## **Book Reviews**

Shelley's novel Frankenstein of 1818, in which a scientist creates human life, and it turns on him in revenge. The story has been retold over and over through the succeeding two centuries in novels, films, cartoons and newspaper headlines; it has become a myth whose horrors can be evoked in a single word, a name. Turney shows how the myth shaped—or perhaps reflected—public response to mechanistic bioscience. Events from Jacques Loeb's artificially fertilized sea-urchin egg, to the eugenics movement, to the first "test-tube baby" were interpreted through Mary Shelley's imagery as shocking and threatening. One has to add the present campaign against "Frankenfoods" to his list of negative imagery of genetic science.

Turney's image ties together an account of how science looks from outside the profession; it belongs to that more demotic historiography of science that has ceased to privilege science alone, and looks at its public constituency as well. However, his image predisposes him to find fear and loathing in the public sector, set off against a gung-ho enthusiasm from the scientists, most exquisitely shown in the cartoons he has found. But a popular view is not confined only to lay culture. The scientists too live in society: imagery and role-playing may affect their choice of objects, and their projects are subject to political decisions. The gung-ho-ness may be rhetoric aimed at persuading their granting bodies that Frankenstein was a good man after all. It is also possible to find other kinds of response to bioscience: a recent New York Times contained a very sympathetic article on two couples' attempts to conceive a child who was a perfect genetic match, in order to supply stem cells to a sibling—a Frankensteinian problem if ever there was one.1 Emily Martin, too, who interviewed the citizens of Baltimore about their views of the immune system, found them to be rather sympathetic to the T cells, personified as "Mr T", and his gallant efforts against the HIV virus.2 Popular

culture is not homogeneous nor does it see science through a one-way glass.

These reservations are really no more than responses to a delightful book that evokes in a reader the need to answer back. This is one of the reasons it has been put on the syllabus of 'Good Breeding', the Open University's course on the eugenics movement.<sup>3</sup> The organizers are sure the students will want to read it, and will want to discuss what they have read.

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<sup>1</sup> Lisa Belkin, 'The made-to-order savior. Two families, two sick children, one revolutionary solution: technology that allows parents to conceive a donor child who is a perfect genetic match', *New York Times Magazine*, July 1, 2001: 36-48; 62-3.

<sup>2</sup> Emily Martin, Flexible bodies: tracking immunity in American culture from the days of polio to the age of AIDS, Boston, MA, Beacon Press, 1994.

<sup>3</sup> James Moore, *Good breeding: science and society in a Darwinian age*, Study Guide A426, Milton Keynes, The Open University, 2001.

## James F Crow and William F Dove (eds), Perspectives on genetics: anecdotal, historical, and critical commentaries, 1987–1998, Madison, University of Wisconsin Press, 2000, pp. 734, £16.95, US\$19.95 (paperback 0-29916604-X).

Crow and Dove launched a new feature in the American journal, *Genetics*, in 1987. As this book's subtitle suggests, the idea was to commission historical essays, commentaries, and reminiscences. This volume reprints the 140 essays that constitute the first twelve years of their feature.

As expected, the range is vast in scope and quality. Reminiscences describe mentors, research groups, and famous congresses. Retiring workers put their careers in perspective. Efforts are made to capture particular moments in the profession. The origins of specialities are described. Key finds are celebrated. In total, the authorship is diverse: there are 106 contributors. Few write more than one essay. The most frequent authors are: Crow (26 essays); Dove (6); Joshua Lederberg (5); and Franklin Stahl (5). Overall, most contributors are working geneticists, though a few professional historians contribute pieces on their special interests. There is much to enjoy in this anthology. But reservations are more important.

The book's publicity suggests these essays "cumulatively are a history of modern genetics research and its continuing evolution". I think not. To be sure, there are many wonderful episodes recounted and many dedicated researchers justly praised. But because the original interest was retrospection, readers of this anthology will not find discussions of post-1980 trends in genetics. Likewise, the overall focus is Anglo-American. Negative and dissident voices are rare. Failure and conflict have a small place. A great deal of the recollecting offered by non-participants derives from third and fourth hand knowledge. Errors of fact abound. Many conclusions have been superseded. Great swaths of the field go unmentioned. Science and society connections are few.

Best uses for this anthology are two. First, it offers a heritage for genetics, not a history. This provides science studies scholars with a splendid and compact opportunity to examine how members of a discipline construct their past and put it to work in their present. Second, I have already seen this anthology assigned in university courses on the history of genetics. Alone it is not enough and should be complemented with original sources like that provided by Robert Robbins' e-library on genetics in the "Electronic Scholarly Publishing" project <www.esp.org>.

I also have some frustrations with the assembly of this anthology. First, the

articles carry no citations to their original volume and page. This forces users back to the original journals for basic publishing information. Second, the presence of an index (rare in anthologies these days) is commendable, but the result is not. It in no way helps readers access relevant essays. Third, the arrangement is chronological, which seems sensible. However, the editors also should have provided thematic links through the series to help readers. No one knows better than they how these essays interconnect as a sequence.

Most important, the introduction is a disappointment. It is less than one page. This was a golden opportunity to describe how their project evolved and to offer impressions on the process to which they were so committed. As commissioning agents for the series, certainly they had goals and expectations. Were these reached? What negotiations moved this process along? How did their attitudes evolve? Were certain messages intended when commissioning particular essays? How did they handle authors clearly pressing personal agendas? On such analytical questions, the editors remain silent. We are asked to accept this anthology as a passive accumulation of knowledge. Everyone knows there's more to the story than this. I can only hope such stories will appear in future instalments of this feature in the pages of Genetics.

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Arne Hessenbruch (ed.), Reader's guide to the history of science, London and Chicago, Fitzroy Dearborn, 2000, pp. xxix, 934, £95.00 (hardback 1-884964-29-X).

This volume is best understood as a guide to how the profession approaches its intellectual work. Hessenbruch's goal has