David M. Alba, PhD.

Head Editor

Journal of Human Evolution

June 24, 2020

Dear Dr. Alba,

I am writing to submit the manuscript entitled, “Ecological perspectives on technological diversity at Kanjera South” for consideration as an original research article in the Journal of Human Evolution. Given that this paper addresses issues regarding hominin behavior, and ecology, we believe that the content presented in the paper will appeal to readers who are particularly interested in hominin evolution.

This article examines the influence of contextual factors on technological diversity of Oldowan stone tools using quantitative measures of stone tool utilization. While the technological analyses are common practice in Oldowan research, the integration of both raw material availability data and quantitative measures of stone tool reduction in this paper is novel. This unique combination of methods and data is used to gain insight into both the tool using behaviors and land-use strategies of Oldowan hominins in western Kenya during the early Pleistocene. This study shows that variables such as stone tool reduction intensity, raw material properties and abundance, have a strong influence on Oldowan technological strategies at Kanjera South. This is an important result as stone tool reduction strategies are often argued to reflect socially learned processes. Here we show that technological variation can also arise due to the interaction of ecological factors. Documenting this relationship between ecological factors and Oldowan stone tool production strategies also allows this work to provide insights into the land-use strategies of Oldowan tool makers.

Given the novel nature of these results we believe that this work will make a substantive contribution to the understanding of the evolution of human behavior and therefore will be a good fit for the Journal of Human Evolution.

Best,

Jonathan