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Earth's moon poses a nomenclature conundrum for publications, including Aerospace America. When English-speakers refer to the moon, is that an informal reference to Earth's natural satellite, or should the moon be considered a proper name requiring capitalization? For some lunar aficionados, the choice to lowercase the "M" shows a lack of respect for this subject of song, myth and human exploration. Space historian John M. Logsdon researched the issue and offers a way out of the conundrum.

BY JOHN M. LOGSDON

## A total lunar eclipse,

Dec. 20, 2010, from Alaska. This series of images was shot over two hours.

U.S. Army

ome publications refer to the moon in lowercase, and I discovered that Aerospace America is one of them while working on the piece "Once We Went to the Moon" [October, Page 30]. That did not seem right to me, given that the moon is Earth's one and only natural satellite and that almost all satellites of the other planets bear proper names starting with a capital letter. I was curious about the origins of the word "moon" and the logic of this stylistic decision. What I learned made me convinced that

the Earth's moon should have the dignity of a name that is a proper noun of some kind. The question was whether that proper noun should be Moon or a different proper name, akin to those of other satellites in our solar system like Europa or Titan.

It turns out that there are 155 named satellites of planets, dwarf planets and asteroids. Almost every natural satellite discovered since Galileo's observation of the four moons of Jupiter in 1610 has been assigned a name, most derived from Roman or Greek mythology. Even some closer in size to space

debris than a respectable moon now have names. Other small moons more recently discovered have only a Roman number, like Jupiter LXXI, found just this year. But the practice of assigning names has not ceased; in July 2018 a less-than-1-kilometer object orbiting Jupiter discovered in 2017 was named Valetudo after the Roman god of health and hygiene.

There unfortunately remains one glaring exception to this list of properly named solar system satellites — the Earth's moon. Most U.S. style guides for popular and scholarly writing do not capitalize our moon. That includes the AP Stylebook that forms the foundation of Aerospace America's style and also the Chicago Manual of Style. This greatly disturbed world-renowned lunar scientist Paul Spudis, who in the years before his death in August frequently spoke out about the issue. In his 1996 book, "The Once and Future Moon," Spudis argued for capitalizing moon, noting that it was "a complex planetary body with its own history of geological evolution," certainly deserving "the dignity of capitalization." I agree with Spudis.

How did this lack of a capital "M" come to be? According to one NASA website, "until Galileo discovered that Jupiter had moons in 1610, people thought that the moon was the only moon that existed. After other moons were discovered, they were given different names so that people would not confuse them with each other. We call them moons because they orbit planets the same way that the moon orbits around the Earth." That doesn't add much clarity: It seems as if the Earth's moon is just "the moon" primarily because it has always been thus. I even inquired of a colleague who is a senior editor at the respected British journal The Economist about that publication's practice. He responded that it had its own style guide, and of course moon was capitalized, as a continent-sized body like Europe or North America. So the lack of a capital letter in the English language seems to be a U.S. phenomenon.

Further evidence that this is the case comes from the international organization responsible for naming solar system objects. The body is the Working Group for Planetary System Nomenclature of the International Astronomical Union. It was that group that approved the name Valetudo for the Jovian moon, and just recently named two craters on the moon "8 Homeward" and "Anders' Earthrise" in honor of the Apollo 8 mission. It would be that body which approves a new name for Earth's satellite; more to the point, it already capitalizes the word moon when referring to that body. If there were to be a new name in English for the moon, it would have to be approved by the IAU.

The word moon is Germanic in origin, based on a similar-sounding word that came into use a few thousand years ago. Spudis in 2009 suggested that the absence of a capital letter in the name of Earth's satellite could be the result of "some classically educated nitpicker who was forced to sit through endless hours on the joys of the ablative absolute in Latin class" deciding that the "Roman-named objects of the universe were worthy of linguistic worship," but not a "vulgar, barbarian" Germanic word like moon. While that may not be the underlying reality, not capitalizing moon seems very arbitrary. After all, the word Earth when describing our home planet is capitalized. Not according the same treatment to its satellite does not make sense. There seems to me no good reason except inertia to continue with past practice.

Earth's satellite already has a proper name, with a capitalized first letter, in many different languages, including Luna in Latin and Selene in Greek. We speak of "lunar landings" as often as "moon landings,' and the scientific study of the moon's geology is selenology. Robert Heinlein in "The Moon is a Harsh Mistress" called the moon Luna. So there is some precedent for a name change. But assigning a new name is likely to be an uphill battle. Besides, changing the titles of popular songs like "Fly Me to the Moon" to "Fly me to Luna" or "Shine on Harvest Moon" to "Shine on Harvest Selene" just doesn't sound right.

Getting U.S. practice aligned with the rest of the world by assigning the proper noun name Moon, with a capital "M," seems a better course of action. NASA's style guide already calls for a capital letter; perhaps the aerospace community could pressure the more general U.S. style guides to make that change. As we celebrate over the next few years the 50th anniversaries of the Apollo missions, might some organization like Aerospace America's parent, AIAA, or The Planetary Society organize a campaign to this effect. The Associated Press Stylebook is issued annually; wouldn't it be a welcome initiative if the 2019 edition reflected the change as a way of recognizing the Apollo 11 anniversary? It would also be a fitting way of honoring Spudis for his lifetime devotion to studying the moon and advocating its important role in humanity's future.

And perhaps Aerospace America could lead the way, by uppercasing Moon henceforth! ★

Editor's note: By lowercasing moon, Aerospace America means no slight to our celestial neighbor and those who have risked their lives exploring it and those who could well do so in the future. The thing is, we don't capitalize words because we view them as important. We capitalize words that are proper nouns. Despite the arguments in this essay, the word moon does not feel like a proper noun akin to Titan, Europa, Phobos or Deimos. We do love a good semantic debate, though, so keep the arguments coming.

— Ben Iannotta, editor-in-chief



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