

One Small Step for Man, One Giant Leap for American History

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“HERE MEN FROM THE PLANET EARTH

FIRST SET FOOT UPON THE MOON

JULY 1969, A.D.

WE CAME IN PEACE FOR ALL MANKIND”

~ Plaque left on the moon by N. Armstrong and B. Aldrin

From the contentious birth of this nation, the United States of America has experienced a myriad of triumphs and tragedies. These events range from the early disease of war to the great celebrations of cultural diversity. They are the foundation which gave birth to the values that have defined the United States and the culture it holds so dear. However, one event truly epitomizes the transformation of the American ideal and is undeniably the most significant event in this country’s history: the day America rocketed the human species to the moon. The moon landing, and the prior space race, were pivotal to the United States’ history due to their effect on the country’s scientific community, politics, economics, public morale, and environmental consciousness.

It was 1957 that marked the dawn of the Space Race: a scientific renaissance spurred on by the political competition between the United States and the Soviet Union. Both of these major world powers, locked in the confines of the Cold War, put vast amounts of their resources toward

the effort of building and launching spacecrafts destined for the moon. In 1957, the Soviet Union celebrated the first success upon their launch of the first satellite, Sputnik. For the next twelve years, the United States worked tirelessly to catch up with the Soviet technology. It was not until July, 1969, that the United States “won” the space race when Neil Armstrong, Buzz Aldrin, and Michael Collins piloted the first successful moon landing mission, Apollo 11, and returned home safely. From that moment on, the United States was redefined as a nation.

The most tangible consequence of the moon landing was the inspiration for many great scientific innovations. Many of these inventions, originally created for space flight, are now taken for granted, and the time when they were unavailable, long forgotten. These include, but are not limited to, “TV satellite dishes, medical imaging devices...smoke detectors, fire-resistant materials used in firefighting, sunglasses,...global positioning devices, and food preservation processes” (Moon Landing). Even more impressive than the entirety of this list is the institute that created them. The National Aeronautics and Space Administration (NASA) was arguably the greatest product of the moon landing due to its emergence as the global representation of scientific exploration. NASA has evolved into the ultimate aspiration for children who dream of touching the stars. Dr. William Culbreth, associate dean of the University of Nevada, Las Vegas (UNLV) College of Engineering, has even stated, “For me, I hadn’t really thought of going into engineering or science. I think that [the 1969 moon landing] threw a whole generation of kids into thinking about [careers in] science and engineering” (Moon Landing). Not only did the moon landing grant us an array of life-saving technology and a new scientific research platform, it also rekindled a nation-wide fervor toward science and engineering.

On many levels, the moon landing also had great political ramifications. Upon Apollo 11's splashdown in the Pacific Ocean, President Nixon greeted the crew and requested they accompany him to 30 cities around the world. Later, Armstrong stated that Nixon had told him, "He had been trying for years to get a meeting with Romanian President Nicolae Ceaușescu, and after leaving the *Hornet* [the U.S. Aircraft carrier being used for transportation to the cities] he was able to get an appointment" (James Hansen). These relational improvements were so critical that President Nixon unofficially stated that "that meeting alone paid for everything we spent on the space program" (Muir-Harmony). However, that statement was widely controversial, as much of the United States' population was strongly opposed to the enormous cost that accompanied the moon landing success - a price tag of over \$25 billion. Additionally, some historians even speculate that the moon landing helped repair the hostile relations that the United States and China shared during that time. These effects were apparently even global in nature because in a later interview, Buzz Aldrin stated that "carrying through on these commitments to reach the moon contributed eventually, I believe, to the end of the Cold War" (Buzz Aldrin). Perhaps one of the greatest benefits of the space program was this momentous step toward peace.

During the anticipation of the moon landing and events directly following it - from 1965 to 1972- the economy benefited from a noticeable drop in unemployment rates as well as a considerable rise in economic growth, further proving space travel's triumphant place in the United States' history. The unemployment rate dropped from 5.2% to 3.8% in the matter of two years and the economic growth rate grew from 2.7% to 4.9% within one year subsequent to the moon landing (Amadeo). Still, some historians argue that other significant happenings of the time -such as the government's decision to "start closing the budget deficits of the Vietnam War"

(The Continued Socioeconomic Impact) - could have influenced these changes. These arguments may harbor some truth, but it can not be denied that the great advancements the moon landing endowed were at least partly responsible for some significant economic improvements. 6,300 inventions came about as a direct consequence to the Space Race (The Continued Socioeconomic Impact). These inventions provided a foundation for an explosion of commercial enterprises, including present day corporate giants such as Intel. Consequently, these businesses introduced the portion of the American public suffering from unemployment to a new job market and allowed a future generation of entrepreneurs to rise. To state that these economic effects were not significant to the United States' history is to suggest that the expansion of private businesses is not a vital component of this capitalist society; ergo, the moon landing had a tremendous, albeit indirect, effect on the economic systems of both the 1960s and beyond.

Additionally, the 1960s were riddled with traumatic events that only harmed the already fragile state of the American public. The assassinations of John F. Kennedy and Martin Luther King Jr., the Vietnam War, the Cuban Missile Crisis, and many other happenings left people stranded in a state of perpetual fear (Rosenberg, Jennifer). Children were being trained to hide under their desks in the case of a nuclear bomb attack, and adults were distrustful of each other, unable to shake the effects of the Red Scare. This era, however, was brought to an abrupt end when science fiction became reality. For a moment, racism and hate were forgotten worldwide; people of all nationalities were proud to be human. One observer stated, "My grandparents were in Paris at the time [of the moon landing] and the French were celebrating just as much as we were. Everywhere they went when people found out they were Americans the French congratulated them like they were responsible for the success of the mission" (Global Reaction

and Impact). The moon landing was more than just a political event; it was one of the few moments in history where humans celebrated each other, no matter their skin color, nationality, religion, or gender (see Appendix 1). All the tragedy that had led to this moment was forgotten, and the United States was immersed in triumph.

One consequence of the moon landing that often escapes the public's appreciation is its effect on Earth's environment. Unbelievably, the moon landing directly led to the creation of Earth Day. Apollo 11 marked the first time an American had beheld the beauty of Earth from afar; hence the creation of Earth Day - just 9 months after the launch - is credited due to the new "awareness that we got from looking homeward...seeing the Earth as a precious and tiny oasis of life in the vastness of space" (Moon Landing). The first Earth Day boasted 20 million participants, the majority of which were Americans, but since then it has evolved into one of the largest global initiatives. Now with over 1 billion attendees, Earth Day has led to the completion of dozens of unbelievable feats of environment preservation, such as the banishment of dichloro-diphenyl-trichloro-ethane (DDT pesticides), the addition of plants to the endangered species list, the regulation of industrial waste dumping, and the protection of 8.6 million acres of wilderness (Earth Day Action). Ironically enough, sending people off of the planet has led to one of the greatest initiatives to protect it.

Although the United States' history is steeped in a substantial amount of racism and hate, this country was truly redefined the moment Apollo 11 touched the surface of the moon. At that moment, people embraced each other, permanently blurring the boundaries drawn in chalk from misguided generations before. Free from the bounds of science fiction, in an era of newfound knowledge, people began to shape the world into what it is today. This scientific triumph

affected nearly every aspect of the United States, from the scientific achievements, politics, and economics to the public morale and environment. The world now lives on in boundless beauty, the wounds carved by wars long ago have begun to heal; people now recognize the dream of reaching for the stars as a possibility- all because of three men and all the people whose shoulders they stood upon. If other countries would acknowledge how truly great that “one giant leap for mankind” was, perhaps the global focus could be shifted from tragedies to triumphs. Perhaps we could focus on science rather than war, similarities rather than differences, and ultimately renew a sense of hope in the attainability of world peace.

Appendix 1:



(Loff, Sarah)

Bibliography:

Primary Sources:

Apollo 11_Mission Report. NASA,

www.hq.nasa.gov/alsj/a11/A11_MissionReport.pdf.

Annotation: This is the mission report for the moon landing. It is the basis for my presentation, as it provided me with initial information on the event. Specifically, the report examined every event that occurred during the mission and provided maps of the predicted and actual landing sites.

“Astronaut Neil Armstrong's Speech on the Moon, 1969 - Apollo 11.” *The New*

Wall - Monte Wolverton, (Type=Role)OnlineProvider,

https://www.nasa.gov/mission_pages/apollo/apollo11.html.

Annotation: This video was the official recording of the landing watched by millions. It followed the descent of Armstrong from his capsule to the moon surface. I chose this source because it demonstrates the impact the moon landing has had, as billions of people have since watched the video.

“Buzz Aldrin Interview.” *Science Explorations* | *Scholastic.com*,
teacher.scholastic.com/space/apollo11/interview.htm.

Annotation: This is an interview of Buzz Aldrin after he returned from the mission. It questions him on his experience in space, his opinion on future space exploration, and his take on the developments in technology that has resulted from the moon landing. The importance of this source as pertaining to my project is that it gets the perspective of someone who has been on the moon on what the importance of tech development from the moon landing is.

Dunbar, Brian. “Apollo 11 Plaque Left on the Moon.” *NASA*, *NASA*,
www.nasa.gov/centers/marshall/moonmars/apollo40/apollo11_plaque.html.

Annotation: This is a photo of the plaque left on the moon by Apollo 11. This plaque is inscribed with the quote provided at the start of this essay. The plaque emphasizes that it was man that landed on the moon, not America. This plaque represents the destruction of divisions among men.

Loff, Sarah. “Apollo 11 Image Gallery.” *NASA*, *NASA*, 16 Mar. 2015,
www.nasa.gov/apollo11-gallery.

Annotation: This photo truly captures how the country reacted to the moon landing. The picture features the NASA director carried on the shoulders of hundreds of smiling (and rather diverse for Alabama) faces. It is a bubble of happiness in a time of tragedy.

Secondary Sources:

Amadeo, Kimberly. "The Strange Ups and Downs of the U.S. Economy Since 1929." *The Balance Small Business*, The Balance, www.thebalance.com/us-gdp-by-year-3305543.

Annotation: This website features the GDP growth and decay since the 1920s along with the unemployment rate trends. These statistics confirmed that the moon landing had noticeable economic effects.

"Earth Day Action: 13 Major Environmental Accomplishments." *WebEcoist*, Momtastic, 23 Apr. 2012, www.momtastic.com/webecoist/2012/04/23/earth-day-action-13-major-environmental-accomplishments/.

Annotation: This website lists the major accomplishments that Earth Day has led to. I used this source to back up my argument that the moon landing, which led to the creation of Earth Day, has affected the environment in positive ways.

"Global Reaction and Impact." *The Apollo 11 Mission*, 33444029.weebly.com/global-reaction-and-impact.html.

Annotation: This website lists multiple anecdotes from people who lived through the moon landing. They describe how they felt and what society looked like during this monumental event. I used these sources to prove that the moon landing was a time when everyone felt closer as a race.

James Hansen, *First Man: The Life of Neil A. Armstrong* (Simon & Schuster, 2005), page 579.

Annotation: This book is the biography of Neil Armstrong and it recounts all of the obstacles that he pushed through. I used quotes from Neil Armstrong found in the book to describe the importance of the meeting that was possible because of the moon landing.

“Moon Landing Taught Us Much about Science - and Ourselves.” *Las Vegas Review-Journal*, Las Vegas Review-Journal, 28 Feb. 2017,
www.reviewjournal.com/life/moon-landing-taught-us-much-about-science-and-ourselves
L.

Annotation: This website describes how the moon landing affected the scientific community. It also features multiple professor's that state that the moon landing had an incredible impact on interest in STEM fields like astronomy and aerospace engineering.

Muir-Harmony, Teasel Muir-Harmony Teasel. "The Role of Space Exploration in Cold War Diplomacy." *Physics Today*, American Institute of Physics, 25 Feb. 2015, physicstoday.scitation.org/doi/10.1063/PT.5.2027/full/#ref1.

Annotation: This website describes the events that followed the moon landing in relation to the Cold War. It provided a quote that strengthened my argument considerably: "That meeting alone paid for everything we spent on the space program"

Rosenberg, Jennifer. "Assassinations and Protests Mark Tumultuous 1960s." *Thoughtco.*, Dotdash, www.thoughtco.com/1960s-timeline-1779953.

Annotation: This website features a list of all of the atrocities that occurred in the 1960s. This source was useful in that it provided the hopeless context for the newfound happiness that the moon landing provided.

"The Continued Socioeconomic Impact of Apollo 11." *Online Learning Tips*, 28 July 2014, onlinelearningtips.com/2014/07/the-continued-socioeconomic-impact-of-apollo-11/.

Annotation: This website lists a few effects of the moon landing. I used this source for its mention that the moon landing resulted in 6300 new inventions, which was the basis for both my economic and scientific impact argument.