300 Book Reviews

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Angus McLaren, Reproduction by design: sex, robots, trees, & test-tube babies in interwar Britain (Chicago and London: University of Chicago Press, 2012), 248 pp., £38.50, hardback. ISBN: 978-0-226-56069-4

Angus McLaren has made a significant contribution to the history of sexuality over the last thirty-five years, particularly the history of reproductive health (abortion, contraception, and infertility). His beautifully readable and engaging writing style has made his work invaluable to those of us teaching these topics at the undergraduate level. He also tends to work in a geographically comparative fashion, moving quite effortlessly between the contexts of North America and Western Europe. His comparative approach remains unusual within the historiography of sexuality and adds further value to anything he writes.

Reproduction by Design is another illuminating and entertaining read. Its central argument is that in the earlier twentieth-century the reproductive body was the focus of significant cultural and political contention, and a key site in debates over the complex and troubling relationship between humans, machines and the environment. While this time around, McLaren appears from the title to offer a rather more circumscribed study – focusing purely on interwar Britain – there is in fact much comparative material to be found once you dive between the covers. It is also timely in its 'medical humanities' approach, relying heavily on novels, plays, films, and science fiction from the 1920s and 1930s. However, part of McLaren's argument is that 'science fiction' was created not simply by novelists and playwrights, but by eugenicists, birth controllers, demographers and doctors. Indeed, anyone talking about the future of sex and reproduction was effectively producing 'science fiction'.

The book advances on the uncontroversial basis that most depictions of the future' in scientific theories and popular culture were in fact crystallisations of current social concerns, rather than predictive of future trends. Interwar fears over 'modernity' thus stemmed in large part from the social upheaval that accompanied the First World War, with its sacrifice of individual freedom to the admirable but deadly emerging forms of technology. Aldous Huxley's *Brave New World* (1932) is simply the best known of the many writers of his generation who were debating the impact of the encroachment of science and industry on humanity: the road to unparalleled progress, or to death and destruction?

As the boundaries between human and machine, natural and artificial, appeared to be collapsing, McLaren argues convincingly that reproduction became a particular battleground for those anxiously debating the merits of modernity. Many of those writing about the relationship between capitalism, mass society, urbanisation and technology – most famously, Aldous Huxley, George Orwell and H.G. Wells, but many lesser known authors besides – were also debating the future evolution of sexual and family relations, and a perceived crisis in reproduction. Modern, mechanised society was increasingly being held responsible for producing both shoddy products and unfit families. The robot represented both the docile worker on which modern industry depended, and the unthinking drone whose uncontrolled reproduction posed a serious threat to social stability. Eugenic concerns implicitly or explicitly framed most accounts of the future of sex, gender, and reproduction: eugenics was either their best hope of countering the population problems which the forces of modernity had created or the worst example of the age's penchant for technological fixes.

Book Reviews 301

In *Reproduction by Design*, McLaren has produced a highly readable account of the complex relationship between technology, ecology and sexuality, and the reproductive dilemmas that accompanied modernity. Those interested in the modern history of science, reproductive technology and sexuality should find it a rewarding read.

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**Lawrence M. Principe**, *The Secrets of Alchemy* (Chicago, IL: University of Chicago Press, 2013) pp. v + 281, £ 17.50, hardback, ISBN: 978-0-226-68295-2.

The historiography of alchemy has undergone a sea change in the past few decades. As the pejorative label of 'pseudo-science' was abandoned, the alchemical tradition became an area of serious historical study. Scholars discovered new texts and archives, (re)edited and translated important documents, and unearthed hitherto unrecognised lines of development. This welcome historiographical turn, however, brought about one (and only one) drawback: except for the specialists, nobody else could have a clear glimpse of the current state of research. This is why scholars from various quarters began calling for a new synthetic survey of the history of alchemy. The book under review has now fulfilled this expectation. The author, Lawrence Principe, is one of the most distinguished scholars in the field. Combining his own research with a wide-ranging reading of old and new studies, he produces a reliable, up-to-date, and stimulating historical narrative. His prose is clear, jargon-free, and full of humour. Many references to German, French, and Italian scholarship indicate the book's freedom from any anglocentric bias.

Principe begins his story in Graeco-Roman Egypt, a region that gave birth to the so-called Leiden and Stockholm papyri, as well as the *Corpus alchemicum graecum*. In contrast to the practical nature of these writings, a form of art appeared around the beginning of the fourth century that consisted of transforming base metals into gold with substantial theoretical backups. This is what was to be called 'alchemy'. Chapter 2 of Principe's book gives an overview of the alchemical tradition in the Arabic world from about 750 to 1400. The art was first transmitted into that linguistic sphere around the beginning of the eighth century, again in Egypt. The early alchemical corpuses include the *Emerald Table* attributed to Hermes, the legendary founder of the art. Also worthy of note are a vast array of writings produced under the name of Jābir. The Jābirian authors set forth the Mercury-Sulphur theory, and the quantitative method of producing gold with the use of an elixir.

Chapter 3 outlines the development of alchemy in the Latin Middle Ages. The west began producing its own alchemical writings from the the mid-thirteenth century. One of the most salient is the *Summa perfectionis* written under the name of Geber (Jābir). The work, probably composed by the thirteenth-century Franciscan Paul of Taranto, explains the process of transmutation on the basis of quasi-particulate matter theory. Around the same time, some philosophers started to doubt alchemists' ability to produce gold. It is in reaction to this increased suspicion that alchemy began securing its legitimacy by forging a strong tie with Christian dogmas. The Christianisation was fostered by authors such as pseudo-Arnald of Villanova and John of Repescissa. John also expanded the goal of alchemy to the preparation of medicines. By the start of the sixteenth century,