Review of: "A Uniformitarian Solution to the Appearance of Small-Bodied Hominins, Dwarfs, Pathologies, and Self-Domestication: Theories of New Discoveries"

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Potential competing interests: No potential competing interests to declare.

The paper discusses the discovery and analysis of small-bodied hominins, such as Homo floresiensis and Homo naledi, found in various locations from Africa to Polynesia. These hominins are often referred to as “diminutive” and have sparked significant debate regarding their classification and evolutionary significance.

The paper highlights the skepticism surrounding the unique features of these hominins that do not fit neatly into known species, and the discussion includes the brain size and cognitive abilities of these hominins, noting that some, like Homo floresiensis, had small brains but still made complex tools. It debates whether these hominins represent new species or pathological variations of existing species and touches on the idea of self-domestication and selective breeding among humans, suggesting that preferential mating or selection for certain traits could explain the small-bodied hominins.

The author concludes that the wide separation of small-bodied hominins in time and space suggests a common pathological cause, possibly a viral infection, rather than a single evolutionary lineage. The paper comprehensively reviews the current understanding and debates surrounding small-bodied hominins. It highlights the complexity of classifying these fossils and the various hypotheses proposed to explain their unique features. The discussion is well-rounded, considering both evolutionary and pathological perspectives. However, critics might argue that this focus overlooks other plausible evolutionary explanations and does not adequately consider the possibility of these hominins being distinct species. Moreover, the suggestion that a viral infection could be responsible for the developmental anomalies observed in small-bodied hominins is intriguing but speculative, and there is limited direct evidence to support this hypothesis.

While the author does mention alternative theories, such as island dwarfism and evolutionary adaptation, it does not explore these in as much depth as the pathological explanations. This could be seen as a bias towards one particular viewpoint.

The paper often generalizes findings from small samples of fossils, which might not represent the broader population. A technical observation that can be easily addressed is the quality of the images, which is very low in both versions.