A review of diversity in space science nomenclature: Issues of Power

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Introductions

The current naming conventions for astronomical discoveries exacerbate the underrepresentation of marginalised groups in space science. As space science develops at a rapid pace, new discoveries of planetary features need naming. Conventions, as established by the International Astronomical Union (IAU), dictate what a feature can be named and the ‘themes’ from which names can be drawn.

Ideally, space science nomenclature should reflect a diverse array of people (with representation of different genders, cultures and races, etc.). This expectation is not the reality, and many forms of diversity are lacking from space science nomenclature.

1. The Moon

- **32** names
- **1558** total names

2. Mercury

- **50** names
- **365** total names

3. Mars

- **5** names
- **275** total names

A gender imbalance

Conventions dictate that craters on Mercury are named after famous artists. Women feature just 11.8% (left; pie chart no. 2). Craters named after a person on the Moon and Mars adopt the names of famous scientists. Women feature only 2.0% and 1.8% respectively (left; pie charts no. 1 and 3). No non-binary people are currently represented.

Issues with the current naming conventions

While we have identified a range of factors that contribute to a lack of diversity in the nomenclature, the foremost stems from the IAU requirement that for a real person’s name to be adopted, that individual must have achieved demonstrable fame or recognition. This inherently disadvantages women and marginalised groups; such people have always been scientists and artists but their contributions are lesser known, and hence less easily demonstrated, due to historic barriers faced in achieving fame. This is the product of a societal structure set by and to the benefit of the patriarchy. Current conventions go with the grain of that injustice, rather than try to be reparative.

The Hackathons

Data collection is ongoing via a series of data entry hackathons. The aim is to explore all forms of diversity (e.g., gender, race, ethnicity, sexuality, disability, etc.) to discover who is overrepresented, underrepresented and missing entirely from the nomenclature.

The second hackathon will take place on the 9th-10th September 2023 virtually and in hubs across the UK. Disaggregation of the database of named features across the solar system is vital to get the conventions changes and to improve diversity in the future.

Published and future work

I published an open letter addressed to the IAU (right) outlining my key arguments. This work is ongoing through a series of data entry hackathons (more details below). Please get in touch if you wish to be involved.