## THE HISTORY OF CARTOGRAPHY PROJECT

## No. 14. THE MOON MAPP'D: IMAGINING A NEW WORLD

Commentary

This year's quotations, and the detail of the 1647 map of the Moon by Johannes Hevelius, demonstrate the power of maps to visualize the unknown and to spark the imagination. People have argued since antiquity that the Moon replicates the Earth. They have taken the patterns of dark and light on the Moon's surface to be seas and continents that parallel those of the Earth. And, just as humans inhabit the Earth, so "lunarians" or "selenites" were presumed to inhabit the Moon.

The parallel between the Earth and the Moon was crucial to Hevelius's work. In the four decades since the first telescopic observations of the Moon were made in 1608-9, astronomers had standardized the image of the Moon "as it appears," and Hevelius compiled just such an image from multiple, detailed telescopic observations (see his "Fig. R" on the reverse of this commentary). But Hevelius also adopted some of the symbolic conventions of geographical mapping to create a truly innovative map (his "fig. Q"), a detail of which appears on the broadsheet. By simplifying and inverting the play of light and shadow visible on the Moon's surface, Hevelius classified the Moon's surface as either water (the map's light areas, although seen as shadows on the Moon) or land (the map's darker areas, seen as brightly lit on the Moon). He mapped the shadow-casting ridges and crater rims of the Moon's surface as if they were chains of terrestrial mountains; he also added rivers. He applied place-names derived from Classical geography because, he argued, the Moon's features replicated the terrestrial globe as known to the ancients. On the broadsheet, for example, you can see "Etna M" (Mount Etna) on the island of "Sicilia" (Sicily) in the center of "Mare Mediterraneum" (Mediterranean Sea); you can also see several channels of the "Fl. Nilus" (River Nile) flowing into "Syrticum Mare" (Sea of Syrtica [Libya]) and "Mare Ægyptiacum" (Egyptian Sea). The result was an image that "domesticated" the Moon's "strangeness" by mapping it as if it were a terrestrial space.3

Hevelius's creative mapping so seized the popular imagination that it soon became a device for reflecting on the state of contemporary knowledge. In 1664, Samuel Butler could thus parody the idea that telescopes ("our Tubes") could reveal all the details of that distant world as part of a general condemnation of wild and irrelevant speculation as the work of so many "Lunaticks" ("What Trade from thence can you advance, | But what we nearer have from France?"). It is clear, from an earlier mocking reference to the Moon's "Mediterrean Sea," that Butler reacted specifically to Hevelius's map and nomenclature.4 Much later, George Alexander Stevens, in his History of Tom Fool, extended what he took to be Hevelius's conceit as part of a lengthy series of momentary passions that engaged the young man: rhetoric, politics, ancient philosophy, astronomy, history, natural philosophy, and alchemy. Each passion started out promisingly, only to collapse

quickly in disenchantment or confusion. In the case of his Moon studies, Tom Fool read a conflicting account, which held the Moon to be dry and dead, and in short order "all my former pretty Prospects vanish'd." 5

The ability to use telescopes to see the Moon in all its detail served throughout the Enlightenment to point out the progressive nature of human knowledge, its still imperfect state, and its potential for eventual perfection. This was made explicit in the broadsheet's third quotation, from an anonymous emulation of Rudolf Erich Raspe's wildly popular Baron Munchausen's Narrative of his Marvellous Travels (1786). In this case, the ability to see and know the Moon, even its forests, is specifically contrasted to the late-eighteenth century anxiety over the poor state of contemporary knowledge of the interior of Africa. This sentiment should not surprise us: oceanographers habitually comment today that we know the surface of the Moon and other planets in far greater detail than we do the sea floor of our own planet.

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Telephone: 608.263.3992 Fax: 608.263.0762
Email: hcart@geography.wisc.edu
http://www.geography.wisc.edu/histcart

¹ The quotations are from Samuel Butler, canto III of Hudibras: The Second Part (London: John Martyn and James Allestry, 1664), 183-84; George Alexander Stevens, The History of Tom Fool, 2 vols. (London: T. Waller, 1760), 2:39; and the anonymous A Sequel to the Adventures of Baron Munchausen, ... Humbly Dedicated to Mr. Bruce, the Abyssinian Traveller, 2 vols. (London: H. D. Symonds and J. Owen, 1792), 2:78-79. The broadsheet image is a detail of Johannes Hevelius, Selenographia; sive, Lunae descriptio (Danzig, 1647), fig. Q.

<sup>2</sup> Christian Jacob, "De la terre à la lune: Les débuts de la sélénographie au XVII<sup>e</sup> siècle," in *Cartographiques*, ed. Marie-Ange Brayer (Paris: Réunion des Musées Nationaux, 1996), 9-43; Philip J. Stooke, "Mappaemundi and the Mirror in the Moon," *Cartographica* 29, no. 2 (1992): 20-30.

<sup>3</sup> Jacob, "De la terre à la lune," 29. See also Ewen A. Whitaker, Mapping and Naming the Moon: A History of Lunar Cartography and Nomenclature (Cambridge: Cambridge University Press, 1999), 50.57

<sup>4</sup> Butler, Hudibras: The Second Part, 185 and 150-51.

<sup>5</sup> Stevens, *History of Tom Fool*, 2:39. Note the typographic error of "Stevelius" for "Hevelius." Stevens identified the author of the conflicting account as Christian Huygens, actually well-known as an advocate for life on other worlds; Stevens should more appropriately have blamed Giovanni Riccioli for ending Tom Fool's spate of lunacy.