

"Perhaps you could mention," wrote David Lyon to the editor, "that this is intended to be an exploratory piece, initiating a debate rather than providing a definitive statement." An appropriate request; for Lyon's article is at once provocative and extensively argued. Mr. Lyon, whose latest book is *Sociology and the Human Image* (IVP, forthcoming this fall) teaches sociology at Bradford & Ilkley College, UK.

By David Lyon

Valuing in Social Science: Post-Empiricism and Christian Responses*

IT WAS ONCE ASSUMED that valuing only had a place outside science. Science was the realm of fact while beyond was the realm of value. Science shed light in hitherto dark places, according to Francis Bacon, whereas the fruit of science was its social application and benefit. No one denies, of course, that some values are taken as essential to science—not concealing or falsifying data, sharing the results of investigation publicly, and so on—but the assumption was that other values held by scientists should not be allowed to influence science-as-a-body-of-knowledge. This assumption was extended, in time, to the burgeoning social sciences. In Max Weber's celebrated distinction, social science was emphatically value-relevant, but at the same time should strive for internal value-freedom.

Now, however, challenges to this view have emerged from several quarters—known collectively as "post-empiricism"—and valuing is increasingly seen as an important aspect of the internal practice of science, especially social science.¹ This awareness and acceptance of the necessary and unavoidable role of valuing has led practitioners and philosophers of social science to call for clarity about what kind of valuing is involved. Some merely wish to allay suspicions that this new "committed" social science is a neo-marxist Trojan horse,

*This paper was prepared during my tenure as Fellow of the Calvin Center for Christian Scholarship in 1981-1982, and was read at the Canadian Sociology and Anthropology Association meeting at Ottawa in June, 1982. I am indebted to a number of more and less sympathetic critics, including Shirley Dex, Paul Helm, David Livingstone, David Bebbington, Mary Hesse, Donald MacKay, and Clifton Orlebeke.

¹"Post-empiricism" has yet to receive a precise definition; but as the term suggests, the intention is to distinguish this new tendency from empiricism. Thus, at present it is still somewhat negatively defined.

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while others, accepting the force of the post-empiricist critique, attempt a new explicitness about the connection between their valuing commitments (whatever they are) and their social science.

All this puts members of the Christian community in a curiously paradoxical position. On the one hand, Christians typically are conscious of the importance of valuing in daily life, but on the other, they have just as typically accepted the received view that valuing has no place within natural science, and have extended this to the social science rubric. Post-empiricism thus presents a challenge to the Christian practice of science, especially social science, a challenge made all the sharper by the fact that some post-empiricists have manifestly unchristian commitments. It would seem that any escape from this paradoxical stance would depend, first, on the determination of whether the traditional view of science is somewhat mistaken, and second, on some clarification of what is meant by "valuing." With regard to the latter, I have in mind not mere subjective preference ("bias") but criteria derived from fundamental commitments and basic beliefs. If the post-empiricist critique of the traditional view of science has validity and does not imply unchristian commitments, then it would be appropriate for Christians to articulate in theory and express in practice a social scientific expression of Christian valuing.

The foregoing is a skeleton of my argument. I move from a brief discussion on the confluence of thought-streams which forms the background of post-empiricism, to a comment on the seminal contribution of Mary Hesse, and finally to a discussion of Christian responses to post-empiricism in social science (PESS) and their implications for social scientific practice.

The background to PESS

Prominent among those who have contributed to PESS are Thomas Kuhn, Jürgen Habermas, and Alvin Gouldner. A summary of their contributions will uncover some of the diverse roots of PESS.

Thomas Kuhn's groundbreaking work in *The Structure of Scientific Revolutions* has produced a huge crop of debate, reinterpretation, and misconception. Kuhn's central point, the occasion of the controversy, as Gary Gutting rightly indicates, concerns the authority of science.² From his studies in the history of science Kuhn proposes that scientific authority resides not in the rule-governed method of inquiry, but in the scientific community which obtains the results. This community recognizes the validity of certain scientific achievements which provide model problems and solutions, working within (as Kuhn calls it) a paradigm. But when the appropriateness of the paradigm becomes questionable, "normal science" practices begin to break down, and, eventually, a new paradigm may emerge. However, and this is the point, competing paradigms, according to Kuhn, are incommensurable, and the scientific community has to decide, on some grounds other than mere rule-application, which paradigm does in fact "make sense" of the data.

²Gary Gutting, *Paradigms and Revolutions* (Notre Dame: University of Notre Dame Press, 1980), p. 1.

From the viewpoint of the history and sociology of science, Kuhn's work represents an advance on the approach of Robert Merton, who maintained a strict distinction between science as a cognitive system and science as a social system.³ Whereas Merton only allowed for the sociological analysis of the social context of science, Kuhn makes it possible for sociology to break through into the realm of rational rules, methods, and ideas within science. The criteria of rationality may vary in relation to social and cultural factors. For illustration Kuhn points to factors such as Kepler's sun-worship, to nationality, and to the reputation of the scientists.⁴ Kuhn thus provides conceptual space for the notion that varied forms of commitment and valuing affect the acceptance or rejection of scientific theories.

From a quite different philosophical and cultural standpoint (i.e., critical theory) Jürgen Habermas sets out to expose "the objectivist illusion that deludes the sciences with the image of a reality-in-itself consisting of facts structured in a law-like manner. . . ."⁵ He believes that this "conceals the constitution of these facts, and thereby prevents consciousness of the interlocking of knowledge with interests from the life-world" (pp. 305-6).

Habermas believes that he can demonstrate precisely what has been obscured in postivist (and scientific) conceptions of science, namely, the interlocking of knowledge with what he calls "human interests." Especially in natural sciences, Habermas indicates, we see an interest in technically-exploitable knowledge. Prediction and control is the aim of such "empirical analytical sciences," deriving from nomological knowledge. But they pride themselves precisely upon the "unswerving application of their methods without reflecting on knowledge-constitutive interests" (p. 315). By means of such false consciousness (which ignores the knowledge-interest connection) people can end up substituting technology for enlightened action. Worse, this "objectivist self-understanding" can extend into the "historical-hermeneutic sciences" with the result that the latter produce artificial accounts of human activity and lock "history up in a museum" (p. 316).

Habermas pleads for a critical theory expressing an emancipatory interest in which the veil of objectivism is torn away, revealing to reflecting human beings the conditions of action and thus making possible their transformation. He makes no secret of the fact that he believes that "the truth of statements is linked in the last analysis to the intention of the good and true life" (p. 317).

While Kuhn's connection with the issue of valuing comes by way of a history of science perspective, and Habermas's from the perspective of European critical theory, our third example, Alvin Gouldner, approaches the issue from the vantage-point of a practitioner of social science. In a sense his work is complementary to that of Habermas (although there are of course disagreements between them) in that he sees sociology as properly directed toward social

³Robert K. Merton, "Science, Technology and Society in Seventeenth Century England," *Osiris* 4 (1938), No. 2.

⁴Thomas Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962).

⁵Jürgen Habermas, *Knowledge and Human Interests* (Boston: Beacon Press, 1971), p. 305. Further page references are inserted into the text.

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reconstruction. "The new society we want is, among other things, a society will enable men better to see *what is* and say *what is* about themselves and social world." But, clearly, "we cannot have a reconstructed society with critical revamping of our established ways of thinking about society. . . ."

Gouldner received widespread critical acclaim for his watershed study *The Coming Crisis of Western Sociology*.⁷ There he devastatingly pinpoints the complicity of American academic sociology with welfare state capitalism, pointing out that a liberal ideology underlies each. He blasts all sociologists (and others) who claim to be researching in a value-neutral manner, and calls instead for a reflexive sociology, that is, a self-aware discipline " . . . which recognizes that the development of sociology depends on a societal support that permits growth in certain directions but simultaneously limits it in other ways and thus warps its character."⁸ Gouldner is committed to the project of producing a sociology of sociology, not as a navel-gazing exercise, but as a means to create a morally aware and accountable discipline which makes no artificial theoretical practice divide, and no secret of its alignment with human social ideals.

PESS, at least in Anglo-American circles, has thus been fostered by Kuhn's insistence that valuing is, historically speaking, an aspect of scientific rationality. By Habermas's claim that human interests are partly constitutive of scientific knowledge, and by Gouldner's contention that the social theorist "is trying to reduce the tension between a social event or process that he takes to be real to some value which this has violated."⁹ The implication, at least of the latter view, is that self-conscious valuing ought to be an aspect of the internal practice of social science. Needless to say, these views have been attacked not only for their apparent openness to "extremist" interpretation, but also for their strong relativist implications. One does not have to be a Christian to be disturbed, for example, by the fact that Habermas's discussions lead him to a "consensus theory of truth."¹⁰ While I do not intend to address such issues head-on, I shall comment in the next section on the work of an important post-empiricist who is neither secularist, marxist, nor relativist, and in the last section, on the compatibility of post-empiricism with a truth-criterion congenial to Christians.

Mary Hesse's contribution

The clearest discussion of our topic occurs in the writing of Mary Hesse, especially in her paper "Theory and Value in the Social Sciences."¹⁰ Her thesis is this:

⁶Alvin Gouldner, *For Sociology* (New York: Basic Books/Harmondsworth Pelican, 1973), p. 8.

⁷Alvin Gouldner, *The Coming Crisis of Western Sociology* (New York: Basic Books; London: Heinemann, 1970).

⁸*Ibid.*, p. 405.

⁹*Ibid.*, p. 484.

¹⁰On a consensus theory, a proposition is regarded as true if some stipulated group of persons agree that it is true. (Ed.)

¹⁰Christopher Hookway and Philip Pettitt, eds., *Action and Interpretation* (London/New York: Cambridge University Press, 1978); reprinted in Mary Hesse, *Revolutions and Reconstructions in the Philosophy of Science* (Bloomington/London: Indiana State University Press, 1980).

... all natural scientific theories are underdetermined by facts, and ... this being the case, there are further criteria for scientific theories that have to be rationally discussed, and ... these may include considerations of value.¹¹

Still with natural science in mind, Hesse says that "statements of facts" are value-laden, that metaphysical and other assumptions become determining criteria for theories, and that these have sometimes included value judgments. However, such value judgments tend to be filtered out over time, due to the "universal adoption of one overriding value for natural science, namely, the criterion of increasingly successful prediction and control of the environment"— what she calls the "pragmatic criterion."¹²

While some value judgments may refer to the use ("fruit") of science, Hesse concentrates on those evaluations which enter into scientific theory construction as assertions about what ought or ought not to be (for example, that humans ought to be seen as the acme of the created order). Of course some of these value-determined elements do get filtered out, and the discovery of adverse data is often influential in such rejection. But, according to Hesse, the only way to account for the acknowledged element of progress and accumulation in natural science is to suppose that a value judgment, the so-called pragmatic criterion, has been operative overall. Natural science has preferred those theories that allow for the most successful predictions, and therefore also the greatest control over natural events.

Hesse speaks not only of natural science but also alludes to an important aspect of the uniqueness of social science, namely, that social science theories do not and probably will not satisfy the pragmatic criterion. Moreover, since adopting the pragmatic criterion involves a value judgment, it is possible to reject it as a goal and to seek possible alternatives. Clearly this is exactly what happens in, for example, Marxian social science, in which the ever-present value is "the intention to restore man's understanding of his potential role in the world, and thereby the revolutionary project."¹³

Hesse does not deny that the pragmatic criterion could in some cases be used to reject theories based on social science. This, however, may prove impossible, for other values may enter the picture, supplanting the pragmatic criterion. If, then, the objectivity ideal is impossible in social science theorizing, and thus some valuations are necessary, this fact should be exposed and the relative merits of different valuations should be discussed. Hesse concludes that

The proposal of a social theory is more like the arguing of a political case than like a natural-science explanation. It should seek for and respect the facts when there are to be had, but it cannot await a possibly unattainable total explanation. It must appeal explicitly to value judgments and may properly use persuasive rhetoric.¹⁴

¹¹Hesse, *Revolutions*, p. 187. "Underdetermination" refers to logical determination; the facts, according to Hesse, do not rule out all but one theory.

¹²*Ibid.*, p. 188.

¹³Richard P. Appelbaum, "Structural Constraints and Social Praxis," in Scott McNall, ed., *Theoretical Perspectives in Sociology* (New York: St. Martin's Press, 1979), p. 205.

¹⁴Hesse, *Revolutions*, p. 203.

Such, then, is a summary of Hesse's position. The fact that *she* argues that not insignificant. She is a well-respected philosopher of science, and ideologically distant from various Marxist groups who might make a similar case,¹⁵ from whom she explicitly dissociates herself. Her paper may well open a chapter in the philosophy of social science, which I am content to leave to the philosophers. There is, however, one point on which I would venture to make a comment. Given her more centrist ideological stance, it is perhaps a little surprising that she should have chosen political debate as her analogy.

Her political analogy, as she herself cautions, would have to involve "sifting and accounting for facts more conscientiously, and in constraining its rhetoric this side of gross special pleading and rable-rousing propaganda."¹⁶ An emotionally-charged connection might be made with historiography. The historian also has to face analogous problems of data (selection and preinterpretation of data), and also engages in rhetoric in order to make a case. As David Bebbington suggests, on the one hand history is a form of social science insofar as it involves a "systematic quest for ordered knowledge."¹⁷ But on the other, history "cannot be expected to record indubitable facts." History is also a "humanity divorced from the events of the past."¹⁸ Learning partially on Perelman,¹⁹ Bebbington maintains that the historian "characteristically argues, presenting reasons for adopting a particular version of the past."²⁰ And the "reasons," Bebbington goes on, have not only to do with evidence, but with different valuations, linked to worldviews and historiographical schools. This is not dissimilar from what Mary Hesse is advocating for social science generally.²¹

Post-empiricism and Christian Response

Although, at first blush, Hesse's position might seem attractive to Christians as contributing to the integration of their views with social science, there are two stumbling blocks. One is the traditional willingness among many Christians to hold to the empiricist paradigm in order to attempt to maintain the purity of science from ideological—including religious—contamination. The other, more emotive problem, is that the post-empiricist account seems to be linked in the minds of some with a secular or Marxist—and therefore suspect outlook.

With regard to the first obstacle, some have evidently feared that sociology would not be permitted to investigate certain areas (particularly those of r

¹⁵See, e.g., Robin Blackburn, ed., *Ideology in Social Science* (London: Fontana, 1971); Hilary Rose and Steven Rose, *The Political Economy of Science* (London: MacMillan, 1977).

¹⁶Hesse, *Revolutions*, p. 203.

¹⁷David Bebbington, *Patterns in History* (Downers Grove, Ill.: InterVarsity 1979), p. 5.

¹⁸*Ibid.*, p. 12.

¹⁹Chaim Perelman, *The Idea of Justice and the Problem of Argument* (London: Routledge & Kegan Paul, 1963).

²⁰Bebbington, p. 14.

²¹On this point see also Kenneth Gergen, "Social Psychology as History," in L. H. Strickland, et al., *Social Psychology in Transition* (New York/London: Plenum Press, 1976).

ligious concern and consequence) unless the strict neutrality of sociology toward religion was maintained. Sociologists of religion are still encountering hostility (which may or may not be well-founded) in their attempts to investigate church-religion.²² At any rate, such definitive statements as this may be found in literature describing sociology-Christianity relationships:

Sociology . . . represents an attempt to apply scientific methodology to the study of relationships . . . any science is a set of generalizations induced from observations about empirical phenomena. Christianity . . . is a set of deductive propositions, many of which are simply beyond the ken of empirical verification.²³

Apart from the rather unflattering view of Christianity here presented, Scanzoni clearly holds to an empiricist model of social science. A similar view is seen in a more recent text by Christians: "The discipline of sociology is in itself neutral and descriptive, not normative."²⁴

I shall not review the old debate about valuing in sociology, which received one of its earliest and most frequently misunderstood contributions from Max Weber.²⁵ I merely note that empiricist sociologists have gone much further than Scanzoni appears to allow in explicating the impact of valuing in social science (though they would go on to try to demonstrate how such an impact may be filtered out).²⁶ Rather, the point is to approach the old issue with the benefit of a new perspective in the philosophy of science, a perspective which suggests that social science does have something in common with Christianity—namely, value-commitment and metaphysical assumption—and that therefore a break with the empiricist framework is called for.

The post-empiricist position, which I commend for consideration, rests primarily on two important premises: first, that facts and theories cannot radically be separated (so facts are theory-laden), and second, that theories are under-determined by facts. The latter idea is hardly new, of course, but it forms the logical prerequisite of the former, more controversial claim. As Hesse puts it, statements of fact "presuppose concepts whose meaning is at least partly given by the context of theory."²⁷ An interesting example of this—which precisely shows that this is more than just values suggesting a specific theory—is provided by David Thomas.²⁸ In a widely-read study of *Family and Kinship in East London*, Young and Wilmott try to answer the question: Why do former slum-dwellers not like living in new, publicly-owned housing projects? The answer,

²²See e.g., Roger Homan, "Theology and Sociology: A Plea for Sociological Freedom," *Theology* 84 (Nov. 1981): 428-39.

²³John Scanzoni, "Sociology," in M. Smith, ed., *Christ and the Modern Mind* (Downers Grove, Ill.: InterVarsity, 1972), pp. 123ff.

²⁴Stephen Grunlan and Milton Reimer, eds., *Christian Perspectives on Sociology* (Grand Rapids: Zondervan, 1982), p. 20. See my review of this book in the *CSR* 12 (1983): 93-95.

²⁵See, e.g., Gresham Riley, ed., *Values and Objectivity in the Social Sciences* (Menlo Park, CA: Addison-Wesley, 1974).

²⁶See David Thomas, *Naturalism and Social Science* (London/New York: Cambridge University Press, 1979), 121-25.

²⁷Hesse, p. 187.

²⁸Thomas, pp. 127-28.

for them, lies in the strongly mother-centered extended kinship structure slums, which is broken up by the move to new housing projects. Loneline a felt loss of framework for meeting people results: hence the discontent w housing projects. The wider significance of this study is implied by link with the hypothesis that a highly significant mother-daughter tie is a uni phenomenon in all areas of high proletarian density. Weight is added to t reference to other similar empirical studies.

Now, David Thomas argues that here we have an illustration of the fact every element of a social scientific theory is value-laden, that the "relatic tween the evaluative and cognitive elements of a theory is internal or logic just an external matter of specific values causing a certain social scient suggest a specific theory" (p. 127). How is this so in Young and Wilmott? reveal that they in fact value considerations of community spirit more highly those of the physical standards of housing, which makes it easier for understand why they chose their mode of explanation of the puzzle c discontented housing project dwellers. They could, equally plausibly, referred to the preference for staying where one was raised, or to the dimini sense of control over one's environment experienced in the housing pr

But in fact Young and Wilmott's particular values penetrated the whole of their study, which is highly empirical (and indeed, became an exempla British sociology in the early 1970s). Their positive evaluation of integri community (as they saw it) affects their descriptive statement as well as overall explanations. They believe Bethnal Green (East London) to be clo integrated on the grounds that 55% of married women with mothers alive seen their mothers during the past twenty-four hours. Yet they elsewhere a that a majority of these same daughters neither visited nor were visited by relatives. Their notion of community integration, in other words, is clo bound up with contact between kinfolk. If, alternatively, they had valued t tact between non-kinfolk as a sign of community integration, a different "fac description" would have emerged.

Of course one could object that Thomas has chosen a notoriously slippi sociological concept—community—on which to base his discussion of valuin internally integral to social science. It is perfectly true that conceptual criti and refinement enhance the accuracy of community studies. Nothing I have s here is intended to lead in a radical relativist direction. It could be objected t empirical research done on the basis of an agreed and explicit definitio "community" might constitute "objective social science." But this would s port, not destroy, the case that I make here, that whatever definition is chos valuing unavoidably enters the process of concept-formation. Valuing not o guides one to research topics, it is partially constitutive of social science expla tion itself.

Colin Bell and Howard Newby comment that many community studies s over "into political and moral philosophy" or worse, "into naive value-jud, ments pervaded by a curious posture of nostalgia."²⁹ They proceed to introdi

²⁹Colin Bell and Howard Newby, *Community Studies* (London: Allen & Unwin, 1971), p. 251.

much more clarity and precision into community studies with their proposal of "community study as a method." But they subsequently admit that they themselves value a certain kind of community, and this apparently is built into their critique of others' community studies. They explicitly agree with Raymond Williams's comment that "community only became a reality when economic and political rights were fought for and partially gained, in the recognition of unions, in the extension of the franchise, and in the possibility of entry into new representative and democratic institutions."³⁰

Another, related point may be made here. Because social science theory and descriptions are value-laden, they can never be neutral with regard to the subjects of study. Social science language may be made more logical and clear, but it is still the language of other members of society. As Anthony Giddens economically puts it:

Descriptions of social activity are normatively as well as conceptually related to those employed by lay actors; there is no morally separate or transcendentally "neutral" meta-language in which to couch the vocabulary of the social sciences.³¹

Whatever he thought of their particular choice of values, Giddens would no doubt share the view that Young and Willmott's explanation is value-laden, and that this is expressed in their descriptive and explanatory language. Giddens is making the further inference that their explanation therefore embodies social critique. For example, Young and Willmott could be construed as opposing the relocation of any slum-dwellers from their homes to new projects.

Those impatient with this line of argument may by now have concluded that social science must throw any notion of objectivity to the winds. But wait. An alternative is that the nature of objectivity be differently conceived. Habermas, for example, makes the suggestion—no doubt shocking to empiricists—that one guarantee of objectivity in human science is mutual participation in dialogue between investigator and investigated, in which reciprocal interaction occurs. And Hesse agrees that his idea (or something like it) "is one of the few viable alternatives to the world of natural science in dealing with the human sciences."³² She insists that this does not simply lead one down the path to relativism, or to the abandonment of any notion of external criteria for the evaluation of science. In the case of the Bethnal Green studies, such a dialogue could conceivably have enhanced the value of Young and Willmott's social science. There is no evidence, for example, that these researchers allowed their subjects to respond to the "sociological" explanation of their discontentment, or to contrast it with their own stated accounts of the situation to the effect that they suffered from the discrepancy of expected standards of behavior in different types of housing.

Giddens also takes the point about non-neutral language a little further in his defense of a reinterpreted objectivity. Because humans are able reflexively to

³⁰Raymond Williams, *The Country and the City* (London: Chatto and Windus, 1973), p. 104.

³¹Anthony Giddens, *Studies in Social and Political Theory* (New York: Basic Books; London: Heinemann, 1977), p. 28.

³²Hesse, p. 180.

incorporate social science knowledge into the rationalization of their actions, it must be taken into account in any adequate attempt at social explanation. The conscious discussion of valuing in description and theory choice would actually enhance the objectivity of the social science account. As Giddens has

Rejection of the absolute logical separation of statements of fact and judgments of value does not compromise the possibility of sustaining such social scientific critique objective on the contrary, it is the very condition of its realization.³³

If conclusions like this were acceptable to Christians in the social sciences, the clearly the way would be paved for an epistemological break with empiricism. The relevance of Christian commitment and beliefs to social science could then be articulated in a more direct and integrated manner.

In fact, recognition of the value-ladenness of all social analysis and theory might provoke some genuinely Christian critique, perhaps along lines suggested by Nicholas Wolterstorff in his *Reason Within the Bounds of Religion*. He would agree with the argument that theories are underdetermined by facts, and that value-choices are made in respect to determining the acceptability of different sorts of theories (see his discussion of "control beliefs.")³⁴ He proposes that because Christians, like others, want consistency, wholeness, and integrity in their beliefs and commitments, they ought to allow their control beliefs to function both negatively and positively in their scientific activities. With respect to the former, theories which conflict or do not comport well with Christian commitment would be rejected, and with respect to the latter, theories which comport with it at least are consistent with that commitment could, at least in principle, be devised.³⁵ Hesse herself seems to come to similar conclusions, though she put them more tentatively, in the form of a question. Having commented on the difficulty of maintaining a view of man as a free and partly non-natural agent in the absence of a concept of God, she asks: ". . . are Christians committed to the introduction of some explicit moral and theological categories into the science of man?"³⁶ It must be added, however, that this is by no means to fall back onto easy answers. Hermeneutic questions are raised concerning which theological and moral categories are appropriate. These are often badly in need of sociological scrutiny. Dialogue between sociology and theology would enhance the reflexivity of each.

But there is a second obstacle to Christian acceptance of PESS: its alleged secular roots. Donald MacKay has voiced these fears in an article which sees the attack on the ideal of objective, value-free knowledge as "symptomatic of the practical atheism of our day."³⁷ This prominent spokesman of Christianity-and-science relationships is concerned lest believers be "seduced into giving . . . credence" to the rejection of the value-free knowledge ideal. Now, MacKay is not claiming that the practice, or even the formulations of science are value-free.

³³Giddens, p. 28.

³⁴Nicholas Wolterstorff, *Reason Within the Bounds of Religion* (Grand Rapids: Eerdmans, 1976), p. 63.

³⁵Wolterstorff, p. 72.

³⁶Hesse, p. 254.

³⁷Donald MacKay, "Value-Free Knowledge: Myth or Norm?," *Faith and Thought* 107 (1980): p. 202.

dominion" has occasionally been distorted into a more exploitative than stewardly rendering must in no way be permitted to minimize either the importance of the dominion notion itself,⁴³ or of its connection with natural science.

However, if the directive to "have dominion" must be qualified for natural scientific application, how much more so for human science, where the mandate is emphatically not extended to "having dominion" over humankind. God has other ideas for humans, and the relevant value-words become, for instance, neighborliness, justice, obligation, rights, and authority. Christians, it might thus be argued, ought sometimes to replace and always at least be ready to supplement the pragmatic criterion with other modes of valuing appropriate to social science, relating to the way the Bible teaches us to view human beings in their social relationships.

Let me make two comments on this. Note that I am not advocating the necessary or wholesale rejection of predictive power as a criterion of social science. As it happens, for reasons not spelt out here, I believe that in social science prediction in a strict sense is seldom possible. Rather, I am questioning whether it is always desirable to predict. Gergen suggests that what he calls "sensitizing" might be a better aim in social psychology and this may well also be appropriate for other social science. In Gergen's discipline he sees its potential benefit like this: "It can enlighten one as to the range of factors potentially influencing behavior under various conditions. Research may also provide some estimate of the importance of these factors at a given time."⁴⁴ Knowing about possible occurrences thus expands the researcher's—and, potentially, his audience's—sensitivities and increases readiness for coping with change. In more general terms, this could be seen as part of the social scientific dimension to "discerning the signs of the times"—which is not necessarily the same as prediction or forecasting.

Second, I am not simply asking that Christians exchange a Habermasian notion of the "good life" for a Christian version of the same. Rather, I propose that a whole spectrum of biblical insights on humanness be allowed to penetrate social science as evaluative criteria. In biblical and PESS terms this would then be objective social science, because it would be an analysis of the social realm approximating as closely as possible to the way God sees things. Not only would it be objective, but potentially illuminating, as I try to show in the example below. Seen thus, PESS seems to comport well with the kind of knowing to which all Christians aspire, summarized in Paul the Apostle's certain hope: "Now I know in part; then I shall know fully, even as I am fully known."

My last point is this. Christian acceptance of the validity of PESS will also depend in part, and rightly so, on some evidence that Christian valuing might make a discernible difference to the way social science is done. It could well have

⁴³Loren Wilkinson, et al., *Earthkeeping* (Grand Rapids: Eerdmans, 1980); Jeremy Rifkin, *Entropy* (New York: Viking, 1980), pp. 234ff.

⁴⁴Gergen, p. 27. See also David Livingstone, "Environmental Theology: Prospect in Retrospect," *Progress in Human Geography* 7 (1983): 133–40.

a bearing on previously mentioned analyses of "community," and one might also mention other sociological concepts such as secularization, class, power ideology, and poverty which Christian valuation might help shape. Of course may not (and need not) always be very obvious. In fact, it seems likely that certain points others who do not share the Christian outlook may nevertheless agree with a biblically-derived conceptual valuation, in relation to a specific social theory.

One good example would be the work of Robert Holman on *Poverty: Explanations of Social Deprivation*.⁴⁵ He even makes explicit reference, toward the end of the work, to the way in which his Christian valuing affects his desire to eradicate poverty and thus his conceptualization of "poverty." On both sides of the Atlantic, the debate on poverty in advanced societies has been a bone of contention throughout this century. How can it be that poverty still exists in plenty? Holman discusses various popular solutions to this puzzle, including individual failure, a self-perpetuating "culture of poverty," and deficient welfare agencies, concluding that, while each has some plausibility, none is adequate to explain the extent or the persistence of contemporary poverty. Rather, he argues, poverty must be understood in a social-structural way, in relation to wealth. "Too many studies of social deprivation have simply studied the poor and have deduced that the characteristics which distinguish the poor are therefore the cause of poverty."⁴⁶

Why does Holman opt for a structural explanation, which makes the analysis of poverty part of the examination of the distribution of resources throughout society and of the social mechanisms upholding that distribution? For two reasons. One, his Christian valuing leads him to view the earth's resources as having been placed at the disposal of all humans, without partiality, by the Creator. God values all men and women and thus, says Holman, "Social deprivation—because it means distress and disadvantage for valued people—should not be tolerated."⁴⁷ He believes that biblical teachings militate against tolerance of social-economic inequalities—which are in turn frequently related to societal situations and not merely to individual or other failure. That is (and a fuller biblical treatment would only strengthen this case), Holman expects poverty to be properly explicable in societal terms because of his Christian valuing. But the second reason is precisely: empirical constraint. Other explanations are tried and found wanting. This kind of explanation, on the other hand, does more justice to the facts—it makes sense in empirical terms. Others also may agree with his analysis, constrained as it is by the evidence, and using as it does the work of many marxian and liberal social scientists.

In conclusion, then, if post-empiricism indeed represents a proper approach for social science, it is incumbent upon all who seek to do science honestly, consistently, and in wholeness to search for modes of valuing in social science

⁴⁵Robert Holman, *Poverty: Explanations of Social Deprivation* (London: Martin Robertson, 1978).

⁴⁶Holman, p. 241.

⁴⁷*Ibid.*, p. 252.

Rather, he is saying that God's omniscience is the guarantee that there is a correct way of seeing the world, and that Christians (and others—the history of science shows the advantages accruing to this, according to MacKay) should therefore strive to overcome all bias and value commitment in the doing of science, while ever aspiring to the ideal. This is science's only hope, for, "Once the Author has been removed from the scene, who is to say whether the book of Nature is being accurately read?"³⁸

MacKay rightly notes that certain social scientists have been the strongest proponents of the view that value-free knowledge is a "myth," though he misinterprets their motivation: they are not merely expressing frustration at their failure to produce results similar in rigor to those of natural science. Neither does MacKay take account of the post-empiricist arguments concerning scientific practice, namely, the value-ladenness of facts and the underdetermination of theory by facts. This, according to the post-empiricists, is true of natural science as well as social science. Now, when such people reject value-free knowledge as a "myth," they have in mind science and science alone. They neither affirm nor deny God's omniscience. Doubtless many post-empiricists would attack the relevance of the scientist's aspiring to knowledge like God's. Some may see their post-empiricism as being consistent with an agnostic or secularist stance. But I would have to be convinced that any metaphysical statement about the nature of God's knowledge—or even some commitment to an ideal of scientific truth—is being consciously (or unconsciously) threatened by all post-empiricists. In fact, there is evidence that quite the opposite is the case. Hesse, for example, makes her plea for PESS precisely in the interest of good science. She explicitly hopes that "virtues from the natural sciences" will not be undermined.³⁹

The post-empiricist rejection of the ideal of value-free knowledge must not necessarily be construed either as a rejection of an omniscient God (as MacKay implies by his talk of "practical atheism" and "unbelievers") or even as a rejection of cherished ideals of scientific practice (such as honesty, public accessibility, and so on). Rather, what post-empiricists reject is the completeness of those latter ideals as traditionally conceived. There is more to science—and especially social science—than has previously met the eye. Thus respected philosophers, historians, and sociologists of science are increasingly questioning the solidity of the scientific edifice, but emphatically not because they are secularists.

MacKay, on the other hand, seems to hold to the empiricist model of natural science, which is his standard for any "science." Indeed, he holds out hope for the development of a "natural" science of society, "once the present defeatist fashion is past."⁴⁰ His attack on the rejection of the value-free knowledge ideal apparently is based on the assumption that all post-empiricists are rejecting the biblical notion that "all things are naked and opened to the eyes of Him with

³⁸Ibid., p. 203.

³⁹Hesse, p. 203.

⁴⁰MacKay, p. 206.

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whom we have to do." But is not this misplaced, in the light of the determination of Hesse, Giddens, and others to be objective and do good science? While it may be true that the difficulties of providing reliable social science have stimulated analysis of the value-ladenness of natural science, the onus is on natural scientists (and empiricist social scientists) to refute the sociological-philosophical critique.

Let me raise but not elaborate on one further point. Accepting that from God's point of view there exists objective knowledge about the external world by no means implies that humans can obtain that knowledge. There is a distinction between ontological and epistemological objectivity which is acknowledged but underdeveloped in the article by MacKay. Of course MacKay admits to our human frailty and fallibility; yet he still seems to hold high hopes for scientific approximation to objective value-free knowledge. Further exploration of the effects of the fall on our capacity to know things as they are is required.

If, contrary to MacKay's hope, the "defeatist fashion" does not pass, and if scientific facts and theories do indeed turn out to be better understood in post-empiricist terms, then those who acknowledge the omniscience of God as a catalyst and a caution in doing scientific work will want to foster a heightened awareness of value-orientations in science, and greater discernment as to which values are appropriate when.

A new direction?

I have pointed out, then, that PESS represents an advance on the old natural science versus human science debate in that the distinction may be seen to rest on a mistaken notion of natural science. Some have now returned to talk of "naturalism" in social science,⁴¹ not for reductionistic reasons, but because of the conviction that theories are underdetermined by facts, and facts are value-laden in all science, not only social science. Thus social science may be seen as value-laden (for the above reason) and yet scientific (because it is nevertheless constrained by empirical data). Such discussion is taking place not only in social science itself, but more importantly in the philosophy of science.

Mary Hesse has clarified the PESS position by indicating (a) that the dominant pragmatic criterion in natural science itself implies a value, and (b) that in the social sciences other values may be preferable. This, she claims, might make social scientific discourse analogous to arguing a case in politics. I proposed historiography as a closer analogy (that is, one which also places great emphasis on empirical constraint). The question for Christians at this point (and assuming a certain receptivity to PESS) might be, would God expect the pragmatic criterion to be used in social science? In natural science, the pragmatic criterion and technical control would appear to be quite compatible with "creation-mandate" notions like "having dominion." As has been pointed out, however, such ideas are open to rape-of-the-earth type misinterpretation.⁴² But the fact that "having

⁴¹See, e.g., Thomas, p. 1.

⁴²On this see A. R. Peacocke, "On 'the historical roots of our ecological crisis,'" in H. Montefiore, ed., *Man and Nature* (London: Collins, 1975).

which are consistent with their deepest convictions and life-style. And if fears the unchristian roots of PESS are indeed unfounded (or at least if they can be shown not to be necessary to PESS), then an epistemological break with empiricism and some new applications of biblical Christian commitment are called for. The time is ripe for both natural and (especially) social science to become more reflexive and responsible.

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