
Functional analysis of Middle Palaeolithic flint points and other lithic pointed tools from Abric del Pastor (Alcoi, Alicante)

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Résumé

Discussion about use of lithic projectiles for hunting during the Middle Palaeolithic (Shea, 2006; Villa & Lenoir, 2009; Plisson & Beyries, 1988; Plisson & Roots, 2014; Rios, 2012) is still open. The identification of macroscopic and microscopic diagnostic impact features; such as fractures, linear polishes at the apex, and preparation for hafting at the proximal end, confirm this hypothesis. However, not all pointed lithic artifacts have the same support and tip morphology.

An ensemble of 65 pointed stone pieces of different thickness, retouching and preparation of the support have been recovered from *Abric del Pastor*. A previous study (Galván, Hernández and Francisco, 2007) identified several macroscopic impact traces on some of them. The *Abric del Pastor* is a small shelter located about 800 meters above sea level, on the right bank of the *Barranc del Cinc (Alcoy)*. Last neanderthal groups have occupied that shelter and the *El Salt* site. However, we find in *Abric del Pastor* a higher concentration of lithic elements, that could be related to hunting activity than in the other settlement.

We present here a sample of 34 pieces of pointed morphology, selected for their potentialities for the use as hunting weapon.

These elements have been grouped by dimensions and morphology into 4 groups.

- Group 1: is defined by a support elongation index (Width / Length in mm) between 0.30 and 0.43, thickness between 7 and 8 mm and lengths between 43 and 56 mm. These are retouched pieces with frequently abrupt lateral retouches and edges that tend to be curved in shape. All of them have a slightly curved support cross-section.

- Group 2: artifacts are characterized by their short and wide triangular shape (between 25 and 40mm). The elongation index is between 0.60 and 0.95. The supports are thin in the

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area of the tip, and show sharp edges, some without retouching, and others with simple and flat retouches. None of them, have abrupt retouches.

- Group 3: pointed and elongated pieces (elongation index between 0.40 and 0.56), thin sub-triangular and straight in section supports. The retouches on the lateral edges are simple.

- Group 4: two small pieces, 24 and 25 mm long, showing triangular and thin morphology; between 3 and 5mm and an elongation index next to 1.

The results of the use-wear analysis demonstrate a relationship between morphology and the use as a projectile. In this sense, the pieces in groups 2 and 3 are those showing diagnostic impact traces of use, which can be related to their use as a spearhead or a pike.

Although the relationship between morphology and function is not decisive, the traces of use report the existence of an intentionality in the selection and preparation of the spear points

Mots-Clés: Use, wear analysis, Middle palaeolithic, lithic technology, hunting weapons