Bylvination

The new geopolitics of the Moon

More space-faring countries and tech tycoons are new players in a space race, raising questions of rights to celestial bodies

When the Apollo spacecraft landed on the moon in 1969, the United States, Soviet Union and China were the world’s only spacefaring nations. Today, more than 50 years later, the lunar mission was very much part of a sweeping geopolitical rivalry with the Soviet Union on Earth. Yet, despite the Cold War competition, the Moon mission had, more broadly, the United States’ space program’s role in the 20th century was both tempered by a sense of scientific internationalism, an awareness of man’s cosmic insignificance and the belief that outer space would eventually be the stage for human cooperation, rather than competition.

Today, as we celebrate the 50th anniversary of Apollo, there is an uneasy sense that humans are beginning to understand some of their fundamental political problems around space.

The near-Earth space is becoming a contested zone among nations; the passive militarization of the 20th century in the form of communication and intelligence gathering is shifting towards active weaponisation in the 21st. Plans are also being developed for solar weapons in space.

Earth’s orbit and the Moon’s orbit, a different form of great power rivalry in space, is unfolding in the scramble for the moon.

The competition raises a whole set of difficult questions, including the need for international cooperation and activity on the Moon, and whether the Moon can be effectively regulated and exploitation of the Moon is generating questions about property rights on Earth’s only satellite. Whose the Moon? The FIRST LUNAR RACE

President John F. Kennedy’s proclamation in May 1961 that America would land a man on the Moon “within the decade” was aimed at reversing the perception that the US was falling behind the Soviet Union in the race to space. That impression, in turn, was designed by Moscow’s successes: placing the first satellite in 1957, landing the first man-made object on the Moon in 1969, and putting the first man in space in 1961.

He knew that the Russians were winning the space race, but then the Soviet Union was making symbolic gains, the US was losing big. A powerful weapon project could potentially remit tension, stabilize the world. Thus, space stations such as Mercury, Gemini and Apollo heralded impressive advances in space technology, including vital experts. America’s bid was in microelectronics, microelectronics and aerospace technologies – the products of its scientific talent.

It was the best of politics, however, that drove president Kennedy to prepare America for a major nuclear deterrent as a target against America – a successful manned moon mission. Pressure was very much part of it and we saw what we now call “will power” – the Apollo missions were accompanied by huge space diplomacy and public outreach.

Although the Moon mission đáped almost any doubts about America’s technological prowess, considerations of prestige and propaganda value were not strong enough to sustain the Apollo programme after the early 1970s.

At the peak of the Apollo mission, the National Aeronautics and Space Administration (NASA) was consuming nearly 4% of the US Federal budget.

After other adventures – all American men – followed in the footsteps of Armstrong and Aldrin on the Moon, Washington decided to shut down the costly Apollo programme. Russia’s competing lunar mission was stopped but a smaller Russian moon probe was launched.

But the competition has not ended. Today, a renewed interest in the Moon has turned into a measure of space exploration in the US, amid a broad discussion on the mission’s benefits.

After the collapse of the Soviet Union, the competition was renewed. Russia has recovered from the collapse and is now leading in the race for the moon. The US has also been limited to the ISS. Russia and China are in the race. The ISS, along the way, interests the US and India and is still full of the priority of both nations.

NEW PLAYERS, GRANDER PLANS

The United States had been established as a world space-faring nation and private companies.

I would like to see the United States in the Moon in a reversal of the Apollo mission. This idea is not limited to a few “Moon villages” that can be sustained by a handful of people. The broader ambition is to take the Moon into a very small amount of man’s exploration of Mars and beyond.

Among the new players, India orbited its Chandrayaan-2 spacecraft around the Moon in 2008. It hopes the Chandrayaan-2 lunar mission, which was supposed to last one week due to technical glitches, will lift off smoothly later this month.

A successful soft landing of one of the Moon’s moons will make India only the fourth country capable, after the US, Russia and China, to fly to the Moon. China and the European Union, are beginning to put the Moon on their national space agenda, and Russia too has plans to return to the Moon.

But it is the Chinese programme that is receiving the most interest. Beijing’s lunar mission, named after the Chinese moon goddess Chang’e, was unveiled in 2007. Since then, China has put two spacecraft into lunar orbit – Chang’e 1 and 2 – and landed two rovers on the Moon’s surface. Chang’e 3 and 4 are expected to land on the Moon in this year or early next year – expected to bring lunar material back to Earth.

And not all, China is expected to land rovers on the Moon in the early 2030s, with plans for a research station on the lunar South Pole.

To support China’s space-faring ambitions, the State Council has copped with a five-year plan that includes a powerful rocket to lift huge payloads into orbit, and as well as a space station expected to be operational in about three years. As President Xi Jinping made clear in a speech earlier this year, the Chinese Communist Party will push hard to pursue the country’s “amazing dream of flying into the sky and reaching for the Moon”.

The need for China’s space programme, across the civilian and military domains, has grown even further. China has also been increasing the establishment of the military. China is as important as the US and Russia and China, to fly to the Moon.

Blue Origin, for instance, has a NASA contract to build lunar lander systems, while SpaceX’s Dragon crew is planned for the first flight of the Starship, a reusable rocket designed to take humans to the Moon.

The Moon could also become a theatre for military rivalry. The US, China and Russia are all developing space stations and systems. The Moon and other celestial bodies will be “space assets” of potential economic and military value.

This is a problem that is entirely unfamiliar to the international community. The past, it has addressed legal questions on managing the so-called commons – territories that were under nation’s sovereign control, such as Antarctica and the seabed.

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