Feminist Cultural Studies of Science and Technology , and: *The Male Pill: A Biography of a Technology in the Making* , and: *Messengers of Sex: Hormones, Biomedicine and Feminism* (review)

Siân Beynon-Jones

WSQ: Women's Studies Quarterly, Volume 37, Numbers 1 & 2, Spring/Summer 2009, pp. 284-288 (Review)

Published by The Feminist Press
DOI: *https://doi.org/10.1353/wsq.0.0134*

MAUREEN MCNEIL'S *FEMINIST CULTURAL STUDIES OF SCIENCE AND TECHNOLOGY*
NEW YORK: ROUTLEDGE, 2007

NELLY OUDSHOORN'S *THE MALE PILL: A BIOGRAPHY OF A TECHNOLOGY IN THE MAKING*
DURHAM: DUKE UNIVERSITY PRESS, 2003

CELIA ROBERTS'S *MESSENGERS OF SEX: HORMONES, BIOMEDICINE AND FEMINISM*
NEW YORK: CAMBRIDGE UNIVERSITY PRESS, 2007

SIÂN BEYNON-JONES

How can feminist theory be brought into critical, yet productive, dialogue with science and technology? While the books reviewed in this essay deal with different empirical subjects, and draw on a range of theoretical approaches, their convergence around this question generates a number of cross-cutting themes. One that is central to all of them is the potential generated by working across the boundaries of different disciplines. This issue is explored in detail by Maureen McNeil in *Feminist Cultural Studies of Science and Technology* (hereafter *FCSST*). Although her book develops a distinctive approach to the study of science and technology, McNeil eschews the kinds of "discovery narratives" (1) used to frame discussions of "new" ideas in both science and other academic disciplines. Aware that such narratives obscure their own histories as well as many of the voices that have given rise to them, she begins by tracing the multiple disciplinary approaches that have contributed important resources to feminist cultural studies of science and technology: cultural anthropology, literary studies of science, studies of visual culture, British cultural studies, and feminist science fiction studies (chapter 2).

In an engaging and intentionally autobiographical manner, the main body of the book goes on to provide a series of case studies through which McNeil reflects on the experience, the ideas, and the tensions generated by doing feminist cultural studies of science and technology. The cases she considers encompass the processes through which scientific "heroes" (and anti-heroes) are made; the "stories" that it is possible to tell about so-called new reproductive technologies (NRTs); and the ways in which science and

[*WSQ: Women's Studies Quarterly* 37: 1 & 2 (Spring/Summer 2009)]

technology have operated, and continue to operate, as "spectacles" that publics actively watch and consume. The book's division into three parts based on these methods of meaning-making ("Making heroes," "Telling stories," "Witnessing spectacle"), and its empirical focus on popular cultural forms, represents a deliberate and convincing challenge to "the assumption that science is simply what scientists do, say or write" (10).

Another theme that *FCSST* highlights is the way in which particular perspectives are rendered silent or invisible by popular cultural representations of science and technology. Many of McNeil's case studies illustrate the neglect or active marginalization of feminist perspectives, as well as of (particular) women's voices and bodies. While this issue is pertinent throughout the book, it is perhaps most salient in chapters 5 and 6, where McNeil also grapples with the emotional significance of science and technology as she analyzes the stories that are (or could be) told about NRTs. Her analysis centers on the tension that often pervades feminist research on this subject; how to recognize the significance and longing that some women invest in science and technology while finding a place from which to critically analyze the forms that science and technology take. This problem is addressed more explicitly in chapter 8, where McNeil reflects on her own position as a feminist analyzing science and technology, and the difficulties of developing a perspective that affords "critical distance" (140), but which does not simultaneously become overly negative or "elitist" (141). Although she finds no easy answers to her questions, in many ways *FCSST* is a book that reaffirms the importance of continuing to search for them.

There is a striking contrast between the reflexive, autobiographical voice that McNeil employs in *FCSST* and the position that Nelly Oudshoorn adopts as "biographer" of *The Male Pill*. However, while the analyst disappears almost entirely from view in this second book, the gender politics of *The Male Pill* occupy center stage throughout Oudshoorn's fascinating account of this technology's troubled history. She begins by highlighting the gendered division of labor produced by existing contraceptive technologies, which overwhelmingly target women's bodies. Oudshoorn suggests that this state of affairs helps to stabilize the assumption that women "naturally" bear the responsibility for contraception, as well as the health risks associated with many of the contraceptive technologies available (for example, the female pill). The central aim of *The Male Pill* is to destabilize this assumption, by revealing the social and cultural barriers that have made it difficult to produce hormonal contraceptives for men.

Like *FCSST*, *The Male Pill* reveals the insights generated by working across and bringing together different bodies of theory. In the first half of the book, Oudshoorn draws productively on a concept often used within Science and Technology Studies (STS) to study technological change—"sociotechnical networks" (11). She employs this concept to illustrate the relationships (between experts, industry, social movements, and so on) that have been built up around the research, production, and distribution of hormonal contraceptives for women. This enables her to convey the hard social and material labor that various actors have had to engage in to establish alternative sociotechnical networks around the research and development of contraceptive drugs for men.

While the concept of sociotechnical networks is clearly useful, Oudshoorn argues that it is also necessary to explore cultural barriers to the development of male contraceptive drugs. By addressing this issue, she reveals the insights that gender theory has to offer STS in its attempts to explore the dynamics of technological change. Drawing on Connell's concept of "hegemonic masculinity" (Connell 1987), she highlights two critical misalignments between the idea of male contraceptives and normative gender identities. First, as outlined above, taking responsibility for contraception is strongly associated with femininity. Second, an important component of hegemonic masculinity—male (hetero)sexual performance—is strongly linked to male fertility.

Oudshoorn goes on to suggest that the construction of the gender identities of male contraceptive users is crucial in determining the "cultural feasibility" (11) of this technology. In the second half of the book she explores this process in depth, employing Butler's performative theory of gender (e.g., Butler 1990, 1993) in order to emphasize the potential for gender norms to be challenged, and changed. Using a rich body of empirical data, she reveals that the construction of "the male contraceptive user" has been an incredibly complex, and contested, process that has taken place in a wide variety of locations (for example, family planning clinics, the print media, clinical trials). While her analysis addresses a number of interesting issues, its central message is that, if gender identities can be successfully renegotiated, male contraceptives could yet become a "culturally feasible" technology.

Sex hormones are central to the story of *The Male Pill*. However, Oudshoorn's focus is on human actors' attempts to manufacture and promote them as a particular kind of technological artifact, and the ways in which this process is bound up with the negotiation of gender identities. Adopting

a very different perspective in *Messengers of Sex*, Celia Roberts is interested in foregrounding the activities of sex hormones themselves. She notes that biological arguments concerning these activities are mobilized time and again in order to divide humans into two kinds of bodies, male and female, and to justify their differential treatment. Like other feminist theorists, Roberts is concerned that dismissing biological arguments about bodies as mere "social constructions" is to leave the power of "the material world" untouched and intact, while reproducing a dichotomy central to scientific discourse, namely, the nature/culture or biological/social split. By confronting the material activities of hormones, and developing a feminist perspective from which to theorize them, her book produces the most challenging and innovative ideas of all of those reviewed here.

In developing a theoretical framework for her analysis, Roberts integrates three key approaches: feminist theories of the body, STS's theorization of nonhuman actors, and Foucauldian approaches to the history of biology and biomedicine. Her book begins by applying these theoretical lenses to the history of sex hormones and reveals how their "discovery" incorporated and perpetuated earlier theories of sexual difference. She then goes on to demonstrate how this history materializes in several contemporary biological discourses about sex hormones, including their role in the development of sexed bodies and behavior, in hormone-replacement therapies, and as environmental toxins. Her analysis reveals how dominant discourses persistently position sex hormones as simple determinants of sexed bodies/behaviors that are differentiated in terms of heteronormative, hierarchical, binaries. In the case of hormone-replacement therapy, Roberts also argues convincingly that "notions of racial and class differences are entangled with contemporary versions of the two-sex model" (128). However, she suggests that because their very existence depends on, and is inseparable from, models that are simultaneously cultural, these problematic biological discourses automatically create space for feminists to re-vision sex hormones' material activities.

Far from returning us to the realms of biological determinism, *Messengers of Sex* rescues sex hormones from their depiction as presocial objects "discovered" by biology and positions them instead as active agents whose interactions with other forms of agency (human and nonhuman) across "bio-social systems" (22) produce particular kinds of bodies, at particular points in time. In spite of the apparent complexity of this idea, Roberts's accessible style, in combination with the empirical examples she provides, makes her central argument very appealing. By treating sex hormones as

relational actors, she reveals that it is possible to reassess the political basis of our collective interactions with them and to create opportunities for new kinds of bodies, and ways of living, to materialize (199).

SIÂN BEYNON-JONES is a doctoral candidate in Science and Technology Studies at Edinburgh University's Research Centre for Social Sciences. She is currently researching the perspectives of health professionals who are involved in abortion provision in central Scotland.

WORKS CITED

Butler, Judith. 1990. *Gender Trouble: Feminism and the Subversion of Identity*. New York: Routledge.

———. 1993. *Bodies That Matter: On the Discursive Limits of "Sex."* New York: Routledge.

Connell, Robert, W. 1987. *Gender and Power*. Cambridge, U.K.: Polity Press.