus - a consensus which accepts the assumptions as reasonable. This consensus, however, is temporary; it exists only so long as the reasonableness of those assumptions is not seriously challenged. It is, of course, the claim of historical materialism that these changes in consensus are intimately related to structural changes in society.

We have established, therefore, that all scientific theories are constructed in terms of a basic language, and rest upon certain assumptions, which are generally accepted as unproblematic and reasonable. In the physical sciences, most terminology and assumptions enjoy relatively general and long-term acceptability, although the major scientific revolutions, such as the Galilean or the Einsteinian, were challenges to older assumptions and represent their substitution by new ones. In the social sciences, there is considerable contention regarding theoretical assumptions, and hence, theoretical concepts and terms. The nature of this contention, and the relevance here of Marxism, can now be made clear.

III

The purpose of all scientific inquiry is obviously to produce viable explanatory theories. A theory, according to the established positivist conception, is "a systematically related set of statements

including some lawlike generalizations, that is empirically testable". 14
The strongest lawlike generalizations are those which are deterministic, irreversible, sequential, necessary and sufficient. 15
There are several such generalisations which are found in the various physical sciences, although as we have indicated in the earlier section, the reliability of all such assertions is probabilistic and never certain. But in the physical sciences there do exist fairly reliable systematic process laws, i.e., logical relationships between variables on the basis of which we can, given the present state of a system, specify a subsequent or prior state. We do not have any such laws regarding social phenomena which are quite so strong. In the social sciences we can only have historic process laws, to use which we require information about the past history of a system in order to predict some future state.

So much is clear. What is more important for our discussion, however, is the way in which we can arrive at these historic process laws. In his analysis of the scientific enterprise, Kuhn suggests that in order to provide a schematic guide for research, there must first be a "paradigm" or to use Gregor's terminology, a "preliminary conceptual schemata". This conceptual schemata must consist of certain broad theoretical or speculative hypotheses about the phenomena being studied, so as to determine what will count as relevant date and then to make some sense of this data. But this is only a preliminary stage. Before we can understand in a meaningful way the empirical relationships we

<sup>14.</sup> Rudner, op.cit., p.10.

<sup>15.</sup> Eans L. Zetterberg, On Theory and Verification in Sociology Totoma, N.J.: Bedminster, 1965).

<sup>16.</sup> Thomas C. Kuhn, The Structure of Scientific Revolutions (Chicago : Iniversity of Chicago Press, 1962).

establish between a limited number of variables within a limited domain, we must have a larger theoretical framework which places the limited domain within the perspective of the larger universe of inquiry. Thus, to make any sense of an empirical relationship we may establish between, let us say, party preference and the age group of voters, or between the social structure of a town and the occupants of office in municipal government, we must have a general theory of social structures in which we can locate concepts such as political power, party preference, political generations, etc. This is a vital question which is either not recognised by the usual run of "empirical" researchers in the West (or for that matter in India), or if recognised, not paid any attention to. A general theory of society is a necessary framework for constructing and understanding partial theories.

This leads to two very important conclusions. First, there is no sense in arbitrarily demarcating separate disciplines of social science. If the significance and meaning of a small set of events can only be understood by placing it in the context of the whole universe of study, then any partial theories which we may develop regarding economic relations or political life would not be meaningful if we permanently assume away all non-economic or non-political variables. Yet this is exactly what is done under the present arrangement of sectioning out the study of society into various social "sciences".

The answer to this problem is not "interdisciplinary" research.

The farce which has resulted in most universities from this ramshackle experiment is common knowledge. When basic conceptual schemes, empirical techniques, research strategies - indeed, the whole intellectual

tradition of a researcher - are structured within the confines of one narrow discipline, the problem of constructing more general theories embracing the contents of several disciplines is not solved by a forced nating of diverse concepts or inappropriate techniques. The answer must be a conscious effort to study society as a totality, a totality whose "meaning" is historically revealed, and a totality which is for ever changing.

The second conclusion relates to our choice of a general social theory. And here it will be my contention that at the present time there are only two sets of assertions regarding social phenomena which could claim to represent general theories of society. One of these is essentially a liberal theory of society which, in its various manifestations, either implicitly or expressly forms the framework for all Western or, more properly, bourgeois, social research. The other is historical materialism.

The liberal macrotheory has grown out of the positivist sociology of Comte, through Durkheim, Weber, and the functional authropologists, to its culmination in recent decades in the functionalist sociology of Parsons and his school. The functionalist macrotheory does conceive of the social system as a whole within which particular problems must be located. But the assumption is "that a process or set of conditions either 'contributes' to the maintenance (or development) of the system or it is 'dysfunctional' in that it detracts from the integration and effectiveness of the system. It is thus the functional reference of all particular conditions and processes to the state of the total system as a going concern which provides the logical equivalent of simultaneous

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equations in a fully developed system of analytical theory". 17

That the functionalist "theory" of the social system represents, both in its conservative and radical versions, an essentially liberal (capitalist) conception of society has been amply demonstrated by Alvin Gouldner. 18 In its application to politics particularly, the liberal ideological foundations of the entire theoretical edifice become clear in the works of Gabriel Almond and his associates. 19 Yet, even among Western social scientists, functionalism is rapidly losing its status as the general theory of society - this indeed is the crisis which Gouldner talks of. Functionalism has in recent years been subjected to seriously damaging criticisms with respect to its logical and scientific status, its adequacy is describing non-Western and non-liberal social systems, and above all, its suitability as a theory of instability and

<sup>17.</sup> Talcott Parsons, Essays in Sociological Theory Pure and Applied (New York: Free Press, 1954).

<sup>18.</sup> Alvin W. Gouldner, The Coming Crisis of Western Sociology (New York : Basic Books, 1970).

<sup>19.</sup> The most important works here are G.A. Almond and J.S. Coleman,

The Politics of the Developing Areas (Princeton: Princeton
University Press, 1960); G.A. Almond and G. Bingham Powell,

Comparative Politics: A Developmental Approach (Beston: Little,
Brown, 1966); G.A. Almond, Political Development: Essays in

Heuristic Theory (Beston: Little, Brown, 1970).

social change. 20

IV

Many of the more telling criticism of functionalism have, in fact, been made from a positivist standpoint on the scientific method. Yet, positivist attempts to construct an alternative theory of society have not been any more successful. The dominant effort in this direction has gone towards the construction of a theory of social choice. Instead of a structural theory of society, the concern here is to produce a consistent theory of collective choice given a set of individual preforences and alternative sets of decision rules. The exercise is analytical in a purely instrumental sense. It is not denied that any method of arriving at a collective choice on the basis of a set of individual preferences will involve a value judgment. Nevertheless, as Arrow explains, "given these basic value judgments as to the mode of aggregating individual desires, the economist should investigate those mechanisms for social choice which satisfy the value judgments and should

<sup>20.</sup> Some of the important critiques of functionalism, particularly in reference to its applications to politics, are Carl G. Hempel. "The Logic of Functional Analysis" in Gross, ed., Symposium on Sociological Theory, op.cit., pp.271-307; Alvin W. Gouldner, "Reciprocity and Autonomy in Functional Theory" in ibid., pp.241-70; Rudner; op.cit., ch. 5; Robert E. Dowse, "A Functionalist's Logic", World Politics, 18,4 (July 1966), pp.607-22; John G. Harsanyi, "Rational-Choice Models of Political Behavior vs. Functionalist and Conformist Theories", World Politics, 21,4 (July 1969), pp.513-38; W.G. Runciman, Social Science and Political Theory (Cambridge: Cambridge University Press, 1969), ch.6; A. James Gregor, "Political Science and the Uses of Functional Analysis", American Political Science Review, 62,2 (June 1968), pp.425-39; Alvin Rabushka, "Functionalism, Comparative Politics and Scientific Explanation: Have We Reached a Dead-End?", Government and Opposition (Summer 1771). Plus, of course, there is Gouldner's book already cited.

check their consequences to see if still other value judgments might be violated. In particular, he should ask the question whether or not the value judgments are consistent with each other, i.e., do there exist any mechanisms of social choice which will in fact satisfy the value judgments made?"

The limits of this kind of instrumental analysis are made even clearer by Sen 22 who makes the distinction between "basic" and "non-basic" value judgments. "Basic" judgments are those which apply under all conceivable circumstances, while others are "non-basic". If a particular value judgment is considered basic, and a person would hold it under all conceivable circumstances, then one cannot dispute it on any factual or analytical grounds. If, however, they are "non-basic", i.e., conditional, then a factual or analytical examination can be made about its validity or consistency with other value judgments. Now, most value judgments that we make everyday are "non-basic", and hence are amenable to analysis of this kind. Further, although value judgments may be demonstrated to be non-basic, no value judgment can be demonstrated to be basic, since at no point of time can one consider every conceivable circumstance. Consequently, an instrumental analysis of social choice can be conducted for virtually all sets of value judgments one is likely to encounter.

Unfortunately, the tangible results of much of this instrumental analysis of mechanisms of social choice have not been particularly

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<sup>2:</sup> Kenneth J. Arrow, Social Choice and Individual Values (New York: John Wiley, 1963), pp.4-5.

<sup>22.</sup> Amertye K. Sen, Collective Choice and Social Welfare (San Francisco: Holden-Dey, 1970), pp.59-64.

meaningful as elements of a theory of society. The early attempts were concerned with certain paradoxical situations in choosing according to the simple majority rule. These were later generalised in Arrow's famous general possibility theorem which proved that there was no possible rule by which a set of collectively chosen preference orderings for society could be obtained which satisfied four extremely mild and plausible necessary conditions of logical completeness and consistency, rationality and democracy. This was an undoubtedly significant result, which raised several questions about the validity of trying to find social orderings of preference by any democratic procedure. Later analysts have sought to avoid this rather disastrous result by relaxing several of Arrow's conditions, or by trying to find methods of social choice rather than complete orderings. Compared to the volume of work that has gone into these attempts, the results are not exhilarating. Indeed, it is very difficult to imagine how the dezens of papers now appearing on subjects such as strategic voting without collusion under binary and democratic group decision procedures, or the necessary and sufficient conditions for Nash-stability of sincere voting situations, would ever add up to a more meaningful general theory of political institutions. Abstracted completely from all considerations of the historical development or the structural context of social institutions, these studies have now reached the stage of a laborious but essentially barren pursuit of logical rigour for its own sake.

These are, of course, attempts to build theoretical formulations on the basis of purely instrumental analyses of certain assumptions about behaviour, institutional arrangements and logical requirements which appear to have a certain broad acceptability. Their explanatory scope is, naturally, severely limited by this very mode of analysis.

There are, however, certain other theories which attempt to reach towards a more general theory of social institutions and change while claiming, at the same time, not to transgress the limits of non-cognitive instrumental analysis. One example of this is the theory of constitutional choice proposed by Buchanan and Tullock. 23 This theory assumes a society consisting of rational individuals whose only goal is to maximise individual utilities, and then goes on to deduce from this that the "ideal" constitutional rule of collective decision-making is that of unanimity. In institutional terms, this implies that collective activity should be decentralised so that the costs of bargaining and reaching unanimity are reduced as far as possible. Secondly, by allowing vote-trading in matters of political choice, i.e., allowing bargains and contracts as in market exchange, the attainment of unanimity would be made even easier.

The formulation obviously ignores the entire problem of imperfections or inequality in the basic structure of the initial situation in which contracts are to be made, and when applied in a constitutional, i.e., political, situation involving the state, which is not a voluntary organisation but an organisation of power, the absurdity of the theory is patent. Replying to the charge that the rule of unaminity would inevitably tend to preserve the status quo in political relations, Buchanan and Tullock defend their formulation by saying that it "provides us with an extremely weak criterion for 'betterness', a criterion that is implicit in the individualist conception of the State itself". 24 Indeed, the apparently harmless 'positivist' conception of

<sup>23.</sup> James M. Buchanan and Gordon Tullock, The Calculus of Consent (Ann Arbor: University of Michigan Fress, 1962).

<sup>24.</sup> Ibid., p.14.

the utility maximising individual can only lead to the rationalisation of an extremely narrow and conservative individualist ideology if the scope of explanation is extended beyond purely instrumental analysis to a more general political theory of institutions and social change.

This is, in fact, admitted by Buchanan and Tullock themselves, for at the end of their theoretical exercise they concede that their purpose is to "provide scale theoretical determinacy to the working of individualist democracy", and to provide its supporters with "a somewhat stronger theoretical base from which to defend their position against the continuing onslaughts of the proponents of idealist democracy". So much for "value-free" scientific theory!

Perhaps the most significant of recent attempts to reconstruct the liberal macrotheory is John Rawls's much-discussed A Theory of Justice. 26 It is doubtful if Rawls would consider his work "positivist" in the sense in which modern bourgeois economists or political scientists define the methodological foundations of their work. It is quite clearly intended to go beyond the limits of merely instrumental analysis, and in fact proposes certain principles which could serve as elements of a normative theory of social institutions and social change. On the other hand, Rawls asserts that his theory is also "a part, perhaps the most significant part, of the theory of rational choice". 27 It would be interesting to discuss how this is so, and how far Rawls succeeds in combining a liberal theory of society with a theory of rational choice.

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<sup>25.</sup> Ibid, p. 301.

<sup>26. (</sup>London: Oxford University Press, 1972).

<sup>27.</sup> Ibid, p. 16.

Rawls's principles of justice in their final form, and the rules of priority between those principles, are:

First Principle: Each person is to have an equal right to the most extensive total system of equal basic liberties compatible with a similar system of liberty for all.

Second Principle: Social and economic inequalities are to be arranged so that they are both: (a) to the greatest benefit of the least advantaged, consistent with the just savings principle, and (b) attached to offices and positions open to all under conditions of fair equality of opportunity.

First Priority Rule (The Priority of Liberty): The principles of justice are to be ranked in lexical order and therefore liberty can be restricted only for the sake of liberty. There are two cases: (a) a less extensive liberty must strengthen the total system of liberty shared by all; (b) a less equal liberty must be acceptable to those with the lesser liberty.

Second Priority Rule (The Priority of Justice over Efficiency and Welfare): The second principle of justice is lexically prior to the principle of efficiency and to that of maximizing the sum of advantages; and fair opportunity is prior to the difference principle. There are two cases: (a) an inequality of opportunity must enhance the opportunities of those with the lesser opportunity; (b) an excessive rate of saving must on balance mitigate the burden of those bearing this hardship.

Besides, there is a general conception underlying all this, viz.,

All social primary goods - liberty and opportunity, income and wealth, and the bases of self-respect - are to be distributed equally unless an unequal distribution of any or all of these goods is to the advantage of the least favoured. 28

The analytical method by which these principles are derived is particularly instructive. Rawls assumes a hypothetical situation in which all individuals care only for their personal interest (a standard assumption of "methodological individualism"), but negotiate with each other under a "voil of ignorance" in order to arrive at certain commonly agreed principles of institutional arrangement. That is to say, when this negotiation takes place, no one knows what his social or economic position, his special interest or his own personal abilities will be in the new society. Rawls calls this the "original position" in which social institutions are commonly agreed upon through mutual negotiations, i.e., a contract, made in a situation of uncertainty. The arrangements agreed upon in this contract will be just, because all structural imperfections, inequalities or special interests are eliminated by the device of the original position.

What decision rules would the individuals follow in making their negotiations in the original position? In the theory of decisionmaking under uncertainty, there are two schools, each of which suggests a different decision rule in such situations of uncertainty. One is

<sup>28.</sup> Ibid., pp. 302-3.

the expected utility maximisation rule, which is most commonly accepted by social scientists working in the new positivist tradition. According to this rule, when an individual is faced with the problem of choosing between several alternative states, he will estimate for each of the outcomes the utility which will accrue to him if that outcome actually transpires, and also assign the probability or expectation that the outcome will occur. He will then choose the alternative which maximises his expected utility. Rawls, however, objects to the use of probabilities in the original position, because, he says, there can be no basis for subjective probabilities, or even logical probabilities completely determined by symmetry considerations, if there is absolutely no empirical evidence available regarding possible future states.

Instead, Rawls in his attempt to construct an alternative to the utilitarian theory, adopts the other decision rule, viz., the maximin principle. This principle says that an individual must evaluate each alternative in terms of the worst possibility that can occur to him should be choose that alternative. He must then choose the one in which there is the possibility of least harm. Now, many decision theorists have pointed out that the maximin principle often leads to decisions which are highly irrational, because it eliminates alternatives in which there is even the slightest chance of a disastrous outcome, no matter how attractive they may otherwise be. If strictly followed, it means that no one may cross a street if there is even a remote chance that he may be run over by a car. And where the maximin principle yields

<sup>29.</sup> This is a very loose description of the expected utility maximisation rule. For a more detailed and rigorous discussion, see R. Duncan face and Howard Raiffa, Games and Decisions (New York: John Wiley, 1967), pp.12-34.

decisions which seem reasonable, it is found that they are precisely those situations where the maximin principle is more or less equivalent to the expected utility maximisation principle. 30

Following the maximin principle in the criginal position, Rawls deduces his principles of justice in which every possible institutional arrangement is evaluated in terms of the interests of the least advantaged. He thus arrives at a conception of society which guarantees greatest equal freedom, fair equality of opportunity, and the admissibility of inequality only on the ground that it maximises the prospects of the least advantaged. Applied to present-day society, it would mean substantial redistribution of wealth and income sufficient to achieve and maintain fair equality or opportunity and to guarantee man's self-respect. In ideological terms, it is a bold attempt to incorporate into the corpus of liberal theory, based upon the assumption of the rational individual pursuing his self-interest, considerations of collective rationality which, in the present context, arise essentially out of the ideology of social democracy.

Nevertheless, the analytical problem of holding on to the concept of a rational calculating individual pursuing his self-interest (the fundamental assumption of possessive individualism), and yet steering clear of the nonegalitarian consequences of utilitarianism, once again

<sup>30.</sup> See the criticism of Rawls by John C. Harsanyi, "Can the Maximin Principle Serve as a Besis for Morality? A Critique of John Rawls's Theory", American Political Science Review, 69, 2 (June 1975), pp.594-606. Also, Kenneth J. Arrow, "Some Ordinalist-Utilitarian Notes on Rawls' Theory of Justice", Journal of Philosophy, 70 (May 1973).

proves an impossible task. Rawls seeks to perform this feat by devising a situation where there are self-interested individuals but no particular interests. The objection has been made that this is impossible ; you cannot have individuals with a hypothetical anowledge of what it means to have interests and desires without their actually having particular interests and particular desires. 31 Rawls then proceeds to derive his liberal-egalitarian principles of justice by adopting the maximin decision rule - an essentially conservative rule with a strong emphasis on security and risk-aversion. This procedure has led some of Rawls's critics to make the rather paradoxical point that, contrary to appearances, Rawls's man is not bourgeois men and his theory not egalitarian at all. Rather, his choice of the maximin rule suggests profoundly conservative biases which are "anti-capitalist in thrust and to some degree anti-liberal in their spirit". 32 In the end, what Rawls suggests by way of policy is a continual transfer of incomes and resources from the wealthy to the least advantaged classes, enough to satisfy the minimum "human" needs of the poor, but not exceeding a limit where the productivity and efficiency of the economy begin to fall. Needless to say, this is an idealist prescription which ignores the entire political process through which such decisions must be made in society, and in which all existing concentrations of capital and wealth

<sup>31.</sup> Benjamin R. Barber, "Justifying Justice: Problems of Psychology, Measurement, and Politics in Rawls", American Political Science Review, 69,2 (June 1975), pp.663-74, at p.664.

<sup>32.</sup> Ibid, p.666.

imply concentrations of political power. 33 The fundamental theoretical problem in the new liberal denocratic macrotheory of reconciling a self-seeking individualist conception of man with an avowed concern for a dynamic egalitarian welfare society remains unresolved, despite the methodological innovations of positivist rationality.

The difficulties with the "beral macrotheory have led a number of positivistically oriented political scientists to beat a retreat - a retreat from all considerations of general theory to a devotion to narrowly defined limited problems. Here, it is felt, something can be said about the real world of politics without seriously impairing the tenets of "positivist science". General theories of society try to generalise about huge events which turn out to belong to classes with very few members or which have no identifiable structure. Hence, such theories are impossible to verify or falsify, and are therefore, in a scientific sense, meaningless. So, forget about general theory, concentrate on relatively small and oft repeated events about which empirical laws can be discovered and formulated as theorems within an axiomatic structure of theory. These assumptions will strictly delimit the theoretical field to a narrow area where events can be precisely described.

<sup>33.</sup> See in this connection C.B. Macpherson, <u>Democratic Theory</u>:

<u>Essays in Retrieval</u> (Oxford: Clarendon Press, 1973), pp.87-94.

Also see Brian Barry, <u>The Idberal Theory of Justice: A Critical Examination of the Principal Doctrines in A Theory of Justice by John Rawls</u> (Oxford: Clarendon Press, 1973).

Of political scientists, Riker has made the most sustained plea for "positive" political theories of this kind. 34 The example he constantly urges political scientists to emulate is that of the demand-supply price theory in necclassical microeconomics. Here, he feels, is a well-formulated theory based upon an empirical law (the law of demand) which is universally valid if properly restricted, embedded in a theory of choice, and the conclusions non-obvious, non-trivial and strongly supported by empirical evidence. The restricted applicability of the theory merely to situations of competitive equilibrium is not, according to him, any more disturbing than the fact that the law of falling bodies is restricted to a vacuum.

Riker highlights certain areas in political science in which progress has been made in a similar direction. Three propositions, in particular, seem to represent "more or less embryonic political theories" which could be developed further:

- (1) that simple majority elections in single member districts favour the two-party system, a proposition formulated by Maurice Duverger 35;
- (2) that in two-party systems with a single, ideological dimension and a unimodal distribution of voters, the platforms of both parties converge to the ideological

<sup>34.</sup> William H. Riker, "The Future of a Science of Politics", American Behavioral Scientist (1977); William H. Riker and Peter C. Ordeshook, An Introduction to Positive Political Pheory (Englewood Cliffs, N.J.: Prentice-Hall, 1972).

<sup>35.</sup> Maurice Inverger, Political Parties, tr. by Earbara and Robert Worth (London: Mathuen, 1964), pp.206-28.

position of the median voter, a proposition first formulated by Downs and later developed further by Davis, Hinich, Ordeshook, McKelvey and others 37;

and (3) that in situations similar to n-person zero-sum games with side payments, participants create coalitions just as large as they believe will ensure winning and no larger, i.e., the "size principle" formulated by Riker.

What Riker thinks is particularly commendable about these propositions is that they are essentially of the same theoretical structure as price theory: they are based upon certain empirical laws about the behaviour of voters, politicians and leaders and are theorems within an axiomatic theory of rational choice. They are also theories about equilibrium social states which go beyond mere psychological observations to the social consequences of interactions between different groups of people with different interests and motives. Finally, they are about small and oft repeated events which can be precisely described and defined: they do not fall into the trap of overambitions formulations about a general theory of society.

<sup>36.</sup> Anthony Downs, An Economic Theory of Democracy (New York: Harper & Row, 1957).

<sup>37.</sup> There are many papers published recently in the field of electoral competition, but the most general statement of the problem is Otto A. Davis, Melvin J. Hinich and Peter C. Ordeshook, "An Expository Development of a Mathematical Model of the Electoral Process" American Political Science Review (June 1970).

<sup>38.</sup> William H. Riker, The Theory of Political Coalitions (New Haven, Conn.: Yale University Press, 1962).

Riker does not show himself to be aware that the theoretical status of the fundamental assumptions behind these propositions about political phenomena, or of those of price theory for that matter, may itself be called into question. What, for instance, is the theoretical basis for assuming that voters are maximising utilities when they vote for a particular candidate (unless this is so in a purely tautological sense), or that voter preferences fre unimodally distributed, or that election candidates are interested only in winning? 39 In other words. by which criteria or in what theoretical context do we define concepts such as electoral competition, ideological preferences, party platforms, etc., and accept the primary assumptions which use such concepts? And once such questions are brought in, there is no escaping the fact that partial theories, in order to be intelligible, must be placed in the context of a general theory. Despite all protestations to the contrary, it is not as though the "positive" theories of politics do not implicitly assume a certain general conception of society when they accept as valid the assumption that ideological preferences are unimodally distributed among the electorate, or that voters vote for the candidate who is ideologically closest to them, or - a fundamental assumption - that they are maximising utilities when they are voting. 40 Certain general propositions about society are implicit in all these assumptions, these propositions are not, however, integrated into a cohesive theory of

<sup>39.</sup> The argument that candidates who act otherwise are rejected by the system only begs the question: what, then, is this system?

What sort of society would produce such an electoral system?

<sup>40.</sup> How, for instance, would such models explain the phenomenon of entire villages in India boycotting the elections to register their protest on some local issue? Are the voters here maximising utilities? How?

society, but that is precisely the crisis of liberal theory today. The problem, however, is not solved by running away from such questions.

It is possible, of course, to argue that the method of working upwards from certain well-formulated and well-tested partial propositions towards a more general theory gives us a viable research strategy. The question that would then become relevant concerns the objectives of social scientific inquiry. Certain comments are in order here. The example often cited here of the development of the theories of physical science is apt to be misleading. The physical sciences underwent the most phenomenal developments in a period of history which also experienced far-reaching socio-economic changes in the structure as well as the techniques of production. There was a tremendous social urge for change in which technological development went hand in hard with the development of scientific theory. It is often forgotten that the fundamental assumptions of the bourgeois social sciences - the idea of the self-seeking rational individual, the perfectly competitive market and its equilibrium - were all developed in this historical period of change, most notably in the political theory of Hobbes, Locke and later of the utilitarians, and in the economic theories of Adam Smith, Malthus and Ricardo. The social ideas of medieval Europe underwent fundamental and sweeping changes in this period. From that day, inspite of much analytical window-dressing. the fundamental assumptions about man and society have remained unchanged in liberal social theory.

rigorously formulated partial theories of competitive equilibria, ignoring all considerations of a general theory of social development, implies that we turn our eyes away from the changes which are taking place today in different parts of the world. The evidence is now massive that these theories, whether about equilibrium prices or equilibrium party strategies, are totally useless in situations which prevail in most countries of the world. Such academic exercises are perhaps feasible in countries where the fundamental coordinates of social interaction remain largely stable, or where, in the absence of any urgent movement for social action, the motivation for social scientific inquiry is literally reduced to the mere advancement of scholarly careers. In the meantime, the liberal theory of society remains a complete shambles.

v

The alternative general theory of society that is available to us today is the theory of historical materialism. That this framework is far better adapted to analyse society in terms of the historical development of social structures and their interrelationships, and particularly to tackle the problems of instability and change, can, it seems to me, hardly be doubted. It is, in fact, a general theoretical framework within which one could look for historic process laws about partial structures, applicable to limited and concrete situations. It must be recognised, of course, that this general theory only attempts to provide a simple and abstracted theoretical system whose specific descriptive implications are necessarily incomplete and for ever

corrigible. There exists, therefore, considerable scope for the development of partial historic process laws which provide increasingly powerful explanatory theories, and the consequent enrichment of the general theory as well.

This point has been expressed quite clearly by Lukacs: "The framework is complete. As a requirement and approach to the general

"Where speculation ends, where real life starts, there consequently begins real, positive science, the expounding of the practical activity of the practical process of development of men. Empty phrases about consciousness end, and real knowledge has to take their place. When the reality is described, a self-sufficient philosophy loses its medium of existence. At the heat its place can only be taken by a summing-up of the most general results. abstractions which are derived from the observation of the historical development of men. These abstractions in themselves, divorced from real history, have no value whatsoever. They can only serve to facilitate the arrangement of historical material to indicate the sequence of its separate strata. But they by no means afford a recipe or schema, as does philosophy, for neatly trimming the epochs of history. On the contrary, the difficulties begin only when one sets about the examination and arrangement of the material - whether of a past epoch or of the present - and its actual presentation. The removal of these difficulties is governed by premises which certainly cannot be stated here, but which only the study of the actual life-process and the activity of the individuals of each cooch will make evident." Mark and Engels. The German Ideology, op.cit., p.43.

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<sup>41.</sup> Consider this passage from The German Ideology: "This manner of approach / the materialist conception of history 7 is not devoid of premises. It starts out from the real premises and does not abandon them for a moment. Its premises are men, not in any fantastic isolation or fixity, but in their actual, empirically perceptible process of development under definite conditions. As soon as this active life-process is described, history ceases to be a collection of dead facts, as it is with the empiricists (themselves still abstract), or an imagined activity of imagined subjects, as with the idealists.

study of society, as an interpretation of society in its globality, in its totality, in view of its structural and cultural, i.e., historical transformation - in these respects, Marxism is really complete. But it also is complete as a method, i.e., as a node of analysis and as the criterion for establishing the theoretical hierarchy of the constitutive factors of society. Completeness of method, however, does not necessarily imply that one can find in Marx everything in all its specific contents. Instead, these can come to light only through long, patient research, conducted on the basis of the Marxist method, which brings out the global, historical sense of social evolution ... What the positivists dun't understand is precisely this; facts must be interpreted, thus transcended; the process of abstraction is fundamental for the construction of a general theory. And without a general theory, facts are and remain meaningless."

What I have argued here is not simply that historical materialism provides "certain useful insights into social processes" and must, therefore, be taken seriously by social scientists (which is essentially what most of the celebrated "radical sociologists" plead). The argument is that we must work with a general macrotheory of society in order to structure our research at lower levels of generalisation, and that historical materialism is the general theory of society at the present juncture in history. This, however, is not the place for a detailed discussion on this matter.

<sup>42.</sup> Franco Ferrorotti, "Colloquio con György Lukacs", La Critica Sociologica, 17 and 18 (1971), pp.179-84 and 92-104, translated 68 "An Interview of Georg Lukacs", Sociological Abstracts, 20, -2 (Jan - Apr 1972), pp.i-vi and 20, 3 (May 1972), vii-xvi.

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