6A The Magdalenian Skeleton from Cap Blanc

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An almost complete human skeleton from the Cap Blanc site in the Dordogne region of southwestern France has been housed in the anthropological collections of the Field Museum in Chicago since 1927. At the time of its acquisition, it was the only virtually complete European Paleolithic human skeleton in the US, and this remains the case today (Figure 6.1). The Cap Blanc site is a rock shelter that is particularly notable because of a striking sculptured frieze extending some 40 feet along its back wall. The frieze includes exquisitely carved images of horses, bison, and reindeer. In 1911, during construction of a wall to protect the frieze and excavation to lower the floor sediments to increase its visibility, a human skeleton was discovered just a few feet from the base of the frieze (Lalanne and Breuil 1911). Unfortunately, the discovery occurred accidentally, resulting when a workman plunged a pickaxe through the right side of the skull, shattering it into several pieces. The individual was probably deliberately buried, as the legs were flexed into a characteristic "fetal position." No grave goods had been included during burial, although a small artifact identified as an "ivory point" was found near the skeleton.

Following their excavation, the encrusted skeletal remains were transported to Paris for expert removal of the surrounding matrix, consolidation of the bones, and initial study involving some reconstruction. In 1924, some years after the skeleton had been excavated, the Cap Blanc landowner, Monsieur Grimaud, shipped it to New York in hopes of selling it to the American Museum of Natural History at a price of \$12,000. When negotiations for the sale eventually came to nothing, Henry Field (nephew of the Field Museum's founding director Stanley Field) quickly intervened and was able to purchase the skeleton for the bargain price of \$1,000. He subsequently organized a public display of the individual in a specially constructed case, but the individual was laid out in an extended "anatomical" position rather than the original fetal position. Partly thanks to Henry Field's well-honed public relations skills, on the first day of its display the Cap Blanc skeleton attracted 12,000 eager visitors. Fanciful interpretations that probably drove this record-setting attendance included Field's suggestion that the individual might have been a young maiden who had carved the frieze, accompanied by the speculation that the "ivory point" had played a part in her death.

From the outset, the Cap Blanc individual was enigmatic in several respects. To begin with, the geological age remained somewhat uncertain, although the remains likely date to the Upper Paleolithic. Because of certain characteristic tools recovered from the Cap Blanc site (but not in association with the remains), a Magdalenian age is generally accepted. However, some artifacts from the site indicate an older Solutrean date. Despite initial confusion regarding the sex of the individual, the

remains were eventually determined to be female. A major factor here was a detailed anatomical study of the skeleton published by Gerhardt von Bonin in 1935, which convincingly established osteological sex as female. Far greater uncertainty, which has persisted up to the present day, surrounds her age at death. Because the wisdom teeth (third molar teeth) had not fully erupted in upper or lower jaws, von Bonin inferred that the individual was aged about 20 years. Yet the rest of the skeleton—portions of which show a more advanced degree of ossification of growth zones in long bones and some evidence of wear and tear in the vertebral column—indicates that the individual had reached adulthood, with an age at death somewhere between 21 and 35 years.

Since 2004, researchers at the Field Museum in Chicago have been engaged in a detailed reexamination of the Cap Blanc individual, using a range of modern methods. Detailed anatomical investigation of the remains has included digital X-rays, CT-scanning, and virtual 3D reconstructions of the skull and pelvis. Information obtained has confirmed that the individual is female and has shed additional light on her likely age at death. Although there is relatively little wear on the erupted teeth, apart from some abrasion of the tips of the incisors, scanning has revealed that development of the unerupted wisdom teeth was anomalous and hence unreliable for inference of age. Moreover, internal imaging of her bones has indicated that their development was quite close to completion.

Virtual reconstruction of the skull from the CT-scans including mirror imaging to compensate for the damage to the right side inflicted by that workman's pickaxe—indicated that the 1935 physical reconstruction crafted by von Bonin differed in certain key features. Overall, interpretations at that time were reflected by a general bias toward giving the skull a more "primitive" appearance, especially in the facial region. Using the CT-scans, individual bones—which had been firmly integrated with robust plaster in von Bonin's reconstruction—were painstakingly isolated and then gradually integrated into a corrected reconstruction following established anatomical guidelines. That virtual reconstruction was then used to generate a threedimensional print of the skull for display. Moreover, a copy of that 3D print was dispatched to the renowned French paleoartist Elisabeth Daynès. She was commissioned to produce a captivating bust of the Cap Blanc individual that is now on public display at the Field Museum alongside the original skeleton and a print of the skull.

In tandem with the anatomical investigation, bone samples from the Cap Blanc remains were subjected to radiometric analyses with the aim of establishing a reliable geological age for the individual. However, two samples submitted for C14 dating at the Oxford University Radiocarbon Accelerator Unit in 2004 yielded distinctly

different, non-overlapping calibrated dates of 17000–16400 cal BP and 14900–13800 cal BP, respectively. In an attempt to resolve this problem, two additional samples were sent to the Oxford laboratory in 2006. Unfortunately, the new results were also distinctly different and did not overlap with one another or with either of the two initial dates: 12500–11900 cal BP and 9600–9300 cal BP, respectively. One possible explanation for the discordance between the four C14 dates, which extend over a range of over 7000 years, is that the Cap Blanc skeleton was contaminated with organic carbon-containing materials in preparations used to consolidate the bones. Further work is in progress to test the plausibility of this explanation and to seek additional dates with samples from relatively isolated parts of the skeleton.

In sum, although it seems well-established that the Cap Blanc individual is female, uncertainty about her geological age and the age at death has persisted up to the present day.

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Although mobility remained a key element of human life during the Paleolithic, there are indications that seasonal camps in certain places were occupied for longer durations and by larger numbers of co-residents (Wengrow and Graeber 2015). As the sizes and durations of aggregations increase, so do interactive densities and scales of cooperation. Humans are simultaneously both selfish and competitive (Carballo, Roscoe, and Feinman 2014), so human cooperation is generally strategically situational and contingent on the nature of social ties (Blanton and Fargher 2016, 31–32). Interpersonal networks and aggregations tend to be fluid (Birch 2013), even when specific settlements are more sedentary and temporally durable (Feinman and Neitzel 2019).

For mobile hunter-gatherers, networks of social relationships generally are dispersed, open, and ephemeral, changing as groups and individuals split apart and nucleate. But the most stable unit is small, made up of close kin (and those who are proximate) who have in-depth knowledge of each other (Apicella et al. 2012). These individual relations tend to be face-to-face, personal, and biographical (Coward and Gamble 2008); biographical in the sense that people have in-depth and specific knowledge of those to whom they have ties of deep personal familiarity and details about one another. As a result, most mobile

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hunter-gatherer groupings are not purely egalitarian, as inequities are often manifest along the lines of age, sex, and ability (Cashdan 1980). Likewise, especially during aggregational episodes, leaders and specialists may arise, but their roles tend to be situational and ephemeral (Feinman 1995).

In general, prior to 12,000 years ago, most preserved funerary remains reflect these social contexts with mortuary placements made in the vicinity to where seasonal aggregations occurred. Nevertheless, as the size of aggregations tended to be limited to scores of people, the labor investments largely were modest (Magdalenian), simple cists or pits in which one or two individuals were situated (Riel-Salvatore and Gravel-Miguel 2013). Likewise, grave accompaniments generally were neither extremely ample nor costly in regard to either labor allotments or material acquisition. Many small ornaments, like beads, found in burials may be items that adorned the individual during life. Where burial populations are clustered and so a broader sample is comparable, individual differences in burials tended not to be extensive; many appear to reflect key attributes, like distinctions in age and sex. The positioning of mortuary interments in spots where people aggregated repeatedly likely provided incentives for the living to return, remember/honor their ancestors, and thus retain ties to other co-residents even following the deaths of



Figure 6.1. Magdalenian woman, a human skeleton from Dordogne, France, dated to the Upper Paleolithic (FM 42943).

people who may have been former forebearers or social intermediaries.

Although most Paleolithic interments were not particularly elaborate, select ones were, and these have been reported from the Dordogne to the Don (Wengrow and Graeber 2015). Most of these contexts contain at most a few individuals. But the interred in these rare contexts often were flooded with adornments, such as the thousands of mammoth ivory beads and perforated fox canines found in select contexts at the Sungir site in Russia. Although archaeologists do not uniformly agree on the meaning of these elaborate burials, they would seem to mark key individuals of skill or importance who in times of aggregation assumed a key role, which was commemorated at their death. Yet there is no indication that their situational and/or achieved status was necessarily transferred to their descendants. These represent some of the earliest examples of what might constitute wealth being interred with the dead. Earlier interments may have constituted intentional burial,

and even included grave offerings. It was these more elaborate burials, however, that may have manifested social differences in life and the input of substantial social resources into the chambers of the deceased.

Death and the Scale of Holocene Social Networks

In certain regions, there is ample evidence that human populations grew to higher densities toward the outset of the Holocene (ca. 12,000 years ago). In some of those places, such as the Levant in Southwest Asia, this led to larger, longer aggregations and eventually transitions from mobile lifeways to more permanent settlements. We know that in and of itself sedentism often fosters episodes of demographic growth (Bandy and Fox 2010), due to transport and child-spacing considerations, as well as the availability of weaning foods. Early weaning may shorten nursing, which may affect female fertility. Nevertheless, the specific suite of causal factors may not be uniform from region to region or case to case.

6B The Mortuary and Commemorative Poles from Skidegate, British Columbia, Canada

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Located at the southern end of Graham Island, British Columbia, Skidegate is a village belonging to the Haida Gwaii Indigenous nation. According to local beliefs (Swanton 1905), the origin of this Indigenous nation dates back to the arrival of the "primordial ancestresses" belonging to matrilineal groups that settled down on the island some 17,000 years ago. Some of these powerful ancestresses include the Foam Woman, Creek Woman, and Ice Woman, whose spirits inhabit, even to the present, the surrounding glaciers. Centrally located within the Haida Gwaii archipelago, Skidegate was named after the chief who ruled the village in early 1880. Skit-ei-get, means "red paint stone," although European colonizers standardized the name of the village to Skidegate (Horwood 2014).

Skidegate, along with other Haida Gwaii communities, is recognized by its cultural traditions, art, language, and, particularly, totem poles. Monumental, elegant, and stylized, totem poles are made of massive trunks of red cedar that are carved and subsequently painted with intricate designs and motifs. Whereas the practice of creating ceremonial carvings in wood is relatively widespread among North American Indigenous groups, the level of perfection, monumentality, and stylization of the Northwest Coast poles is particularly distinctive. As Edward Malin (1996, 18) reminds us "Haida totem poles achieved an artistic significance without parallel in human experience." But the Haida Gwaii poles are more than visual and spatial markers or ornamented pieces of heraldic

art. For the Haida Gwaii people, the poles can be better understood as physical manifestations that embody the histories, desires, and rights of each member of the family that owns it (MacDonald 1983). They are consequently items with a deep historical significance. But it is, perhaps, their relationship with the ancestors and death, as well as their capacity to serve as a bridge with the afterlife, that makes these wooden carved poles particularly important for the Haida Gwaii people (MacDonald and Cybulski 1973). The images often displayed are crest figures, many of which represent supernatural beings or ancestors from whom families obtain hereditary rights and privileges. Poles thus proclaim and validate one person's lineage and importance.

Mortuary Poles

In Skidegate, poles are commonly erected for both remembering the dead and serving them as a means for transcendence (MacDonald and Cybulski 1973) (Figure 6.2). In both cases, poles enable the owners to reinforce their links with their lineages, ancestors, and deep family histories. Poles are thus objects of memory that enable the living both to live and remember. As members of the Haida Gwaii recount, when a high-ranking person passes, the clan goes into mourning for about a year. The members of the clan do not attend festivities; they are completely isolated. During this time, the remains of the person are treated according to each of the family traditions. Furthermore, the