

But the book's failure in this dimension should not be allowed to obscure its considerable merits in others. Pateman is successful not where he is propounding confessedly unsupported generalizations about society but where he talks of particular features of experience. For example, his brief but penetrating condemnation of the way Great Books are often dealt with in philosophy departments must have struck a chord in many a heart, with its description of the student being set to read bits of Locke as grist for the weekly essay mill 'like a schoolboy reading *Lady Chatterley's Lover*' and as a result coming to the conclusion 'That Locke or Descartes or whoever was a muddle-headed old fool. For he didn't "solve" "the problem" to the satisfaction of the latest local contributor to *Mind*' (p. 12). He also makes the interesting observation that when the student comes to discuss tolerance and Mill on liberty, he will put himself in the position of the state, not the individual. If the question is raised what the individual should tolerate from the state, that will be shifted to political obligation, where a different set of considerations apply. (p. 86).

The ability to draw out the significance of common experiences and forge connections between them gives the book its most important strength, given the context in which Pateman is writing. He does actually show the relevance of philosophy to everyday experience. I have already mentioned his discussions of knowledge and idle discourse in this connection. Stripped of its political pretensions, the discussion of repressive discourse is another example. It shows specifically how a philosophical investigation of language can be of more than academic interest and may affect the way you and I relate to each other in our everyday dealings. Though he does not use these terms, one point he is concerned to make is that the distinction between illocutionary force and locutionary content is worth getting hold of because it will enable you to understand more clearly how someone can concentrate on the former as a means of avoiding a consideration of the latter; a point which is brought home by means of marvellously tangible and concrete examples such as 'Don't be cheeky' and 'Don't talk to your mother like that' (pp. 60-61). There are many such examples dotted through the book, and they give plenty of room for further thought to any reader who, like me, rejects the more grandiose political aspirations of the author.

Language, Truth and Politics, then, will not start a revolution—at least not one I should want to see. But it will blow some cobwebs out of philosophy departments, which I suppose is after all one kind of revolution. It is no diminution of Pateman's achievement to say that his book is refreshing partly in contrast to the general run of dry, remote academic philosophy books. And it would be a greater achievement still if it were to render itself redundant by provoking a rash of better books of a similar kind to its own.

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The Way of Discovery, An Introduction to the Thought of Michael Polanyi. BY RICHARD GELWICK. New York: Oxford University Press, 1977. Pp. xix + 181. \$14.95 (cloth), \$3.95 (paper).

I: Sheldon Richmond

What gives me the strength to bear poverty, sickness, and worst of all hopelessness? That's a good question, my young friend. I asked the same question when I first read the Book of Job. Why did Job continue to live and suffer? So that in the end he would have more daughters, more donkeys, more camels? No. The answer is that it was for the game

itself. We all play chess with Fate as partner. He makes a move; we make a move. He tries to checkmate us in three moves; we try to prevent it. We know we can't win, but we're driven to give him a good fight.

Isaac Bashevis Singer, 'A Friend of Kafka'

No, not even that, Michael Polanyi would respond. As far as the human situation is concerned, though victory is not guaranteed, defeat is not inevitable.

The mechanistic view of the universe and the objectivist ideal of knowledge has misled us into thinking that there is no point to bearing human suffering. Man is nothing more than physico-chemical processes. His values and aspirations are imaginary—merely subjective. Is there any point to human life in a universe where our ambitions have no more importance than the path of a single rain drop?

This problem is, according to Gelwick, the one faced and solved by Polanyi. It is the core of the crisis of contemporary western civilization, and it is the product of modern philosophy. The crisis, on Gelwick's view, is one of belief. We have nothing we can believe in. This is nihilism. The problem facing us is how to escape nihilism. Can we show that the values of western civilization are worthy of belief? So Gelwick, in his introduction, characterizes Polanyi's problem.

In chapter I, Gelwick describes the genesis and dynamics of this problem. The upshot is an incisive statement of Polanyi's goal: 'In this situation, we need to find out how human values and scientific understanding can coexist without producing nihilistic consequences' (p. 14). In brief, two features are prominent in this discussion. (1) How can we regain faith in western civilization? (2) How can we regain this faith in a context 'consonant with a scientific and rational understanding of the world' (p. xiv)?

In chapter II, Gelwick gives us a brief intellectual biography of Polanyi. In the next four chapters, Gelwick presents Polanyi's philosophy from four perspectives. In chapter III, he presents Polanyi's philosophy as a *new paradigm*: a new 'configuration of beliefs, values and techniques'. In chapter IV, he presents it as a new 'heuristic' philosophy, a philosophy of living or *praxis*. In chapter V, he presents it as a new social philosophy—a way of viewing society as communities of 'explorers'. In chapter VI, the final chapter, he presents Polanyi's philosophy as a new view of what we can hope for.

Polanyi's remedy for our civilizational crisis goes as follows. Firstly, he replaces the objective ideal of knowledge with his theory of personal knowledge. Secondly, he modifies the mechanistic world-view. His theory of personal knowledge is that the knower gets closer to reality by relying on his tacit knowledge. Discovery—uncovering new aspects of reality—comes through a change in focus. The scientist relies on largely tacit traditions and skills to see things from a new perspective. The new perspective cannot be fully grasped in words. Nor can it be subjected to test by explicit criteria. The test is whether it offers a new view of reality to responsible scientists. In addition to this theory of knowledge, Polanyi views the universe as composed of a hierarchy of levels. The mechanistic model applies to one level only, though this level sets the boundary conditions for the next level, the organic level. Every level is bounded by the level below, but has its own operational principles. The highest level is occupied by man and his activities, including science. In short, human values are of intrinsic interest for two reasons. First, they define man's place in the universe as an animal who seeks knowledge. Second, they are part of the tacit principles guiding human activities.

In sum, Polanyi answers the question, are our values worthy of belief?, as follows. Our values are worthy of belief because they form the basis for our creative efforts—our efforts at uncovering truths and making meanings. It is

only within the framework of these values that we can achieve anything—including the simple task of writing and reading a sentence.

I like Gelwick's book but am somewhat disappointed. Of course it is a short introduction and cannot be expected to have lengthy excursions into Polanyi's shortcomings, if any. Still we can expect Gelwick to mention briefly the mistakes and gaps—at least the unsolved problems. He does not. Instead he presents Polanyi's philosophy as a complete and perfect system of thought. This is disappointing. Perfection leaves no challenges.

I am disappointed also to find no stories which epitomize Polanyi's personality and philosophy. However, such a book may not be the place for those tidbits.

A final disappointment—and I think a serious one—is Gelwick's presentation of Polanyi's philosophy as a new *paradigm*, echoing Kuhn. This is misleading. Polanyi unlike Kuhn is a universalist. Though there is no universal methodology for scientists, the implicit premisses and ideals guiding scientists have universal intent. This disagreement is publicly presented in the comments and replies on Kuhn's paper, 'The Function of Dogma in Scientific Research', in A. C. Crombie (ed.), *Scientific Change*, New York 1963. From a Polyanian point-of-view, Polanyi's philosophy is not the discovery of a new paradigm—a radical break from previous philosophy. It is a new perspective developed through a realignment of the implicit premisses and guiding ideals of philosophy—a reconstruction rather than a rejection of past philosophies.

Apart from these disappointments I was happy to find that Gelwick placed Polanyi in a setting fitting the scope and penetration of Polanyi's thought. The setting, the crisis in western civilization, is characterized by Gelwick in a religious manner as a loss of faith. This characterization is not faulty but I prefer a more sociological statement of the problem. How high should we set our goals? When we set our goals too low—a loss of faith?—we retreat to nihilism. When we set our goals high and expect too much, we vacillate between optimism and pessimism. The problem is to find the balance between high goals and realistic—humane—standards of success and failure. Did Polanyi find a balance? In any case, he tried.

Cambridge, Mass.

II: Sue Carry Jansen

Twenty years have passed since Michael Polanyi's *Personal Knowledge* was published, but we are only now beginning to fully grasp the profound implications of his synthesis of psychology and epistemology. Gelwick describes Polanyi's breakthrough as 'paradigmatic': 'As much as Copernicus changed the former world view by making the earth revolve around the sun, Polanyi is changing it by making all knowledge revolve around the responsible person' (p. 56). Credulity usually collapses under the weight of such rhetoric. However, Gelwick's statement is a self-confirming prophesy. The very fact that a book like *The Way of Discovery* can at last be written shows how far we have come in the direction of affirming the change he describes. Gelwick's book is an uncompromising introduction to the subtleties of Polanyi's thought. Yet, it can be mastered by undergraduates. A decade ago such an expository feat was regarded as impossible.¹ Today, it is certainly welcome, but can hardly be heralded as a startling achievement.

1 William H. Poteat, 'Upon First Sitting Down to Read *Personal Knowledge*', in Thomas A. Langford and William H. Poteat (eds.), *Intellect and Hope: Essays on the Thought of Michael Polanyi*, Durham 1968, pp. 3-18.

The author of a dissertation on Polanyi and a veteran of ten years experience teaching Polanyi's theory of knowledge, Gelwick displays remarkable skill in translating the more intricate facets of Polanyi's work into simple analogies. He even goes so far as to provide a lucid series of drawings (by a student) which graphically illustrate Polanyi's aphorisms on the gestalt of tacit knowing. But, it may be the decision to approach Polanyi's perspective via the biographical route which assures Gelwick's passage to clarity.

Taking Polanyi at his word—'ultimately, it is my own allegiance that upholds these convictions, and it is on such warrant alone that they can lay claim to the reader's attention' (*Personal Knowledge*, p. viii)—Gelwick examines a series of incidents in Polanyi's career as a chemist which reveal the auspices of his allegiances. Polanyi's opposition to the rule of authority in the evaluation of scientific evidence gains resonance when considered within the context of the mistaken, but for a time decisive, rejection of his theory of adsorption by Einstein and Haber. Similarly, against the background of his conversations with Bukharin, Polanyi's intense struggle against centralized planning of scientific research patterned after the Soviet model acquires logical, rather than merely ideological, force. Bukharin claimed that the pursuit of pure science 'was a morbid symptom of a class society; under socialism the conception of science pursued for its own sake would disappear, for the interests of scientists would spontaneously turn to problems of the current Five-Year Plan (*The Tacit Dimension*, p. 3). To Polanyi (who only two years earlier had resigned his position at the Kaiser Wilhelm Institute in protest against Hitler's politicization of science) Bukharin's argument meant independent scientific inquiry was being denied by the same socialist theory which located its claim to ideological supremacy in its alleged scientific base. The scientific outlook had produced a mechanistic conception of human nature and history in which there was no longer a place for science itself. Polanyi attributes his grasp of the paradox ('moral inversion') implicit in the scientific outlook to the exchange with Bukharin. Later, he would denounce the objectivist inversion as providing the grounding for dogmatism in science and authoritarianism in society. Gelwick also alludes (too briefly!) to Polanyi's participation in the bi-annual meetings of 'the Moot' with Karl Mannheim, Walter Moberly, T. S. Eliot, H. A. Hodges, and others as a major influence upon the direction of his thought. Perhaps, Polanyi's acute conviction that moral inversion lies at the root of the sense of anomie which characterizes scientifically advanced cultures had its genesis in this dialogue?

When Polanyi received Le Comte du Nouy Foundation Award for *Personal Knowledge*, he commented,

I have been often asked why I gave up my work in chemistry in favor of economics, sociology, philosophy, and the like. The answer is really quite simple: a desire to go back to normal. We all started with being interested in the whole world; it's the only genuine interest we can have. [p. 29.]

Gelwick offers a more heroic interpretation. He compares Polanyi to Socrates contending that he was driven from science to philosophy by the moral crisis of his time which compelled him to ask the basic questions about the nature of knowledge and the good.

Polanyi described his perspective as 'post-critical' philosophy. William Scott has referred to it as 'gestalt philosophy'. Gelwick suggests the neologism, 'heuristic philosophy', as a more accurate portrayal because Polanyi's approach is more constructive than the negative contrast with the period of critical philosophy implies and more voluntaristic than the link to the mechanistic models of traditional gestalt psychology would indicate:

The term 'heuristic' seems to bring together and to emphasize the distinctive contribution of Polanyi's point of view. 'Heuristic' derives from the Greek, *heriskein*, to find or discover. The nature of discovery is the root idea that illuminates and motivates Polanyi's philosophy. When we follow through Polanyi's analysis, we find that it is not only an end to the subject-object dichotomies of modern philosophy, not only a refutation of the objective ideal of knowledge, but also a new vision that beckons us toward a responsible society of explorers. [p. 84.]

Polanyi saw himself as 'a scandal-monger', not a visionary. The task he set for himself was to deflate the false pretense of the Baconian ideal of scientific inquiry by confronting conceptions of the theory of scientific practice with anomalous anecdotal evidences on the practices of scientific inquiry.

Gelwick contends that the current cross-disciplinary popularity of 'the Kuhnian thesis' indicates a major turn in the direction of Polanyi's philosophy. Although many celebrants of the liberating potential of Thomas Kuhn's work evidence little familiarity with Polanyi's heuristic philosophy; Gelwick points out that Kuhn himself freely acknowledges that his notion of the centrality of paradigms is a derivative of Polanyi's analysis of the tacit dimension of knowing (p. 128). However, whereas Kuhn is reluctant to extend the implications of his findings beyond the realm of the natural sciences, Polanyi is less timid:

I start by rejecting the ideal of scientific detachment. In the exact sciences, this false ideal is perhaps harmless, for it is in fact disregarded there by scientists. But we shall see that it exercises a destructive influence in biology, psychology and sociology and falsifies our whole outlook far beyond the domain of science. [*Personal Knowledge*, p. vii.]

Contra Kuhn, Polanyi asserts that it is not enough to disprove the objectivist ideal. A new theory of knowledge must be formulated to explain what it is in the nature of scientific knowing that allows the creative intellectual to grasp a reality which is incongruous with existing paradigms. Polanyi's mapping of the geography of tacit knowing can therefore be viewed as post-Kuhnian.

Since Polanyi developed his perspective outside of (and often in violation of) accepted canons of academic philosophy; he made no systematic attempt to locate his position *vis-à-vis* other schools of philosophical thought. Drawing upon the work of Helmut Kuhn, C. B. Daly, Iam Ramsey, William Poteat, Marjorie Grene, Donald Millholand, and William Scott, Gelwick assesses the relation of Polanyi's perspective to traditional philosophy, analytical philosophy, and existentialism. Additionally, he displays a comprehensive knowledge of the growing corpus of secondary sources in which attempts are being made to assay the implications of Polanyi's perspective for the natural and social sciences, art, and theology. The merit of this section lies in organization rather than originality. It can serve as an excellent preface to the more specialized studies in Langford and Poteat's *Intellect and Hope: Essays in the Thought of Michael Polanyi* (1968) from which much valuable material has been drawn.

Gelwick is a theologian. He regards Polanyi's perspective as a message of hope and reconciliation. His review of secondary sources in the social sciences echoes this predilection. He cites Bellah's invitation to sociologists to explore the promise of Polanyi's 'cities of the interior'. He reviews Aron's comparison of Polanyi and Weber in which Polanyi is cast as 'a philosopher of reconciliation, convinced that it is only through a misunderstanding of its true nature that science disenchants the universe'; while Weber is consigned to the role of 'a philosopher of contradiction dedicated to science, but in suffering, with covert sorrow of being excluded by the progress of science from the paradise of faith' (p. 126). He quotes Jouvénal's utopian vision of the Polyanian 'republic of

science' as a model for the body politic. And, he considers Freidrich's assertion that Polanyi's thought may provide the groundings for regeneration of natural law theory.

Perhaps due to Polanyi's unequivocal rejection of Marxism under Lenin and Stalin, Gelwick does not consider Polanyi's influence upon emerging schools of phenomenological neo-Marxism. Yet, even a cursory examination of the footnotes of 'critical' theorists indicates the resonance of Polanyi's perspective transcends ideological simplifications. Additionally, Gelwick's enthusiastic commitment to the promise of heuristic philosophy deflects his attention away from the hard questions which Polanyi's position poses regarding prevailing practices within the social sciences. The conventional positivistic separation of fact and value must be regarded as untenable. The linguistic bid which Polanyi describes (much in the vein of the later Wittgenstein) raises serious question as to whether the search for universalistic verification or validation of personal knowledge can succeed in the social sciences.² Acceptance of Polanyi's perspective may ultimately require social scientists to surrender the fiction of science along with the fiction of value-freedom. In 1968 Polanyi described 'scientific' sociology as an emperor with no clothes and proposed a ten-year moratorium on the word 'scientific': 'let us not attribute merit to something by saying, "This is scientific"'. Let's describe its value, its reliability, its penetration and its creativity'.³

The conceptual rigour and exhaustive documentation which Polanyi marshals to demonstrate the moral and intellectual dangers of scientism are sufficient warrant to recommend his work to social scientists. And, the reliability and penetration of Gelwick's exposition is sufficient warrant to recommend it as a 'standard' introduction to Polanyi.

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Quest for an American Sociology: Robert E. Park and the Chicago School. BY FRED H. MATTHEWS. Montreal: McGill-Queens University Press, 1977. Pp. ix + 278. \$16.00 cloth, \$7.00 paper.

ROOTS

This is a personal book review. As an anthropologist coming late to the discipline of sociology, and therefore perhaps less immersed in its historical roots than I would wish to be, Matthews' book is an eye-opener and a myth debunker. Although he modestly claims that 'This is an intellectual biography, not a chapter in the history of sociological theory or in the institutional history of academic departments' (p. viii, preface) nothing could be further from the truth.

2 Although the 'form of life' of a particular linguistic community may articulate criteria for verifying or validating social facts; whether those criteria can be translated into another linguistic frame is questionable. Pierre Hegy builds a strong argument in support of the position that sociology is 'a language which uses, often in a specialized sense, concepts borrowed from the language of society to which it belongs. Therefore, these concepts (like power, authority, social class, power elite, etc.) have a meaning which can be considered "objective" only in reference to this particular society: the "objective" definition of power, authority or social class in French would be considered ideological in American sociology and vice-versa'. 'Words of Power: The Power of Words', *Theory and Society*, 1, 1974, 339.

3 Michael Polanyi, 'A Conversation with Michael Polanyi', Interview conducted by Mary Harrington Hall, *Psychology Today*, 1, 1968, 20.