

When the astronaut is a woman

Book

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Introduction: When the astronaut is a woman: beyond the frontier in film and television

Lorrie Palmer and Lisa Purse

When US President John F. Kennedy addressed Rice University in Houston, Texas, on 12 September 1962, he presented his ideas about the conquest of space and the ongoing race against the Soviet Union in uniquely ideological terms. Standing in a sports arena, he deployed the evocative metaphor of the ‘frontier’ to new technology, to American football, to maritime adventure, to mountain climbing, to science and education, to power and progress, and to money. The full text of his speech is posted on the website of the National Aeronautics and Space Administration (NASA). In it Kennedy speaks of rocket technologies with the force of fetish: ‘We have felt the ground shake and the air shattered by the testing of a Saturn C-1 booster rocket, many times as powerful as the Atlas which launched John Glenn, generating power equivalent to 10,000 automobiles with their accelerators on the floor’ (Kennedy n.p.). This rhetoric of the power, speed and acceleration of machines suggests a homosocial site in which *men* are the ones who build and fly and risk and explore.

The resulting imagery gave rise to a foundational myth in the era of spaceflight that owes its particular dimensions to another speech, the ‘frontier thesis’ delivered by historian Frederick Jackson Turner at the Columbian Exposition in 1893. Turner famously advanced the thesis that US democracy and character was indelibly formed by the frontier, the founding of a civilisation out of the wilderness. Pushing into the geographical frontier of the Wild West generated a cultural perception that the origins of ‘freedom, change, progress, democracy, equality, individualism, success, and manifest destiny’ (Opt 41) were embodied by the pioneers of that westward expansion; outer space was to be the next step in this lineage of conquest and exploration. As with the historical framework established in Turner’s frontier thesis, the story of spaceflight omits women and people of colour in favour of a raced, gendered pseudo-utopia in which white men brave the wilderness to establish a pathway that others may (eventually) follow. Our contemporary moment is only beginning to fill in the gaps of that narrative; many of the people who populate this recovered history have been previously unknown in popular culture and in the wider public understanding of spaceflight. Media makers of both mainstream and documentary cinema are telling these stories using creative techniques that range from the classically structured to the poetic and expressionistic, utilising Hollywood star power, the archive and personal testimony. *Hidden Figures* (Melfi US 2016), a mainstream commercial release, reveals the untold story of the African-American women who acted as NASA’s human computers performing the complex mathematical calculations that made the Mercury flights of Alan Shepherd and John Glenn possible. The documentary *She Should Have Gone to the Moon* (Kubatta UK 2008) has traversed the film-festival circuit sharing the story of Jerri Sloan Truhill, an aspiring astronaut and member of the group of women pilots who became known as the Mercury 13. These women passed the same medical and psychological tests the male astronauts had undergone in a 1960s private research programme designed to assess the suitability of women for spaceflight. We interviewed the film’s documentarian, Ulrike Kabatta, for the introduction to this special issue of *Science Fiction Film and Television*, during which she told us about her ‘personal and romanticised’ approach to telling Truhill’s story as a ‘hybrid form, featuring factual events, archive footage, fictional constructions and performances’. Ten years later, a documentary currently circulating on Netflix, *Mercury 13* (Sington and Walsh US 2018), uses a combination of archive footage, interviews and creative reconstructions to situate Truhill and the rest of the women tested for spaceflight in 1960–1 within the larger ideological,

technological, political and institutional contexts of NASA, the U.S. government, the Cold War and the space race – all rendered through their underexamined gender dynamics.

Our film and television screens have always examined both science fact and science fiction, but only recently have they begun to disrupt the homogenising myths previously established by a range of earlier space narratives represented by sf television serials and feature films like *Flash Gordon* (multiple series, 1930s-1980s), episodic television such as *Star Trek* (US 1966-1969), 1960s-era educational films produced by NASA to build public support for the costly space programme proposed by President Kennedy in his Rice University speech and by commercial cinematic blockbusters from *2001: A Space Odyssey* (Kubrick UK/US 1968) to *The Right Stuff* (Kaufman US 1983) to *Apollo 13* (Howard US 1995) to *Space Cowboys* (Eastwood US 2000). This special issue takes as its premise that now is the time to move beyond the frontier of these significant but limited perspectives of the human journey from Earth to outer space. As evidenced by *Hidden Figures* and the documentary films described above, there is a shift underway in how cinema and television see that journey – and who is seen to participate in it. The *who* matters here. We believe the figure of the female astronaut best embodies the current shift in our perceptions of space – its exploration, its technologies, its dangers and its heroes.

The first female astronaut in sf appeared in 1889, in an Andre Laurie novel entitled *The Conquest of the Moon*. Gertrude Kersain wears a spacesuit (a first!) and explores the lunar surface on her own, making valuable scientific discoveries. She was followed by space heroines in other novels, such as George Griffith's *A Honeymoon in Space* (1900) and *The Moon Maker* (1915), written by Arthur Train and Robert Wood. The female astronauts in these tales are physically active characters whose intelligence frequently propels the action, and they continue on in print fictions into the 1920s, 1930s and 1940s (Miller). However, this representation of the female astronaut did not progress as it naturally might have (for example, through growing visibility and presence across film and television screens); instead, until recently, she was overtaken by the male astronaut in our popular fictions and, consequently, in the public imagination.

This special issue thus takes as its subject the current transformation of those fictions and that public imagination – and the real-world contexts that have made the female astronaut a marker of representational and cultural change. This junction of the real and the fictional is where documentary filmmaker Ulrike Kubatta positions Jerri Truhill, one of the Mercury 13 and the subject of *She Should Have Gone to the Moon*. In our interview with Kubatta, she described what she learned about Jerri's experiences as a pilot, wife and mother, caught between 'her ambitions and societal restrictions', which stemmed in part from a '1940s conservative Texas upbringing'. Kubatta's in-person and telephone interviews with Jerri underscore both the 'dilemmas and opportunities experienced by her generation of women, as she struggles with the conflicting demands of motherhood and work as a test pilot'. A talented storyteller, Jerri narrates her personal testimony, 'spanning desire, frustration and ultimately injustice', after NASA refused to admit women into the 1960s space programme. The theme of journeys – whether in dreams or in the exploratory act of filmmaking – became Kubatta's conceptual approach for presenting Jerri Truhill on camera, particularly since 'Truhill never fulfilled her ambition to travel into space, [so] she is left to exit the earth's atmosphere only via her imagination'. Kubatta weaves together fiction and nonfiction materials to explore her subject in her film, in much the same way as the contributors to this special issue. Kubatta constructs 'stylized vignettes' evoking 1950s air travel intercut with a 'suited figure' (the filmmaker herself, wearing a replica of Jerri Truhill's fitted white flight suit and helmet) walking the dunes that form the White Sands

National Monument. She found this ‘surreal’ landscape ‘an apt space to symbolise the Space Race’ while also conveying Jerri’s lost dream, whereby she is ‘in perpetual limbo and never reaches her destination’.

This liminal status points to the blurring of socially accepted gender roles that the Mercury 13 experienced in these early days of NASA and the Space Race. In *She Should Have Gone to the Moon* Kubatta describes the contrast between the femininity of Jerri’s home, with its ‘frills and handmade ceramics’, and her professional aviation career, during which she ‘had flown bombers in the middle of the night to test infra-red equipment’. Our cultural imaginary has often struggled to find a place for the female astronaut due to the persistence of a normative, and normatively policed, gender binary, leaving the women who play astronauts in sf as well as the remarkable real-life women who have finally become astronauts to bridge fiction and reality. Kubatta’s strategies of juxtaposition in her film are effective in illustrating the extent to which women’s presence in the space programme was impossible to either imagine or permit: her Truhill interviews and creative vignettes are interspersed with

fragments of archive footage, pulling the viewer back to the historical context of Truhill’s story. Images of men overseeing earthbound shuttles in the 1950s root the film in a time when space technology was still in its infancy; while excerpts from the educational film *Lift Off to Learning*, the history of space travel narrated by male astronauts, represents NASA’s official viewpoint.

NASA’s gendered perspective, as Kubatta explains, is summed up by the words of a NASA spokesman: ‘The thought of a US spacewoman makes me sick to my stomach. I’d prefer to send a monkey into space than a bunch of women.’ As such, Kubatta’s film offers insights into the strength of resistance women like Truhill encountered, a gendered and raced resistance that shaped recruitment strategies in NASA well into the 1970s. The first intake of women into a NASA training programme took place in 1978, one year before the first male African-American astronaut, Guion Bluford, was selected to train; the first female African-American astronaut, Mae Jemison, joined the programme in 1985.

As Charles Bingham, formerly a NASA human resource manager, notes: ‘If you know NASA at all, you know this is not where woman and minorities would normally turn as a first opportunity for a job’ (Sage 156). This policy did not only result in the absence of female and nonwhite astronauts in the US space programme for a good number of years; it also shaped the characters written for and cast in sf film and television narratives ever since. The Russians, in both fiction and nonfiction, surpassed NASA in sending women astronauts into space: first in *Planeta Bur* (*Storm Planet*, Pavel Klushantsev USSR 1962), which features Captain Masha (played by Kyunna Ignatov), and then, a year later, with real-life cosmonaut Valentina Tereshkova. The US space programme did not include a woman until Sally Ride became an astronaut in 1981 onboard the space shuttle *Challenger*. ‘The popularity of science-fiction television was apparently a key factor in NASA’s decision to open up recruitment in 1978 to “ensure that capable women and minority candidates – who had filled *Star Trek*’s cast but had been excluded from NASA’s astronaut corps – would be well represented”’ (Martín 174, qting Hersch 84). From our entertainment screens to the institutional policies of governments and space programmes, the female astronaut is a cultural mirror held up to history, enabling us to see where we were and where we are. This special issue and its six contributors will address the history of representation of the female astronaut and its present moment of diversification.

Yvonne Tasker opens the issue by addressing arguably the most mainstream contemporary iteration of the female astronaut in sf cinema, in the recent female-driven iterations of the traditionally male-centred Star Wars franchise, *Star Wars: The Force Awakens* (Abrams US 2015) and *Rogue One: A Star Wars Story* (Edwards US 2016). Tasker explores the extent to which these films retain or move away from the tales of male redemption and father-son melodrama that have characterised the franchise's earlier episodes and argues for space as a landscape across which female heroism can be productively staged. Lorrie Palmer takes up a different strand of contemporary representations of the female astronaut in her study of *Gravity* (Cuarón UK/US 2013). Connecting this realist sf film to real NASA history, she frames her discussion of the relationship of women and technology in the film with reference to the early days of the NASA space program, and its exclusion of women, and to real-world female astronauts who now live and work on the International Space Station. Lisa Purse extends the special issue's examination of the recent history of the cinematic female astronaut, exploring the conventions of framing and close-ups that define the appearance of the female mission members in space exploration films from the 1990s and 2000s, and the ways in which these animate issues of gender, embodied strength and technological empowerment during a period of representational transition. Bronwyn Lovell extends the issue's discussion into television as well as film, in an examination of the ways in which the representation of the female astronaut in sf media engages with and troubles normative cultural discourses around Mother Earth, motherhood and who is permitted access to space exploration. Joseph Jenner furthers this line of inquiry by moving outward, accounting for the expanded perspective of the earth from outer space that is typically granted to the white male astronaut in sf, to argue that the female astronaut is now capable of political intervention in the current geological epoch of the Anthropocene. From there, Amanda Keeler takes up the focus on television in her comparative analysis of the latest series in the *Star Trek* universe, *Star Trek: Discovery* (US 2017–) and *National Geographic's* hybrid sf / documentary series *Mars* (US 2016–). Both are attempts at diverse and inclusive storytelling, and both engage, as do the rest of the subjects of this special issue, with the place of women in the intersecting histories of space exploration as science fact and as sf.

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