

REPLY TO HENRICH ET AL.:

The Tasmanian effect and other red herrings

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Henrich and his large group of cosigners (1) miss the point of our paper (2). They believe we were rejecting the relevance of population size in cultural evolution outright, whereas we were critiquing the recent trend in archaeology to use population size to explain patterns in the archaeological record; hence, our title “Population size does not explain past changes in cultural complexity” (2). Perhaps not surprisingly given their misreading of our paper, none of Henrich et al.’s points (1) contradicts our argument.

We argued that the recent wave of studies in which population size is claimed to explain past changes in cultural complexity is problematic. One cause for concern, we averred, is that the models that underpin what we called the “population size approach” only yield a relationship between population size and cultural complexity under certain conditions. Such conditionality holds not just for the models we examined but also for the model that Henrich et al. (1) highlight. Contrary to what they imply, the relationship between population size and cultural complexity is not universal, a point that is illustrated by the fact that some models do not yield the relationship (3, 4). The conditionality of the models means that population size cannot simply be used to interpret changes in the archaeological record. Instead, the conditions in the archaeological case need to be matched to the conditions assumed by the models that support the population size approach. Such matching has not been carried out in any of the archaeological studies that have appealed to population size, and that means their claims are not defensible.

The other point we made is that the population size approach does not fare well at all in relevant empirical

tests. We demonstrated that it fails in the highest profile cases in which it has been used, including the one that gave rise to the term the “Tasmanian effect.” We showed that Henrich’s analysis of Tasmania’s archaeological and ethnographic records (5) is flawed. Subsequently, we demonstrated that the majority of studies that have tested predictions of the population size approach have not supported it. Neither of the points that Henrich et al. (1) make in connection with this part of our paper changes the situation. Their criticisms of Collard’s studies (6) are not only speculative but also ignore the fact that other researchers have obtained the same result using different datasets (7–9). Henrich et al.’s appeal (1) to work focusing on linguistic complexity in the Pacific and patenting activity in the United States has little relevance to the studies that have used population size to explain archaeological patterns, all of which pertain to hunter-gatherer material culture.

To conclude, we stand by our argument. Currently, there is no reason to think that population size explains any, let alone all, changes in cultural complexity in the past. This conclusion has been reinforced by a number of studies published since our paper appeared (4, 8, 10).

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