

Peer Review

Review of: "Does Palaeolithic Resource Management Leading to Domestication Explain Human “Modernity”?"

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I thank you for offering me the opportunity to review this article. I would like to clarify that I am Antoine Balzeau. The title of this article caught my attention, which is why I agreed to review it. The proposed work lacks structure. It provides no data, and the discussion does not contextualize the state of knowledge on the topics addressed. At best, it gives the impression of listing a few data points on animal groups without ever truly contextualizing them. There is no structuring of the argument, no justification. Many concepts are introduced without ever being defined. The author merely unfolds a line of reasoning that supports their own views without ever demonstrating them.

Overall, this article is not publishable. It would require substantial revision, both in form and in content. I detail below some observations to justify my assessment, following the order of the article.

Title: provocative—and why not in principle. But from the abstract onward, the author tells us that it is not possible to answer the question being addressed. So why such a title?

The use of the verb “*leading*” in the title is awkward. The author implies a cause-and-effect relationship without subsequently analyzing even a possible covariation, and obviously without ever demonstrating a causal link. This limitation recurs many times throughout the article.

Similarly, the end of the abstract poses the same kind of pseudo-hypothesis, only to immediately say that it is not supported. At this stage, it is difficult to understand what the aim of the paper actually is.

In general, many notions should be properly defined: modernity, self-domestication... Domestication is defined, but the proposed definition implies that it is not applicable to humans.

“Music at Lomekwi” is an example of the kind of gratuitous, untestable claim that is presented as unquestionable support for a directive argument, despite the absence of any robust scientific basis.

Figure 1 is clumsy and entirely gratuitous. It has nothing scientific about it: just words and arrows, with

no justification for the proposed links.

Page 4: the first sentence is completely circular.

What is the “human system”? Technology and anatomy have nothing to do with one another.

Agriculture is presented as a driver of evolution, enabling the progress of humanity. There is abundant literature showing that things were far more complex. Linking this to art, writing, and science makes absolutely no sense. It is deterministic and scientifically incoherent.

Page 5: please provide references for all these adaptations.

Devoting an entire page to end with the idea that evolution is more complex than we think is unexpected in a scientific article. Simple and circular stories that confuse correlation and causation are indeed not within the domain of science.

What follows is weakly contextualized.

This leads, on page 8, to the claim that self-domestication is established—without contextualization and without mentioning the scientific literature that mostly argues the opposite.

Page 9: the same assessment applies to the entire content of this page.

Having worked extensively on La Ferrassie, your shortcut regarding the competencies of different human species is unfounded.

Just as I thought I was still in the introduction, a new subheading opens a new topic with no transition. I will pass over these sections, which mix disparate pieces of information, often poorly contextualized and sometimes off topic.

Human domestication then appears and is presented by the author as an unintentional fact. No need to rely on references or to demonstrate it—it is simply asserted.

The author then argues that the replacement of human species by *Homo sapiens* did not occur. This is their viewpoint, which is largely a minority one, but it is used as support for what follows.

What follows, spanning pages 17 to 28, seems like a joke. The author argues that we have not found everything and therefore that some prehistoric elements may have escaped us. This is ironic, since the author himself does not confront alternative viewpoints or data. In short, this entire section states the obvious, and this attempt to conceptualize information loss is scientifically weak.

We finally reach the discussion. Yet there have been no results, no data presented, and no synthesis of existing knowledge. This discussion, which runs over one page, is merely a summary of what was said before.

Declarations

Potential competing interests: No potential competing interests to declare.