

THE MEANING AND SIGNIFICANCE OF
"EMPIRICAL METHOD" FOR THE
CRITICAL THEORY OF SOCIETY

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A critical theory of society is opposed to the contradiction
between its structure and that of its object.

Theodor W. Adorno

I

The problem of the relation between knowledge and practice has always been a central concern of those individuals engaged since the 1920s in formulating the "critical theory of society". To some extent the result of a rethinking of Marxism as it pertained to the theory and practice of revolution in the advanced societies, particularly Germany, the critical theory of society has sought to account for these societies through the development of a critical posture which first and foremost addresses itself to Marx and Engels but in their name. To continue to be true to Marxian concerns and commitments in the face of significantly altered social and economic conditions, not excluding the development of capitalism as a global system, it would be necessary to confront the "scientism" and "latent positivism" of Marx himself, as well as his linear and mechanistic conception of social change. Equally necessary would be the effort to reformulate the static relation between the substructural "mode of production" and the political-cultural superstructure which Marx inherited virtually intact from political economy.

The social sciences as interventionist, or potentially interventionist, disciplines committed to "empirical social research" figure prominently in this latter reformulation. These disciplines, after all, are not simply neutral agents that carry out research on the relations between alleged sub- and super-structural elements at a distance from these elements. This very reformulation is in part necessitated by the degree to which the social, behavioural and ad-

ministrative "sciences" have become a *force of production* which no longer constitute a mere reflection of productive forces that determine them. The dialectical character of society as simultaneously formed, formative and forming can nowhere be seen in bolder relief than in the present situation of interpenetration and interdependence among corporations, bureaucracies, governments and these disciplines. Indeed, one could make a good case for the claim that the imperatives of these disciplines are more and more a necessary condition for successful "practice" among decision-makers and policy-makers in advanced industrial societies.

The gradual shift away from the critique of capitalism and economic organization toward the critique of instrumental reason and "Society" as a false totality was virtually given in critical theory's analysis of traditional theory. Traditional theory was simply the necessary "other side" of the methodical empiricism carried out by Popper's (and Weber's) responsible rational theorist in the social sciences. Disciplined observation in the social sciences effectively short-circuited reflexivity because its purpose, *like both science and capitalism*, was to serve appropriative and accumulative interests in knowledge as a grasp rather than a glimpse. The critical theory of society saw the relation of the social sciences to instrumental means/end rationality in a decidedly dialectical way. Not only was means/end rationality *the operative* concept of reason to be found in the proper working of the social sciences as success-oriented "technological" disciplines with an interventionist bias and the requirement of "results". This very interventionist bias and results orientation revealed the instrumental relation of *the social sciences themselves* as disciplines and knowledge — accumulating (or producing) activities functioning as agents or "means" to ends defined outside them by authorities in economic, political and bureaucratic organizations.

What the social sciences, following the lead of science, do to "theory" is thus done to the social sciences themselves. Just as theory becomes an instrumental handmaiden obliged to serve data accumulation and intervention by both agreeing to and assisting in its structural decomposition into testable, falsifiable hypotheses, so also do the social sciences that demand such an activity of theory limit themselves to a success orientation which can only be realized if they accede to external norms and standards of reason as instrumental rationality, norms which define "progress" in terms of progressive differentiation and specialization. This differentiation, however, does not simply take the form of a parallel development between these disciplines and the social division of labour which includes them. As already noted, these disciplines become a force of production because their norms and canons are effectively "generalized" to encompass commonsense practices formerly subject to custom, convention and tradition. At the same time that this occurs, its effect is to reveal the subjugation of the social sciences to society *because*

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their mission is to realize Society as an historically and culturally specific collective which is thereafter fetishized as the only alternative to social disorder and disorganization.

II

The issue of the relation, real and "ideal," between the critical theory of society and empirical method in the social sciences thus underscores the contrast between social theorizing as a reflexive activity or enterprise and sociological theory as a repudiation of reflexivity. While the first addresses "society" as simultaneously a concept and a phenomenon, the second views itself, with Parsons, as a subset of sociology's academic division of labour. The "partial reflexivity" of the critical theory of the first generation, embodied in the idea (and practice) of negativity or "negative dialectics," fundamentally abjures as falsely concrete the empirical view or understanding, since it proceeds out of the assumption that the facts are concrete and theory "abstract" when precisely the opposite is the case.¹

Sociological theory, in subordinating itself to this false concreteness, accedes to the position that it can only vindicate itself in the "real world" that sociology says it understands from a distance by permitting (indeed applauding) its structural decomposition into testable, falsifiable hypotheses. Its only defense then becomes that it is now ready, willing and "available" for utilization as a means or instrument for carrying out a version of the Western project in microcosm, namely, sociological research directed to the appropriation of facts and the accumulation of probabilistic generalizations. The production of these generalizations demands hypotheses, along with operational definitions effectively predefining the "significance" of the "behaviour" of sample populations enroute to stating those always tentative conclusions. The rationale for this allegedly linear and serial development, whose progress involves "theory" in these recurrent acts of intellectual suicide, must be clear: intervention in social life in the interests of piecemeal and incremental change where such activity presupposes a "knowing" elite (man) and an ignorant mass (nature).²

Recent efforts to reach a compromise between the critical theory of the first generation (Horkheimer, Adorno, Marcuse) and the incremental or piecemeal approach of Karl Popper and Hans Albert, most notably by Habermas and his followers and students, is as professionally unacceptable and methodologically confusing to sociologists as it is an analytical washout for supporters of critical theory as a reflexive negative dialectics.³ The idea of "splitting the difference" in the interests of reaching such a compromise, originally termed "radical reformism" by Habermas, but more recently labelled "critical social science", reflects Habermas' disillusionment with the West German student protest movement which reached something of a climax in 1968-69. It is worthwhile

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quoting Habermas in full on the reasons for his "conversion" from the position he had taken during the German Sociological Association meetings of 1961, later to become part of, the "Popper-Adorno" controversy, and elsewhere.

Under other historical conditions, the juxtaposition of the categories "revolution" and "reform" constituted a sharp line of demarcation. In industrially advanced societies it no longer discriminates between possible alternative strategies of change. The only way I see to bring about conscious structural change in a social system organized in an authoritarian welfare state is radical reformism. What Marx called critical-revolutionary activity must take this way today. This means that we must promote reforms for clear and publicly discussed goals, even and especially if they have consequences that are incompatible with the mode of production of the established system. The superiority of one mode of production to another cannot become visible under given structural conditions of military technology and strategy as long as economic growth, the production of consumer goods, and the reduction of average labour time — in short, technical progress and private welfare — are the only criteria for comparing competing social systems. However, if we do not deem insignificant the goals, forms and contents of humane social and communal life, then the superiority of a mode of production can only be measured, in industrial societies, with regard to the scope it opens up for a democratization of decision-making processes in all sectors of society.⁴

The point here is that support for what sounds suspiciously like Mannheim's "fundamental democratization" does not necessarily rule out commitment to negativity. Practical conditions always constitute some form of "piecemeal social engineering" simply by dint of their ongoing character. As a recommendation such a nostrum is meaningless for the practical realm precisely because it is inherent in the practice of an unfinished and/or false totality — society. But as a recommendation to social theorists which allegedly puts them in an either/or situation where they can choose *either* "ontology" or constructive action it is an all too familiar instance (following Durkheim) of empiricizing (and thereafter reifying) the dichotomy between thought and

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action.⁵ Such a posture fails to take into account that here we are not dealing with two "options" — points of view whose differences are seen to presuppose far more basic agreements (consensus?) *given* an empirical conception of the concrete (parts, events, facts) and the abstract (wholes, "relations," theories). In effect, one "side" does not accept the ground rules which include (ironically given the empiricist commitment to the concerns of formal logic) the view that negativity is incompatible with support for reforms, whether piecemeal or radical.⁶

The critical theorist does not "support" such reforms in the practical realm by turning away from negativity. He rather engages these reforms as constructive changes which are at one and the same time an effort to make the social whole more human by seeking to improve it in a way which (necessarily) begins by taking its structure as a (false, incomplete) whole as essentially "given." He neither disputes the "good will" of participants in these efforts, nor does he reify society by acceding to its alleged monolithic character as a totality in which dialectical movement in the direction of becoming has ceased or become meaningless.⁷ But he knows the difference between such efforts — as well as the social science which stands behind and effectively legitimizes them — and critique as a negative dialectics. In a certain sense, then, intervention in the interests of the sort of change which can be realized by and through such efforts tells us as much about the advanced societies as social structures and social process as it does about the social sciences as "disciplines" which simultaneously name and are named. Sociological theory, by inverting its relation to "research" in the act of acceding to the academic division of labour, reflects its real role as the light infantry of a technological social science required to prove its claims to professional status and governmental/corporate "support" by its capacity to produce with a fair efficiency "works" valued as relevant by those who direct the dominant institutions of society.⁸

The point about a social science which puts "theory" in the service of non-reflexive technological efforts at intervention of this sort is thus that its claim to neutrality is the way it *reveals* its auspices in the attempt to hide them. The idea of standing "outside" a topic with nothing more than one's values, Weber's vaunted "value-relevance," presupposes that the world can be construed in such a way that it is amenable to "ex-planation" part by part.⁹ It is the inside/outside, beginning/ending presumptions given in *causal inference* as the quintessential form of lawfulness or connectedness which serves to underscore the refusal of empiricism and methodical empiricism (the social sciences) to admit that what underlies and makes possible their enterprise is precisely their unacknowledged presumption that reality is necessarily a *concrete* rather than an abstract totality after all. That the dialectical character of this whole is *the reality*, rather than an arbitrary way of looking at it "intellectually," is effectively covered over by the accusations of Popper and his cohorts which

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Habermas' "critical social science" only aids and abets in its "radicalization" of false concreteness.¹⁰

Explanation presupposes a whole which we must thereafter pretend not to recognize because of the way knowledge and knowing have themselves been defined in terms of grasp, appropriation, accumulation and investment. This requires that the whole be presumed real only by reference to parts which demand that it be frozen, and thereafter carved up and put out.¹¹ Explanation thus constitutes a manifestation in the social and political realm of that quintessential one-dimensionality which grants individuals their "subjectivity" only on condition that they yield up their reason to scientific, technological and organizational-bureaucratic conceptions of reason as rationality.¹² From the standpoint of a social science committed to intervention, explanations are the only conceivable knowledge-productions "relevant" to its enterprise, which means that theory must necessarily content itself with a subordinate instrumental role as a means to this appropriative effort. The implications of this commitment leave theory no choice but to bow to the demand that it not only permit, but actually assist in, its structural decomposition into testable, falsifiable hypotheses.

What all this means, of course, is that there is no way the critical theory of society can possibly abjure its combined commitment to negativity and ultimate optimism on grounds that now we have a "good reason" for getting involved in radical reformism *and therefore for turning away from the critical task*. It also means that the attitude it must take to empirical method may conceivably endorse its reformist objectives as valuable *given* society as a false totality while at the same time viewing its increasing predominance *vis a vis both theory and practice* as indicative of the character and direction of the false whole itself. In effect, empiricism (and empirical method) must remain of central interest to the critical theory precisely because it constitutes the core of a programme whose technological concerns and interventionist bias self-confirm its promise of incremental and piecemeal successes *given* a frozen and carved up whole, while its widening ambit threatens to annihilate thought and reconstitute practice in its own image. To say that the social sciences reveal their auspices in the effort to hide them through the assertion of a neutrality conditioned only by relevance is to suggest that what makes their inversion of theory and method of central significance is the fact that it shows how much sociology and society belong together.¹³ The critical theory can hardly afford to ignore or underrate the importance of "intellectual" activities so indispensable to its understanding of society as a false whole.

This is why Adorno was so concerned in the years following his wartime experience in the United States with the need to take the social sciences seriously. He made his point unambiguously, without in the process acceding to either

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piecemeal or radical reformism as *a substitute* for thought, in the following statement:

My own position in the controversy between empirical and theoretical sociology, so often misinterpreted, particularly in Europe, I may sum up by saying that empirical investigations are not only legitimate, but essential, even in the realm of cultural phenomena. But one must not confer autonomy upon them or regard them as a universal key. Above all, they must terminate in theoretical knowledge. Theory is no mere vehicle that becomes superfluous as soon as the data are in hand.¹⁴

Adorno is speaking here to the bargain which *all* forms of knowledge honouring a scientific vision have effected with society. This "compromise" promises that knowledge and knowledge-claims will be tolerated only on condition that they overcome any residual interests in reflection which, for Bacon and Popper alike, are *at best* "a courtesan and not for fruit or generation," and begin in the boundary-as-limit posed by the truncated reason that is Western rationality.¹⁵ The reason for not "conferring autonomy" on the facts or viewing them as a "universal key" is that they are the result of intervening in a *false whole* whose partiality is covered over by assertions about concreteness, "relations" and technological self-sufficiency. To "intervene" is necessarily to serve this whole by acceding to its one-dimensional vision of the world as an abstract totality whose reality is to be discovered in its "parts," and in the explanations which presuppose and proceed from them.¹⁶

III

It might be argued that the foregoing has presumed interventionist concerns and "interests" when empirical method in the social sciences need not have such an animus at all. We would respond that this is highly doubtful, given the fact that even where a particular social scientist claims to be interested in engaging in "empirical" research for its own sake, this work is necessarily "available" for utilization as a means for intervention by others, whether social scientists or "users" in the corporations, governments, professions or unions. The academic division of labour to which social science as theory and method accedes, however poor a mirror of society as a *social* division of labour, is nevertheless integrated into this larger structure in quite specific and continuing ways through the dependence of the university and "research" on the above institutions.¹⁷ Even the individual researcher, allegedly employing

empirical methods in the absence of any specific or general interventionist interest, must publish or otherwise make visible his efforts if he is to gain the recognition on which his advancement and/or status depends. Finally, even were we to grant the above claim, the points we have made regarding intervention itself as a feature of the whole it claims to be "outside", save for the matter of values, would hold with even greater force for an empirical method allegedly uninterested in anything other than an accurate registry of "the facts."

Radnitsky's effort to bridge the gap — which was first articulated in detail in the "Popper-Adorno" controversy — by underwriting Habermas' "global programme" for a critical social science carries the attempted reconciliation of critical theory and social technology to something of an end-point.¹⁸ His determination to find common ground on which Anglo-American empiricism and continental dialectics and hermeneutics can build a discipline committed to "radical reformism" echoes a similar false "theoretical" resolution achieved earlier by Parsons and Mannheim. In both cases, the resolution was false because it was effected *sociologically* and therefore in express opposition to the continuing *reality* of *societal* contradiction as a feature of social structure and the social division of labour.¹⁹ Quite apart from a view of language which comprehends itself as a neutral instrument "outside" society, whose "standards" commit it to smoothing over rather than embodying social contradiction, this development bears no relation whatsoever to the continuing need for the critical theory as a negative dialectics.

Not only is radical reformism no substitute for the critical theory of society; it also fails as a meaningful reorientation of sociology as a discipline whose theories serve its accumulative and either directly or indirectly interventionist objectives. Indeed, the idea of a "reflexive sociology" is itself a contradiction, since sociology's scientific pretensions, given in its commitment to "works," necessarily disposes it toward society and against reflection and negativity.²⁰ This suggests instead that the critical theory must now go beyond even Adorno's understanding of the social sciences and empirical method and take account in its critical posture of the fact that society now includes a specific knowledge-producing component with "radical" and "reflexive" pretensions alongside conventional social science. To be sure, eventually this alleged "difference" between an orthodox and a "critical" social science would be revealed for what it really is, because the latter's acquiescence in the concrete fact and abstract whole would compel it to opt for *either* one-dimensional intervention through empirical method or "smoothing" and false resolution through some form of "grand theory."²¹

A related aspect concerns an issue which constitutes what is perhaps the central rationale for a critical social science in its critique of Marxism: its alleged failure to "produce" revolutionary change out of its critique of political

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economy which *really* transcends capitalism, coupled with its retreat into ontology, ideology, and rhetoric.²² While Adorno was wrong to construe negative dialectics pessimistically as necessary *because* Marxism had "failed," the question of the ripeness of society from the standpoint of the relation between the means and the mode of production cannot be ignored.²³ The fact that this relationship has been reversed in significant ways by the increasing influence of the social sciences, and "social relations" generally, with technical progress and its rules now *subordinate* to social norms, hardly makes a case for scrapping "capitalism" as an analytic in favour of "science" on the grounds that we now have a critical social science as part of this enterprise which can "lead" economic and technical developments. Neither does it necessarily support disillusionment with an analysis from "objective conditions" where precisely their absence addresses simultaneously the incompleteness (untruth) of present practice as *social reality* and the need for the real need to be embodied in negativity *because* contradiction is present in the social reality itself.²⁴

A sincere commitment to the view that radical reformism is a distinctly different enterprise from both the social sciences and the critical theory fails first of all to appreciate its present status as an alternative which bears essentially the same relation to social reality now that conventional social science did for an earlier period in the development of advanced industrial societies. In addition, its repudiation of objective conditions puts it in the unenviable position of having to presume the very heightened consciousness in the absence of these conditions which it is the purpose of radical reformism to affect. Perhaps the most paradoxical feature of this support for a critical social science is the way its impatience leads it to recommend actions which are no less a repudiation of the idea that the distinction between thought and action is false than was the case for Marx and Engels when they endorsed revolutionary action in the absence of objective conditions. Only the conviction that universal intelligibility can be presumed for all or most as an inherent capacity and "interest" *in this absence* can overcome this paradox, and this, we would argue, is untenable given the level and character of individuation in the advanced societies at present.²⁵

The life of critique depends on its determination to hold fast to negativity in the absence of objective material and social conditions because this negativity, as recognition of the contradictory character of society, even in the face of ideology and rhetoric defending the truth of the present reality, is part of this unfinished reality, not something "outside" it. Negativity would only be inconceivable where the social contradictions which brought it into being had been overcome and the real need satisfied. Our point has been that a critical social science is far more likely to underwrite, perhaps even legitimize, these contradictions than it is to overcome them. To refuse to accord the socially

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“correct” (but untrue) dichotomy between thought and action analytical validity is to speak to what collective life beyond social contradiction must mean. Commitment to negativity addresses the essential difference between reality and truth not in the hope of system collapse but in the expectation of transcendence. Because the possibility of such developments relates to practical realities, these developments are not to be construed as realizable by and through top-down interventionist strategies and techniques alone, whether of the reformist or the radical reformist variety.²⁶ In the absence of objective conditions providing the impetus for mass, or concatenated individual, action, no social change can ever escape the reality of top-down direction, and will therefore miscarry and fail to realize true social progress.

Adorno’s demand that we reappraise the presently inverted relation between social theory and sociological data accumulation through empirical method, where theory can survive only if it accedes to its structural decomposition into testable, falsifiable hypotheses, speaks both to the reality of sociology as the first science of society as a *false* totality and to the real need. The fact that he endorsed pessimism by according “society” the status of a frozen construct whose monolithic character admitted of little if any dialectical movement in the direction of becoming in no way diminishes the perceptiveness of the following observation regarding reflection in contemporary society. It is one which those who support the displacement of the critical theory by a critical social science all too readily exemplify.

Thought is subjected to the subtlest censorship of the *terminus ad quem*: whenever it appears critically, it has to indicate the positive steps desired. If such positive goals turn out to be inaccessible to present thinking, why then thought itself ought to come across resigned and tired, as though such obstruction were its own fault and not the signature of the thing itself. That is the point at which society can be recognized as a universal block, both within men and outside them at the same time. Concrete and positive suggestions for change merely strengthen this hindrance, either as ways of administering the unadministratable, or by calling down repression from the monstrous totality itself.²⁷

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Notes

1. See particularly: Karel Kosik, *The Dialectics of the Concrete*, Dordrecht: Reidel Publishing Co., 1976; Theodor Adorno, *Negative Dialectics*, New York: Seabury Press, 1973; John O'Neill, *Sociology as a Skin Trade*, London: Heinemann, 1972; and H. T. Wilson, *The American Ideology*, London: Routledge, 1977. Parson's most significant single work in this regard is *The Social System*, Glencoe: Free Press, 1951.
2. Wilson, *op. cit.*, chapters 2 and 5.
3. Wilson, "Science, Critique, and Criticism: the 'Open Society' Revisited," in *On Critical Theory*, John O'Neill, N.Y.: Seabury Press, 1976, pp. 205-230.
4. Jürgen Habermas, "The Movement in Germany: A Critical Analysis," in Habermas, *Toward a Rational Society*, London: Heinemann, 1971, pp. 31-49 at p. 49.
5. See particularly: Wilson, *The American Ideology*, Chapter 5; Herbert Marcuse, "Karl Popper and the Problem of Historical Laws," in Marcuse, *Studies in Critical Philosophy*, Boston: Beacon Press, 1973, pp. 191-209.
6. The best known critique of this form of reductionism is Herbert Marcuse, *One Dimensional Man*, Boston: Beacon Press, 1964. On its ramifications for political thought see: Robert Paul Wolff, Barrington Moore and Herbert Marcuse, *A Critique of Pure Tolerance*, Boston: Beacon Press, 1965; and Charles Taylor, *The Pattern of Politics*, Toronto: McClelland and Stewart, 1970.
7. Kosik, *op. cit.*, pp. 17-32. Also Theodor Adorno, "Society," in *The Legacy of the German Refugee Intellectuals*, Robert Boyers, N.Y.: Schocken Books, 1969, pp. 144-153, where early recognition of the monolithic character of society is viewed as an unfortunate alternative to a progressive dialectic.
8. Wilson, "The Poverty of Sociology: 'Society' as Concept and Object in Sociological Theory," *Philosophy of the Social Sciences*, Volume 8, No. 2 (June, 1978); Wilson, "Towards a Political Theory of Technocracy," *Polity* (Spring 1980) (forthcoming).
9. George Spencer Brown's understanding of "ex-planation" in *Laws of Form*, London: George Allen and Unwin, 1969, p. 126 is particularly instructive in this regard. On Weber's dilemma as a frustrated theorist, Wilson, "Reading Max Weber: the Limits of Sociology," *Sociology*, Volume 10, No. 2 (May, 1976), pp. 297-315.
10. Kosik, *op. cit.*, particularly his critique of Gonsseth, pp. 21-22; Wilson, "Science, Critique, and Criticism"
11. Brown, *op. cit.* Also Romano Harré and E. H. Madden, *Causal Powers*, Oxford: Basil Blackwell, 1975.
12. Marcuse, *One Dimensional Man*, pp. 104-114; Wilson, *The American Ideology*, especially chapters 1 and 2.
13. Adorno, "Society," *op. cit.*; Alan Blum, *Theorizing*, London: Heinemann, 1974; Wilson, "Reading Max Weber," *op. cit.*
14. Adorno, "Scientific Experiences of a European Scholar in America," in *The Intellectual Migration*, D. Fleming and B. Bailyn, Cambridge, Mass: The Belknap Press, 1968, pp. 338-370 at p. 353.

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15. The excerpt is from Francis Bacon. See particularly his *Novum Organum, New Atlantis, and Aphorisms* in *The Works of Francis Bacon*, 7 vols., by J. Spedding, et al., N.Y.: Garrett Press, 1968. Popper's work constitutes the "classic" contemporary attack on social theorizing as an enterprise whose dialectical character is understood to threaten society as social process. See: *The Open Society and Its Enemies*, London: Routledge, 1945; *The Poverty of Historicism*, London: Routledge, 1957. Also Hans Jonas, "The Practical Uses of Theory" in *Philosophy of the Social Sciences: A Reader*, N.Y.: Random House, 1963, pp. 119-142; and Wilson, *The American Ideology*, chapter 3.
 16. Compare Harré and Madden, *op. cit.*, to G. H. Von Wright, *Explanation and Understanding*, Ithaca: Cornell University Press, 1973, Chapter 2.
 17. See George Grant, "The University Curriculum," in Grant, *Technology and Empire*, Toronto: Anansi Press, 1969, pp. 113-133.
 18. Gerard Radnitsky, *Contemporary Schools of Meta-Science*, Goteborg: Akademi forlaget, 1970. See generally Theodor Adorno et al., *The Positivist Dispute in German Sociology*, Glyn Adey and David Frisby, London: Heinemann, 1976.
 19. See Talcott Parsons, *The Structure of Social Action*, Glencoe: Free Press, 1937; and Karl Mannheim, *Man and Society in An Age of Reconstruction*, London: Routledge, 1940.
 20. For two instances of this effort at "reflexive sociology" see Alvin Gouldner *The Coming Crisis in Western Sociology*, N.Y.: Basic Books, 1970; and John O'Neill, *op. cit.*
 21. These distinct but interdependent orientations in American sociology are discussed in C. Wright Mills, *The Sociological Imagination*, N.Y.: Grove Press, 1959.
 22. See Jeremy Shapiro, "One Dimensionality: the Universal Semiotic of Technological Experience," in *Critical Interruptions*, Paul Breines, N.Y.: New Left Books, 1970, pp. 136-186; Habermas, *op. cit.*; Habermas *Legitimation Crisis*, Boston: Beacon Press, 1975; and Wilson, "Science, Critique and Criticism"
 23. Adorno, "Society," *op. cit.*
 24. Wilson, "Towards a Political Theory of Technocracy," *op. cit.*
 25. See generally Adorno, *Negative Dialectics*, and compare to Habermas, "Toward a Theory of Communicative Competence," in *Recent Sociology*, No. 2, H. P. Dreitzel, N.Y.: Macmillan, 1970, pp. 115-148.
 26. For a study supporting the view that the social sciences necessarily favour a top-down technocratic approach, see H. P. Dreitzel, "Social Science and the Problem of Rationality: Notes on the Sociology of Technocrats," *Politics and Society*, Volume 2, No. 2 (Winter, 1972), pp. 165-182.
 27. Adorno, "Society," *op. cit.*, p. 153.
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