

is that today's students have never heard of them. How quickly we grow old.

*Liberation and Control: The Uses of Knowledge and Power* has two volumes: the first contains the study and answer guides, and the second is an anthology of eighty-two readings. The study guide has three sections: "The Ends of Progress" by Chris Ryan and Chambers; "An Energetic Debate: Case Study of the Uranium Mining Controversy" by Jim Falk; and "Risking the Future," dealing with risk assessment, by Richard Gillespie. These are beautiful volumes, with about seventy poems relating to the topics covered. The message that the text delivers is put best by John Henry on page 57: "John Henry told his captain, / 'A man ain't nuthin' but a man, / But before that steam drill beat me down, / I'll die with my hammer in my hand, Lawd, Lawd, / I'll die with my hammer in my hand!'"

Another reviewer (Melvin Kranzberg, *Isis* 73 [1982] 2: 291-92) has expressed concern at the absence of reading selections by professional historians of science or technology, asking: "Don't we have anything to offer?" Some of the preceding units (esp. *On the Social Analysis of Science, On the Philosophical Analysis of Science, Puzzles and Revolutions*) make significant use of readings which are the work of professional historians of science and technology. The point is, of course, that the authors of the texts are themselves professional historians of science applying their skills to selecting and collating contemporary materials and analyzing current issues. The lack of consensus about what constitutes the appropriate dimensions and fundamental knowledge base in the history, philosophy, and social studies of science and technology (including our inability to arrive at a satisfactory name) means that attempts at developing teaching texts will probably be met with limited acceptance. Nevertheless, the two reviewed here make significant contributions and should be considered by everyone teaching in the area.

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*The Imaginary Witness: The Critical Theory of Herbert Marcuse.* By Morton Schoolman. New York: Free Press, 1980. Pp. xv+399. \$19.95.

Just when some may have thought 1960s antitechnology radicalism was all but dead, along comes this major scholarly study to attempt to breathe new (academic?) life into it. This is more than a study of the intellectual development of the radical social philosopher and New Left ideologue Herbert Marcuse; in the course of his analysis,

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Schoolman offers serious criticisms aimed at providing an adequate critical theory.

Every serious thinker should have a Morton Schoolman as intellectual biographer. *The Imaginary Witness* analyzes the corpus of Marcuse's works with the painstaking diligence of a devoted disciple determined to "get right" the text of the master. At the same time, Schoolman is relentlessly critical, over and over again demonstrating that "the critical theory of Herbert Marcuse" (to cite the book's subtitle) is not, ultimately, critical enough with respect to the institutions Marcuse wished to attack.

As Schoolman would have it, Marcuse's intellectual odyssey centers on the theory of technological domination—particularly a domination of individuals' potential for critical and revolutionary subjectivity—as espoused particularly in *One-dimensional Man* (1964). In the beginning, Marcuse had high hopes for a union of theory and revolutionary practice. He abandoned this, according to Schoolman's account, in the face of the ease with which German liberals caved in to fascism. Thereafter, especially in *Reason and Revolution: Hegel and the Rise of Social Theory* (1941) and in *Eros and Civilization* (1955), Marcuse laid the theoretical (neo-Marxist and neo-Hegelian) and "second-dimensional" (Freud-based but anti-Freudian) foundations for the theory of technological domination that was to come in *One-dimensional Man*. In that book, mostly implicitly (according to Schoolman), there was the beginning of an enhanced view of revolutionary subjectivity that would become clearer in some essays associated with Marcuse and the New Left movement; however, the full flowering of this more open and optimistic—from a revolutionary perspective—union of theory and practice would not come until *Counterrevolution and Revolt* (1972). In the wake of the failures, the disappearances underground, etc., of the New Left, Marcuse finally returned to his thesis of technological domination and found such solace as he could in premodern "bourgeois art": see *The Aesthetic Dimension: Toward a Critique of Marxist Aesthetics* (1978). Marcuse died in July 1979.

*The Imaginary Witness* begins with "Early Writings, Early Hopes" (chap. 1), covering works published 1928–33 when Marcuse's Marxism was temporarily wedded to an interest in, and study under, Martin Heidegger. As Schoolman would have it, "Heidegger's philosophy addressed a particular problem and filled a void . . . [and this] was to be received favorably only to the degree that he contributed . . . to Marxist theory and practice" (p. 4). What Marcuse found in Heidegger was an emphasis on the "concretely existing individual"—but as potentially revolutionary subject, of the sort that seemed to be ruled out by the then-dominant Marxist theory (Lukács). When, in 1932, Marx's *Economic and Philosophical Manuscripts* were published, Marcuse (according to Schoolman) quickly discovered that everything he sought from Heidegger was already available in Marx.

Then came Hitler. "In the wake of fascism the hopes of Marcuse's

early years, which bore the promise of the years to come, are lost. . . . Hegel's relation of lordship and bondage and Marx's concept of labor, the central elements of the theory of historicity and praxis, which proved the individual to be a theoretical as well as a practical subject, have been discarded" (p. 37). The rest of the book documents, in stages, Marcuse's "abandonment of the individual" (part of the title of chap. 2) in the face of "technical rationality." Each chapter, with one exception, concentrates mainly on one book of Marcuse's together with related essays produced for the most part during the same period of his life. The exception is *One-dimensional Man*, which is central to three separate chapters (4–6) and signals the overwhelming importance, in Schoolman's view, of technology in Marcuse's critical system.

Schoolman's critical distance from Marcuse is established in chapter 2, where he demonstrates Marcuse's abandonment of the individual in favor of a "rationalistic framework" (p. 81; Schoolman is not so convincing in interpreting this as Marcuse's escape from fascism)—and in chapter 3, "The Second Dimension." The latter, extraordinarily meticulous in its analysis both of Marcuse's *Eros and Civilization* and of the relevant works of Freud, is really the key to Schoolman's critique of Marcuse's critical theory. He takes what others would call a hard-line, strict interpretation of Freud's metapsychology and rigorously and systematically shows how Marcuse misunderstood, misinterpreted, and misused it.

In the central chapters of the book (4–6, "Civilization without Discontents, I, II, and III"), Schoolman uses Marcuse's abandonment of the individual and ignorance of the revolutionary character of Freud's metapsychology to dissect the account of technological "advanced industrial" society in *One-dimensional Man*. However, he has other criticisms to make, the two most notable being (1) that Marcuse "is guilty of a fundamental hostility to politics" (p. 189), and he is so (2) mainly because, from the outset, he assumes that the individual can be totally controlled by technological rationality: "Marcuse, in his investigation, presupposed a minimal anthropology determining in advance that modern society and, most important, the individual within it are one-dimensional. As it has been conceptualized by Marcuse, the validity of technological domination depends upon the validity of the very behaviorism Marcuse attacks" (p. 221).

Chapter 5 takes up in detail the Freudian reply to Marcuse as outlined by Schoolman in chapter 3, now in the context of analyzing the technological domination theory of *One-dimensional Man*. Chapter 6 contrasts the technological domination theme that dominates *One-dimensional Man* with a mostly implicit subtheme—that after all there may be some subjectivity left to challenge the all-pervading objectivity of technical rationality—which will become fully explicit only later, and then only temporarily.

Chapter 7, which takes up the "enhanced subjectivity" theme in the

context of Marcuse's association with the New Left and centers around *Counterrevolution and Revolt*, may fairly be said to express as much as is given in this book of Schoolman's own version of critical theory. Finally, in chapter 8, as noted earlier, Schoolman sees Marcuse as abandoning this promising new beginning of enhanced subjectivity, as reverting to the technological domination theme, with nothing critical left but "bourgeois art"—which "can appeal to no one, save a socially anonymous subject. Its passing is mourned only by the critical spirit that knows of the truth locked securely away within the aesthetic dimension. Who will inherit the truth sheltered by critical theory when it, following after bourgeois culture, slips silently and invisibly into the past?" (p. 347).

Schoolman's interpretation of Marcuse's New Left period, culminating in *Counterrevolution and Revolt*, is perhaps the most interesting and provocative part of *The Imaginary Witness*. Schoolman sees the concept of "enhanced subjectivity" as at once the revival of Marcuse's early hopes and the promise—if there is any—for the future of critical social theory (p. 356). What does he have in mind? "[*Counterrevolution and Revolt*] offers a radical critique of the existing state of affairs, but the individual on whose behalf this critique is waged is not yet a radical subject. Rather this individual is, according to Marcuse, discontented and more—precarious, uncertain, ambivalent, receptive to political discourse. Given such an individual, theory is obliged to draw Marcuse's conclusion, a conclusion, in fact, that Marcuse had first drawn in his early writings: theory and practice meet on the plane of radical criticism and a radicalized liberal politics" (pp. 319–20).

The particular groups Marcuse (and presumably Schoolman) would have the New Left organize for political purposes are not only the working class but also "professional and technical classes" (p. 298)—all of whom might be said to share enough of the ambivalent discontent described above to be catalyzed into a potent force for political change. But change of what sort? Schoolman notes that Marcuse, as late as 1975, admitted that "Theory, by its very nature, . . . always contains within it an essential conflict or tension with practice" (p. 325). Perhaps the best a radical theoretician can hope for is radicalized liberal politics. And even then, who is right, Marcuse or Schoolman? For the radical, is all hope lost or not?

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