Supplementary Material

Gender in Mineral Names

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1. Determination of Name Roots

Minerals were considered to share the same name root if the name was given to denote an inherent relationship to another species. This guiding principle proved problematic when

categorizing minerals with the prefixes "pseudo", "meta", and "para", among others. In the case of pseudomalachite, the mineral was named in allusion to it being mistaken for the unrelated mineral malachite. However, in the case of pseudomarkeyite and markeyite, the minerals are actually chemically and structurally related. In practice, these minerals are named *for* existing minerals, rather than for the namesake of the existing mineral or as an extension of the nomenclature surrounding that particular mineral. This becomes arbitrary if the same distilled logic is applied to chemical analogues that are discovered. Strontiodresserite was named as the strontium analogue of dresserite, rather than specifically after John Alexander Dresser. It is therefore not a constructive line of reasoning. In our consideration of root names, we take those with the "pseudo" prefix to not share the root name of the minerals they are named for (*e.g.*, pseudocotunnite and cotunnite are considered as having different root names) because, unlike other chemical or structural prefixes, the prefix "pseudo" does not convey a specific relationship to the "namesake mineral" (even if a relationship does exist).

In the case of the prefix "para", a polymorphous relationship is typically implied with the name (*e.g.*, pararealgar being a dimorph of realgar). The same is true for the prefix "meta", which typically implies a hydration or polymorphous relationship with the root name mineral (*e.g.*, metauranocircite is the lower hydrate of uranocircite). However, there are inconsistencies in the use of "meta" and "para". For example, paravauxite is the higher hydrate of vauxite, whereas metavauxite is the dimorph of paravauxite. Despite inconsistencies, these terms are functionally no different than prefixes like "clino", "iso", "tetra", etc., that also denote structural relationships and take the same form as chemical analogue notation such as "cupro", "stibio", "fluor", and so on. Using these guidelines, we count 4993 unique mineral root names.

2. Additional Namesake Country Information

In section 2.2, we mention that the world map using only post-1954 data (Fig. 5) is nearly identical to the world map using all data (Fig. S2). This is because only around 22.6% of unique eponyms were established prior to 1954 and men comprise around 92.3% of the post-1954 data. Therefore, the data are effectively unchanged (to 93.9% men) by a 22.6% contribution of data where men constitute 99.5% of namesakes. Only a few minor namesake contributors show noticeable change, including Ireland and Turkey.
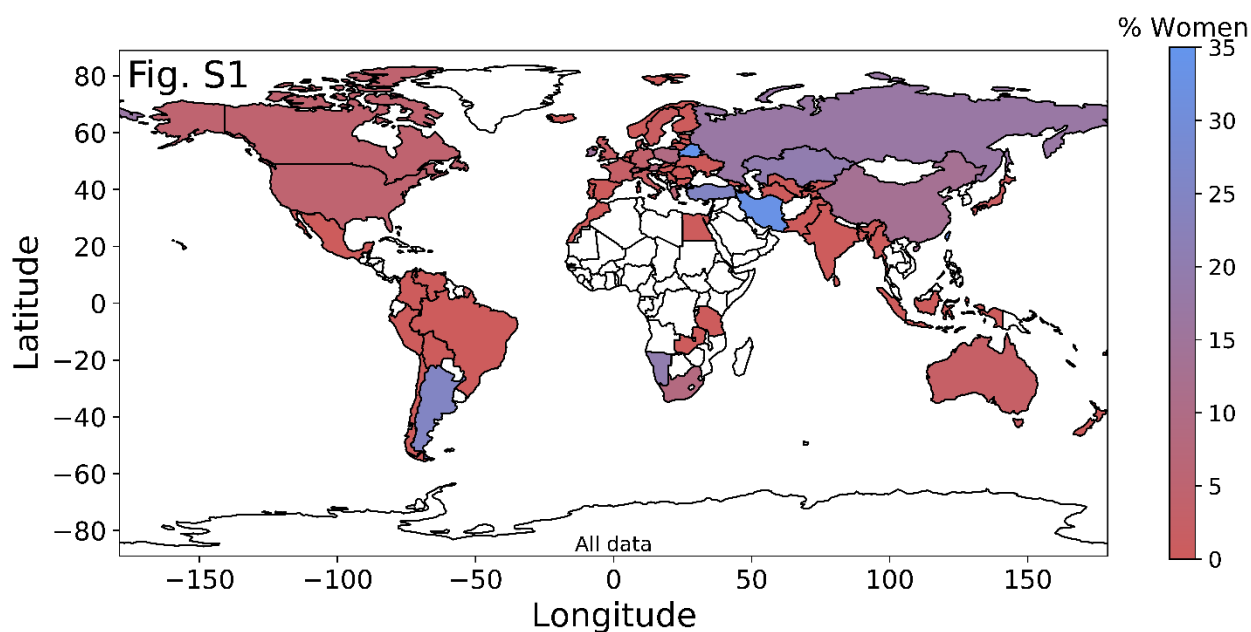

Figure S1.

World map colored by the percentage of women among unique namesakes for each country for all years in the dataset. The representation of women among Belarussian namesakes (50%) exceeds the color scale, but this country contributes only two namesakes; the colorbar was

adjusted to show detail in the other countries. All other countries have % women values within the range of the colorbar.

Table S1. Namesake metrics for the top ten countries in terms of number of women namesakes for all years in the dataset. Some namesakes are counted for multiple countries to better capture complex national identities and therefore these metrics are discordant with counts of total unique individuals. *# of Women* is the number of women namesakes from that country; *W Rank* is the ranking among all countries in the number of women namesakes; *# of Men* is the number of men namesakes from that country; *M Rank* is the ranking among all countries in the number of men namesakes; *Approx. W* is the approximate incidence rate of women among mineral namesakes from that country.

Country	# of Women	W Rank	# of Men	M Rank	Approx. W
Russia	72	1	342	2	1 in 6
USA	27	2	522	1	1 in 21
Germany	12	3	282	3	1 in 25
China	7	4	46	13	1 in 9
Austria	6	4	63	11	1 in 11
Canada	5	5	104	7	1 in 22
Argentina	5	5	15	23	1 in 4
UK	4	6	179	4	1 in 46

Italy	4	6	176	5	1 in 45
France	4	6	149	6	1 in 38
Switzerland	3	7	47	13	1 in 17

3. Pertinent Scientist Classification

In our consideration and discussion of naming minerals for scientists, we only considered scientists whose contributions were in some way relevant to mineralogy. While not perfect, this distinction helps to narrow down individuals who were honored for their scientific contributions rather than for their non-academic mineral involvement.
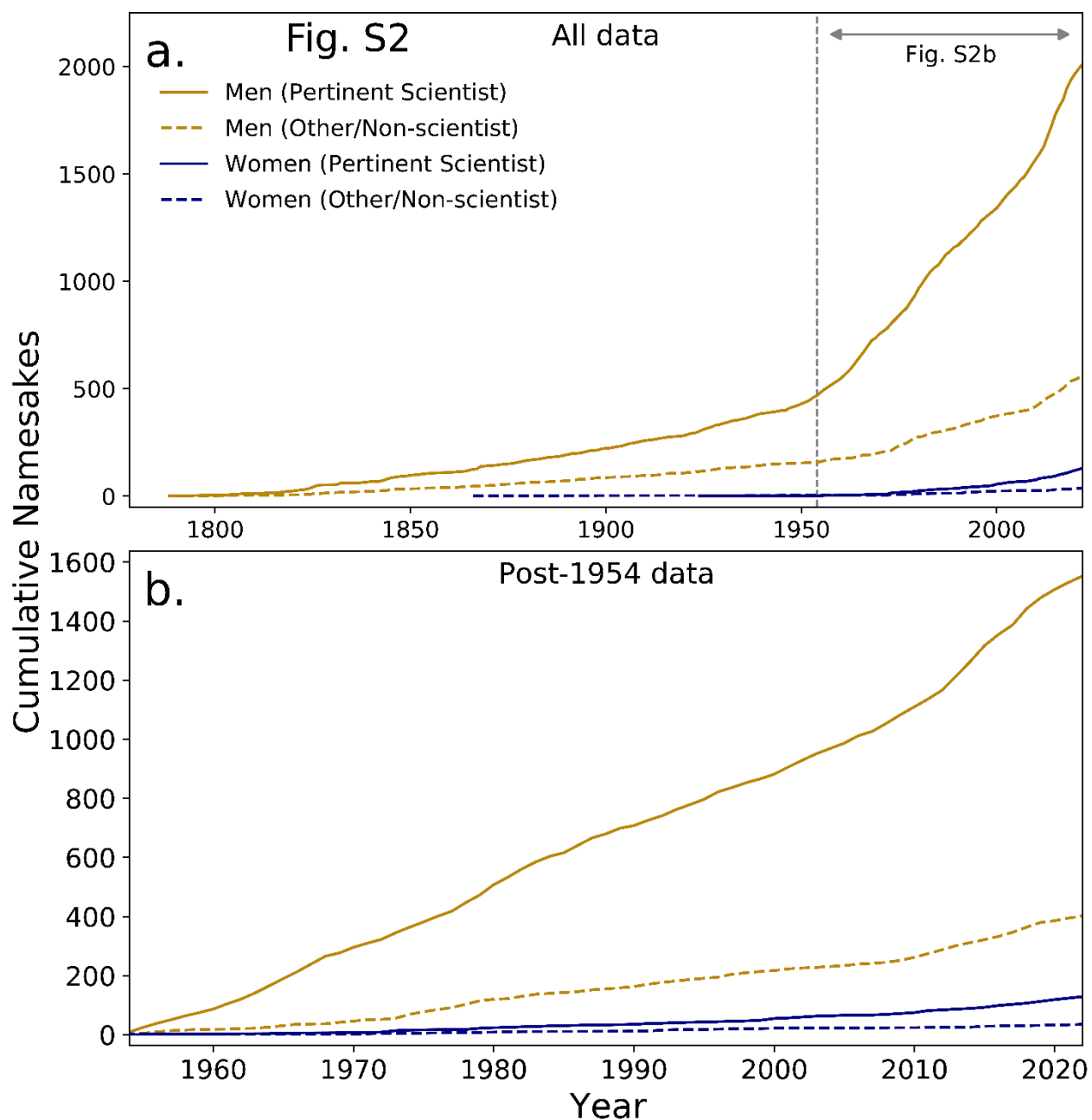
Figure S2.

Cumulative namesakes over time categorized into scientists whose contributions are pertinent to mineralogy and other/non-scientists for (a) all data and (b) only namesakes introduced from 1954 onward. The groupings in (b) all begin at zero because namesakes introduced prior to 1954 are not included in the cumulative counts.

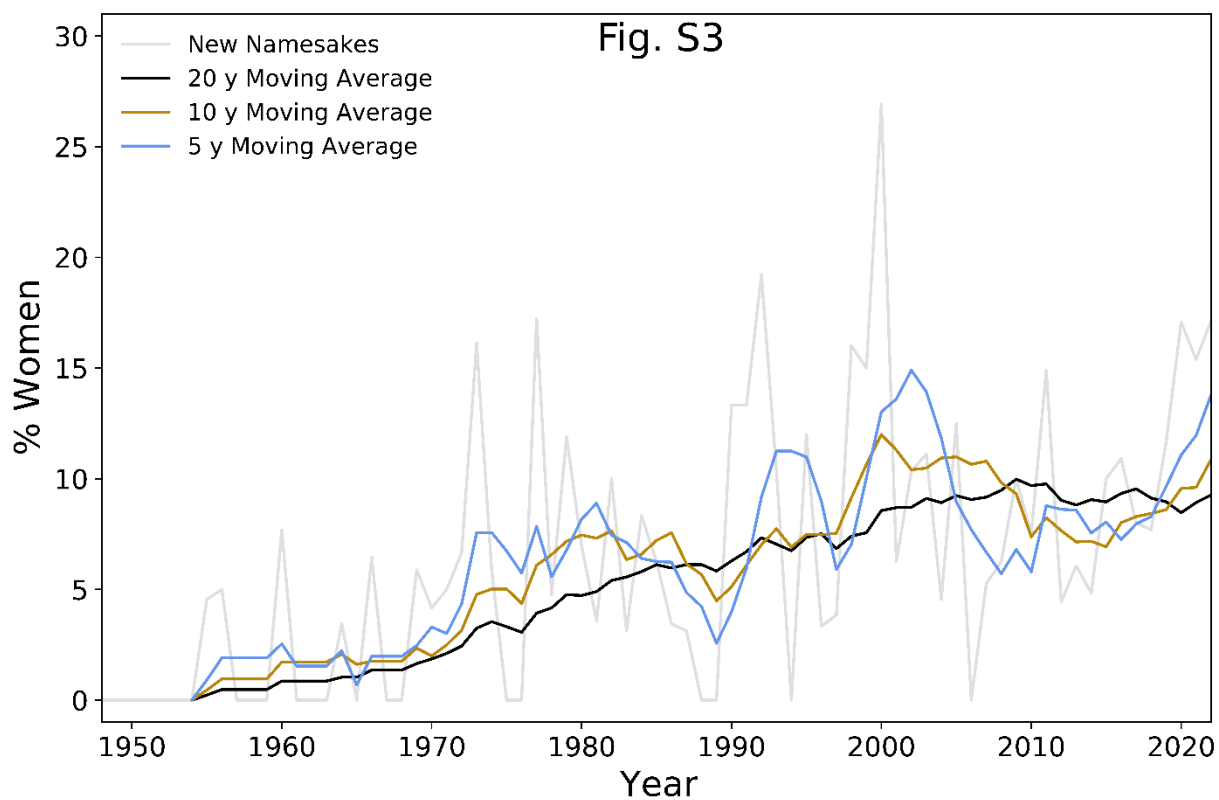## 4. Additional Moving Average Visualizations

Figure S3.

Alternative moving average windows for the year-on-year percentage of women among new mineral namesakes.
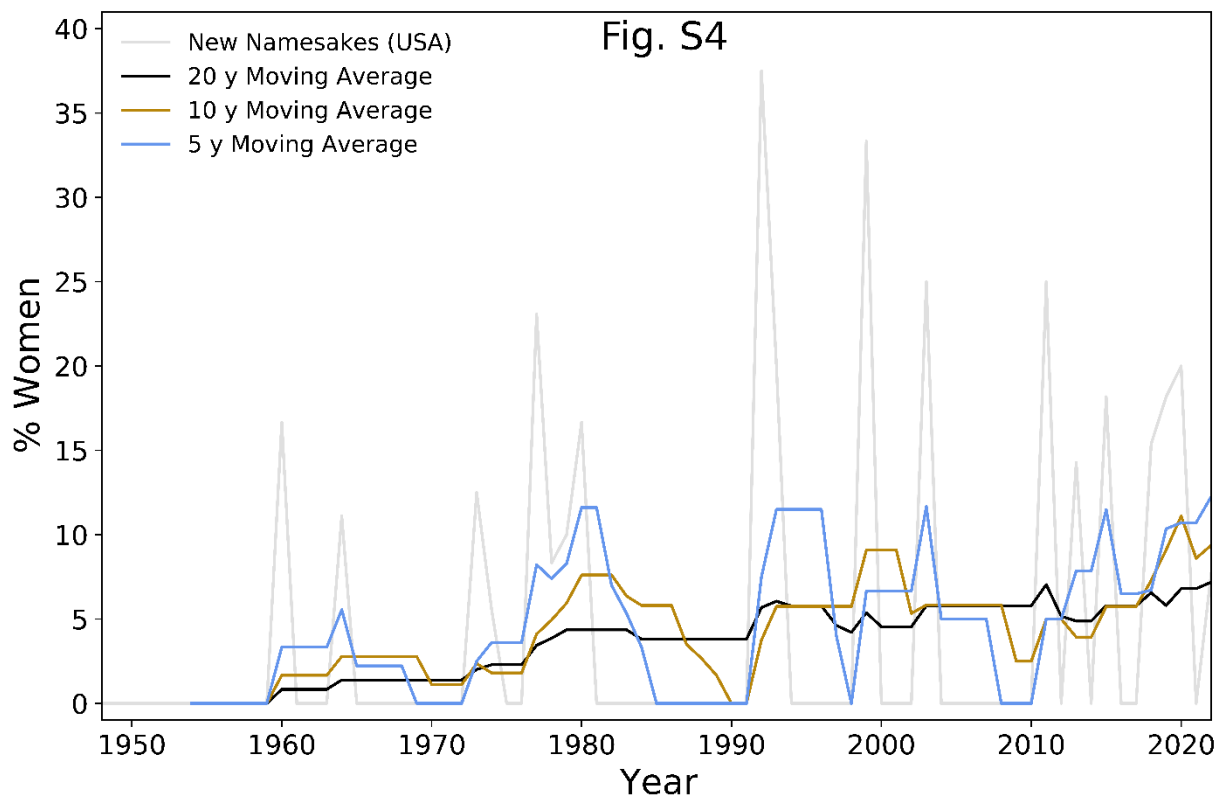
Figure S4.

Year-on-year percentage of women among new mineral namesakes from the USA (gray line)

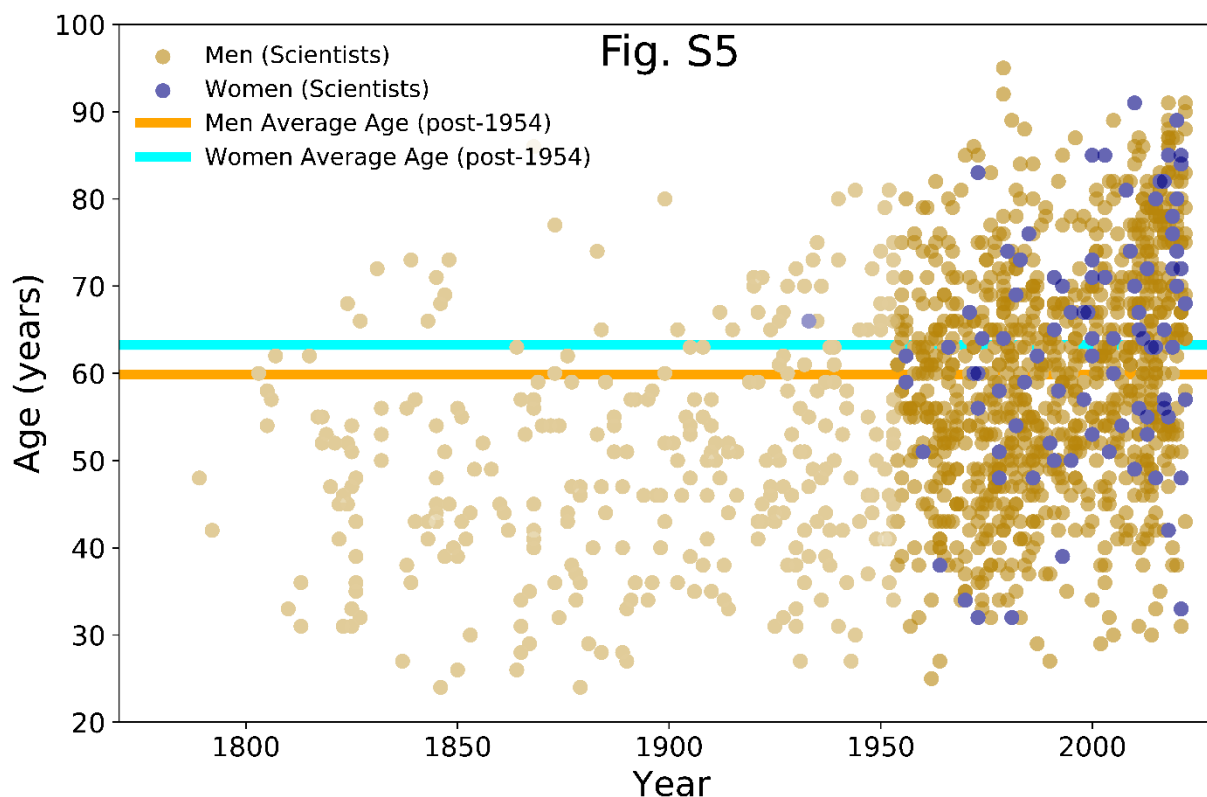with 20 (black line), 10 (yellow line), and 5 (blue line) year moving averages through these data.

Figure S5.

Ages of men (gold) and women (blue) when a mineral was first named in their honor as a function of the year when the mineral was named. For simplicity, ages are calculated from the birth and naming years without considering specific dates. These data represent only the first occurrence of a mineral being named for each person, and do not include data for any subsequent mineral names. The orange and cyan lines represent the respective average age of men and women established as eponyms after 1954 (inclusive). Data from prior to 1954 are faded to emphasize that they are not included in the age averages.