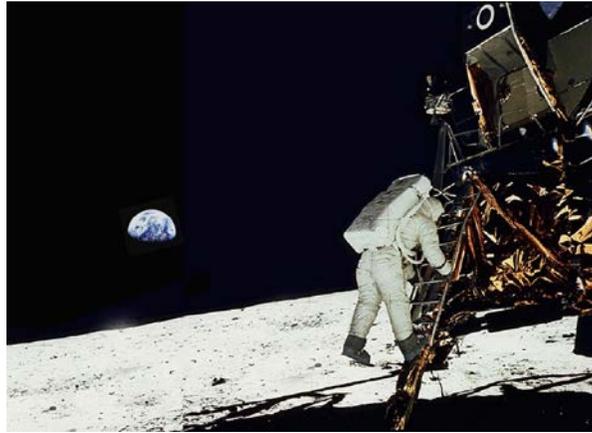


Apollo 11 Astronaut Neil Armstrong Broadcast from the Moon (July 21, 1969)

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Essay by Cary O'Dell



“One small step for...”

Though no American has stepped onto the surface of the moon since 1972, the exiting of the Earth’s atmosphere today is almost commonplace. Once covered live over all TV and radio networks, increasingly US space launches have been relegated to a fleeting mention on the nightly news, if mentioned at all.

But there was a time when leaving the planet got the full attention it deserved. Certainly it did in July of 1969 when an American man, Neil Armstrong, became the first human being to ever step foot on the moon’s surface. The pictures he took and the reports he sent back to Earth stopped the world in its tracks, especially his eloquent opening salvo which became as famous and as known to most citizens as any words ever spoken.

The mid-1969 mission of NASA’s Apollo 11 mission became the defining moment of the US-USSR “Space Race” usually dated as the period between 1957 and 1975 when the world’s two superpowers were competing to top each other in technological advances and scientific knowledge (and bragging rights) related to, truly, the “final frontier.”

There were three astronauts on the Apollo 11 spacecraft, the US’s fifth manned spaced mission, and the third lunar mission of the Apollo program. They were: Neil Armstrong, Edwin “Buzz” Aldrin, and Michael Collins. The trio was launched from Kennedy Space Center in Florida on July 16, 1969 at 1:32pm. They set down on the moon four days later, landing on July 20th at approximately 8pm. The next day, July 21st, at 10:56pm, it would be Armstrong who would take that first historic step, that initial trip out of the confines of the LM (lunar module) and onto the desolate ground of Earth’s single orbiting satellite.

Neil Armstrong was born in 1930 in Wapakoneta, Ohio. He rode in his first airplane at age six. After high school, Armstrong attended Purdue University and majored in aerospace engineering. He graduated with his Bachelor’s degree in 1955. Armstrong served in the US Navy, as a naval aviator, from 1949 to 1952. During his military service, he flew 78 missions over Korea.

In 1955, Armstrong joined the National Advisory Committee for Aeronautics (NACA), the organizational precursor to NASA. At NACA, Armstrong worked as an engineer and test pilot flying on over 200 missions in every kind of experimental aircraft. In 1958, he was selected for the U.S. Air Force’s Man In Space Soonest program. He achieved full astronaut status in 1962.

Armstrong first exited the Earth's atmosphere in 1966 as a member of the Gemini 8 team. In December, 1968, Armstrong was offered the position of commander for Apollo 11. He accepted.

Once Armstrong had stepped on the moon, what he said, and radioed back to NASA, has not only long been quoted but also long been discussed, analyzed and, actually, debated.

Some say that Armstrong's words—his "One small step..."--were a spontaneous, unrehearsed statement. Armstrong, though, once stated that he discussed and planned his opening words after many long, earth-bound discussions with his then wife, Janet. An interesting recent claim is that Armstrong's famous opening words were distilled from an earlier memo sent by NASA deputy administrator William Shapley to Dr. George Mueller, head of the Manned Space Flight Center, and that Armstrong, intentionally or not, cribbed some of its language. Another fanciful theory—alive and well on the internet today—is that the phrase can be sourced back to J.R.R. Tolkien's "The Hobbit" (1937) which does contain the line "not a great leap for man, but a leap in the dark."

Also long discussed is the exact wording of Armstrong's first comments. Armstrong himself has long maintained that he said (or intended to say), "That's one small step for a man, one giant leap for mankind." But most here on earth heard "That's one small step for man,..." the "a" either omitted or lost in broadcast noise. This case of the missing article has inspired many to return to NASA's original tapes to get the sentence just right. In 2006, aided by the latest in audio technology analysis, an Australian researcher, Peter Shann Ford, dissected the recordings and pronounced that the "a" was there. Armstrong biographer, James R. Hansen, after reviewing the research, concurred and presented the findings to Armstrong and others at a meeting at the Smithsonian. If they are correct, then one of the world's most famous quotations is habitually incorrectly repeated.

Actually, his words were not that accurate either. The ladder descending from the LM did not reach all the way to the moon's surface. Armstrong actually had to jump from the final, lowest rung. It was, in some ways, a leap of faith. Though innumerable tests and studies had been done, no one knew exactly what the moon's surface would be like nor what it would be like stepping into 16.7% gravity. (Armstrong later radioed back that moving about on the moon's surface was actually easier than it had been in Earth-bound simulations.)

But, in any event, whatever Armstrong said is of lesser importance than where he said. Actually, as interesting as his opening salvo are his transmissions immediately after he completely dismounted the LM's ladder and began to examine his new surroundings. He said:

Yes, the surface is fine and powdery. I can kick it up loosely with my toe. It does adhere in fine layers, like powdered charcoal, to the sole and sides of my boots. I only go in a small fraction of an inch, maybe an eighth of an inch, but I can see the footprints of my boots and the treads in the fine, sandy particles.

Astronaut Armstrong was now, for the very first time in human history, touching and reporting on something that was, literally, not of this earth--truly, boldly going where no one had gone before.

Armstrong's moonwalk, in which he was also joined by fellow astronaut Buzz Aldrin, lasted two hours and 13 minutes. They collected soil samples, took photos and hoisted an American flag. Throughout their excursion, the astronauts maintained a steady radio conversation between themselves and Mission Control located in Houston, Texas. A full transcript of their interactions can be found at NASA's website: <http://www.hq.nasa.gov/alsj/a11/a11.step.html>

After their two-plus hour excursion, the Apollo astronauts returned to their ship and, on July 24th, returned to Earth, splashing down into the Pacific Ocean where they were subsequently collected by the USS *Hornet*.

It is hard to imagine that any event in human history has been more closely followed than the news coverage of the United States landing on the moon. Even the massive annual numbers of viewers for the Super Bowls pale in comparison to this moment in time and history. Viewership reached beyond America; people worldwide tuned in to watch the first citizens of the Earth walk across this previously unpopulated, untouched orb in the sky.

Though Armstrong no doubt knew that his words while walking on the moon would live on in history, it's doubtful even he realized just what a profound impact they would make. Perhaps only Lincoln's "Four score and seven years ago..." is better known--and that is an arguable point. The first utterances made by man on his first visit to an outer space body had to be as eloquent and austere as the occasion it described. And, in this case, Armstrong's simple declarations were, they suitably summarized the event in all its remarkable importance.

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