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Recoding Nature is an unabashedly critical collection of essays on genetic engineering. The foreword by Mae-Wan Ho, a British life sciences academic and Director of the not-for-profit Institute of Science in Society, sets the tone: ‘The mechanistic science of genetic engineering coupled with today’s pervasive monetary culture is ensuring that the gross violation of nature has become a matter of routine, rather than public outrage’ (p.15). The book is critical of GM foods, genetic applications in health and social policy, western medicine, western science and capitalism. It is sympathetic to organic food, Green politics, social movements and indigenous cultures.

Many of the authors come from a ‘social studies of science’/ ‘environmental studies’ background. Discipline backgrounds include sociology, politics, philosophy and law. Several authors come from a science background. There are also several activists. In other words, the authors are diverse – but only up to a point.

The book is divided into four parts. Part 1 is about ‘GM culture and politics’. There are three articles here. The first, by the editors, is about the narrative of biological determinism, associated with the new genetics. The second, by Hugh Campbell, presents a case study of the Royal Commission on GM foods in New Zealand, and how organic crops became the acceptable face of critique. The third article – by Richard Hindmarsh and Kees Hulsman - discusses the deep philosophical divide between those who support GM foods and those who oppose them: more on this article later.

Part 2 is entitled ‘Ecology, GM food and organics’. There are two articles here by biological scientists – Philip Davies, a geneticist, and Judy Carman, a biochemist - on the science of GM food. They made me feel nervous. Another article by a team of sociologists addresses consumer views of organic and GM foods. They emphasise the ambivalence of consumers, fuelling the growth of the organics industry. The fourth article by Scott Kinnear, spokesperson for Biological Farmers of Australia, is essentially an advocacy piece for the organic paradigm.

Part 3 contains four articles on ‘Human Genetics – the future?’ These articles are all by authors from the social sciences and humanities. Rosaleen Love writes about clones and designer babies, and the forlorn ambition of ‘deleting sadness’ from human experience. Adrienne Hallam addresses the political economy of genomics and health care in very broad terms. Shirlene Badger presents a case study of a genetic testing website, arguing that such testing may be the thin edge of the wedge for genetic medicine. Richard Hil and Barbara Hocking write about the eugenics tradition in relation to crime, and how the new genetics promotes a revival of this tradition.
Part 4 is entitled ‘Biocolonisation to activism’. There are three articles here. Jessica Hutchings – an activist herself – talks about the Maori tradition in relation to GM. She warns: ‘Science is occurring at the expense of our Earth Mother’s well-being’ (p.191). Monica Seini’s contribution is a critique of bioprospecting in the Australian context. Finally, Sarah Hindmarsh – another activist – describes the experiences of the People’s Caravan 2000, an oppositional event in Asia. It concludes with the confident statement that the ‘strong grassroots movement against industrial agriculture was gaining momentum in Asia and the growing voices of the People’s Caravan are shouting louder than ever’: ‘Resist! Resist! Resist!’ (p.220)

The timing is certainly right for a book such as this one. Every day the media breathlessly announce great breakthroughs in the life sciences, leading towards a future where we eat as much as we want, never get sick and live forever. We desperately need some critical analysis. The book does make the case for critical perspectives against the bloated claims of the new genetic paradigm. In particular, Davies and Carman set out the case against genetic foods in very clear terms, and Love makes a fundamental philosophical point about the trajectory of western medicine in elegant style.

From my point of view, the article by Richard Hindmarsh and Kees Hulsman – in the first section of the book – is the most interesting. It clarifies in explicit terms the philosophical gulf between the protagonists in the GE debate. On the one hand, the critics ‘claim that GMOs [genetically modified organisms] lack intrinsic value’: this is ‘because, as technically mediated organisms, as unnatural transgenic ones, they are not an inherent part of nature or evolution, and therefore any attempt to place them within nature is misplaced’ (p.64, original emphasis). On the other hand, ‘for most scientists and policy makers within the dominant scientific paradigm, intrinsic values are unobservable phenomena belonging to pre-Enlightenment worldviews that modern science sought to displace’ (p.64). In this context, it is not surprising that the protagonists in this debate often talk past each other. There is little scope for persuasion. People either believe in the scientific worldview, or they do not.

Perhaps the philosophical underpinnings of the debate explain why this is ultimately a disappointing book. In general terms, the book is a position statement for non-believers. It is often predictable, and lacks curiosity. Sometimes it is didactic. There is limited engagement between the paradigms. I am sure that the book will find enthusiastic reception from those who already accept its basic premises. I do not think that it will change anybody’s mind though. For my part, I finished this book in the same state of mind as when I started: cautious, but uncertain.

Notwithstanding the philosophical gulf between the protagonists of the debate, there is scope for engagement between their positions. Not all critics believe that GMOs are intrinsically misguided: indeed, some would find this view a conservative one, even reactionary. (For my part, I was reminded of the conservative opponents of birth control one hundred years ago, who described birth control as a ‘revolt against nature’ and successfully restricted its availability.) Likewise, not all scientists reject intrinsic values – as this book demonstrates. After all, the authors themselves cite studies from the life sciences and employ methods from the social sciences as support for their position. If critical perspectives were not just reflexively critical, but reflexively self-critical, then they might also be more persuasive.