

*Science-Mart: Privatizing American Science.* By Philip Mirowski. (Cambridge: Harvard University Press, 2011. 454 pp. \$39.95, ISBN 978-0-674-04646-7.)

Part history of economics, part history of science, part lament for the decline of American academia, Philip Mirowski's *Science-Mart* is an enlightening, engaging, sometimes maddening tour through the "Temples of Mammon" that Mirowski believes universities have become. *Science-Mart* begins by surveying economists' evolving views on the organization of science. Influential early Cold War American economists articulated a linear model of science—basic research (a public good) leads to new technologies (and therefore propels the economy)—which their neoliberal successors annihilated after 1980. The linear model mandated that some public entity (the military) pay vast sums for esoteric, curiosity-driven research that, by being open to all, would eventually, if unpredictably, yield socially beneficial applications. Neoliberals overturned that arrangement by redefining scientific knowledge as a commodity. Knowledge is worth what the market will pay (not much for the esoteric stuff); once someone has paid, their ownership should be ironclad and asymmetric. Neoliberal intellectual "property" entailed a right to awareness of, control over, and profit from all downstream knowledge, but no obligation to share knowledge with anyone else.

Mirowski is best when mapping the pathologies of neoliberal science: universities' faith in technology transfer offices and biotech start-ups that *never* make money; intellectual property thickets that hamper discovery; outsourced, offshore, precooked clinical trials that evade oversight and function as advertising, not research; the reconceptualization of science as a

blinkered race toward predefined ends rather than an open-eyed process of discovery. Ultimately, neoliberal science is self-defeating. Applied, high market-value science must be supported by an infrastructure that includes curiosity-driven, pedagogically oriented research. If you demand that this infrastructure quickly and accountably pay for itself, you eventually pay more and get less.

*Science-Mart* is shakier, though, on privatized science's origins. In his rush to settle scores with neoliberal economists, Mirowski endows them with supervillain-like agency in constructing a new science policy regime after 1980. That story line ignores earlier challenges to the Cold War science policy regime created by the Vietnam conflict's budgetary and cultural fallout and given voice by progressive politicians (for example, Ted Kennedy) and New Left radicals. Non-neoliberal Vietnam War-era proponents of reform (including many scientists) saw Cold War research as rigged to produce weapons and social control rather than solutions to the problems of poverty, environment, energy, or war. Many reformers saw commercialization as one way for academic scientists to lessen dependence on military funding and make their research more relevant to civilian human problems.

Maybe, as Mirowski implies, reformers were simply snookered by those bent on commoditizing knowledge. If so, *Science-Mart* is a useful antidote to the pernicious Reagan-era notion that commercialization is the *only* thing universities should strive for. But Mirowski does not really consider the possibility that Vietnam War-era reformers successfully sought what Andrew J. Nelson calls a "multivocal" university where modest, partial commercialization aids activities that cannot turn an accountable profit—and vice versa ("Cacophony or Harmony? Multivocal Logics and Technology Licensing by the Stanford University Department of Music," *Industrial and Corporate Change*, Jan. 2005, pp. 93–118). Worse, Mirowski attacks historians of the long, complicated relationship between commercial and noncommercial academic activities as stooges of neoliberalism. Such asides mar what is otherwise a wonderful examination of postwar American science

and economics, and the perilous, parlous relationship between them.

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