LETTER

Inference and Proto-Sumba

In Reply: The genetic–language–geography analysis in our work (1) is based on association summary statistics: Mantel tests, principal components analysis, and correlations. These methods are not inferential and make no assumption on the data beyond what is necessary to calculate these statistics. In particular, their computation depends neither on the nature of migrations to Sumba nor on the technology of the resident Sumbans at the time of contact. These procedures, by their nature, cannot establish causality. Consequently, our conclusions from the statistical analysis are limited to comparisons with other studies and hypothesizing on aspects of the prehistory of Sumba that are consistent with our findings. Regarding the existence of Proto-Sumba, Donohue crucially assumes that there are no innovations that include all Sumbanese language groups, yet are exclusive to Sumba, and in this we disagree. The following are represented in all Sumba subgroups (satisfying the criterion of inclusivity) but not found outside of Sumba (satisfying the criterion of exclusivity): *loŋge, *head hair*; *takuŋ, *cane*; *ka=weda, *old*; *pa=ŋədaŋ, *think*; and *pa=newe, *say*. In addition to these examples, the following are lexical retentions with morphological and/or phonological innovations: *ka=iku, *tail* (with an innovative prefix *ka=); *n=dauŋ, *year* (with an innovative nasal prefix that has led to voicing of the root initial); and *m=buato, *heavy* (which is probably a continuation of Proto-Malayo-Polynesian *ma=bəRəqat with unique vocalism and word-final vowel epenthesis). Importantly, the Proto-Sumba pronouns that are reconstructible show a unique innovation where an initial palatal nasal onset *ñ- has been added to the root: *ñauwa, *first person singular* (this has been further modified in subgroup D-E); *ñemi, *second person singular*; *ñame, *first person plural*; and *ñida, *third person plural*. Based on this evidence, it is therefore justifiable to consider the languages of Sumba to be derived from a single ancestor, Proto-Sumba. Finally, regarding the introduction of agriculture on Sumba, even though Sumba and the surrounding islands have not seen much archaeological work, the most parsimonious explanation remains that both agriculture and ceramic technology arrived alongside Austronesian language patterns (2, 3).

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The author declares no conflict of interest.

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