

Chapter 6

Joseph Margolis on Technological Society

Laura H. Carnell Professor of Philosophy at Temple University in Philadelphia, Joseph Margolis's main interests (according to his website) are in the philosophy of the human sciences, the theory of knowledge and interpretation, aesthetics, philosophy of mind, American philosophy, and pragmatism. Academic positions have included Columbia University and Long Island University, at the beginning of his career, through a professorship (including chairmanship of the department) at the University of Western Ontario to his present position as professor of philosophy at Temple University, with honorary and visiting professorships all over the world, from the University of Toronto to the University of South Africa.

Honors, fellowships, awards, grants and other responsibilities (according to his website) have included everything from an honorary lifetime membership in the International Association of Aesthetics to the co-directorship of the Greater Philadelphia Philosophy Consortium, and from a doctorate *honoris causa* from the University of Helsinki to Fulbright fellowships in Sweden and Scandinavia, and grants from the Pew Charitable Trusts to being distinguished professor in the College of Liberal Arts at his home institution, Temple University (among many, many others).

Editorial boards have included dozens of journals, from the electronic journal of the Canadian Society of Aesthetics to the *Journal of Value Inquiry*, from the *International Journal of Applied Philosophy* to *Research in Philosophy and Technology*, as well as numerous book series.

On Margolis's overall philosophy, see Michael Krausz and Richard Shusterman, eds. *Interpretation, Relativism, and the Metaphysics of Culture: Themes in the Philosophy of Joseph Margolis*. New York. NY: Humanities Books, 1999.

Margolis's own writings are so numerous that even a partial listing is overwhelming. The books I find relevant to this chapter are listed in the bibliography at the end.

I am going to do something different, and perhaps risky, in this chapter. Until recently, Margolis had been involved with SPT during most of its existence. He contributed important articles to several of our early publications, and practically

every year I would importune him to turn those articles into a full-scale book—even a short book—on philosophy of technology as he understood it. He never did so. So I am here going to try to reconstruct what he might have said, *using his own SPT publications*—in conjunction with a recent book of his on pragmatism.

Before beginning that risky project, I note that in a textbook, *Philosophy of Psychology* (1984), Margolis explicitly claims he is a “non-reductive materialist”—like Marx in some respects but anti-Marxist in others. In his recent pragmatism book, Margolis is more Peircean than Deweyan, and he sees pragmatism in analytic philosophy terms, as the yet-to-be-fulfilled promissory note on a defensible future analytical philosophy/epistemology. Indeed, Margolis attacks Dewey for his activism. Most of this has much more to do with general analytical philosophy than it does with philosophy of technology. I think the early essays, placing himself in the middle between Bunge and Ellul, and between Marx and Heidegger, while fitting in with other philosophical work on technology, can—somewhat arbitrarily—be linked with Margolis's recent book to create *my* interpretation of a Margolis philosophy of technology. The effort will, unfortunately, entail some rather long quotations because of Margolis's style, which is even more dense than is customary in analytical philosophy. However, Margolis's (implicit) philosophy of technology is worth the effort.

I begin with Margolis's most recent statement of his general philosophy in his *Reinventing Pragmatism* (2002); what follows is my summary, taken from an article on pragmatism that I prepared for the *Encyclopedia of Science, Technology, and Ethics* (2005). The published article (volume 3, p. 1468) has been modified by the editors to make it fit within the encyclopedia's style, so I don't feel the need here to treat what follows as a quotation. (See Note on Quotation Styles, at the end of the introduction.)

The Recent Revival of Pragmatism

Margolis contrasts early American pragmatism with the revival of pragmatism in American analytic philosophy after about 1980. In the revived version, the focus is not on Mead and Dewey's “meliorizing” progressivism, with its suspicion of large science-based corporations, but on quarrels over different versions of epistemology. With the exception of Richard Rorty, who wants his pragmatism (he says it is more literary than philosophical) to join in leftist causes (Rorty, 1998), none of the “revived pragmatists” have much interest in ethics, less in

technology, and an interest in science that is reducible to a scientific model of human knowing—or opposition to such.

Margolis's is the best summary of these disputes that I know of, though his writing style is as always dense and convoluted. The primary debate Margolis talks about pits what he thinks is an acceptable pragmatism against "naturalizers." In fact, he talks about several debates between Rorty (claiming to speak for Donald Davidson as well as himself) and Hilary Putnam. The conflict has to do with how to safeguard a "true" pragmatism from relapsing into a Cartesian quest for a guaranteed foundation of knowledge, primarily scientific knowledge.

To summarize the account, at some cost in terms of glossing over the nuances, Margolis (p. 15) says: "In any event, Putnam's [1994] newly minted denial of his earlier denial [1980] of the subject-object disjunction . . . risks his joining forces with the Cartesian realists he opposes."

Margolis gives the reader some help in understanding the controversy: "On any serious reading, you can hardly deny that the essential philosophical questions that arise from the first appearance of Descartes's principal tracts persist to the very end of the twentieth century. We are evidently still trapped by the two unavoidable paradoxes Descartes has bequeathed us: *one*, that of . . . pretend[ing] to reclaim an objective and neutral grasp of the way the world is apart from our inquiries; *the other*, that of the conditions for resolving the first puzzle, *if* we are confined to inner thoughts and perceptions" (Margolis, 2003, p. 13).

Putnam, in Margolis's view, makes too much of a concession to "naturalizers." (Margolis lists W.V. Quine, 1969, and Donald Davidson, 1986.) Naturalizing, Margolis thinks, is incompatible with the earlier generation of pragmatists' repudiation of any and all versions of Cartesianism.

Margolis's critique of Rorty as the other pole in his "primary debate in recent pragmatism" is easier to state in simple terms. Rorty's "postmodernism" is incompatible with any pragmatism legitimately related to earlier pragmatism, with its trust in science and expertise generally.

In the end, Margolis outlines his own version of pragmatism. He sees it as following from the failures of the two parties: "Putnam went much too far in rejecting his internal realism when he rejected his [earlier] representationalism;

and Davidson and Rorty go too far in construing the mind-dependent constitution of the independent world” (p. 22).

According to Margolis, there can today be “no viable realism that is not also a *constructivism*. Constructivism means at the very least that questions of knowledge, objectivity, truth, confirmation, and legitimation are constructed in accord with our interpretive conceptual schemes . . . ; that, though we do not construct the actual world, what we posit (constructively) *as* the independent world *is* epistemically dependent on our mediating conceptual schemes.”

This is Margolis's take on his place within general philosophical pragmatism today. I next turn to his various contributions to SPT publications, where Margolis showed in some detail how all of the above implies a *technological* construal of the knower and the world known. The first selection comes from volume 5 of the Philosophy and Technology (Kluwer) series, entitled *Technological Transformation: Contextual and Conceptual Implications* (1989) edited by Edmund Byrne and Joseph Pitt. (See pp. 1–4, 8–9, 13.)

The Technological Self

“There is a double puzzle that Thomas Kuhn collects in certain well-known remarks in his *The Structure of Scientific Revolutions* that compellingly links the theory of science and the theory of human inquiry—in effect, the theory of cognizing agents, of selves, of persons. One may doubt that Kuhn has formed an entirely coherent picture of the sciences, but there can be no question that he has completely neglected the analysis of what a human being must be like in order to live and work in the world he posits. Kuhn's linking these two issues remains instructive, nevertheless. For he grasps its paradoxical features in a way that does not really depend on the validity of his own account of the historicized sciences; and what he does say about the sciences is quite compatible with (indeed, it memorably instantiates) a number of very large doctrines that the entire sweep of Western philosophy may fairly now be said to be converging upon. These include at least: (a) the rejection of all forms of cognitive transparency and privilege; (b) the indissoluble unity of realist and idealist elements in any plausible theory of the sciences; (c) the conceptual symbiosis of cognizing self and cognized world; and (d) the matched historicity of self, science, and world. Doctrines (a)–(d) dissolve any hierarchical advantage that might otherwise be assigned so-called naturalistic and phenomenological theories *vis-à-vis* one another and fix at the same time the sense in which theories of

either sort could incorporate so-called deconstructive or post-structuralist exposes of their own pretensions regarding any form of cognitive transparency. By a term of art—a fair term—contemporary views incorporating (a)–(d) may be dubbed *pragmatist*.

“Kuhn’s remarks are these: first of all, that ‘Lavoisier . . . saw oxygen where Priestley had seen dephlogisticated air and where others had seen nothing at all. . . . Lavoisier saw nature differently . . . Lavoisier worked in a different world’; secondly, speaking of that phase of post-fourteenth-century physics (affecting Galileo’s work) in which Buridan and Oresme’s impetus theory replaces Aristotle’s, that ‘I [that is, Kuhn] am . . . acutely aware of the difficulties created by saying that when Aristotle and Galileo looked at swinging stones, the first saw constrained fall, the second a pendulum. Kuhn, of course, favors the thesis that these paired scientists ‘pursued their research in different worlds.’

“Until [for example] that scholastic paradigm was invented [Kuhn says], there were no pendulums, but only swinging stones, for the scientist to see. Pendulums were brought into existence by something very like a paradigm-induced gestalt switch.

“We are not interested here in the bafflements of Kuhn’s own conception of the sciences except as they may help us to understand what is required of a theory of the cognitively apt selves that pursue particular inquiries under the conditions Kuhn advances or, more generally, under constraints (a)–(d) that Kuhn’s own views instantiate. Kuhn gladly abandons all talk of ‘the given of experience,’ ‘immediate experience,’ ‘a pure observation-language,’ ‘mere neutral and objective reports on the given.’ But he effectively reneges on this proviso—however unwittingly—in his explanation of the viability of the contingently different worlds of different societies: ‘An appropriately programmed perceptual mechanism,’ Kuhn explains, ‘has survival value. To say that the members of different groups may have different perceptions *when confronted with the same stimuli* is not to imply that they may have just any perceptions at all.’ The remark is fair enough. But on what grounds (accessible to Kuhn) can we speak of the operations of ‘the same stimuli’ across different paradigms, differently ‘programmed perceptual mechanisms’? ‘Two groups,’ Kuhn maintains, the members of which have systematically different sensations on receipt of the same stimuli, do *in some sense* live in different worlds. We posit the existence of stimuli to explain our perceptions of the world, and we posit their immutability to avoid both individual and social solipsism. About neither posit have I the

slightest reservation. But our world is populated in the first instance not by stimuli but by the objects of our sensations, and these need not be the same, individual-to-individual or group-to-group. To the extent, of course, that individuals belong to the same group and thus share education, language, experience, and culture, we have good reason to suppose that their sensations are the same. . . . They must see things, process stimuli, in much the same ways. But where the differentiation and specialization of groups begins, we have no similar evidence for the immutability of sensations.

“These are very curious remarks: first, because ‘invariance’ or ‘immutability’ of ‘stimuli’ (neurophysiological connections, even physical laws) are merely *posited* to forestall solipsism (skepticism, radical incommensurability, intellectual nihilism, anarchy, relativism); second, because such invariances are themselves validly relativized to the shared ‘form of life’ of a given society *and only there*; and third, because, apparently both intra- and inter-societally, the division of labor and historical variation *threaten our confirming any genuine, context-free invariances*.

“Kuhn is not content with this kind of tenuousness. ‘We try,’ he says, to interpret sensations already at hand, to analyze what is for us the given. However we do that, the processes involved must ultimately be neural, and they are therefore governed by the same *physico-chemical* laws that govern perception on the one hand and the beating of our hearts on the other. But the fact that the system obeys the same laws [in all perceptual cases, presumably in all societies] provides no reason to suppose that our neural apparatus is programmed to operate the same way in interpretation as in perception or in either as in the beating of our hearts.

“It is in this same context that Kuhn concludes that, ‘An appropriately programmed perceptual mechanism has survival value.’ This means that those who live in ‘different worlds’ also live in ‘one world,’ that the provisional invariances internal to the different worlds of socially shared practices are also good guesses of some sort regarding the actual invariances that hold across such different worlds, that the ‘incommensurable viewpoints’ of these separate worlds are also collected within the range of commensurability (or, at least within the range of intelligibility) of the one overarching world. Incommensurability is not—or at least should not be—construed as equivalent to incommunicability or unintelligibility or untranslatability; on the contrary, moderate incommensurabilities, as much of conceptual categories as of metrical

instruments, must, on pain of incoherence, be intelligible, even comparable, to the same inquirer or inquirers. And yet, of course, *to be able to affirm invariances across moderate incommensurabilities signifies cognitive sources that cannot be confined within the bounds of such incommensurabilities*. Kuhn never explains that ability.

“There is no question that Kuhn has put his finger on the essential puzzle of a historicized conception of science still bent on formulating the lawlike invariances of the entire order of physical nature. But it is equally clear that Kuhn’s solution is threatened with an ineliminable measure of incoherence. For our present purpose, it is more important to emphasize what may be called the ‘constructive’ or ‘constitutive’ theme in Kuhn’s theories, the notion that the world we live in—we ordinary percipients as well as Aristotle and Galileo as more disciplined scientists—is in some way *constituted* by the socially shared paradigms or practices that form or preform (tacitly rather than by explicit conjecture) the way we perceive and think. Kuhn sees the matter more in terms of the general nature and psychology of human investigators than in terms of the merely formal features of potential truth-claims advanced within the relevant space; and yet, he nowhere directly considers *what* a human person must be like, constituted and reconstituted *by* such cultural forces in the same instant in which the ‘world’ is constituted and reconstituted *by* our changing inquiries and interventions. In this sense, Kuhn offers the barest glimpse of the interesting notion (which his own theory requires and which is required by any generic theory that subscribes to (a)–(d)): that *the human self is itself technologically and praxically constituted*. The potentially radical implications of this notion normally escape our notice, in spite of the fact that constraints (a)–(d)—perhaps, now, only marginally clarified by Kuhn’s own favored theories—must surely be among the most salient conceded in our own age. The point may be taken as embedded at least in Kuhn’s challenging distinction between a swinging stone and a pendulum.

“We are marking off a strategy of argument, possibly a map of an argument, not an actual argument. The approach enjoys a considerable economy. For, there are a surprising number of quite powerful consequences that follow from admitting (a)–(d) together with the cognate finding that if ‘worlds’ are constituted by the inquiries and practices of human selves, then selves are correspondingly constituted by processes internal to the formed worlds in which they contingently mature. . . .

“Merely to concede the point of what may now be called (e), the thesis of the technological or technologized self, leads directly to a number of important findings—in a remarkably painless way. It affords a very simple conceptual lever by which to topple a large number of fashionable theories. . . .

II.

“What we have sketched thus far are the lines of an argument by which, admitting the constructive nature of the world along the moderate (if somewhat muddled) lines of Kuhn’s historicizing, we find ourselves obliged to admit the constructive nature of cognizing selves. Mark that (the constructive thesis) as thesis (1) of what we have termed the doctrine of the technological or technologized self. It exercises an immense economy in disqualifying at a stroke all forms of logocentrism—all essentialisms, all universalisms, all natural necessities of cognition, all totalizing, all closed systems, all apodicticity. But it is itself fragile and incomplete as an account of what the technologized self entails. It does not sufficiently identify what, minimally, the achievement of human communication requires. . . .

“A better clue lies elsewhere—in the biologized philosophical anthropologies of the European tradition. Marjorie Grene, for instance, captures what we shall mark here as theme (2) of the technologized self: to be a person is to be a history. In what respects? In two respects, opposed but related. On the one hand, being a person is an achievement of a living individual belonging to a natural kind whose genetic endowment and possible behaviors provide the necessary conditions for that achievement. On the other hand, a human being becomes the person he is within, and as one expression of, a complex network of artifacts—language, ritual, social institutions, styles of art and architecture, cosmologies and myths—that constitute a culture. A culture, of course, is itself a sedimentation of the actions of past persons; but it is, nevertheless, preexistent with respect to the development of any particular person.

“. . . Technology, then, is the biological aptitude of the human species for constituting, by alternative forms of equilibration, a world suited to a society of emergent selves or a society of such surviving selves adjusted, diachronically, to such a world. We understand one another for the same reason we survive as a species. Technology is the flowering of our biological endowment and is incarnate in it

Conclusion

“One cannot refuse the bare option of the reduction or elimination of the cultural dimension of the real. But its intended prize has yet to be earned. The doctrine of the technological self is incompatible with the victory of that project; and, in fact, the separate vindication of its own characteristic claims—the constructed nature of reality and self, the incarnation of cognition, the praxical nature of theory—counts against a bifurcation of the real and the rhetorical, in virtue of which one might be otherwise tempted to endorse their ultimate rejection. Failing that, we are invited to make a fresh analysis of what is clearly salient in human history—of what, in the opposing view, tends to be neglected anyway. Nevertheless, in achieving just this small advantage, we have not yet explained what the sense is in which the technologized self or its world *are* constructed and yet are not *merely* constructed.”

This long and complicated quote—which whittles down Margolis's account in a way to which he would surely object on the ground that it has ignored his nuances—can be supplemented by way of two other SPT publications, in which Margolis situates himself in the middle between extreme opponents on both sides of him (as he sees things). The first is found in *Research in Philosophy & Technology*, vol. 7 (pp. 146, 156):

Three Conceptions Of Technology: Satanic, Titanic, Human

“. . . Theories of technology . . . are strongly tempted—when they are drawn to moral appraisal—to construe the present age in an apocalyptic light or in such a way as to confirm the promising advance of the powers of human reason over the alien and troublesome forces of brute nature.

“. . . On Bunge's view, 'technology is applied science'; and the rules of conduct he is prepared to favor are those only (opposed to merely 'conventional,' 'groundless' rules, like those of etiquette) that are 'based on a set of law formulas [scientific laws] capable of accounting for [their] effectiveness.' Once, however, science is historicized, and science and technology praxicalized, there is no longer room for the elementary confidence Bunge exudes. The truth is that *there can be no discovery of the right objectives to which our technology and social reforms ought to be consecrated*. But there is a tradition of reflecting on the ends of man—diachronically changing, plural, self-conflicting, and yet conserving; and it can only be in a dialectical enlargement and revision of that tradition

within the particular processes of human history (changing, plural, self-conflicting, and conserving still) that the ‘human’—not the satanic or titanic—alternative of the emancipatory possibilities of technology can be found at all.

“The point is that we must look for reasonable directives and constraints in the right place and give up those yearnings that are impossible to satisfy. Technology is nested in historicist and praxical processes. In recognizing that, we understand as well the rearguard disappointment that Ellul’s and Bunge’s opposed essentialisms are hopelessly designed to dissolve. It is also to understand, with considerable trepidation, the dangerous options of a genuinely human freedom.”

The final quotation is from volume 1, *Philosophy and Technology* (eds. P. Durbin and F. Rapp) of the Philosophy and Technology (Kluwer) series (pp. 291, 296, 305–306):

Pragmatism, Transcendental Arguments, And The Technological

“. . . To assimilate Heidegger’s contribution and to reject it at a stroke, we may say, by way of epithets that are somewhat cryptic but perhaps not disagreeably so, that Heidegger pretends to have made a *transcendent* discovery about technology (indeed, about the whole of Western philosophy), whereas the best (and entirely adequate) effort that men can hope to make in answering the Overwhelming Question is to offer a *transcendental* proposal about the nature of technology and reality. . . .

“. . . It is impossible to ignore, here, Marx’s insistence on construing philosophy and science—all theoretical knowledge—as forms of *praxis*; they are, Marx affirms, conceptually and really dependent on the historical conditions of actual production. In this sense, whether or not we agree with Marx’s diagnosis of capitalism (or, indeed, of the whole of human history), we cannot fail to see the important sense in which Marx anticipates and (in effect) resists Heidegger’s philosophical injunction. . . .

“. . . The technological, therefore, performs a double role. On the one hand, in accord with Heidegger’s and Marx’s view, it signifies how reality is “disclosed” to humans—primarily because it is through social production and attention to the conditions of survival (both precognitively and through explicit inquiry) that our sense of being in touch with reality is vindicated at all; but contrary to the thrust

of Heidegger's late qualification, the correction of all theories of cognition and reality thus informed is itself inevitably historicized and subject to the ideological limits of any successor stage of *praxis*. There is no escape from the historical condition, but the recognition of that fact itself is the profoundly simple result of transcendental reflection *within* the very condition of history—which obviates, therefore, the inescapability of Heidegger's various (transcendental) pessimisms and the need for his extravagant (transcendent) optimism. On the other hand, the technological signifies how the study of the whole of reality—of physical nature, of life, of the social and cultural activities and relations of human existence—is unified in terms of our own investigative interests. Hence, at the very least, not only can the theory of the physical sciences not afford to ignore the systematic role of the actual historical work of particular human investigators (for instance, against the model of the unity of science program); but also, we can neither preclude the scientific study of man nor insure that the human sciences must conform to any canon judged adequate for either the physical or life sciences. The primacy of the technological, therefore, facilitates a fresh grasp of the methodological and explanatory peculiarities that the human studies may require—for example, regarding the analysis of causality in the human sphere, the relation of causality and nomologicality, and the bearing of considerations of rationality, understanding, interpretation on the explanation of human behavior.

“Seen both in its transcendental role (as insuring inquiry a measure of objectivity relativized to the conditions of *praxis* and dialectical review) and in its role *vis-a-vis* the human sciences (as modelling the methodological distinction of such sciences) the technological may fairly be interpreted as helping to preserve whatever distinction bears on human freedom and dignity, the thrust and direction of human inquiry, the balance between realist and idealist components of cognition, the tolerance of plural, even incompatible, theories compatible with a common *praxis*, the provision of grounds for disclosing ideological distortion without appeal to foundationalism, the admissibility of a moderate relativism consistent with objectivity, and such similar doctrines as the recent currents of pragmatism have been advancing. But that is probably as much as one can ask of any relevant theory—and more than most can afford.”

In terms of *controversies*, in these last two selections, Margolis situates his version of *technological pragmatism* in the middle between Bunge (*science* quadrant) and Ellul (*idealism*), as well as between Heidegger (*idealism* again) and Marxist *socialism*. We might ignore his similar approach, above—situating himself between Rorty and such “naturalizers” as Quine in recent attempts to turn

analytical philosophy or epistemology into pragmatisms (plural)—or, alternatively, we could try to draw the analysts into the game. (But that would need to be done in a book with different purposes than the present one.) So in whatever fashion, we can clearly identify Margolis's positioning of himself within quadrants, though my reference at the beginning to Margolis's calling himself a “non-reductive materialist” would seem to keep him within the same general quadrant as Marxism while still being opposed to all versions of it.

Finally, if we add in his disparaging of Deweyan pragmatism as “epistemologically naïve” (while defenders like Hickman would say Margolis's resultant pragmatism is not pragmatic at all), Margolis would be opposing the *whole range* of quadrant positions.