
Techno-functional and macro-wear analysis of Nalai site, Bose Basin, Guangxi, Southern China. A new insight into hominin behaviors and technical evolution in Eastern Asia.

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Résumé

The Bose Basin, Guangxi, Southern China, has yielded many Middle Pleistocene sites known for a very long time. The technology is based on pebble shaping, usually unifaces and sometimes on both sides. Although the technology has been carefully studied in several sites, the tools themselves were analyzed so far only from a typological point of view.

Two major results came out from the previous analyses of Bose Basin archaeological sites. First, the technology seems to remain stable from 800 ka to 20 ka, which is an important singularity in the worldwide Pleistocene archaeological record. Second, the tool-kit is dominated by heavy-duty tools shaped on pebbles, with a high proportion of picks and transversal cutting edges.

The discovery of Nalai site, rich of more than 2 000 pieces into 7 stratigraphic layers from the Lower Pleistocene to the Neolithic provides an opportunity for studying the assemblage from a techno-functional approach, in order to identify precisely techno-functional groups and their functional potentials. Furthermore, macro-wear traces were preserved on some of the pieces. This combination allows this study to focus on the diversity of the tool-kit and its use by hominins through the Middle Pleistocene in Southern China.

Focusing on the Pleistocene stratigraphy also leads to address the issue of technical stability or continuity into the hominin technologies through time. The chronological succession will provide brand new data to understand the technical evolution in the Bose Basin through the Middle Pleistocene to the Holocene.

The results of this work show a good correlation between the techno-functional categories hypothesized and the macro-wears identified. It brings the research to a next step of understanding in terms of technical activities and hominin behaviors in Southern China during the Lower Pleistocene.

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