BOOK REVIEWS / COMPTES RENDUS

The Politics of Evolution: Morphology, Medicine and Reform in Radical London
Adrian Desmond
Chicago: University of Chicago Press, 1989. x + 503 pp. N.p. (cloth)

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Why did Geoffroyan anatomy and Lamarckian evolution dominate London medical science in the 1830s, when they were adopted by reformers wishing to democratize such institutions as the Royal College of Surgeons? Why were these theories rejected by the "governing class," the Oxbridge Paleyiite Anglicans? Desmond argues that they flourished where they were politically useful. The Lamarckian model of relentless, democratic ascent, of "power-driven from below," provided a natural legitimation for reform. By contrast, the Paleyiite alternative, in which an omnipotent Deity intervened directly to create new species, promoted the "aristocratic ideal of a downward-delegating authority" (p. 107).

These are loose analogies, at best. And although Desmond speaks of the "cultural implications of the competing . . . anatomies" (p. 373) and of the "binding legalistic requirements" which the new sciences "entailed" (p. 198), he does not mean *logical* entailment, for he acknowledges that their "social meanings . . . were . . . contingent and not logically inherent" (p. 378). The conservatives *could* have been Lamarckians.

In place of an objective, *logical* connection, Desmond tries to find a *social* link, with a force rivalling logic. He tries to illuminate it with a mixture of mechanical, medical and mercantile metaphor: "[W]hat . . . riveted the contingent political and scientific aspects . . . together was the disputes engaged in [between reformers and] conservatives. These . . . kept the camps polarized ensuring that [participants] supported the socio-scientific packages in their entirety" (p. 130). It was like subliminal advertising: the conservatives' distaste for the reformers' politics spread by association to their science. But why were things packaged this way in the first place? Why were reformers Geoffroyans and Lamarckians? Geoffroyan anatomy was like the common cold: "in the medical societies . . . Geoffroyans rubbed shoulders with . . . moderate [reformers]" and the "new anatomies thrived" in the presence of an "infectious radicalism" (p. 197).

Desmond's epidemiology seems to me mistaken. Shoulder-rubbing often produces friction, debate. Desmond ignores the scientific debates taking place *within* the opposing political camps. For example, not all conservatives were Paleyiite Divine Interventionists. William Whewell, a conservative Cambridge divine, argued that God acts not directly but through natural law. (See my "Baden Powell and the Whewell Legend," *Annals of Science* 47 [1990], 301-312). For Whewell, as for the radicals, nature was subject to binding, legalistic requirements; but Desmond, who sees only mutually exclusive packages, portrays him as a Paleyiite (pp. 63-64, 172-173).

If we deny that political and scientific ideas had to come in complete, distinct packages, Desmond's question remains. Why was evolution to be found in the reforming medical schools, but not in Oxbridge? Desmond cannot, in the end, answer this and he thus makes clear the deficiencies of the so-called Strong Programme in the sociology of science, with which he has close links. This school denies that ideas, scientific theories, are "autonomous entities with power or influence over . . . minds" (Barry Barnes, *T.S. Kuhn and Social Science* [Macmillan, 1982], p. 8). Desmond is determined to have no "truck with the old 'internalists' who wrenched science from its social context and wrote ghostly histories of disembodied ideas" (p. 21).

Though he writes as if his main historiographical rival is the old-fashioned Baconian inductivist, Desmond's real opponent is Karl Popper, who argues that fallible theories, intellectual problems and critical arguments do have an existence, a status, somehow separate from, and independent of, subjective thought processes, and a capacity to influence the course of history.

In limiting himself to social forces, Desmond has ensured his project will fail. We see this clearly where he summarizes his argument (pp. 378-380). If the "social meanings of the sciences were local and contingent," why did Geoffroy and Lamarck flourish among medical democrats? Because, the author answers, "the medical manufactures were the original warehouses of this imported republican science" (p. 379). This merely restates the problem: the medical schools, not Oxbridge, imported Lamarck. But why? Because, Desmond continues, "low status medical teachers were attempting to raise their 'professional stock' by engaging in polemics with the Paleyiites" (p. 380). Perhaps, but not just any polemics would do: why, again, were Lamarckian polemics appropriate?

This is as far as Desmond can go within the Strong Programme and, in the lengthy paragraph on p. 380, he simply offers more obfuscating politico-economic metaphor: "The new knowledge was being sold on the strength that it would provide the up-and-coming GP with scientific credentials" (p. 380). But why did the buyers think Lamarck would do the trick? Here we can almost see a ghostly "internal" explanation struggling to emerge and organize Desmond's welter of social details. The ideas themselves must have had a promising *intellectual* status. They were, perhaps, able to resolve anatomical problems, a preoccupation in the London medical schools. Oxbridge Anglicans paid more attention to the fossil record where the deficiencies of Lamarck were evident. Desmond himself does say that the imported science "had medical value" (p. 20), but by ruling out a *detailed* study of its intellectual status, he has deprived himself of the explanation he needs.

Neighbourhood Tokyo
Theodore C. Bestor
Stanford, California: Stanford University Press, 1989. xvi + 268 pp. + appendices. $35.00 (cloth)
Crafting Selves: Power, Gender, and Discourses of Identity in a Japanese Workplace
Dorinne K. Kondo