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# Bifacial shaping: experimental and archaeological approaches for the identification of manufacture's stages

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## Abstract

The study of handaxes' waste products can contribute to better understand the bifacial mode of shaping and the mobility pattern of the hominins. By studying experimental and archaeological samples, we tried to identify attributes that enable to differentiate handaxes' flakes according to stage of manufacture. Flakes resulting from experimental bifacial shaping and archaeological handaxes from two sites, Guado San Nicola (Italy) and la Noira (France), are examined and analysed by technological and statistical methods. Although most of the considered attributes are not significant, some characteristics allow differentiating the first stage of shaping from the final stages. We also notice that further information about flakes' phases attribution can be obtained if the knapping technique and the blank used to shape the handaxes are known. In addition, to separate the experimental samples based on knapping techniques allow making some remarks on the validity of the attributes usually associated with hard and soft hammer percussion.

**Keywords:** bifacial shaping, experimental approach, statistics, acheulean

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