# Artefacts, skulls and written sources: the social ranking of a Celtic family buried at Münsingen-Rain

Felix Müller<sup>1</sup>, Peter Jud<sup>2</sup> & Kurt W. Alt<sup>3</sup>

An examination of the skeletons from the well-known La Tène cemetery of Münsingen-Rain shows that they represent members of a high ranking group, and that they were closely related. These new findings prompt the authors to examine the written documents that refer to nobility in the Roman and Celtic world.

*Keywords:* Iron Age, La Tène, Europe, Münsingen-Rain, cemeteries, skull metrics, Julius Caesar

The last few centuries BC saw the beginnings of written accounts concerning the regions north of the Alps. The temptation to relate archaeological evidence to that transmitted in historical documents is therefore great, and the dangers of doing so are well-known. The challenge is to combine in a methodologically rigorous manner these different kinds of evidence. In the case outlined below we attempt to confront the archaeological and anthropological data from a famous Celtic burial ground with the indications found in Julius Caesar's writings.

The burial ground at Münsingen is one of the most important reference sites for the chronology of the Early and Middle La Tène period. Located in Switzerland between the city of Bern and Lake Thun, at the entrance to the Alps, it was excavated a century ago (Figures 1 and 2). The strip occupied by the cemetery extends over 140m and is 40m wide at its widest; it follows a break in slope, known by the place-name 'Rain'. The graves, approximately 220, are nearly all inhumations, of women, men and children. The dimensions of the grave cuts correspond to the size of the bodies of the deceased. Depth varies between 0.3m and 2m. Traces of wooden coffins and of stone settings are documented in several cases. The presence of above-ground markers could not be established. The techniques of excavation at the beginning of the twentieth century were not sufficiently fine to ascertain whether there were any further archaeological features (enclosure ditches, postholes) between the graves. It seems that the entire burial ground was investigated; gravel quarrying or erosion can account for only a few losses.

<sup>1</sup> Bernisches Historisches Museum, Helvetiaplatz 5, CH-3000 Bern 6, Switzerland (Email: felix.mueller@bhm.ch)

<sup>2</sup> 48, Rue Victor Hugo, F-69002 Lyon, France

<sup>3</sup> Institut für Anthropologie der Universität, FB 21, D-55099 Mainz, Germany (Email: altkw@mail.uni-mainz.de) Translated by Madeleine Hummler, Antiquity, King's Manor, York YO1 7EP, UK

Received: 12 April 2007; Accepted: 21 June 2007; Revised: 20 July 2007

ANTIQUITY 82 (2008): 462-469



Figure 1. The site of Münsingen-Rain is located in an area rich in La Tène burials in the region of Bern and 57km from the eponymous site of La Tène.



Figure 2. The excavations of 1906 were carefully documented, in written and graphic records. Original record of Grave 6 (using Hodson's numbering system), dated 13 September 1906 (Wiedmer-Stern, Dokumetationsalbum III, 1906).

Around three quarters of the inhumations were accompanied by grave goods. The women, numerically over-represented, wore items of personal adornment; these often show signs of wear and repair. Some men were provided with sword and spear – only in one case with a shield. There are no helmets. Food offerings, of which there are few, took the form of large joints of meat and not of offerings in ceramic vessels.

In the publication that followed shortly after the conclusion of the excavations, Jakob Wiedmer-Stern (1908) discovered intuitively a relative chronology in the occupation of the cemetery, growing from north to south - an idea that will emerge much later as the method known as 'horizontal stratigraphy'. This horizontal stratigraphy, based on the distribution of artefacts, was confirmed in an analysis by Hodson (1968), who used combination statistics applied to the assemblage. From a theoretical point of view, this is of highest importance, as both systems independently led to the same result. Current research dates the cemetery of Münsingen-Rain into the phases Reinecke La Tène A2 to C2, which correspond to an absolute date of c. 420-180 BC.

Given these preconditions, Münsingen became the favoured focus for a wide range of experimental investigations, of a typological, chronological, costume-

historical, art historical and sociological nature (summarised in Müller 1998; see also Hinton 1986). Here methods developed under ideal conditions could be transferred to objects excavated elsewhere and tested for general validity. Around 300 bronze and iron fibulae form a most important corpus of types, highly relevant in terms of a relative chronology. A bronze fibula with decorated disc of coral or glass was identified as a type now known as the Münsingen fibula. This led to the identification not only of stylistic modifications on certain type fossils, but also to the recognition that some types of ornament (for example torcs, anklets or bracelets, Figure 3) were replaced sequentially over time; similarly, certain combinations of objects of personal adornment proved to be chronologically sensitive.

At the outset it was assumed that the people buried represented the inhabitants of a small settlement unit, whose differences in status were reflected in the differences in grave goods.



Social ranking of a Celtic family buried at Münsingen-Rain

Figure 3. Münsingen-Rain. Map of the burials with distribution, derived from horizontal stratigraphic analysis, of (A) neck-rings or torcs, (B) sets of four-part bronze anklets, and (C) glass bracelets.

This would presuppose that the cemetery represented a section through a whole population. By using standard demographic calculations we have however come to the realisation that the burials at Münsingen only represent the burials of members of a small social group, whose mathematically deduced numbers, though they fluctuate over time, nevertheless hardly ever reached beyond a couple of dozen. We therefore had to address the question of whether the social position of this group within a whole population could be defined. There are fundamental problems in answering this question, since we do not know the size of any given population in prehistoric societies, and consequently it is hardly possible to estimate the proportions represented in a cemetery.

Our primary interest was therefore to investigate if the persons buried at Münsingen could be genetically related to each other. DNA analysis has recently created a tool allowing such questions to be answered; in theory this method could also be applied to ancient bone assemblages. It had, for the Early La Tène period, already been used in evaluating the cemetery of Nebringen and had produced good results, at least in certain respects (Scholz *et al.* 1999). In the case of Münsingen however, spot samples of the human bone assemblage

Felix Müller, Peter Jud and Kurt W. Alt



Figure 4. Münsingen-Rain. Examples of well-developed deformations of the skull from six burials. Sagittal aspect.

revealed that there were no longer any traces of ancient DNA present. But during this first evaluation we noted anatomical variations that may have had an epigenetic origin and it was decided to conduct an analysis of morphological relationships. The conditions appeared favourable at Münsingen: though the skeletal remains of only 77 individuals were kept, these were fortunately distributed more or less over the entire area of the cemetery. In 49 cases only the skulls were available, as it was the practice in the early twentieth century to keep mainly these.

On this basis the Swiss National Science Foundation gave its support to a research project that was completed in autumn 2006 and which was published in the same year. It consisted of a comprehensive anthropological analysis and an archaeological appraisal. It was the first time that a completely excavated prehistoric cemetery was examined in such a manner (Alt *et al.* 2006).

## Analysis of morphological relationships

The anthropological analysis is based on the extensive recording of defined characteristics on teeth, skulls and the postcranial skeleton. It concluded that there was an aboveaverage morphological homogeneity amongst the persons buried at Münsingen. Two relationship strands ('founder families') were identifiable; these were already formed before the cemetery was established. Right from the beginning of occupation there is a noticeable and marked deformation of the skull (*Plagiocephalus*) visible on a number of skulls (Figure 4). This trait can have several causes. In our case it is likely that we are dealing with congenital muscular torticollis, caused by an asymmetrically-shortened musculation of the shoulder. Amongst infants the crooked or tilted carriage of the head results, in the course of growth and the hardening of the bones, in skull deformation. Torticollis is hereditary and seems to occur more commonly in unions between related people.

Many of the individuals analysed are connected, to a greater or lesser degree, in a web of kinship relationships. For some individuals a relationship could neither be identified nor discounted, as there was insufficient evidence. Closest genetic links existed between the women in burials 40, 130, 141, 157 and 173, who were all shown to have a skull deformation (Figure 5). They are distributed over nearly the entire cemetery. Further examples of Plagiocephalus could be identified with a greater or lesser degree of confidence. Even if the epigenetic analyses carried out do not match the quality that DNA analyses might achieve, there is no doubt that the persons buried at Münsingen-Rain were related to each other in a tight kinship network.

## Archaeological appraisal

The conspicuous burials of the Hallstatt period undoubtedly represent the expression of power by a high-ranking social group. Their disappearance during the La Tène period can, but does not necessarily have to, be linked to the demise of the dominant social group. Historical and ethnological analogy shows that expressions of prestige in the form of prestige- or luxury-goods, as well as monumental architecture, may have been used as a means of legitimising rulership in unstable systems. Stable and broadly supported systems, on the other hand, often do not require such conspicuous display. It is therefore suspected that in these



Figure 5. Münsingen-Rain. The five females buried in Graves 40, 130, 141, 157 and 173 exhibit the closest genetic links.

superficially egalitarian Early and Middle La Tène burials, there lies hidden an elite social structure.

In all previous attempts which used archaeological criteria to rank the persons buried at Münsingen into 'wealth groupings', the stumbling block was that amongst the dozen or so individuals living at any one time there had to be a strong segmentation of the population; this is the only model that would fit a whole population. A few individual male burials are distinguished from the rest of the weapon burials by the addition of exceptional grave goods such as gold finger-rings or joints of veal. Only in very few cases could richly furnished female burials be set beside them as potential spouses. Overall the value of the grave goods deposited at Münsingen is considered above-average, if we take into account the value of the materials (amber, coral, glass, gold, silver as well as the other metals) and the quality of manufacture of the artefacts (in particular the fibulae). At around 240 years, the period of occupation of the cemetery is exceptionally long.

We conclude that the cemetery at Münsingen is the resting place of members of a wealthy, tradition-conscious, indigenous social group whose membership was small. This ruling group, present over several generations, shows characteristics that could be compared to 'nobility' in the Middle Ages.

## A quasi-historical recourse

Ancient history may throw further light on the findings from the latest biological research (Alt *et al.* 2006) and prompts us to offer a few additional reflections. Instead of 'nobility' it would be more correct to use the term '*nobilitas*', a notion understood in antiquity. The most exhaustive comments on the social relationships of the middle of the first century BC are to be found in Julius Caesar's so-called excursus on the Gauls in Book 6 of his 'Gallic War' (Dunham 1995). Let us however remind ourselves that the occupation of the cemetery at Münsingen had ended some 100 years before Caesar's commentaries.

Caesar writes that almost the entire population belongs to the *plebs*, which lives largely deprived of rights. Treated almost like slaves, these people are unable to acquire goods or even act on their own initiative. One has to assume that their material conditions were modest. The *nobilitas* emerges from Caesar's writings as the dominant class. The *equites* and *druides* should also be added to, or perhaps even identified with, this dominant group. Celtic society at this time was thus in no way egalitarian; on the contrary, it was rigidly hierarchical.

What do the semantics of *nobilitas* entail and mean for Caesar and his Roman readership? It goes without saying that historians have come to a diversity of interpretations over time and space. Yet some structural characteristics remain similar or are comparable. In the list of important traits we find: ancestry, self-awareness, landholding, prowess in war, creation of a following, exotic life-style, hospitality, ostentatious leisure, feasting and celebrations. The members of the Roman *nobilitas* saw themselves as an aristocracy, 'the rule of the best', when they could muster at least one consul amongst their ancestors. It was therefore of greatest importance to claim a family history going back over several generations (Hölkeskamp 1987; Näf 2001). The *equites*, on the other hand, owed their prestige to their economic power without any direct claim to specific functions in public life. The priesthood, which

#### Social ranking of a Celtic family buried at Münsingen-Rain

at least in part fulfilled functions similar to those of the *druides*, was recruited among the ruling class. According to R. Syme (1939: 476), Rome's aristocratic families made history: *'the lower class had no voice in government, no place in history'*. This hierarchy is also reflected in the burial evidence found in Rome, ranging from monumental funerary buildings for leading families down to the infamous *puticuli*, the mass graves where the greater part of the urban population was disposed of (Heinzelman 2001).

When Caesar, in the course of his eight-year war, had to deal with the Gaulish leadership, it was naturally with this dominant *nobilitas*. Since Caesar's war reports are political writings, it has to be established very precisely what intentions lay behind the chosen themes. Nevertheless a whole mass of unsuspected information is given quite incidentally in the account, enabling us to piece together the elements of a mosaic (a practical listing and register of the citations used below can be found in Perrin & Decourt 2002). Thus we learn that the Celtic protagonists Moritasgus and Tasgetius were of high birth (summo loco natus) and that their ancestors were kings (reges); they can therefore claim to be descended from a long-established line. The same goes for Vercingetorix. The Aeduan Convictolitavis is said, literally, to come from a very old family (antiquissima familia). The descriptions of two important opponents of Caesar contain further clues: Orgetorix, by far the noblest and richest (longe nobilissiumus et ditissimus) amongst the Helvetii, commands a clientele allegedly of 10 000 heads. The Aeduan Dumnorix had a cavalry troop for his own protection and engaged actively in marriage politics, marrying off members of his family into chosen tribes. His brother Dumnorix, the only druid which we know by name, kept company with Cicero during his stay in Rome and was a close supporter of Caesar. The Gaulish nobilitas thus counted cosmopolitanism and education amongst its accomplishments, particularly for druids. A passage that refers to Eporedorix and Virodormarus, describing the former as high-born (summo loco natus) and the latter as of lower birth (genere dispari), suggests that in the *nobilitas* itself there was a hierarchy.

By Caesar's time it seems that among some tribes a certain institutionalisation of councils (*senatus*) had developed, providing the means whereby the tribal aristocracy could measure and police itself. Occasionally a champion would emerge from this group, but his supremacy could disappear just as rapidly. Members of the *plebs* were of course denied access to these councils.

It is unlikely that the situation in the mid-first century BC that Caesar describes came about spontaneously. Fifty years earlier – and two generations closer to Münsingen – Poseidonios reported that the social rank of a Celt was determined by his valour in battle, his birth and his possessions.

In summary, the cemetery at Münsingen can be characterised in the following way:

- Over its 240 year-long occupation there existed a very long chain of at least ten generations.
- The material value of grave goods made of gold, silver, amber or coral is not insignificant.
- Some women owned several sets of fibulae, and therefore clothes for different occasions. In antiquity textiles would have counted amongst valuables.
- The weapons of the men and the strongly standardised costume and jewellery combinations worn by the women denote a concern for status and representation.

- Whole joints of veal were put into the graves of some men. Could this be linked to their function as providers of hospitality to their clientele in this world as well as beyond?
- Hardly any graves cut each other, which is only possible if there was some form of aboveground marker. This implies that the dead ancestors were remembered as individuals and that their graves could have been the focus of repeated commemorations.

All these archaeological elements point to the existence of a ruling group, a nobility. Since it is the wont of the *nobilitas* to further partition itself, there must have been criteria unknown to us that defined quality and were used to establish a ranking. It is not yet possible for us to determine the rank of the nobility at Münsingen. Future anthropological analyses of further cemeteries – including DNA analyses where possible –will enlarge our knowledge base, and help to put the experience of Münsingen into wider context.

#### References

- ALT, K.W., P. JUD, F. MÜLLER, N. NICKLISCH, A. UERPMANN & W. FACH. 2006. Biologische Verwandtschaft und soziale Struktur im latènezeitlichen Gr\u00e4berfeld von M\u00fcnsingen-Rain. Jahrbuch des R\u00f6misch-Germanischen Zentralmuseums 52, 2005 (2006): 157-210.
- DUNHAM, S.B. 1995. Caesar's perception of Gallic social structure, in B. Arnold & D. Blair Gibson (ed.) *Celtic chiefdom, Celtic state*: 110-15. Cambridge: Cambridge University Press.
- HEINZELMANN, M. 2001. Grabarchitektur,
  Bestattungsbrauch und Sozialstruktur Zur Rolle der *familia*, in M. Heinzelmann, J. Ortalli,
  P. Fasold & M. Witteyer (ed.) Römischer
  Bestattungsbrauch und Beigabensitten in Rom,
  Norditalien und den Nordwestprovinzen von der
  späten Republik bis in die Kaiserzeit. –
  Internationales Kolloquium, Rom 1.-3. April 1998 (Palilia 8, 2001): 179-91.
- HINTON, P. 1986. An analysis of burial rites at Münsingen-Rain: an approach to the study of Iron Age society, in A. Duval & J. Gomez de Soto (ed.) Actes du VIIIè colloque sur les âges du Fer en France non méditerranéenne, Angoulême 18-20 mai 1984. Aquitania Suppl. 1: 351-68. Bordeaux.
- HODSON, F.R. 1968. The La Tène Cemetery at Münsingen-Rain. Catalogue and relative chronology (Acta Bernensia 5). Bern: Stämpfli.
- HÖLKELSKAMP, K.-J. 1987. Die Entstehung der Nobilität. Studien zur sozialen und politischen Geschichte der Römischen Republik im 4. Jhdt.v.Chr. Wiesbaden: Franz Steiner.

- MÜLLER, F. (ed.). 1998. Münsingen-Rain, ein Markstein der keltischen Archäologie: Funde, Befunde und Methoden im Vergleich – Akten eines Internationalen Kolloquiums 'Das keltische Gärberfeld von Münsingen-Rain 1906-1996' (Schriften des Bernischen Historischen Museums 2). Bern: Bernisches Historisches Museum.
- NäF, B. 2001. Stichwort Nobilitas, in Der Neue Pauly. Enzyklopädie der Antike, Band 15: 1070-84. Stuttgart/Weimar: J.B.Metzler.
- PERRIN, F. & J.-C. DECOURT. 2002. L'aristocratie celte dans les sources littéraires: recueil de textes commentés, in V. Guichard & F. Perrin (ed.) L'aristocratie celte à la fin de l'âge du Fer (IIè s. av. J.-C. – Ier s. ap. J.-C.) - Actes de la table ronde du Centre archéologique europeén du Mont Beuvray 'Archéologie, cultures et sociétés. La Bourgogne et la France orientale du Néolithique au Moyen Age, Glux-en-Glenne, 10-11 juin 1999 (Bibracte 5): 337-412. Glux-en-Glenne: Centre archéologique européen du Mont Beuvray.
- SCHOLZ, M., J. HALD, P. DICKE, S. HENGST & C.M. PUSCH. 1999. Das frühlatènezeitliche Gräberfeld von Gäufelden-Nebringen – Neue Erkenntnisse zur inneren Gliederung unter Anwendung archäobiologischer Analyseverfahren. Archäologisches Korrespondenzblatt 29/2: 223-35. Mainz: Römisch-Germanisches Zentralmuseum.
- SYME, R. 1939. *The Roman revolution*. Oxford: Clarendon Press.
- WIEDMER-STERN, J. 1908. Das Latène-Gräberfeld bei Münsingen (Kanton Bern). Archiv des Historischen Vereins des Kantons Bern 18: 269-361.