

Can you buy land on the moon?

October 7 2016, by Matt Williams



Astronauts need spacesuits to survive the temperature of the moon. Credit: NASA

Have you ever heard that it's possible to buy property on the moon? Perhaps someone has told you that, thanks to certain loopholes in the legal code, it is possible to purchase your very own parcel of lunar land. And in truth, many celebrities have reportedly bought into this scheme, hoping to snatch up their share of land before private companies or nations do.

Despite the fact that there may be several companies willing to oblige

you, the reality is that international treaties say that no nation owns the moon. These treaties also establish that the moon is there for the good of all humans, and so it's impossible for any state to own any lunar land. But does that mean private ownership is impossible too? The short answer is yes.

The long answer is, it's complicated. At present, there are multiple nations hoping to build outposts and settlements on the moon in the coming decades. The ESA hopes to build a "international village" between 2020 and 2030 and NASA has plans for its own for a moon base.

The Russian space agency (Roscosmos) is planning to build a lunar base by the 2020s, and the China National Space Agency (CNSA) is planning to build such a base in a similar timeframe, thanks to the success of its Chang'e program.

Because of this, a lot of attention has been focused lately on the existing [legal framework](#) for the moon and other [celestial bodies](#). Let's take a look at the history of "space law", shall we?



The ESA recently elaborated its plan to create a moon base by the 2030s. Credit: ESA/Foster + Partners

Outer Space Treaty:

On Jan. 27th, 1967, the United States, United Kingdom, and the Soviet Union sat down together to work out a treaty on the exploration and use of [outer space](#). With the Soviets and Americans locked in the Space Race, there was fear on all sides that any power that managed to put resources into orbit, or get to the moon first, might have an edge on the others – and use these resources for evil!

As such, all sides signed "The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including

the moon and Other Celestial Bodies" – aka. "The Outer Space Treaty". This treaty went into effect on Oct. 10th, 1967, and became the basis of international space law. As of September 2015, it has been signed by 104 countries (while another 24 have signed the treaty but have not completed the ratification process).

The treaty is overseen the United Nations Office for Outer Space Affairs (UNOOSA). It's a big document, with lots of articles, subsections, and legalese. But the most relevant clause is Article II of the treaty, where it states:



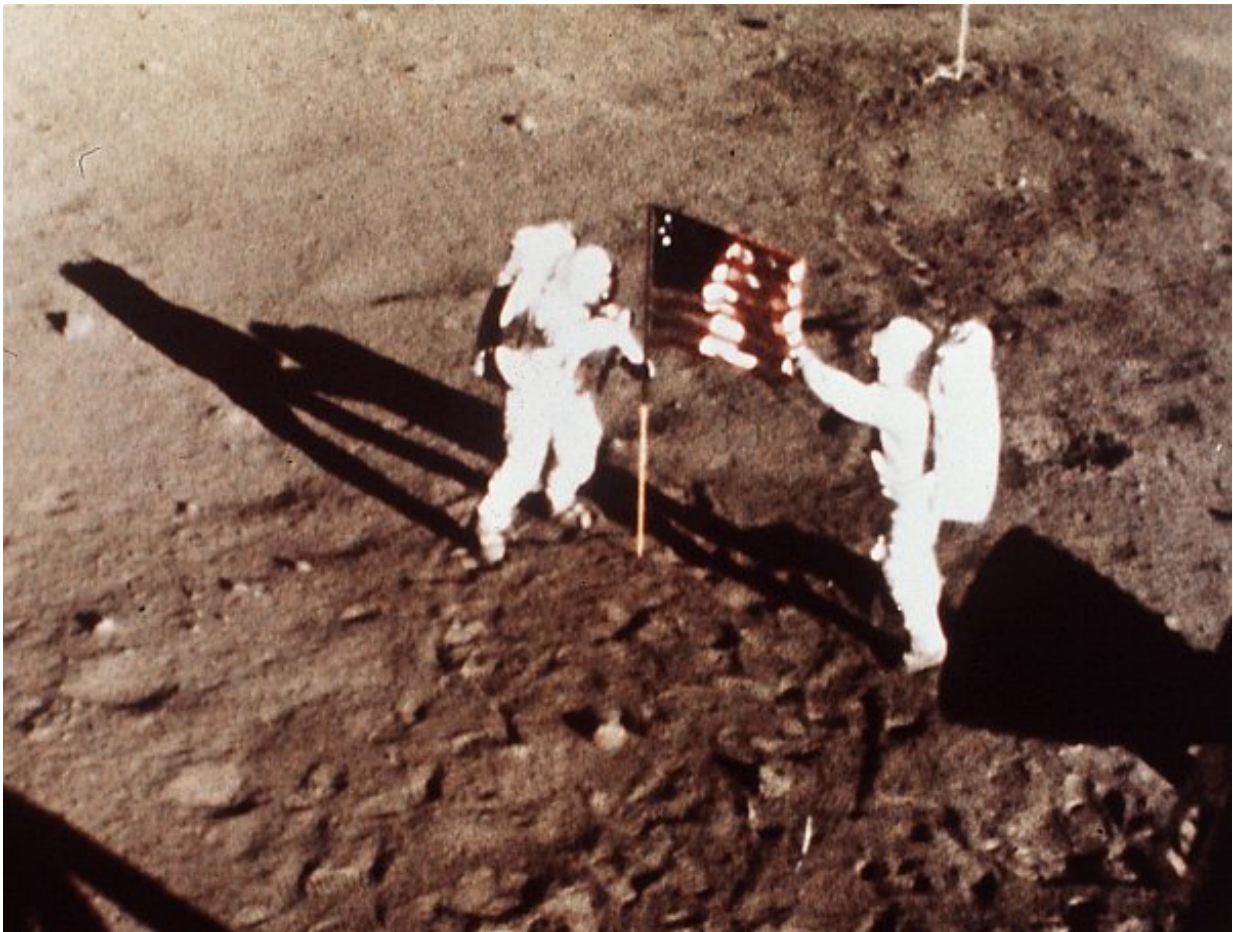
Astronaut Charles M. Duke Jr. shown collecting samples on the lunar surface with the Lunar Roving Vehicle during the Apollo 16 mission. Credit: NASA

"Outer space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means."

"Loophole" in the Treaty:

Despite clearly saying that Outer Space is the property of all humanity, and can only be used for the good of all, the language is specific to national ownership. As a result, there is no legal consensus on whether or not the treaty's prohibition are also valid as far as private appropriation is concerned.

However, Article II addresses only the issue of national ownership, and contains no specific language about the rights of private individuals or bodies in owning anything in outer space. Because of this, there are some who have argued that property rights should be recognized on the basis of jurisdiction rather than territorial sovereignty.

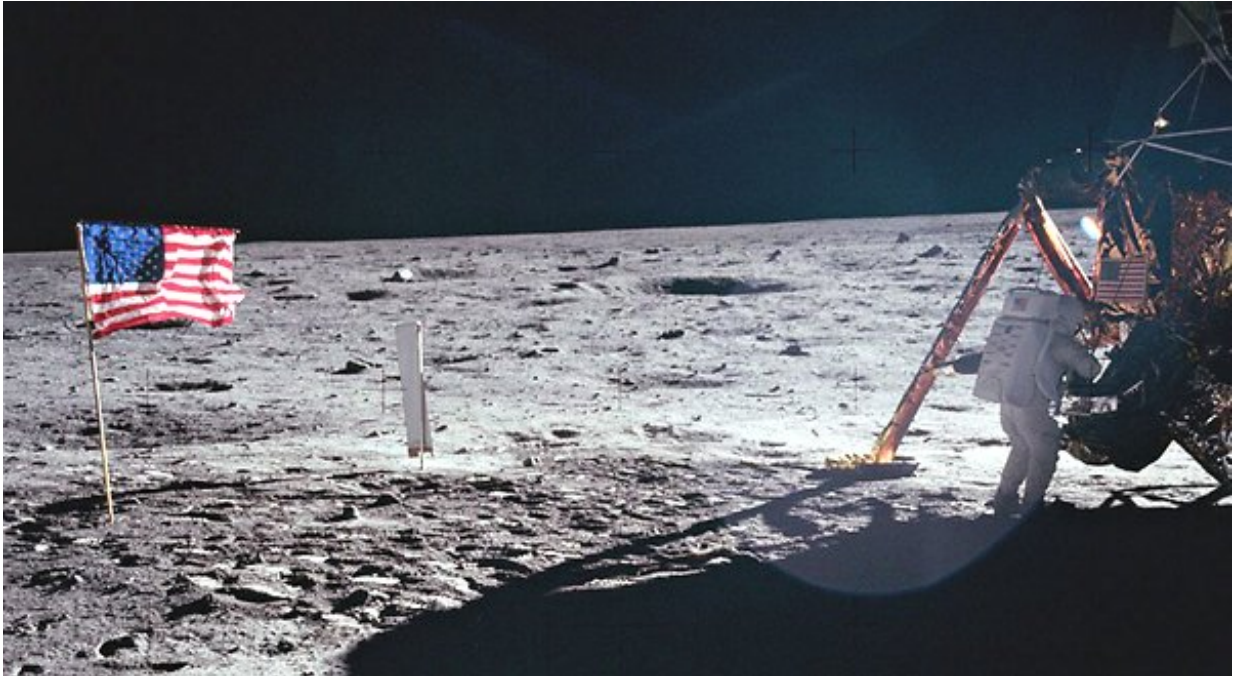


About 20 minutes after the first step, Aldrin joined Armstrong on the surface and became the second human to set foot on the Moon. Credit: NASA

Looking to Article VI though, it states that governments are responsible for the actions of any party therein. So it is clear that the spirit of the treaty is meant to apply to all entities, be they public or private. As it states:

"States Parties to the Treaty shall bear international responsibility for national activities in outer space, including the moon and other celestial bodies, whether such activities are carried on by governmental agencies or by non-governmental entities, and for assuring that national activities are carried out in conformity with the provisions set forth in the present Treaty. The activities of non-governmental entities in outer space, including the moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty."

In other words, any person, organization or company operating in space is answerable to their respective government. But since no specific mention is made of private ownership, there are those who claim that this represents a "loophole" in the treaty which allows them to claim and sell land on the moon at this time. Because of this ambiguity, there have been attempts to augment the Outer Space Treaty.



Buzz Aldrin's panorama of the Apollo 11 landing site is the only good picture of mission commander Neil Armstrong on the lunar surface. Credit: NASA

The Moon Treaty:

On Dec. 18th, 1979, members of the United Nations presented an agreement which was meant to be a follow-up to the Outer Space Treaty and close its supposed loopholes. Known as the "Agreement Governing the Activities of States on the moon and Other Celestial Bodies" – aka. "The Moon Treaty" or "moon Agreement" – this treaty intended to establish a legal framework for the use of the moon and other celestial bodies.

Much like the Outer Space Treaty, the agreement established that the moon should be used for the benefit of all humanity and not for the sake of any individual state. The treaty banned weapons testing, declared that

any scientific research must be open and shared with the international community, and that nations and individuals and organizations could not claim anything.

In practice, the treaty failed because it has not been ratified by any state that engages in crewed space exploration or has domestic launch capability. This includes the United States, the larger members of the ESA, Russia, China, Japan and India. Though it expressly forbids both national and private ownership of land on the moon, or the use thereof for non-scientific, non-universal purposes, the treaty effectively has no teeth.



The annotated features on the lunar nearside. You'll notice, not one of them says "Land for Sale!" Credit: Wikimedia Commons/ Peter Freiman(Cmglee).
Background photograph by Gregory H. Revera

Bottom line, there is nothing that expressly forbids companies from owning land on the moon. However, with no way to claim that land, anyone attempting to sell land to prospective buyers is basically selling snake oil. Any documentation that claims you own land on the moon is unenforceable, and no nation on the planet that has signed either the Outer Space Treaty or the moon Treaty will recognize it.

Then again, if you were able to fly up to the moon and build a settlement there, it would be pretty difficult for anyone to stop you. But don't expect that to be the last word on the issue. With multiple space agencies looking to create "international villages" and companies hoping to create a tourist industry, you could expect some serious legal battles down the road!

But of course, this is all academic. With no atmosphere to speak of, temperatures reaching incredible highs and lows – ranging from 100 °C (212 °F) to -173 °C (-279.4 °F) – its low gravity (16.5 % that of Earth), and all that harsh [moon](#) dust, nobody outside of trained astronauts (or the clinically insane) should want to spend a significant amount of time there!

Source: [Universe Today](#)

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