

Book Review of Tropical Forests in the Deep Human Past: Theme Issue

E.M. Scerri, P. Roberts, S. Yoshi Maezumi, and Y. Malhi (eds.)

Philosophical Transactions of the Royal Society B, 377(1849), 2022, open access.

Reviewed by MANUEL WILL

Department for Early Prehistory and Quaternary Ecology, University of Tübingen, Tübingen, GERMANY; manuel.will@uni-tuebingen.de

Today, our species inhabits almost all terrestrial ecosystems of the world ranging from temperate coasts to high-altitude mountains, and dry deserts to frigid tundras. This extreme ecological flexibility is a rather recent phenomenon and one associated with the global expansion of *Homo sapiens* during the later parts of the Late Pleistocene. As such, the study of how past hominins and our direct ancestors adapted to various environments has been one of the constant and key themes of research in paleoanthropology and archaeology. Not all environments are equal, however, and some have attracted more attention than others. While scholars have often perceived open savannah or grassland environments as favorable and central to becoming human, other ecosystems have received less research, in part because of their (perceived) harshness, low food availability, and scarcity of relevant archaeological evidence.

Tropical forests and rainforests have been such a case and the theme issue by Scerri et al. (2022) goes beyond filling an important gap resulting from the vagaries of research (and taphonomic) bias, showing just how relevant this ecosystem is to understand human evolution and past societies throughout the Pleistocene and Holocene. In order to make this point, the theme issue musters an impressive range of articles that span hundreds of thousands of years, ranging from the early Mid-Pleistocene until the 16th century Pre-Columbian era. The spatial extent is no less spectacular, covering all relevant tropical forests of the Earth, from Africa, Asia, and Oceania to South America in a total of 14 articles and an introduction. The volume is well-structured in a sequence of articles from oldest to youngest, with roughly the first and older half on Africa, followed by three contributions from Asia and Oceania and the concluding and youngest part on South America and the Amazon rainforest. The timeliness of this topic derives from a rising interest in Pleistocene and early Holocene tropical archaeology in recent years (e.g., Roberts, 2021) but also for understanding the nature, extent, and impact of anthropogenic climate change in an especially critical and endangered ecosystem in the 21st century.

A short review cannot do justice to the great diversity and caliber of the presented work, with each article worthy of deserving an in-depth treatment, though likely of varying interest to archaeologists and anthropologists of different specializations and spatio-temporal focus. The high-quality research articles encompass multidisciplinary work on archaeology but also insights from climatology, ecology, genetics, and linguistics. What I do recommend to interested readers is to peruse the Introduction to the theme

issue by Scerri et al., which provides a great attunement for getting into the right cognitive mindset for the rest of the issue. More than a simple summary of each article, the well-written piece sets the tone of the whole volume, provides important general information on tropical forests and their research history, and assesses the relevance of tropical forests to understand the human story in a synthetic way.

So, is the theme issue an overall success? For me it certainly is. Coming from a Stone Age and human evolution background, my general interest in the early third of the issue was certainly nursed and the contributions make a strong case for a relevant role of tropical and rainforest environments also in earlier parts of human evolution. That being said, I also much enjoyed the last third of the issue on perspectives discussing anthropogenic change (or niche construction) within the Neotropical forests of South America already appearing at or slightly before the beginning of the Holocene and intensifying subsequently, well before Europeans appeared in this area. Here, I particularly recommend the fascinating and thought-provoking article by Bush and colleagues. As a result, this theme issue goes beyond being relevant in understanding human evolution, but also concerns neighboring disciplines including conservation biology, and touches upon socio-political issues and policy making.

Yet, nothing is without flaws. Fortunately, the things to criticize about this issue are few and far between and are mostly minor points. More concrete studies providing tangible new archaeological data (e.g., on stone tools) from Stone Age contexts would have enhanced this theme issue, the spatio-temporal coverage within different regions of the world differs quite strongly in resolution and often remains patchy (though this is explicitly recognized by several articles), the quality of illustrations are high among most but not all articles, and some discussions on the wider contextualization of relevant evidence remain rather brief, particularly for the shortest contributions. Some of these minor issues are likely due to a word limit for individual articles and so beyond control of the authors (instead attributable to the journal managers), though this remains odd given the only about 150 pages of the printed issue and a change to Article IDs instead of page numbers of the journal, which should have allowed for more space for all contributions.

In sum though, this is one of the strongest theme issues I had the pleasure of reading. The issue covers a relevant and timely topic that organically unites all articles within a well-rounded structure, showcases high-quality research, and provides interdisciplinary perspectives in a

wider framework. The most important and likely lasting achievement of the publication of this volume, however, is that it will be much more difficult for paleoanthropology and archaeology to neglect tropical forests in their big narratives in the future.

REFERENCES

- Roberts, P., 2021. *Jungle: How Tropical Forests Shaped the World—and Us*. Basic Books, New York.