

*On the road from the City of Skepticism, I had to pass through the Valley of Ambiguity.*  
Adam Smith (1723-1790)

## **The Acheulean Handaxe at Boxgrove**

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**May 30, 2007**

I stepped out of my comfortable arena of New World, Paleoindian archaeology and into the Old World Paleolithic with my first paper on the Acheulean Handaxe in 2006. There I wrote:

The Lower Paleolithic researchers who believe the Acheulean handaxe was the desired product do not find their justification in its function, since its function is not understood ... Instead, they find their justification in its unchanging morphology. For a million plus years, its basic shape remained constant as it spread across three continents.

I further pointed out that this desired-product belief can be traced back to the end of the eighteenth century and John Frere. Then I proposed a different belief, which was the handaxe was actually only the by-product and flakes were the desired-product. The remainder of the paper was then justification for that belief from a morphological perspective.



Since writing that first paper I have had numerous discussions with colleagues about this dichotomy of the desired-product versus by-product. I have discovered that the opinions on the subject are quite strong. Often, it was suggested that I read the Boxgrove literature and this might convince me to change my mind. So I read *Boxgrove: A Middle Pleistocene hominid site at Eartham Quarry, Boxgrove, West Sussex*, which is the monograph of the site at this time. To my surprise, instead of containing evidence to support the desired-product belief, I found that the desired-product belief was the inherent assumption stitched though out the book. But first, why Boxgrove?

Boxgrove is an archaeological site on the southern coast of England and it is the archaeologist's dream. It is a unique Acheulean site in that it contains "... the presence of *in situ* working floors..." (McNabb 2000:439). It has a date range of between 524 and 420 kyr bp, and "the stone tool assemblage, all of which is made from local flint, is dominated by the production of handaxes" (Roberts and Parfitt 1999:xix). It has even yielded a tibia that "... can only definitely be assigned to Homo sp with possible affinities to either H. heidelbergensis ..., H. erectus ..., H. neanderthalensis ..., or H. sapiens..." (Stringer and Trinkaus 1999:420).

As stated above, I found the desired-product belief to be an assumption in the Boxgrove monograph. For example, consider again from the above paragraph, "the stone tool assemblage ... is dominated by the production of handaxes." This comes from the summary at the beginning of the monograph. Though out the discussion of the lithics and their relationship to the archaeological record, flakes are referred to as waste flakes as in the following: "It (assemblage) comprised in the main waste flakes from the production of handaxes and five finished bifacial tools" (Austin, L. A. et al 1999:315). Or, "The debitage from areas Q1/A and Q1/B is the waste from handaxe production" (Austin, L. A. et al 1999:341). In the concluding remarks to the archaeology chapter, which is also the end of the monograph, one finds:

It has been argued that as the lithic assemblages of the earliest occupants of northern France and the United Kingdom are dominated by handaxes, then the source area for the European hominids was from the Levant and Africa, where handaxes were in use from c 1.5myr bp, more so as handaxes appear later in the archaeological record of Asia and central and eastern Europe. Whilst this hypothesis is persuasive, it must be remembered that handaxe manufacture is very much determined by raw material sources ... and caution must be exercised in using tool types as sources fossils. (Roberts 1999:423)

As there was no attempt to test the desired-product belief against the Boxgrove archaeological record in the monograph, I have attempted to do it here. Simultaneously, I tested my by-product belief in a similar manner. Since I have never been to the site and have only seen the artifacts at the British Museum, the monograph is my view of the Boxgrove's archaeological record. The following is a discussion and results of that testing.



















