

# 1 Les Tombes Belle – The Use of ‘Anthropologie de Terrain’ In Prehistoric Archaeology

Aine S. Bradley (<mailto:aine.bradley@student.manchester.ac.uk>)

The French taphonomy-based discipline of ‘anthropologie de terrain’ is not an approach I expect many of you to be familiar with. It is a lamentable fact that the research carried out on mainland Europe is often unimplemented in British archaeology due to the language barriers. The trailblazing research carried out on the continent, however, has the potential to revolutionise our understanding of history.

Anthropologie de terrain is an approach that seeks to reconstruct the conditions and evolution of a burial by examining the position of the skeletal remains as they lie in the grave. This technique relies on the absolutely precise recording of each bone as it appears in the grave and is intended for use in the field, during the excavation of the human remains. However, it has been used retrospectively to great effect by Dr. Liv Nilsson Stutz in her analysis of the Danish Mesolithic cemeteries of Vedbaek Bogebakken and Skateholm I & II (2003).

I believe that anthropologie de terrain has the greatest potential in the examination of prehistoric mortuary practise prehistory, especially the Upper Palaeolithic and Mesolithic periods, has a huge array of burial and post-depositional practises that continue to elude explanation. However, I feel that anthropologie de terrain can help archaeologists attempt to re-evaluate this inexplicable evidence.

## Basic Principles of Anthropologie de Terrain

Liv Nilsson Stutz states that “a cadaver is not static, and a body undergoes significant changes from the moment of death to the moment we as archaeologists excavate them” (2003:148). The processes that affect the body during decomposition have the potential to disturb the skeleton in quite predictable ways, and the examination of the skeletal elements in the grave have the potential to provide archaeologists with detailed information about the nature of the original burial conditions.

Henri Duday has been the most prolific French scholar in this field, and has pioneered the use of anthropologie de terrain across the archaeological spectrum. He identifies the main areas of concern for anthropologie de terrain within the study of burials in a recent paper (2006).

## Primary Deposits

This is the type of burial deposit that is most familiar to most of us the deposition of a recently deceased body that has not begun to significantly decompose. This results in the full process of decomposition taking place within the confines of the grave cut. In a primary deposit, the decomposition of the body has a detrimental affect on the articulations of the skeletal structure. The articulations that bind the skeleton in life, the ligaments, tendons and skin, slowly degrade and depending on the strength of these connections, the skeleton will decompose in a predictable manner. The skeletal articulations are classed as either labile (those that will decompose most rapidly, in a manner

of weeks) or persistent (those that take months or years to decompose) (Duday et al 1990:31). Labile articulations are generally the smaller and more fragile connections of the neck, hands, feet, scapulo-thoracic junction and costo-sternal joints and require detailed excavation. The persistent articulations are those that have the strongest bonds in life, such as sacroiliac joints, knees, hips, ankles and the lumbar spine. The analysis of the labile and persistent articulations can provide information about the decomposition of the body and the conditions in which this occurred.

A primary deposit in a filled grave will appear differently to the archaeologist than a primary deposit that was allowed to decompose in an empty space. In a filled grave, the decomposition of the body and the degradation of the labile and persistent articulations have limited space in which to move around, they can only move within the empty volume of the original cadaver, subject to the infilling of the decomposed space with sediment. In a filled space, the labile articulations are unlikely to be highly disturbed as the pressure exerted from the sediment and lack of scavenging animals will keep the bones in articulation.

Figure 1 demonstrates the effects of decomposition in a filled space on the labile articulations. The phalanges, metacarpals and carpals (coloured red) of the right hand are still (mainly) in articulation. Duday explains the maintenance of articulation as the effect of “progressive clogging” (colmatage progressif) (Duday et al 1990:40) as the body slowly decayed the sediment filled in the empty volumes left by the absent soft tissue. In a filled space, decomposition creates empty spaces within the volume of the body that bones can move into. This can be seen in Figure 1 the bones of the left hand (coloured yellow) have fallen into the empty space created by the decay of the soft tissues in the abdominal cavity.

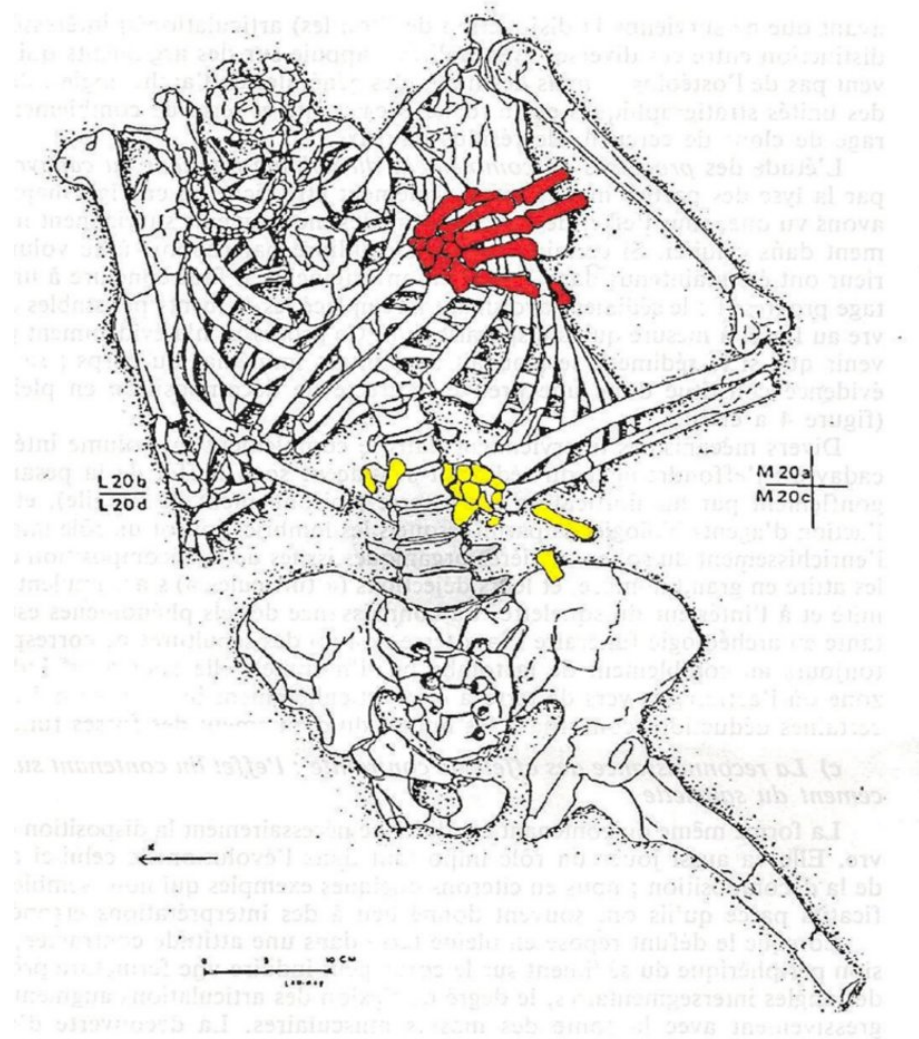
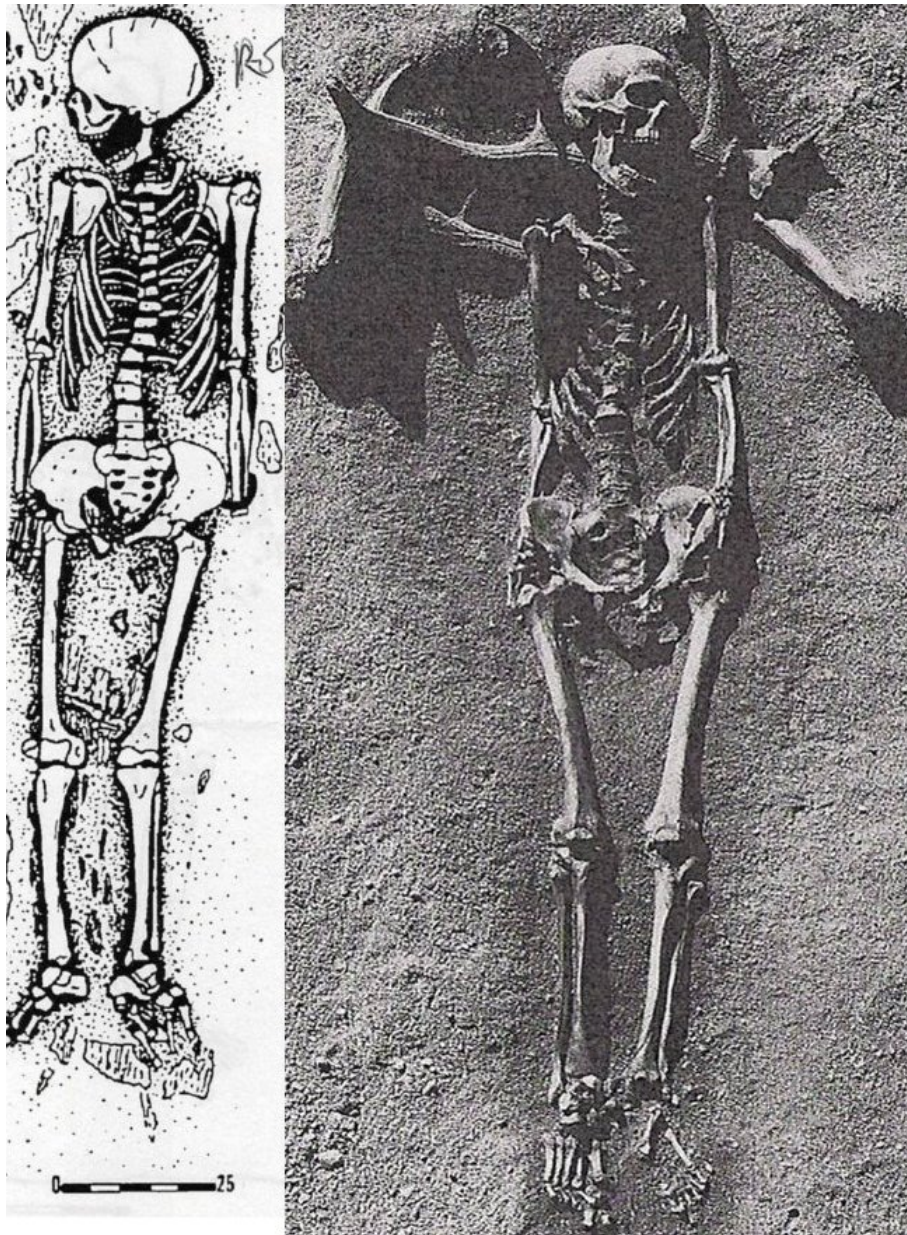


Figure 1: Neanderthal burial from Kebara. After Duday et al 1990:40 and reproduced by kind permission of Bulletin et Memoires de la Societe d'Anthropologie de Paris

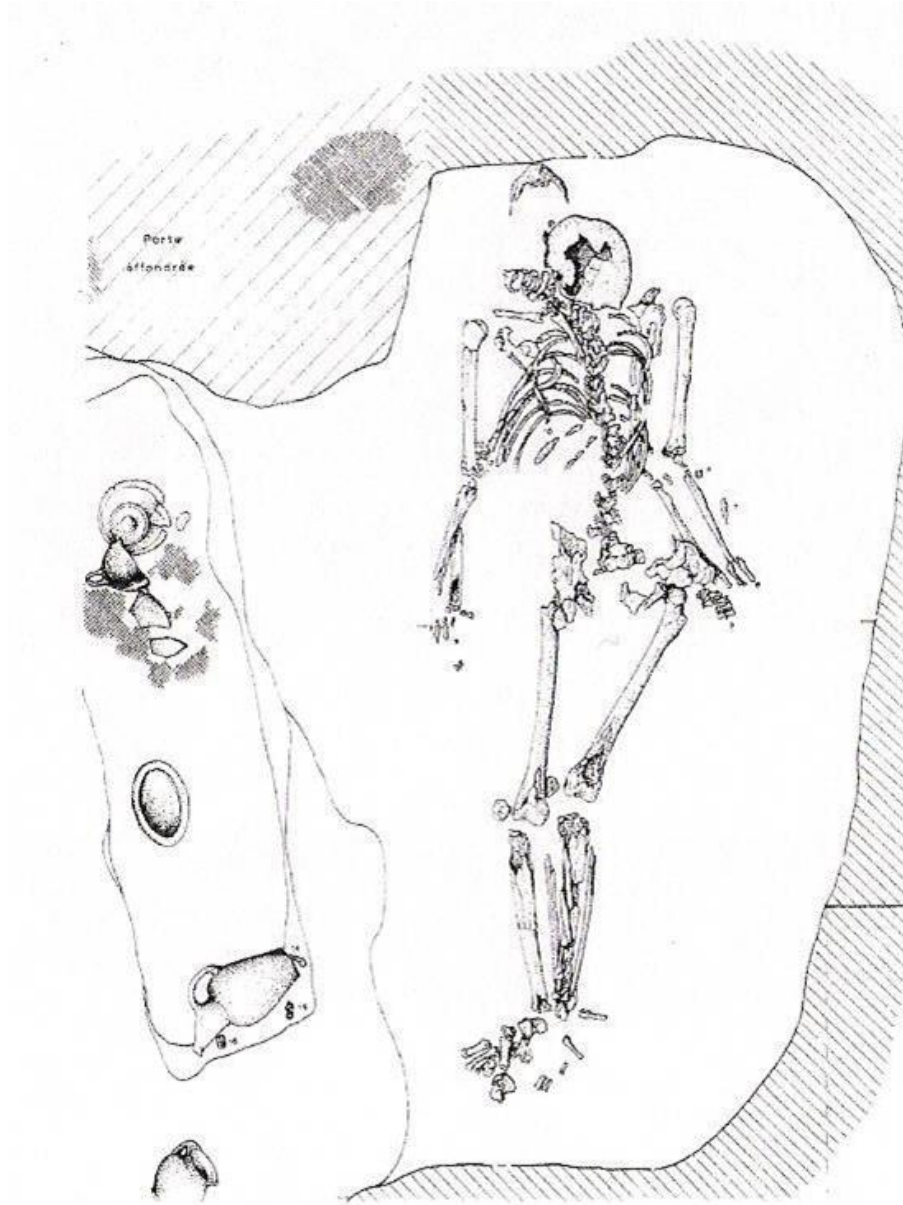
Primary inhumation in a filled space, such as a coffin or shroud, can have a peculiar effect on the appearance of the skeleton. The presence of a container or wrappings around the body can affect how the bones appear in the grave. Figure 2 illustrates what is known as “effet de parois”, or a “wall effect” on the bones, where something has provided a support for the bones as the body decayed, resulting in skeletal elements that appear to be precariously balanced. This can be seen more prominently in Figure 3, Grave 22 at Vedbk Bgebakken where the cadaver appears to have been wrapped in organic material prior to deposition, which results in skeletal remains that appear unnaturally arranged in the grave.



*Left to Right Figure 2: Child burial from Coteau Montigne. After Duday et al 1990:41 and reproduced by kind permission of Bulletin et Memoires de la Societe d'Anthropologie de Paris Grave 22 at Vedbk Bgebakken. After Nilsson Stutz 2003:237 and reproduced by kind permission of Erik Brinch Petersen)*

Primary deposits that have been allowed to decompose in an empty space will appear differently to the excavator. As the body decays, the lack of pressure from surrounding sediment allows the bones to move outside the initial volume of the cadaver. As the connective tissues decay, the bones will rotate outwards, giving the impression of more dispersed skeletal elements. Figure 4 demonstrates the scattered appearance of a skeleton that occurs when the body

has decomposed in an empty space. The os coxae (ilium, ischium and pubis) are completely fragmented and illustrate the degree of displacement that can occur during decomposition.

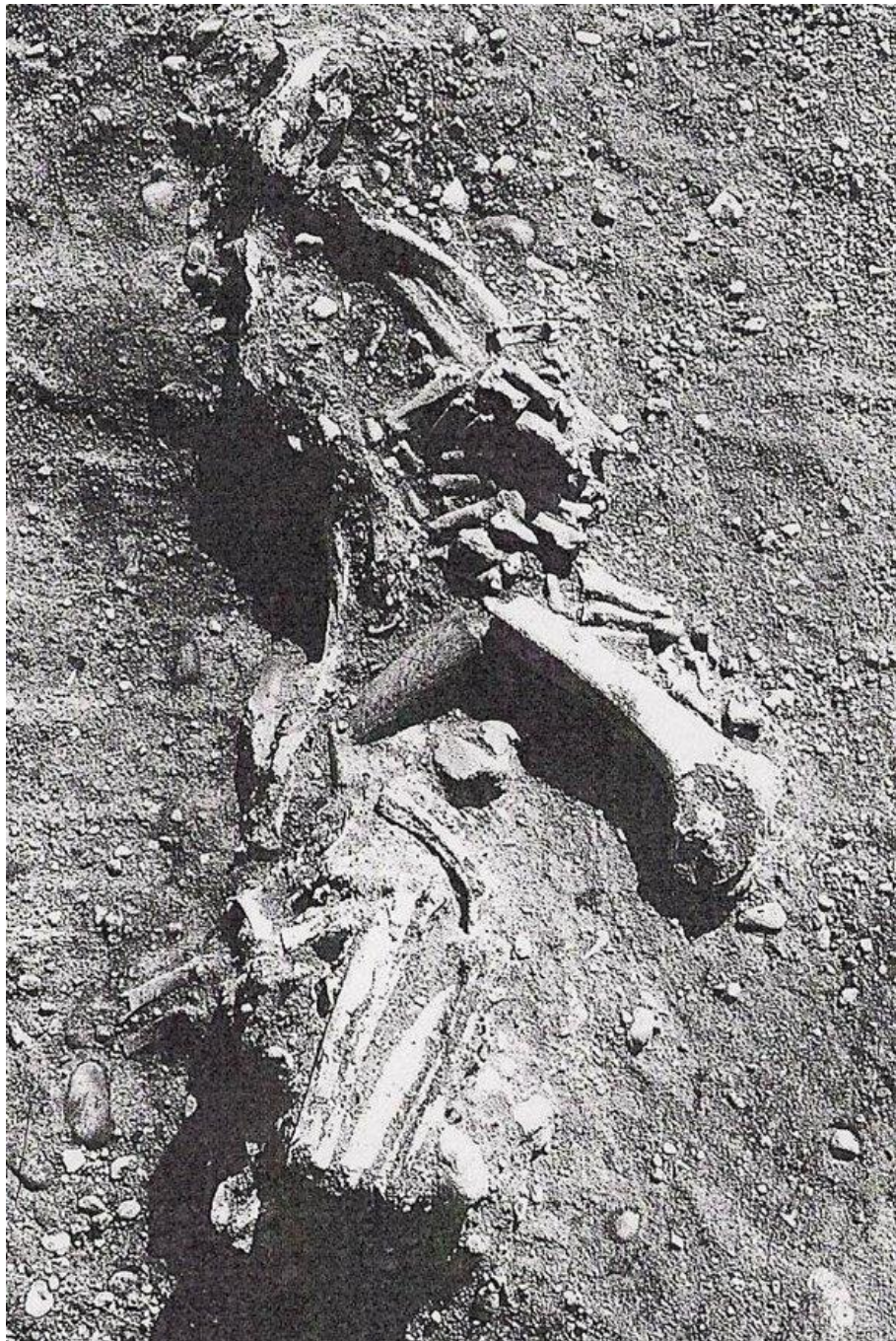


*Figure 4: Grave 175 at Alria. After Duday 2006: 42(Duday 2006:42)reproduced by kind permission of Oxbow Books.*

## Secondary Deposits

Secondary deposits can be described as depositions of 'dry' bones into what will become their final resting place. Duday (2006) identifies problems with the

identification of true secondary deposits the deposition of the bones could be the result of clearing a grave plot for re-use, thus telling us very little about the funerary rites or practises of the society concerned. The detection of true secondary burials can be determined from the survival of anatomical connections “if the defleshing has been incomplete when the remains of the deceased were transferred to the final resting place” (Duday 2006:47).



*Figure 5 – Figure 5: Grave 13 at Skateholm I. After Nilsson Stutz 2003:220 and reproduced by kind permission of Lars Larsson.*

Figure 5 shows the disarticulated human remains found during the Skateholm I excavations, although it is difficult to see in the image the connections of the left hand and right foot were present at the point of burial, even though the body was highly mutilated. Nilsson Stutz interprets this as a body that was

disarticulated before it was placed in the burial (2003:220), however it could be explained as a secondary burial where some of the articulations were still present at the point of final internment.

Given this brief introduction to the complex and technically skilled area of anthropologie de terrain, what can be said about its application in archaeology?

The application of anthropologie de terrain can provide archaeologists with subtle details about the pre- and post-depositional treatment of the body. These funerary practises are relevant to discussions of gender, personhood, society, rank and a myriad of other theoretical approaches. It is not enough to excavate a body and examine the bones in the hope of ascertaining sex, age or pathological conditions – the position of the bones in the grave can give us a greater degree of subtlety in studying the remains. Anthropologie de terrain can therefore let us access detail that would otherwise be completely ignored by an untrained observer.

As mentioned above, the application of anthropologie de terrain is perhaps most useful in cases where the mortuary and funerary practises are ambiguous, or inexplicable. I believe that the earlier periods of prehistory are more deserving of this kind of attention as the great array of identified burial practises requires a greater degree of skill to decipher and interpret. Nilsson Stutz (2003) has applied the principles of anthropologie de terrain to the Mesolithic cemeteries of Vedbk Bgebakken and Skateholm I & II and from her analysis has given archaeologists an unprecedented level of detail in terms of treatment of the body, and from this the wider societal attitudes to death and the dead. The Mesolithic period in particular has suffered greatly from obsessive concerns over rank and economy, and although there has been great advances made in terms of thinking more broadly about Mesolithic society (Nilsson Stutz 2009; Milner and Woodman 2005; Conneller 2009) there remains a discrepancy between the attention paid to diet, economy and technology and the attention that should be given to death, ritual and cosmology.

Anthropologie de terrain can help archaeologists examine these graves in significantly more detail than traditional excavation would permit. However, to use anthropologie de terrain as it is intended, use in the field during the excavation, requires the widespread training of archaeologists and osteologists in this complex and rigorous discipline. The training should not be restricted to professionals who deal exclusively or predominantly in funerary archaeology, when new techniques become available that can edify the study of burials archaeologists have a responsibility to utilise the advances for the benefit of contemporary and future study.

## BIBLIOGRAPHY

- Conneller, C (2009) 'Transforming bodies: mortuary practises in Mesolithic Britain' In: S. McCarten (et al) (Eds) *Mesolithic Horizons* 2009, pp.690-697. Oxford, Oxbow.
- Duday, H, Courtaud P, Crubezy, E, Sellier, P, Tillier, A(1990) 'L'anthropologie de terrain : reconnaissance et interpretation des gestes funéraires' *Bulletin et Memoires de la Societe d'Anthropologie de Paris, ns, tome 2*, 3-4, 29-50.



- Duda, H, (2006) 'L'archologie ou l'archeologie de la mort (Archaeothanatology or the Archaeology of Death)' R. Gowland and C. Knisel (Eds) *The Social Archaeology of Funerary Remains*, 30-56, Oxford, Oxbow.
- Milner, N and Woodman, P (2005) "Looking into the Canon's Mouth: Mesolithic Studies in the 21st Century" In: N. Milner and P. Woodman (Eds) *Mesolithic Studies at the Beginning of the 21st century*, 1-13, Oxford, Oxbow.
- Nilsson Stutz, L (2003) Embodied Rituals and Ritualised Bodies: Tracing ritual practise in Late Mesolithic burials, *Acta Archaeologica Lundensia*, 46.
- Nilsson Stutz, L. (2009) "Coping with Cadavers: ritual practises in Mesolithic cemeteries" In: S. McCarten (Eds) *Mesolithic Horizons*, 656-663. Oxford, Oxbow.