The Human Burial of the Abrigo Lagar Velho Child: an analysis of human burial and the understanding of social relations and ancient society.

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How does a study of burial populations help us understand social relations in an ancient society?

Human burials have been absent from the Aurignacian culture. Burials of individuals or groups uncovered from the beginning of the Gravettian period, have been found full of rich ornamentation. Excavations of some burials from this period raise questions about the extent of inequality in Upper Paleolithic societies. For example, if a child is found in a burial it is important to take into consideration of the child’s age in comparison with the evidence of the effects that are buried with the child. In this way it may be possible to determine whether the individual was born into a position of higher status in a society with a form of social ranking (Chazan 2008: 162-163).

Excavations have shown that the burial rituals in the Upper Paleolithic have some characteristic elements (in terms of items found to be buried with the deceased, for example the use of ochre) and specific layouts (in terms of the placement of the graves on the site). The graves from this period often reveal signs of symbolic and spiritual acts, and evidence of the social environment that the individuals inhabited (Giacobini 2007: 19-39). There is considerable evidence that can be gathered from the site of a human burial; the burial itself tells us that someone constructed, with forethought, a place where one they cared about could rest in peace. If we go deeper, and examine what might be buried with the individual, it often tells us a larger story; who they were, what they did, how they died, and it may give some indication of the individual’s social relations. In short, it often paints a picture of life in an ancient society.
The Abrigo Do Lagar Velho site, which I am going to use as a case study, is found on the south side of the Lapedo Valley, in central western Portugal, in the western part of Europe. (Fig 1.)

The site at Abrigo do Lagar, Portugal, has provided evidence from an Upper Paleolithic human burial that there were signs of early modern humans from this region. The most significant remains that have been found at this site are the skeletal remains of what the archeologists believe to be a four-year-old boy, lying on a bed of burnt vegetation and covered with red ochre and decorated with pierced teeth and shells. The remains have been dated to ca. 24,500 years BP (Petru 2006: 203-208). The fact that the young child found at Lagar Velho was buried in this condition is a very interesting finding. The red ochre may very well represent blood, because of the color red. The society from which the boy lived in, may have used the color red to represent the dead human/Neanderthal. Pierced shells can be a symbol of many things, labor, art or even some sort of design. It is possible that the pierced shells were buried with the child because he had some connection to them when alive. Maybe he liked to work with them, play with them or just liked them in general. If so, then the reason for them being in the burial site is quite intriguing. It indicates that someone, again with forethought, took the effort to leave some sort of symbol to show respect and caring towards the young boy.

Fig 1: Neanderthal sites in the Iberian Peninsula, South West Europe. (Zilhão, 2001)
It is not determined or clear in any way what these artifacts meant for the child, or their actual purpose in the burial. But what is certain is that each and every artifact that was found with the four-year-old meant something. To understand this more closely it is important to determine where the burial was located in a sea of stratigraphic layers. The stratigraphy of Lagar Velho is mainly divided into two groups, the Solutrean layers and the Gravettian layers. Each of these represents different findings of artifacts and ecofacts and very different social behaviors. The Solutrean layers are the more recent levels, and compared with the Gravettian levels it makes it easier to date the skeletal remains of the young child. The stratigraphy of Lagar Velho (Fig 2): The most recent deposits are found of a hanging remnant of soil layers located close to a rockshelter. There are two main levels of strata at this site. Level 6 is the upper level, where archeologists have found burnt cobbles, horse remains, and artifact assemblies from the Proto-Solutrean and fine handcrafted bone points. These handcrafted bone points are most likely small hunting points from the Gravettian period. The charcoal in which these findings were uncovered has been dated by radiocarbon dating three times, and the result of these tests has placed the charcoal from Level 6 to between 22,000 and 21,000 BP. The Gravettian levels are found lower in the stratigraphy. In the summer of 1999, an archeological team tested the soil in the square J13 (Fig 2), by going 3 meters underground. **Fig 2: Stratigraphy section of the Hanging Remnant at Lagar Velho,**

![Stratigraphy section of the Hanging Remnant at Lagar Velho](image)

(Zilhão, 2001)
No artifacts were found, but several ecofacts were dug up; including burnt deer, horse
and rabbit bone. The radiocarbon dating of these bones indicates that the bones were
from between 23,500 and 23,000 BP. Going 50 cm further down from the sequence to the
L20 Square, the burial site of the four-year-old was found. In comparison to the above-
mentioned sediments, radiocarbon dating of this skeleton has resulted in a much more
exact estimate of how old this child’s skeleton really is, 24,500 as written earlier (Zilhão
2001).
An examination of the skeleton has shown that the cranium, mandible, dentition and
postcrania have features from both European early modern humans and Neanderthals.
This admixture between the Iberia Neanderthals and early European modern humans
indicates evidence that support the multiregional hypothesis of the fate of the
Neanderthals, and raises questions regarding the replacement hypothesis of the
Neanderthals. The multiregional hypothesis comes from the idea that the modern humans
spread out of Africa and into Europe, where continuous gene flow occurred between the
Neanderthals and the modern humans (Chazan 2008: 154-155). There is, however, still
not enough evidence to point out that this theory is the correct one. There are many
anthropologists who support the replacement hypothesis, because of some crucial
reasons, which will be explained later in this essay. Developmentally, the remains found
at this site are from a young boy, so it is hard to be certain whether he was a Neanderthal
or a modern human, or even a mixture of them. The four-year-old, was simply not
evolved enough to make any firm conclusion about this. (Trinkaus 1999: 7604-09)
In other word the age of the specimen complicates the analysis of the skeleton and the
dental remains. There are fewer child skeletons than adult skeletons, both modern and
from the past, from which to make comparisons and it is not very clear how adult skeletons are documented and compared to those of young children. The human skeleton from Lagar Velho is a good example of this issue. The structure and body mass of the four-year-old at the time of its death has been estimated by equations between this young human and from other modern human samples (Zilhão et al. 2002). The complete excavation of the Lagar Velho site revealed interesting findings after the very first meeting with the site. Later it was understood that the child was buried on a bed of burnt vegetation. This burnt vegetation may indicate several things. One of the most significant may be the spiritual and religious meaning behind this finding. That he was lying on a bed of burnt vegetation could be an indication that the society from where the young child came had some idea of what was going to happen in the afterlife. Leaving him on such a bed, certainly tells a different story than burying him on plain soil. What I would think this bed symbolizes is for the young child to have a comfortable blessing on his way to the afterlife. The pierced shells that were examined showed signs of the Gravettian style, which is known as a type of industry form the time modern humans migrated to Europe.

The Gravettian period is dated from approximately 26,000 to 23,000 BP, and is known for its tools across Europe, especially the small hunting points (Chazan 2008: 159-160), which has found in numerous stratigraphic layers across Europe. Throughout the Gravettian period, the western part of Europe, also where the Lagar Velho site is located, was a common place for settlement (Zilhão 2001). Based on this cultural transition of archeological remains, the burnt vegetation, red ochre and pierced shells from the Iberian Peninsula, some archeologists have come to the conclusion that at the time when the
modern humans came to Europe (30,000 BP), they replaced the native Neanderthals (Fig 3.)

This map has now been proven wrong. After the findings of the young child in Portugal, which has traits of both Neanderthals and modern humans, it is clear that our modern human ancestors did not replace the Neanderthal until at least 24,000 BP, in the Iberian peninsula. This evidence, in part, answers the mysterious question of whether this boy was modern human or not. By the replacement hypothesis it has been claimed that the four-year-old in fact is a representative of one of the earliest modern human child ever found in Europe.

The complete skeleton found at Abrigo do Lagar is a remarkable finding, because it has been well preserved and intact over the past 24,500 years. The skeleton itself has led to continued discussion of the origin of the child. The chin and lower jaw bones, small front teeth, characteristic muscle markings on the thumb, the narrow space around the pelvis area and many more examples from the shoulder blade and the forearm bones suggest that this child is a modern human. But other parts of this skeleton provide evidence that suggests otherwise. The details of the incisor teeth, the pectoral muscle markings, the knee proportions and the strong lower-leg bones show evidence of a Neanderthal child. **Fig 3: Map of the last Neanderthal regions in Europe ca. 30,000 BP.** (Zilhão, 2001)
The site of Abrigo do Lagar gives us some insight into the behavioral similarities between the Neanderthals and the early modern humans. If we do not think of the obvious paleontological differences between these two races, their adaptive patterns, social behavior and communication have been proven to be similar. Some might even go as far as saying that Neanderthals were just one of many hunter-gatherer groups of the Pleistocene, and, as shown (Fig 4), they were almost just as evolved as the modern humans (Trinkaus & Duarte 2000). Figure 4 tells us something about the behavioral traits of the Neanderthals and the modern humans. The diagram shows that both of these species were bipedal and had the same brain size. This fact provides a new level in the discussion of differences between the Neanderthals and the modern humans because this diagram illustrates that in fact they were very similar.

It was Erik Trinkaus, an anthropologist from Washington University, who was in possession of the bones after the discovery was made. Through his examination of the skeletal remains he came to the conclusion that the child’s anatomy most likely was a result of a mixture between Neanderthal and early modern human ancestry. If this is correct, then it is proof that the Neanderthal lineage was still to be seen in Europe after 28,000 BP, and supporting the fact that they did not just disappear from Europe at that time. Instead they interacted with the modern humans and evolved through a process of gene flow, from which they became a part of our family.

**Fig 4: Diagram of the evolution of brain size and bipedalism.**

(O’Neil 1999)
This rejects the Out of Africa model of modern human emergence and indicates that the society from where the young boy came, at some point, interacted with modern humans (Zilhão 2000). However, what is very interesting with the point that Erik Trinkaus presents, is that for some reason the modern humans did not come to the Iberia peninsula for several thousand year later.

The archeological site in Portugal is one of few in Europe, which shows some evidence of Neanderthals and modern humans living side by side, to some extent. The valley of the Ebro can explain this. North of the Ebro valley modern humans occupied France and Western Europe, developing an Aurignacian culture, where the modern human replaced the Neanderthals approximately 40,000 to 38,000 BP (Fig 5).

Below the Ebro valley, the last societies of the Neanderthals remained until almost 20,000 BP, after the dating from the Lagar Velho child, with a Middle Paleolithic material culture. The Ebro valley may have very likely functioned as a cultural frontier, in terms of the different species that lived on each side of the line (d'Errico et al. 1998: 19-21). This theory may very well explain why there has been found evidence of our Neanderthal ancestors in the Portugal/Spain area around 24,000 years ago.

Fig 5. The Ebro valley

“frontier”. (d'Errico et al. 1998: 21)
The burial of the young four-year-old is a remarkable finding; not only because of what the burial itself can tell us, but also from the research of its skeleton. An examination of the bones from his body has provided some evidence that there was some sort of gene flow between Neanderthals and modern humans in the Iberia peninsula around 24,000 years ago, rather than what archeologists thought before, that the modern humans replaced the Neanderthals by approximately 30,000 BP. This brings both the “Out of Africa” and “gene flow” hypotheses into question, and the evidence from Lagar Velho brings these discussions to a whole new level. It is clear that the society from which this child came had a specific industry of tools from the Gravettian. The findings from the burial itself have given insight into what was going on in the society. There was a form of spiritual or religious belief, and some sort of understanding of death. The pierced shells indicate that someone took time to manufacture and handcraft these artifacts; maybe someone even had this as a profession in their society. The bed of burnt vegetation on which the child was lying again shows some sort of understanding of death. The child’s death at such an early age is perhaps a reason that he was buried with these artifacts. It is hard to believe that a four-year-old could have “earned” these treasures, in a short period of time. Perhaps he was born into a position of higher status?

I have chosen in this essay not to take a stand nor deliberately state whether I believe the child is a modern human or a Neanderthal, or which hypothesis, the replacement or the interaction, is right. I have rather let there be a possibility that both are right, so the understanding of the burial and its meaning is open to interpretation on a wider scale.
Sources:

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