L2/25-079

Phobos and Deimos symbols

Gavin Jared Bala, gavin.jared, gmail.com
Kirk Miller, kirk.miller, gmail.com
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These symbols are not presented as a formal proposal due to the limited extent of attestation. They are shown here to facilitate information exchange. Some of the examples provided are not evidence of text elements that could be considered evidence for encoding. Note that demonstration that a graphic symbol has a conventional meaning is not in itself sufficient evidence that it requires encoding as a character for interchange in plain text.

Earth's moon is the only planetary satellite to regularly receive its own astronomical/ astrological symbol, which has allographs ☽ U+263D FIRST QUARTER MOON and ☾ U+263E LAST QUARTER MOON. Symbols for moons of other planets are rare, as they are not of much use to either astronomers or astrologers: astronomers use the planet's initial plus a number assigned to the moon (e.g. S VIII or S8 for Saturn VIII Iapetus), and astrologers would not generally have occasion to use them as the moons would be in almost the same position as their parent planet and so not independent points of reference.

However, as Mars looms large in the public imagination as our most hospitable planetary neighbour, so too do its moons. Symbols for the two Martian moons, Phobos and Deimos, have seen limited use in science fiction stories where Mars and its moons are inhabited, as well as in discussions of potential astrology conducted from the surface of an inhabited Mars, where its moons would appear as independent bodies.

The most recognized symbols for the Martian moons were designed by Denis Moskowitz, who also designed symbols for the dwarf planets (L2/21-224). These symbols combine the Greek lowercase letters phi and delta (the initials of the moons' names, *Φόβος* and *Δεῖμος*) with the spear of Mars' planetary symbol ♂, yielding ⟨♇⟩ for Phobos and ⟨♇⟩ for Deimos.

Moskowitz also designed symbols for moons of the giant planets and dwarf planets, but here usage is less widespread and there is less standardization. (For example, the Galilean moons have seen lowercase variants based on *ι ε γ κ* in addition to the uppercase glyphs based on *I E Γ K* that were proposed by Moskowitz – see Figure 12.) All but the symbol for Pluto's moon Charon are based on the same principle as the symbols for Phobos and Deimos: namely a combination of the initial letter of the moon's name with a characteristic feature of the parent planet's symbol. For Charon, Moskowitz created ⟨♇⟩ by adding the orb from Pluto's symbol ⟨♇⟩ to a crescent that suggests both the moon Charon and the boat on the river Styx

of the eponymous ferryman Charon. (Pluto I Charon was the only known moon of Pluto at the time, so no further disambiguation was needed.) This symbol is coincidentally similar to U+2BD5 PLUTO FORM FOUR, which would be added to Unicode over a decade later.

Characters

♇ U+... PHOBOS
♆ U+... DEIMOS

Properties

[code];PHOBOS;So;0;ON;;;;;N;;;;;
[code];DEIMOS;So;0;ON;;;;;N;;;;;

References

Denis Moskowitz, Astronomical/Astrological symbols for other planets' moons. https://suberic.net/~dmm/astro/moons.html

Figures

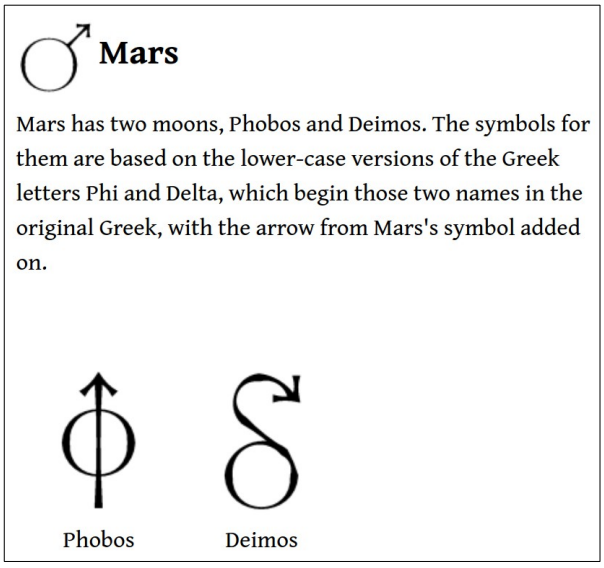

Figure 1. The symbols as presented by Moskowitz on his website.

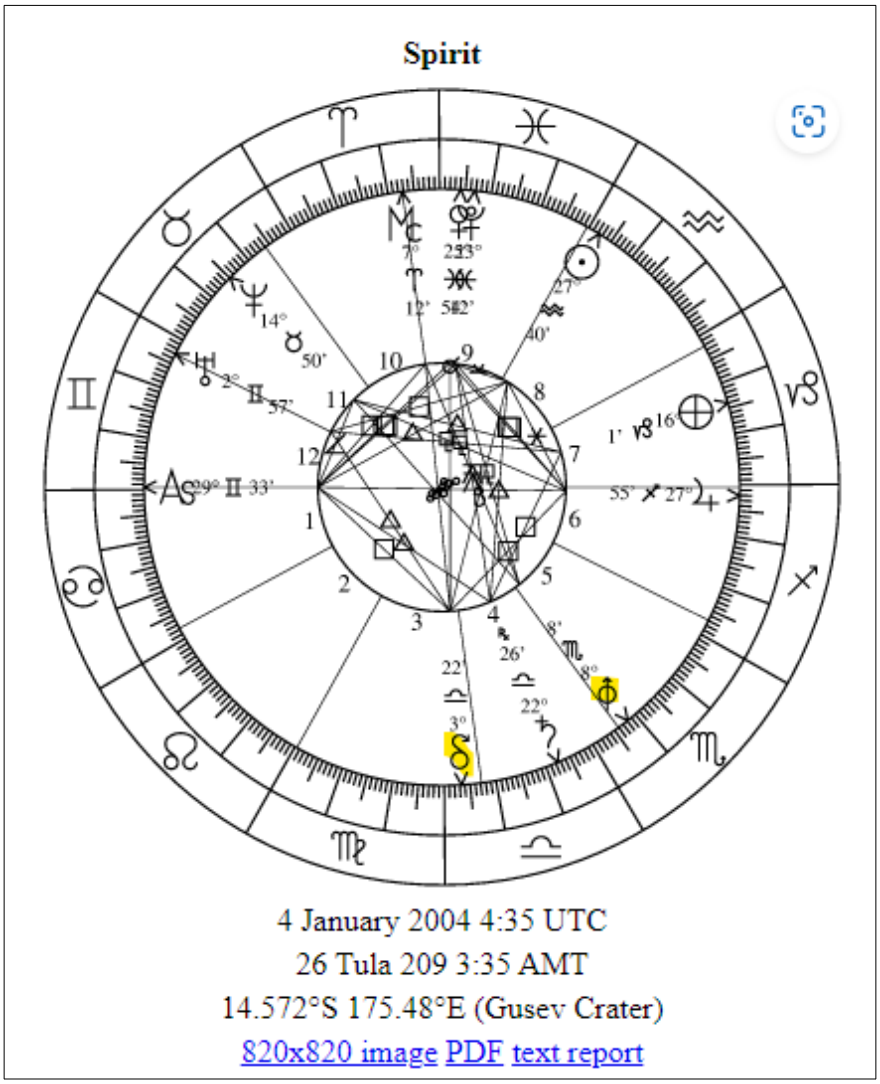

Figure 2. Natal chart of the Spirit Mars rover, drawn by Moskowitz (https://suberic.net/~dmm/magic/astrology/rovers.html). The rover's landing on Mars is used as a "birth date." Of the usual ten bodies used in astrology, Mars, Mercury, and Earth's Moon are replaced with Earth, Phobos, and Deimos. (Since the rover is on Mars, the planet Mars obviously cannot itself be included. Earth and its Moon would always be in the same part of the sky viewed from Mars. Mars being further out from the Sun than Earth is, Mercury is also too close to the Sun to include: it spends about half of the time in conjunction.)

Figure 3. Phobos and Deimos symbols used in-text on Welsh Wikipedia (https://cy.wikipedia.org/wiki/Deimos_(lloeren)).

Figure 4. Phobos and Deimos symbols in-text on Thai Wikipedia (https://th.wikipedia.org/wiki/โฟบอส and https://th.wikipedia.org/wiki/ดีมอส).

星體	平均密度	未壓縮密度	半長軸
水星 ☿	5.4 g cm^{-3}	5.3 g cm^{-3}	0.39 AU
金星 ♀	5.2 g cm^{-3}	4.4 g cm^{-3}	0.72 AU
地球 ⊕	5.5 g cm^{-3}	4.4 g cm^{-3}	1.0 AU
月球 ☾	3.3 g cm^{-3}	3.3 g cm^{-3}	1.0 AU
火星 ♂	3.9 g cm^{-3}	3.8 g cm^{-3}	1.5 AU
火衛一	1.9 g cm^{-3}	1.9 g cm^{-3}	1.5 AU
火衛二	1.5 g cm^{-3}	1.5 g cm^{-3}	1.5 AU
灶神星	3.4 g cm^{-3}	3.4 g cm^{-3}	2.3 AU
穀神星 ⚳	2.1 g cm^{-3}	2.1 g cm^{-3}	2.8 AU
智神星 ⚴	2.8 g cm^{-3}	2.8 g cm^{-3}	2.8 AU

除了衛星外，所有类地星體均符合密度趨勢的定律。而类地星體衛星的密度不同，是因為它們的形成方式與类地星體不同。[11]

Figure 5. Phobos and Deimos symbols in-text in a table of terrestrial planets and their satellites on Chinese Wikipedia (https://zh.wikipedia.org/wiki/类地行星). The protoplanet-asteroids Ceres, Pallas, and Vesta are also included.

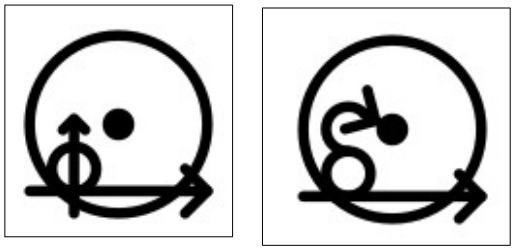

Figure 6. Schematic representations of Phobos and Deimos transiting the Sun as seen from Mars (using the symbols to represent the bodies), from the Chinese Wikipedia articles on such transits (https://zh.wikipedia.org/wiki/火卫一凌日 and https://zh.wikipedia.org/wiki/火卫二凌日).

其他太陽系重要星體名稱列表 [编辑]

符號	♇、□	⚵、⚷	☾、☽	☉	□、□	⚷	⚳	⚴	⚶、⚸	⚺、⚻
漢語	冥王星 (*Míngwángxīng*)[1][2]	火衛一 / 火卫一; 火衛二 / 火卫二[3]	月球 (*Yuèqiú*)[4]	太陽 / 太阳 (*tàiyáng*)[4]	閱神星 / 阅神星 (*Xìshénxīng*)[1][5][6]	凱戎 / 凯戎 凱倫 / 凯伦[5][7]	穀神星 / 谷神星 (*gǔshénxīng*)[1][8]	智神星[8]	婚神星 (*hūnshénxīng*)[8]	灶神星 (*zàoshénxīng*)[8]
英語	Pluto	Phobos; Deimos	Moon	Sun	Eris	Chiron	Ceres	Pallas	Juno	Vesta

Figure 7. A table of names of some important non-planetary bodies on Chinese Wiktionary (https://zh.wiktionary.org/wiki/附錄:行星). Phobos and Deimos are included, as are the Sun and Moon, Pluto and Eris (the largest and most massive known dwarf planets respectively), Chiron (the first known centaur), and the first four asteroids (Ceres, Pallas, Juno, and Vesta), but not any other planetary moons (even Titan or the Galileans). The symbols are used as column-headers.

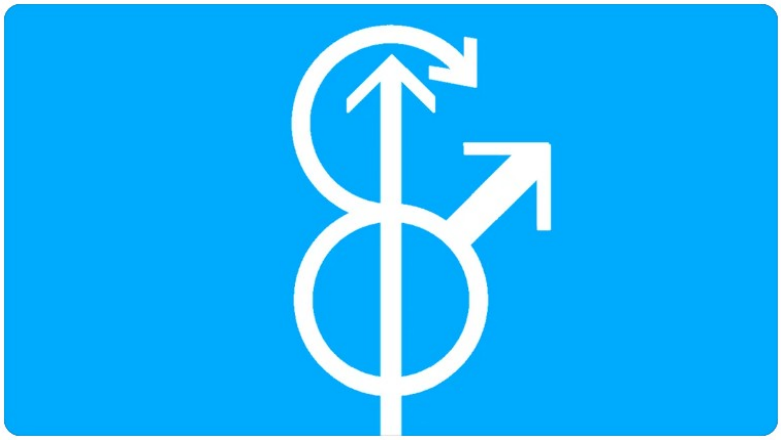

Figure 8. Fantasy flag of Mars proposed on Reddit by user "Xenostroyr," combining the symbol for Mars with Moskowitz' Phobos and Deimos symbols (reddit.com/r/vexillology/comments/drgsc9/mars_flag_greek_symbols_for_the_mars_and_its/).

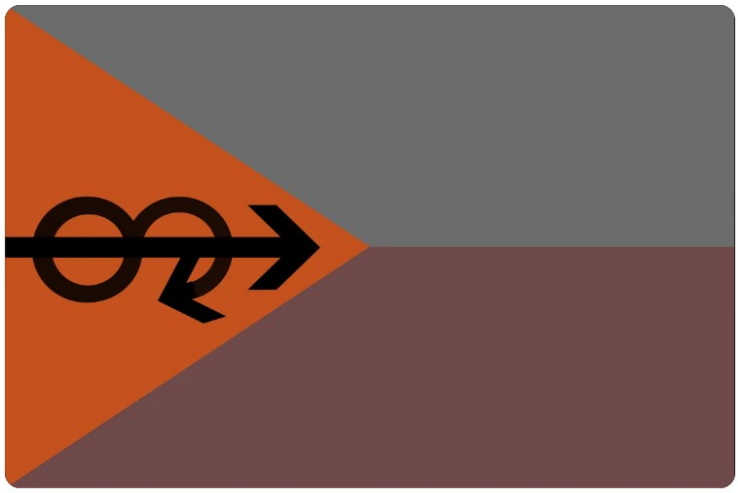

Figure 9. Fantasy flag of a Phobos-Deimos confederation proposed on Reddit by user "Dhinque," combining Moskowitz' Phobos and Deimos symbols (reddit.com/r/vexillology/comments/8dup2f/phobosdeimos_confederation/).

Figure 10. Fantasy flags of Deimos posted on Reddit by user "NK_Ryzov" as part of an alternate-history sci-fi project "Overheaven," where Deimos was colonised in 1980. Two of them use Moskowitz' Deimos symbol (reddit.com/r/worldbuilding/comments/i8j99s/2009_deimos_flag_referendum_overheaven/).

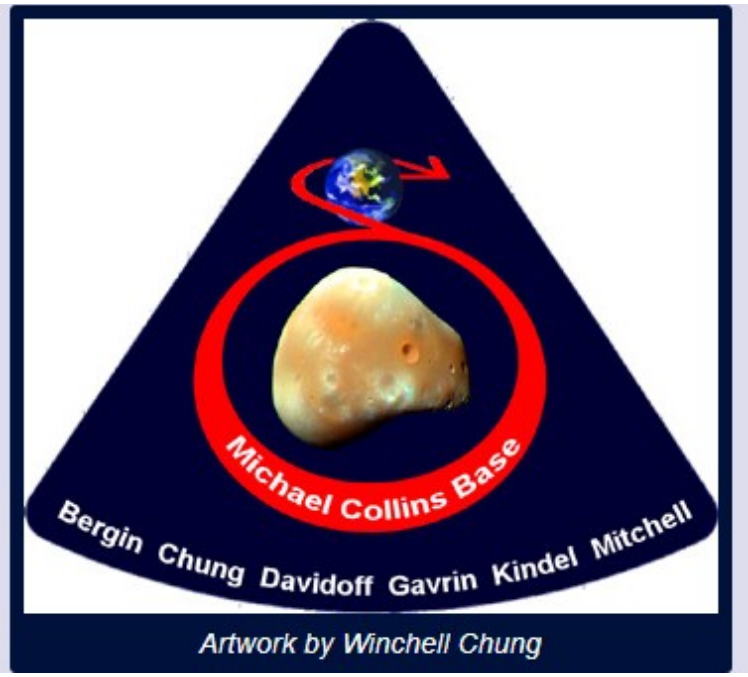

Figure 11. The Deimos symbol used by Winchell Chung ("Nyrath the nearly wise") on his website *Atomic Rockets* (projectrho.com/public_html/rocket/appcapedread.php), in the insignia for a fictional NASA mission. (For real examples of NASA mission patches using planetary symbols, see the Viking and Mariner Jupiter-Saturn mission patches at en.wikipedia.org/wiki/Planet_symbols.)

Figure 12. Moskowitz symbols for planetary-mass moons on Polish Wikipedia, along with their formal astronomical numbers (*Ziemia I* "Earth I" etc.). The Galilean moons are in their lower-case forms and marked by the cross-stroke of the Jovian symbol ⟨♃⟩. The moons of Saturn have the characteristic crook of the Saturnian symbol ⟨♄⟩, those of Uranus have the low globe of the Uranian symbol ⟨♅⟩, Triton has the trident of the Neptunian symbol ⟨♆⟩, and of course Charon has the high orb of the Plutonian symbol ⟨♇⟩. Not shown are Moskowitz's symbols for Hyperion, Proteus and Nereid, which are subplanetary-mass moons.
pl.wikipedia.org/wiki/Geofizyczna_definicja_planety.