
Ceding American Leadership in Space

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The United States' leadership role in space is by no means moribund, yet the perception of absolute U.S. space leadership has clearly declined. A 2013 HuffPost/YouGov poll indicated that almost half of the American public thinks the United States is losing its supremacy in space.¹ This shift in perception can be seen internationally as well. A 2013 piece in *Der Spiegel* suggested that Europe is thinking of redirecting its primary space alliance from the United States to China, as China's global "rising power" status now extends to space.²

Is it possible to change this perception? The answer, regrettably (but realistically), seems to be no. Though the American public still supports the space program, the country is no longer willing to allocate the levels of funding needed to deliver the space spectacles of yore, spectacles that engender perceptions of leadership. As a result, perceptions of U.S. primacy in space exploration will continue to decay.

Contributing to the problem are unrealistically high expectations, formed during the height of the U.S. space program. Both the Apollo

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Program and, to a lesser degree, the space shuttle programs, created expectations of space spectacles on a regular basis. Similar expectations are now difficult, if not impossible, to meet. The generous funding the Apollo Program received was an anomaly—a function of the Cold War—and it was not without cuts toward the end. Such vigorous financial support is

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not likely to be repeated in the near future, and the American public will not be willing to bear the costs of such a program again, particularly in an era of financial instability.

Although the International Space Station (ISS) continues to be the National Aeronautics and Space Administration's (NASA) flagship for human spaceflight activity, the United States has relied on Russia for transportation to and from the ISS since the space shuttle stopped flying in 2011.

This has created the perception that the United States depends on others in space—a space hitchhiker rather than program leader. Furthermore, today's NASA projects are no longer rousing the interest of the American public. NASA is currently working on missions that involve capturing an asteroid, developing a solar electric propulsion system, flying commercial spaceflights that include crewed missions to alleviate reliance on the Russians, and a menu of other science-related missions—but none of these have captured much attention. It also has a largely aspirational Mars program—inspirational because of significant underfunding.³

It is true that governments are not the only space actors, and NASA is not the only U.S. space player. The U.S. national security space budget continues to surpass that of all other countries combined, though at a lesser margin than in the past.⁴ The private space sector is increasing its overall presence as well, though it suffered setbacks in 2014 with the crash of Virgin Galactic's SpaceShipTwo and Orbital Sciences' Antares rocket launch failure.^{5,6} Nevertheless, government activity, with NASA as the face of the U.S. space program, remains the basis on which space leadership is judged, if for no other reason than historical habit.

CONFLICTING MANDATES OF EXCEPTIONALISM

The culture of American exceptionalism makes it difficult to give up the space program all together. While some perceptions of decline might be tempered by cooperation with countries like China, that option has been held hostage by U.S. politics and is unlikely to change in the near future. Unless countries such as China and India essentially halt their space programs (an unlikely scenario), the United States will tacitly lose its perceived space leadership over the next ten years.

The idea of American exceptionalism has been evident throughout the nation's history. Andrew Bacevich wrote in *The Limits of Power: The End of American Exceptionalism* that "from its founding, America has expressed through its behavior and its evolution a providential purpose."⁷ American settlers believed that the New World was a blessed place, and that they had been conferred special rights and responsibilities. Even recently, President Barack Obama delivered a 2013 speech claiming that "the United States has been, and always will be, the one indispensable nation in world affairs. It's...why America is exceptional."⁸

The positive side of exceptionalism is manifested in many ways. From early policies of "Give Me Your Tired, Your Poor," to national-effort programs such as the Hoover Dam and Apollo, America showed itself to be a can-do country. America has long been admired by people from other countries for such efforts. However, Americans' widespread belief in their own exceptionalism also allows for policies and actions that might otherwise be considered self-serving or profligate. Former National Security Advisor Zbigniew Brzezinski describes exceptionalism as a function of fear and ignorance. "[American exceptionalism] is a reaction to the inability of people to understand global complexity or important issues like American energy dependency," Brzezinski says. "Therefore, they search for simplistic sources of comfort and clarity. And the people that they are now selecting to be, so to speak, the spokespersons of their anxieties are, in most cases, stunningly ignorant."⁹

Bacevich posits that Americans' insistence on seeing themselves as exceptional has resulted in a public belief that the United States has an endless line of global credit—economically, politically, and culturally. While Americans glorify the rights inherent to democracy and freedom, they also can ignore the corresponding responsibilities and costs. Ideas of American exceptionalism have created conflicting mandates, whereby the

public desperately wants to preserve U.S. power and prestige, yet consistently instructs public officials not to pay for it. In space, that translates into inadequately funded aspirations.

SUPPORT FOR SPACE EXPLORATION, NOT FOR SPENDING

A 2014 Pew Research Center/Smithsonian Magazine poll on American public attitudes toward space exploration showed that Americans are keen for space exploration but disinclined to spend money on it.¹⁰ This is not a new attitude. Even when America triumphantly leapt into space with the Apollo Program, enthusiasm for actual space expenditure was lukewarm. Benjamin Wormald with the Pew Research Center notes:

A Harris survey taken in 1970—less than a year after the first moon landing—showed that a majority (56 percent) thought the landing was not worth the money spent. A separate Harris poll, in 1971, however, found that 81 percent of Americans agreed with the statement that ‘nothing can equal seeing the astronauts land and walk on the moon as it happened live on TV.’

...[W]e found that Americans are consistently more likely to say that the U.S. spends too much on space exploration than too little. At no time has more than 22 percent of the public said that the U.S. spends too little on space exploration.¹¹

NASA began as a national security program: a valuable weapon against the Soviet Union during the Cold War. Because NASA represented a security instrument rather than a science, exploration, or technology development program, it received a generous budget. President John F. Kennedy even exempted this budget from typical bureaucratic, give-and-take budget battles. Under such conditions, NASA was able to regularly produce the space spectacles in which the public took pride.

Yet fully funding NASA programs to align with policy objectives could not be sustained through the entire Apollo Program. The last three Apollo missions were canceled with little notice or objection from the public or politicians. The policy goal of Apollo—to beat the Soviets—had been met; and U.S. policy toward the Soviet Union now focused on cooperation rather than competition. When one of the last Saturn V rockets was used for the 1975 Apollo-Soyuz “handshake-in-space” mission, American public reaction was muted. The thrill of having seen the first human—an American—walk on the moon had passed.

Space exploration may be desirable, but it is expendable according to voters’ spending priorities, and politicians prioritize accordingly. Since

Apollo, many studies and panels have attempted to convince the American public to increase space spending. The Space Studies Board of the National Academies of Science has released four “revitalizing” studies since 2009,¹² with arguments appealing to economics, the human spirit, excitement, and leadership, but these have had little impact on public attitudes.

INTERNATIONAL COOPERATION

On September 24, 2014, India became the first Asian country to successfully orbit a spacecraft around Mars. It did so with a mission costing less than the budget of the Hollywood movie “Gravity.”¹³ Popular coverage of the scientific aspects of the Mars Orbiter Mission (MOM), also named Mangalyaan, was secondary to media narratives of India “beating” competitors in an “Asian space race” on its first try.¹⁴

Leadership in space is still considered an indicator of national technological prowess, which translates into geostrategic influence. The United States benefited greatly from the considerable geostrategic influence generated from the success of the Apollo Program. Apollo was an early “soft power” tool, an example of leadership that drew admiration from nations around the world. Today, however, that global space-related admiration is largely directed at other countries, primarily China, with its highly visible human spaceflight and robotic lunar program.

The international community perceives multiple space races: the United States against China, China against India, Asia against the West. Traditionally, the United States has had a tentative partnership with India—

likely a function of its position as a geo-strategic counter to China—that allows India to request dual-use technology. The United States’ space relationship with China, on the other hand, has not been a partnership at all.

Although China sought to be part of the International Family of Spacefaring Nations, a euphemism for inclusion in the ISS partnership, the United States has blocked China’s efforts and rejected any sort of space cooperation during the George W. Bush administration. Though President Obama specifically mentioned space cooperation in the official joint statement during his visit to China in 2011,¹⁵ Congressional

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Committee Chair Frank Wolfe (R-VA) blocked any bilateral cooperation-focused policy changes through provisions in the 2011 NASA appropriations act.¹⁶

That legislative barrier means that cooperation with China as a method to keep it from usurping space leadership—if there is no race, there is no winner—is not viable. Further, public perception of activity and commitment often defines leadership, rather than actual or potential capabilities. Consequently, either the United States must outpace China with activity of public interest, such as human spaceflight or “firsts in the record books,” or ceding the perception of unilateral leadership will become inevitable. Given the evidence regarding a gap between what the public wants and what it is willing to pay for regarding space activity, the chances that the United States will again be able to perform the space spectaculars on a regular basis that the public seems to require as criteria for leadership are low.

CONCLUSION

The U.S. space program is not moribund, military space activities continue to outpace other countries, and no country is doing anything in space that has not already been done by the United States. But having started with a space spectacular of the Apollo Program variety, it is difficult to continue that kind of momentum, particularly when the public sees space activity as a good thing to do, but as expendable when ranked against other government supported programs. The reality is that space, as

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That is not to say that the United States will not continue to lead in some areas of space activity. If only by virtue of a naturally heftier budget, the United States will be able to lead in select capacities. But the days of total leadership are over. Without the necessary funding and political support, the

United States' leadership in space will continue to decline—effectively a victim of its own success. It will be a tough pill to swallow for those who

crave exceptionalism—but if we are unwilling to pay for space program funding, the challenge to American exceptionalism will remain. *f*

ENDNOTES

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