

A REVIEW OF DIVERSITY OF SPACE SCIENCE NOMENCLATURE. A. R. Lennox
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Introduction: The current naming conventions for astronomical discoveries exacerbate the underrepresentation of marginalized groups in space science. As space science develops at a rapid pace, new discoveries of objects or surface features are continually being made and such discoveries need naming. Conventions, as established by the International Astronomical Union (IAU), dictate what landscape features on planets and satellites can be named and the ‘themes’ from which names can be drawn. Sometimes the names of famous people or mythological characters are adopted, other times the names of geographical locations here on Earth.

Ideally, space science nomenclature should reflect a diverse array of people (with representation of different genders, cultures, and races, to name a few) and places. However, it appears that this expectation is not a reality; I have found that, for example, on Mercury just 11.8% of craters are named after a woman and for both Mars and the Moon only 2 % of craters named after a person commemorate women. This is, however, not just an issue of gender, and it is apparent that many forms of diversity are lacking in space science nomenclature. These statistics on representation within the nomenclature have not been investigated and are not publicly available.

Data Collection: My investigation of the eponyms of named features is ongoing. My aim is to disaggregate the database of named planetary features, revealing who is represented, who is underrepresented and who is missing in space science and help quantify diversity across the Solar System. To assist with data entry, I led the first in what will be a series of hackathons (a hybrid team data entry event). Ideally, the findings from this group will be made publicly available and can be adopted and maintained by the IAU. Additionally, we aim to raise awareness of the lack of representation in space science nomenclature, such that the conventions might be changed to accommodate better diversity in the future.

Issues with the current conventions: While we have identified a range of factors which may contribute to a lack of diversity in the nomenclature, a compelling argument lies within the requirement that, for a real person’s name to be adopted, an individual must have achieved demonstrable fame (“recognized as a historically significant figure [typically] for more than 50 years”). This inherently disadvantages women and

marginalized groups. Women have always been scientists [1] and artists [2] but their contributions are lesser known due to the barriers they faced in achieving fame and status. This inequality is the product of a historic societal structure set by and to the benefit of the patriarchy. The current conventions go with the grain of that history, rather than being reparative.

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Fig. 1: QR code to access the open letter to the IAU titled ‘Issues of power and its influence on naming conventions for planetary features’

References: [1] Rossiter, (1982). *Women Scientists in America: Struggles and Strategies to 1940*. [2] Meskimmon, (2003). *Women making Art*.