



42435996

STATUS: PENDING 20080430

OCLC #: 1638942

REQUEST DATE: 20080430 NEED BEFORE: 20080530

SOURCE: ILLiad

BORROWER: RVE

RECEIVE DATE:

DUE DATE:

RENEWAL REQ:

NEW DUE DATE:

SPCL MES:

LENDERS: VVP, VKC, YAI, *YHM, ZEM

LHR SUMMARY: v.1-(1913/1914-)

UNIFORM TITLE: Isis (Chicago, Ill.)

TITLE: Isis.

ISSN: 0021-1753

IMPRINT: Chicago [etc.] Published by the University of Chicago Press for the History of Science...

ARTICLE: Erik Fisher: review of The Philosophy of Expertise

VOLUME: 99

ISSUE NUMBER: 1

ISSUE DATE: 2008

PAGES: 232-233

VERIFIED: <TN:159376> OCLC

SHIP TO: R.I.T./Wallace Library/ILL Dept./90 Lomb Memorial Dr./Rochester, NY 14623-5604/

BILL TO: same

SHIP VIA: 2R,Ariel,1st,UPS

MAXCOST: IFM - \$20

COPYRIGHT COMPLIANCE: CCG

FAX: Ariel: 129.21.179.168 (preferred) or ...

EMAIL: illwml@rit.edu

AFFILIATION: RRLC; SUNY/OCLC Zero Group

BORROWING NOTES: Please send articles via Ariel whenever possible. Please don't send multiple articles in one ariel file. Thank you!

PATRON: Selinger, Evan

to research insulin synthesis; the subsequent mobilization of almost a thousand researchers in close to ten disparate research institutes; a comparison of U.S., German, and Chinese research; media propaganda on the significance of the achievement; and the question of why the research has never been awarded a Nobel Prize (an honor no China-based research has yet received). The appendix offers transcribed interviews with key participants.

The authors' most important contribution is their analysis of a specific Mao-era "style" of scientific research, characterized by heavy planning, an emphasis on collaboration, a military "flavor," secrecy, and extensive mobilization of human resources. Using a slogan common during the Great Leap Forward, they dub this style "the great armies do battle" (*dabingtuan zuozhan*) and conclude that at least with respect to insulin synthesis it was a failure. While the researchers succeeded in synthesizing insulin, the pressures burned out many young talents, the obsession with secrecy impeded communication of significant intermediate results, and the extraordinary resource deployment cost China opportunities in many other, more important research areas.

Weimin Xiong and Kedi Wang also offer a fascinating discussion of the Nobel Prize issue. On several occasions, foreign scientists advocated for the nomination. But in 1966, with the beginning of the Cultural Revolution, people feared the political taint of associating with foreign institutions. And in 1972 and 1975 Chinese officials nixed nominations because Alfred Nobel was the inventor of dynamite (and thus a warmonger) and claimed that China did not need "capitalist prize money." When in 1978 political conditions were more favorable, the researchers faced the challenge of nominating no more than three scientists (the Nobel limit) for a project in which at least thirty played key roles. They initially forwarded eight names and intentionally included one woman—not because she was among the top eight but in order to recognize the significant number of women who had participated. (These two issues—the individualist bias of the Nobel Prize and the question of gender in socialist Chinese science—deserve somewhat more attention than the authors give them.) In the end, they nominated just one scientist, Niu Jingyi, but he still did not receive the prize. The authors boldly assert a conclusion unlikely to be popular in China: although impressive, the research was not up to Nobel Prize standards. The researchers failed to recognize a point of key significance: that low-

level protein structures determine high-level ones.

At times Xiong and Wang's prose appears to reflect the nationalism of their subject matter. They often use the first person plural, as in "Our work was the most meticulous, and our evidence was the strongest. Without hesitation . . . we can proclaim: our country was the first in the world to synthesize insulin!" (p. 101). But elsewhere they step outside such sentiment and explain its historical significance. Especially powerful is their critique of the nationalistic motivations of Chinese insulin researchers: "They were not conducting research, but waging a war. They were fighting for China's honor!" (p. 95). (Importantly, however, they note that many Chinese scientists, like their U.S. counterparts, did believe in science for its own sake, despite outward denunciations of this attitude as bourgeois.) Ultimately, I found the combination of empathy and criticism compelling.

I do wonder whether the authors reflected with any amusement on their own participation in a research project (the book series) that in its scale, pace, and mobilization of resources is a bit reminiscent of the Mao-era research style they analyze so well. Given the project's enormous contribution, this could be only the nicest kind of joke. Xiong and Wang take a subject many have wanted to understand much better and offer an account that is at once satisfying and provocative.

SIGRID SCHMALZER

■ Sociology and Philosophy of Science

Evan Selinger; Robert P. Crease (Editors). *The Philosophy of Expertise*. vi + 421 pp., figs., index. New York: Columbia University Press, 2006. \$49.50 (cloth).

This volume assembles fifteen previously published essays in order to explore the conceptual grounds of epistemic authority, especially given the practical necessity of deference and trust on the part of nonexperts. The first such collection to treat expertise from a philosophical standpoint, it exposes a topic that appears ripe for continued inquiry. This much is implied in the stated purpose of the volume: to identify the "key issues and indispensable features" (p. 1) necessary for any philosophically comprehensive framework. Insofar as expertise is a defining feature of the modern world, and yet a concept whose problematization can be traced to Plato's early dialogues, the fact that classical

philosophy and science studies “avoid addressing the issue” (p. 214) itself warrants attention.

Not surprisingly, the book’s contributions traverse a range of epistemological, social, and political issues. In a straightforward and telling move, the volume is organized into three sections, corresponding to the elements of a social taxonomy: those who provide expertise, those who “consume” it, and the relationship between these two “parties” (p. 5). Thus, Part 1 considers the relationship between experts and nonexperts and largely involves individual and institutional capacities to integrate expert advice. Alvin Goldman surveys basic philosophical challenges posed by the expert/lay divide, particularly in the case of conflicting expert accounts. In this section, as well, Scott Brewer critiques the U.S. legal system’s ability to arbitrate among experts, and Stephen Turner assesses the dilemmas posed for the modern liberal state in deploying knowledge as opposed to privileging ideology.

The essays in Part 2 delve into the constitution of experts and expertise. For instance, the chapters by Hubert Dreyfus and Julia Annas, both of which consider apprenticeship, respectively contrast education with distance learning and modern epistemological assumptions with ancient alternatives. Finally, Part 3 centers on the remaining term in the relationship, treating the nonexpert critique and negotiation of expertise in view of its “impacts” (p. 6). This section includes Paul Feyerabend’s provocative “How to Defend Society against Science” and Don Ihde’s closing chapter, which criticizes the expert/lay divide—a concept that not only frames but permeates much of the book—as overly dichotomous.

In several ways, the volume hints that one reason expertise has not received more disciplinary attention may have to do with its disciplinarily untidy implications. In the case of philosophy, the conception of expertise as “embodied cognition” (p. 194) opens the door not only to phenomenological analysis but, by extension, to its treatment from sociological perspectives—a point emphasized both by likening the book’s divisions to social actor categories and by its sociological contributions. In “The

Third Wave of Science Studies: Studies of Expertise and Experience,” H. M. Collins and Robert Evans propose that science studies has so far consisted of a first wave, which conceded scientific authority its claims to knowledge and truth, and a second wave, which demystified scientific authority. They propose that a third wave of science studies would do well to attend to the “pockets” (p. 54) of “experience-based expertise” (p. 42), found outside the core groups of certified experts, that can and ought to participate in technological decision making.

For scholarship more generally, inquiry into expertise may raise contextual questions about the relevance of the scholar’s own expertise. This could perhaps be termed the tar-baby effect. Reflexive occasions are accordingly found in the book, most notably in the case of Collins and Evans, who task sociologists with the need to take their own expertise seriously (p. 43) and suggest “a duty to make history as well as reflect on it” (p. 45). In this light, John Hardwig’s claim that “rationality sometimes consists in refusing to think for oneself” (p. 328) would appear to reside snugly within the first wave of science studies. One is tempted to note other instances of the tar-baby effect, such as Brewer’s proposal that the same person will need to possess legal authority and scientific epistemic competence if the U.S. legal system is to “satisfy its own just intellectual aspirations” (p. 149) and Peter Singer’s suggestion that if moral philosophers are not generally “better suited” than nonphilosophers to reach “the right, or soundly based, moral conclusions . . . one might wonder whether moral philosophy was worthwhile” (p. 189).

The Philosophy of Expertise is worthwhile because of the subject matter, because it contains a number of engaging chapters, and because the contributions tend to engage one another. While the organization involves overlaps and may invite the reader to second-guess placement of some of its chapters, this is only a minor distraction. Overall, this stimulating collection is crisply introduced and thoughtfully compiled, and it succeeds in setting the stage for the next wave of studies of expertise.

ERIK FISHER