

within the numerous scientific research centers that dotted the colonial landscape. We are yet to have a critical history of South Africa's influential Institute for Medical Research. How was science practiced? How did ideas about such things as acquired resistance to malaria or racial susceptibility to tuberculosis move from one colonial setting to another—from India to Africa and back again, or to and from the metropole and America? How did these flows of knowledge shape Western scientific understanding, and in turn public health policies in colonial settings? While the essays by Marks and Klaussen touch on these issues, they do not explore them in any depth. The current volume therefore shows both the potential for historical work on colonial science, medicine, and technology, and its current limits.

Randall M. Packard
Johns Hopkins University

Mary Lynn Stewart. *For Health and Beauty: Physical Culture for Frenchwomen, 1880s–1930s*. Baltimore: Johns Hopkins University Press, 2001. xii + 274 pp. Ill. \$42.50 (0-8018-6483-6).

The product of more than a decade of research, writing, and revising, this book surveys a vast amount of prescriptive literature in the fields of female hygiene, physical education, and occupational medicine. Mary Lynn Stewart supplements her analysis of medical opinion with extracts from women's memoirs and provides useful contextual information drawn from important works in French social history.

The book is divided into three parts. Part 1, "Carnal Knowledge," reviews how sexual dichotomies took root in the natural sciences and were transmitted to the public from the eighteenth century through the early twentieth century. It also follows the campaign carried out by the state and commercial interests to instill Pasteurian hygienic precepts in homes and schools. Part 2, "Reproductive Rhythmn," traces medical experts' depictions of the female reproductive cycle from menarche through maternity to menopause, noting the cultural messages underlying their emphasis upon purity in puberty, their ambivalence about pleasure in procreation, and their association of menopause with loss. In part 3, "Physical Performance," Stewart discusses the development of physical education curricula and the women's sports movement, before moving on to an analysis of the gender and class bias running through the emerging discipline of occupational and industrial hygiene.

Elaborating on the theme of gender bias, Stewart reveals how the commitment of most French physicians to pronatalism and their fears of degeneration after the military defeat of France in 1870 led them to ignore hazardous working conditions for women that did not directly threaten their reproductive systems.

She emphasizes the irony of the pronatalist campaign's undermining by cultural contradictions that forbade explicit discussions of anatomy, sexual intercourse, or birth, even in girls' hygiene classes, and that inclined physicians to describe labor as necessarily very painful.

An analysis of prescriptive literature of the sort that Stewart attempts here is always difficult, because although one has the actual texts in hand, identifying their authors and measuring their influence is a daunting task. Stewart presents us with a dizzying array of opinions of medical experts on a variety of subjects, but she provides little guidance for assessing their significance. Occasionally we are told an author's professional standing, or how many copies of a particular work were sold, but it is often unclear whose opinion prevailed at any time and why. Stewart suggests that appeals to women's desire for beauty as well as health led to greater success in advertising the products endorsed by hygienists, but she leaves unresolved the larger question of the standards for ascertaining truth in medical science at the time.

The extent to which the advice of medical experts affected people's behavior remains open to speculation. In the areas of physical education and occupational hygiene, Stewart documents the gap, first between medical experts' ideas and legislation, and then between legislation and enforcement. In the areas of hygiene and sexuality, she notes that bourgeois women bathed more often but gave birth less often during the time period considered.

For Health and Beauty fills a gap in the social history of medicine in France and, by surveying so many topics, suggests valuable avenues for further research. Stewart notes the increase in women's enrollment in French science faculties from 0 in 1867 to 1,778, or 20 percent of all students, in 1934. She comments on occasions when some women physicians disagreed with some of their male colleagues—viewing menopause, for example, more optimistically. Still, very few women endorsed birth control. It would be interesting to trace more systematically women's early experience as physicians and their influence on the profession. Stewart also observes similarities and differences between French medical opinion on a particular subject—as, for example, on the effects of higher education on women's reproductive role—and the opinion of American or English physicians. Here again, a separate study contrasting French with Anglo-American literature would be revealing.

Lindsay Wilson
Northern Arizona University