## Space Oddities: Women and Outer Space in Popular Film and Culture, 1960–2000.

By Marie Lathers. New York: Continuum, 2012. Pp. ix+240. \$39.95.

JANUARY 2013 VOL. 54 Can one trace the social and cultural evolution in American conceptions of women's abilities in the second half of the twentieth century by analyzing the changing views of women and outer space, from the trapped genie frustrating NASA in television's *I Dream of Jeannie* (1965–70) to the depiction three decades later of an ambitious female radio astronomer decoding a mathematical alien message in the major motion picture *Contact* (1997)? And how did those changes parallel the realities of actual American women participating in spaceflight? In this analysis of women and outer space in fiction and reality, literary scholar Marie Lathers links those two questions, arguing that launching actual American women as astronauts in the 1980s and 1990s "required not only fuel but [also] revisions of western binaries and thought patterns": a shift from viewing women as problematic or alien to depicting "a nurturing, competent, and sane woman in space" (p. 5).

Lathers uses "close literary analysis" (p. 11) to trace a popular culture and literary arc originating in the stymied history of the Lovelace women (female pilots tested for astronaut fitness by the Lovelace Foundation around 1960) and the containment of female power illustrated by I Dream of Jeannie. The groundedness of astronauts' wives in television and film, and books such as Tom Wolfe's The Right Stuff (1979) and Robert Tine's The Astronaut's Wife (1999), highlights by contrast the transition to women associated with actual spaceflight. The next chapter considers the use of chimpanzees as human surrogates in early spaceflights, linking that topic to both the larger question in the early years of the space age about who would occupy spacecraft (chimps? women? men?) and the image of the female primatologist in the 1970s in the midst of second-wave feminism. Next, Lathers addresses the clothes that women wear in space. This includes both actual spacesuits and the revealing wardrobe choices made for scantily clad space women, aliens, and alien-fighters alike (think of both Barbarella [1968] and Alien [1979]). The book's endpoint is Lathers's analysis of women making first contact in space (Star Trek: First Contact [1996] and Contact [1997]).

Lathers sometimes assumes that the reader has seen what she's viewed, jumping straight into analyses in her introduction, for instance, without describing the films fully. Most American readers will probably have seen the films she references, but one of the perils of popular culture analysis is how quickly films and television pass out of currency. For undergraduates reading her book, films that are more than ten years old may have been before the students' time.

Trained, by her own accounting "as a literary scholar" (p. 11), Lather builds the arc of change that she describes using close analyses. For a his-

torian reading the book, in places the subject cried out for a wider historical frame. For instance, Lathers suggests that "the seeds, both economic and social" of women's liberation and the civil rights movement were "planted in the 1950s" (p. 10), setting up her assertion that women appeared in space (both in fiction and reality) only as the movements of the 1960s also created public space for them on the ground. But Buck Rogers's sidekick Wilma Deering, created in 1928, owed much to the fin-de-siècle New Woman and the decades-long fight for women's rights starting in the nineteenth century. Given how well the history of second-wave feminism and women's changing status has been documented elsewhere, Lathers's book does not address the broader real-life historical context supporting her narrative arc (such as equal-opportunity employment protections or Title IX).

Given the potentially enormous scale of her topic, Lathers narrows the examples in ways that focus the book but leave the reader wondering what close reading she might have offered for some very popular pieces of space film and television. For instance, Lathers begins in the 1960s, arguing that other scholars have already sufficiently dissected the 1950s. Likewise, she omits the *Star Wars* franchise and touches only briefly on episodes from *Star Trek* television and film, both rich sources for gender readings.

The book's fluid analyses of the interrelationships of examples may frustrate readers less attuned to Lathers's literary interplay of juxtaposed texts. But her core assertion that "the ways that women in space have been depicted in popular film and literature parallel the way [that] government officials, scientists, and the public have reacted to the idea" (p. 7) is a useful one for historians of science and technology. Far from being neutral or empty, Lathers argues, "space has . . . already been colonized by gender" (p. 210).

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## Instrumental Community: Probe Microscopy and the Path to Nanotechnology.

By Cyrus C. M. Mody. Cambridge Mass.: MIT Press, 2012. Pp xi+260. \$36.

The scanning-probe microscope, and one particularly successful variant, the scanning-tunneling microscope (STM), provide the context for this timely study. The real focus, however, is not the instrument itself but the community of "probe microscopists" who developed and applied this technology from the 1980s to create the new science of nanotechnology during the 1990s. As the author notes (p. 5), popular historical accounts that focus on the hardware fail to register the role of microscopists in making the new tools economically and scientifically important.