



Wearing sombreros, *Apollo 11* astronauts (left to right) Michael Collins, Buzz Aldrin, and Neil Armstrong are swarmed by admirers during a motorcade in Mexico City as part of their international goodwill tour after returning to Earth.

The (soft) propaganda value of lunar exploration

On 20 July 1969, parents around the world sat with their children in front of television sets. Fumbling with their radios, drivers pulled off to the side of the road. Passersby peered at television through storefront windows. For a moment, as they watched and listened to Neil Armstrong stepping onto the Moon, audiences across the world felt connected to each other. For many, the shared experience marked the first moments of a global consciousness. That feeling of community was no happy accident: As historian of science Teasel Muir-Harmony explains in her new book, *Operation Moonglow: A Political History of Project Apollo*, the universal kinship many felt was the culmination of a decade of careful public relations strategy.

Muir-Harmony is a curator at the National Air and Space Museum and is well-known for her work on the material culture of space. She helps museum visitors understand the historic context of objects large and small—from space shuttles to space-themed postage stamps. In *Operation Moonglow*, Muir-Harmony

Operation Moonglow A Political History of Project Apollo

Teasel Muir-Harmony
Basic Books, 2020.
\$32.00



provides an excellent analysis of the relationship between policy and political narrative, from the first beeps broadcast by *Sputnik 1* in 1957 to the international goodwill tour made by the *Apollo 11* astronauts in 1969 after their return to Earth. Her work is reminiscent of Kenneth Osgood's *Total Cold War: Eisenhower's Secret Propaganda Battle at Home and Abroad* (2006), which focused on how the Eisenhower administration's "Atoms for Peace" campaign shored up America's international reputation during the 1950s.

One of *Operation Moonglow's* many strengths is how Muir-Harmony seamlessly weaves analyses of both the domestic and international contexts into a cogent history of public diplomacy. In

the book's introduction, she explains that her doctoral research on NASA's international exhibits was what eventually drove her to write a history of Apollo. Those exhibits, she notes, built on the success of educational displays about nuclear energy that the US Information Agency (USIA) circulated in the 1950s. Other anecdotes highlight public relations strategies in African and Asian nations, such as when the USIA sent African American "space lecturers" to Madagascar and other countries to lecture about American accomplishments in space and to demonstrate racial equality in the US. More ominously, Muir-Harmony also notes that President Richard Nixon attempted to harness the goodwill from *Apollo 11* to influence political leaders during his tour of Southeast Asia at the height of the Vietnam War in summer 1969.

Among the book's highlights are vivid descriptions—including quotations—of the astronauts' international tours. Muir-Harmony successfully argues that the astronaut tours—particularly the one made by the *Apollo 11* astronauts—framed the development of America's aerospace technology as an international triumph. She also notes individual astronauts' agency during those tours. In one example, she describes how the success of John Glenn's visit to Burma in 1966

was entirely because of his own careful messaging. “Glenn was an astute politician,” she explains on page 139. “He sold US space exploration by downplaying competition with the Soviet Union, and explaining the local relevance of space exploration to the Burmese people.”

Surprisingly, Muir-Harmony’s fine-grained analysis shows that President John F. Kennedy’s focus on the space race was not just about “beating the Soviets,” but also about defining his presidency in opposition to the perceived failures of the Eisenhower administration. He believed that success in the space race would position the Democrats as the party of vision and imagination. Muir-Harmony explains how Kennedy’s masterful commu-

nication skills aided in that effort: Television appearances regarding the space race were tightly scripted, and larger PR events were deftly orchestrated.

My favorite part of the book is the description of journalist Edward R. Murrow’s role in creating the narratives of the space race. For historians of Cold War communication, it comes as no surprise that Kennedy recruited Murrow, a public relations expert, to lead the USIA in 1961. At the time, Murrow was one of the most trusted correspondents in America; his weekly television series *See It Now* was one of the most watched programs in the 1950s.

Kennedy tasked Murrow, as head of the USIA, with developing a global com-

munication strategy to promote the US position in the space race. Murrow was fascinated by science, as I have discussed in my own work, and *See It Now* episodes on topics such as nuclear weapons had boosted his reputation in many scientific circles. Muir-Harmony shows us how he carefully guided the development of press kits, news releases, and films that celebrated the Mercury and Apollo missions. Although other communicators, such as Walter Cronkite, helped guide the public’s image of the Apollo years, Murrow played a pivotal role at its inception. I am delighted that *Operation Moonglow* finally gives Murrow his due credit as a science communicator.

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NASA/JPL-CALTECH/GLIMPSE & MIPS GAL TEAMS

An IR image of the nebula W51, one of the most active star-forming regions in the Milky Way, captured by the *Spitzer Space Telescope*.

The legacy of a great observatory

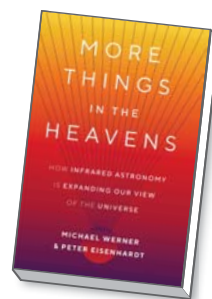
The *Spitzer Space Telescope* is one of four large astronomical observatories launched by NASA in the 1990s and early 2000s; the others are the *Hubble Space Telescope*, the *Chandra X-Ray Observatory*, and the *Compton Gamma Ray Observatory*. An extremely sensitive telescope, *Spitzer* observed the mid- and far-IR bands of the electromagnetic spec-

trum. It was the last of the so-called Great Observatories to be launched, in 2003, and it was decommissioned at the end of January 2020. *More Things in the Heavens: How Infrared Astronomy Is Expanding Our View of the Universe* captures *Spitzer*’s scientific legacy.

The book’s authors, Michael Werner and Peter Eisenhardt, worked on *Spitzer*

More Things in the Heavens
How Infrared Astronomy Is Expanding Our View of the Universe

Michael Werner and Peter Eisenhardt
Princeton U. Press, 2019.
\$35.00



for decades (as did this reviewer). Because they wrote *More Things in the Heavens* for a general audience, they did not use equations, but they still lean heavily