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“Investigating hominin tool-making capabilities using micro CT scanning of metacarpal bones”

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The discovery of hand bones stratigraphically associated with stone tools at Olduvai Gorge in the 1960 ignited debate about morphological correlates of hominin tool making and tool using. Retention of robust metacarpals was then argued to represent tool-making capabilities. Though stone tools dating as early as 2.6 million years have been discovered, robust hominin metacarpals only appear in fossil record after 1.8 million years. The debate then has been about which hominin was responsible for making the earliest stone tools and whether robusticity of metacarpals is a prerequisite for a stone-tool maker. The paucity of a full complement of hand bones dating prior to 600,000 years has limited inferences on stone-tool making. The recent discovery of a near complete hand of *Australopithecus sediba* has provided an opportunity to test the presumed link between metacarpal robusticity and tool making. The novel approach used in this paper consists of testing for metacarpal robusticity by comparing cross-sectional geometric properties of metacarpals across hominoid species (both human and non-human). Insights gleaned from the results can be used to make inferences into hominin tool making repertoires.

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Maybe

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