



ANCESTRAL LANDSCAPES

BURIAL MOUNDS IN THE COPPER AND BRONZE AGES

(Central and Eastern Europe – Balkans – Adriatic – Aegean, 4th-2nd millennium B.C.)

Edited by

Elisabetta BORGNA and Sylvie MÜLLER CELKA



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Proceedings of the International Conference held in Udine, May 15th-18th 2008

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THE DEVELOPMENT OF BURIAL RITES FROM THE TUMULUS TO THE URNFIELD CULTURE IN SOUTHERN CENTRAL EUROPE

Frank FALKENSTEIN*

ABSTRACT

The terms Tumulus culture and Urnfield culture imply a development from inhumations in barrows to cremations in flat grave cemeteries which marks the transition between the Middle and Late Bronze Ages in southern Central Europe. It was the goal of a comprehensive study to investigate this epoch-making cultural change in detail. Important parameters of the investigation are the geographical and chronological distributions of tumulus and flat graves, the dimensions of tumuli, the positions of graves in the barrows and the patterns of primary and secondary burials, the combinations and arrangements of grave goods, as well as the various cremation practices and especially the spread of the urn grave custom. For the analysis by mapping and statistics, more than 3000 burials of the late Tumulus culture (Bronze C, 14th c. B.C.) and the early Urnfield culture (Bronze D, Hallstatt A, 13th-11th c. B.C.) from southern Germany and adjacent areas were encoded to a data base. As a general result it can be shown that the abandonment of tumulus graves in favour of the flat grave custom, the intrusion of incineration and urn rite, and, furthermore, the furnishing of graves with pottery and metal objects represent independent factors of burial practices. Depending on the geographical and chronological contexts the various features are interconnected in manifold ways. The development of burial rites at the transition from the Tumulus to the Urnfield period thus turns out a complex and multicausal process which took place gradually and asynchronously in neighbouring regions. It is suggested that the displacement of the tumulus by the flat grave custom was an inevitable concomitant of the introduction of the cremation practice and triggered by functional reasons. The implementation of the cremation custom and of the urn grave rite should be regarded as chronologically separate processes with different ideological backgrounds.

INTRODUCTION

The terms Tumulus culture and Urnfield culture in southern Central Europe imply a development from inhumation burials in barrows to cremation burials in flat grave cemeteries. This drastic change of burial practices marks at the same time the transition from the Middle to the Late Bronze Age in the general region. It was the goal of a more comprehensive study to investigate this epoch-making cultural change in detail in southern Germany and adjacent areas (Falkenstein 2002). For the analysis, by mapping and statistics, more than 3000 burials of the late Tumulus culture (Bronze C, 14th c. B.C.) and the early Urnfield culture

* Lehrstuhl für Vor- und Frühgeschichtliche Archäologie, Institut für Altertumswissenschaften Julius-Maximilians-Universität Würzburg, Residenzplatz 2, Tor A, D-97070 Würzburg, email: frank.falkenstein@uni-wuerzburg.de

(Bronze D to Hallstatt A2, 13th-11th c. B.C.) were encoded to a data base. In this paper, several significant aspects of tumuli, flat graves, inhumation and cremation burials shall be pointed out. In principle all named variants of the burial customs are met with in all periods under consideration. However, the frequency and proportion as well as the combinations of the features in parts shift dramatically.

FROM TUMULUS TO FLAT GRAVE

The diagram (*fig. 1*) illustrates the epoch-making decrease in the frequency of the tumulus custom at the transition from the Tumulus culture to the early Urnfield culture. The practice of burying in flat graves is definitely known in the Middle Bronze Age and in some regions, for instance the northern part of the Upper Rhine valley, it even prevailed. However, the overall dynamic change of grave types takes place during the Bronze D period. At the close of the Middle Bronze Age this new development is yet hardly perceptible but by the beginning of the Hallstatt A1 period the process is virtually completed.

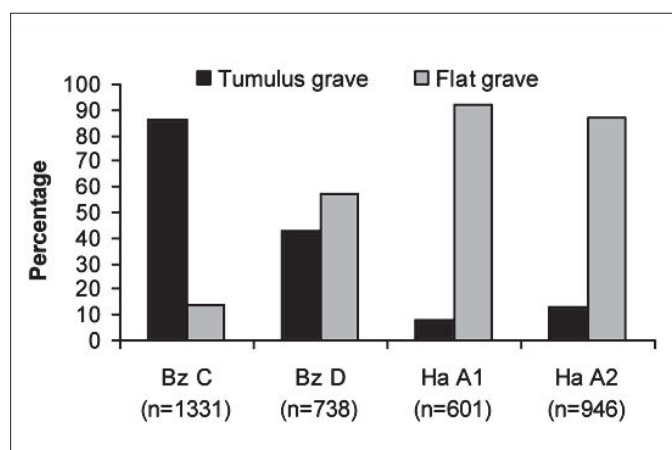


Fig. 1 – Percentages of tumuli and flat graves from the Middle to the Late Bronze Age in southern Central Europe.

regions tumulus burials appear to occur even more frequently by this period, as in the mid Upper Rhine Valley and bordering on the Hagenauer Forest, a landscape that is famous for its expanding tumulus necropolis of the Middle Bronze Age (Area C). Immediately to the north of this micro-region adjoins the northern part of the Upper Rhine valley. Here, the flat grave rite was already practised since the Middle Bronze Age whereas tumulus graves are barely known at all. Likewise, in the area of the river Saar the tumulus custom appears to have been introduced not before the Bronze D period (Area D). In nearly all the regions, which adhere to tumulus burials at this time, the grave custom comprises not only secondary burials in existing mounds from the Middle Bronze Age but also primary graves in tumuli that were newly erected in close proximity to the re-used older ones. This fact indicates that in the 13th c. B.C. (Bronze D) tumulus burial was, on one hand, practised by steadily decreasing groups of population. On the other hand, these minorities still pursued an *active* tumulus rite in that they continued to heap up barrows over primary graves.

Otherwise, the 13th c. B.C. saw an impressive increase in the frequency of the flat grave custom, as illustrated in the distribution map (*fig. 3*). Thus, only a few regions succeeded in resisting this powerful development, such as the ones referred to above (Areas B, C, D) and further, for instance, the mountainous and marginal Fulda-Werra highlands (Area E).

The distribution of the various kinds of burials in the Bronze D period, as seen in the map (*fig. 2*), reveals an altogether patchy picture. In most cultural regions the custom of tumulus graves still continues, but in some regions distinct changes are taking place. In the eastern part of southern Bavaria, in Upper Austria and the Salzburg region the practice of burials in tumuli has come to an end (Area A). At the same time, the occupation of flat grave cemeteries sets in at the Danube, Inn and Salzach and up to the alpine zone of Upper Austria. On the other hand, the neighbouring Riegsee region (Area B) remains entirely unaffected by the process. Further, in some

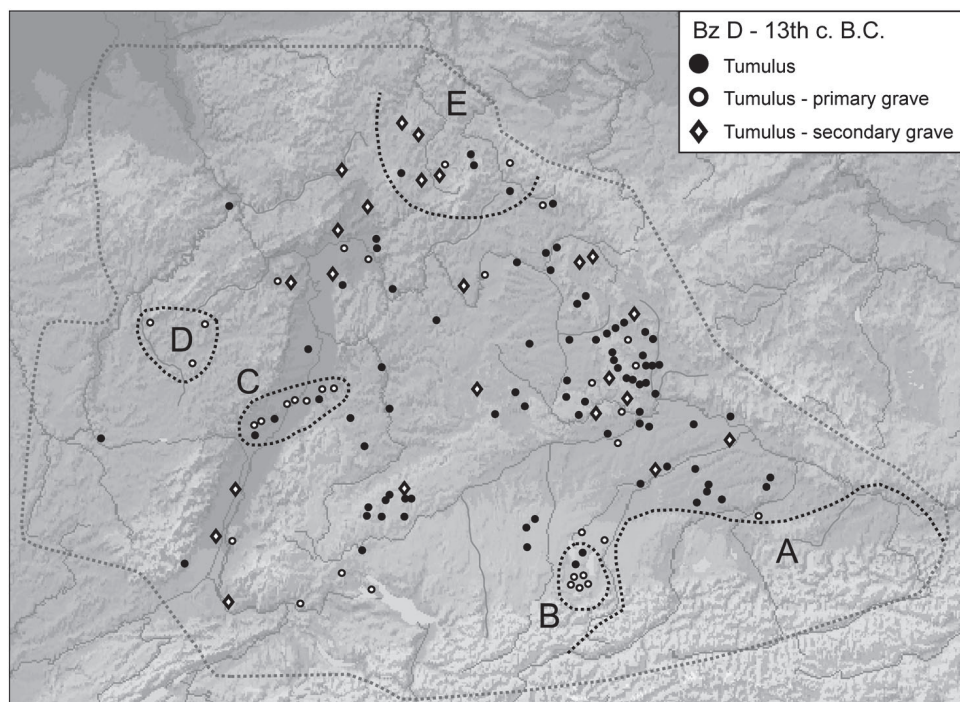


Fig. 2 – Distribution of tumuli of the Bronze D period (13th c. B.C.) in southern Central Europe;
A: Upper Austria, B: Riegsee region, C: upper Rhine valley, D: Saar region, E: Fulda-Werra highlands.

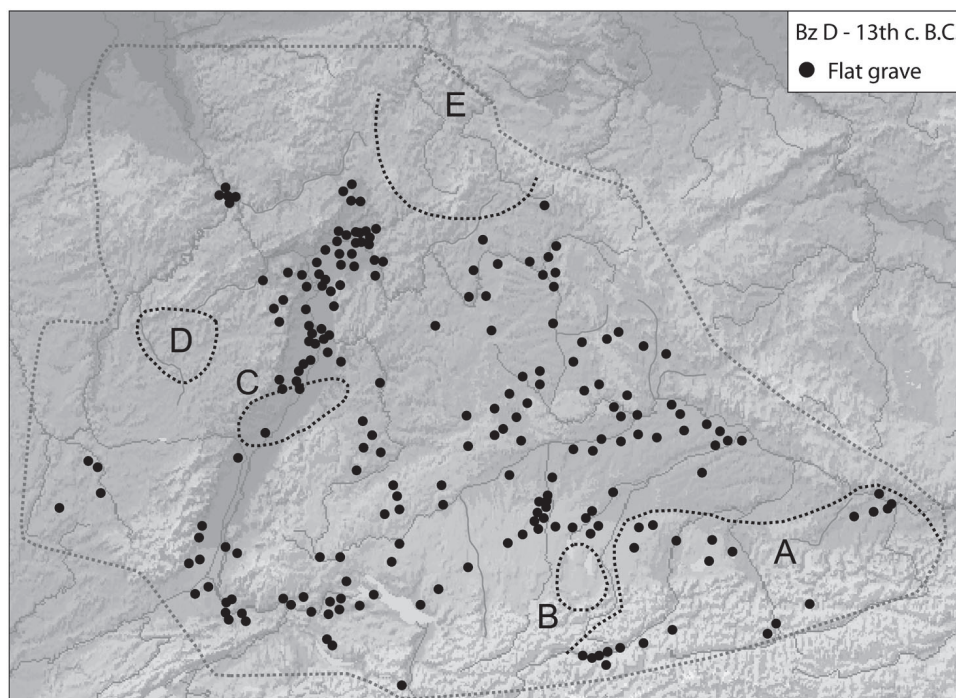


Fig. 3 – Distribution of flat graves of the Bronze D period (13th c. B.C.); A: Upper Austria,
B: Riegsee region, C: upper Rhine valley, D: Saar region, E: Fulda-Werra highlands.

DIMENSIONS OF TUMULI

The most reliable evidence of the original dimensions of tumuli should prove the diameters of the stone circles that were constructed as a boundary at the foot of the mound. In spite of the small numbers of stone circles actually recorded in excavations, the diagram appears to be representative of the statistical norms of diameters, as the bell-shaped distributions indicate (*fig. 4*). A striking observation is the very similar statistical norms of tumuli diameters during the Middle and Late Bronze Ages as in all periods diameters of 7 to 8m are the most frequent. This fact points to special regulations in terms of ritual precepts regarding the building of tumuli. The erection of tumuli thus seems to have followed a long-living convention from the Middle to the Late Bronze Age. Ritual precepts for the construction of tombs possibly allude to two variables: firstly, the number of people involved and, secondly, the time span in which the operation was carried out.

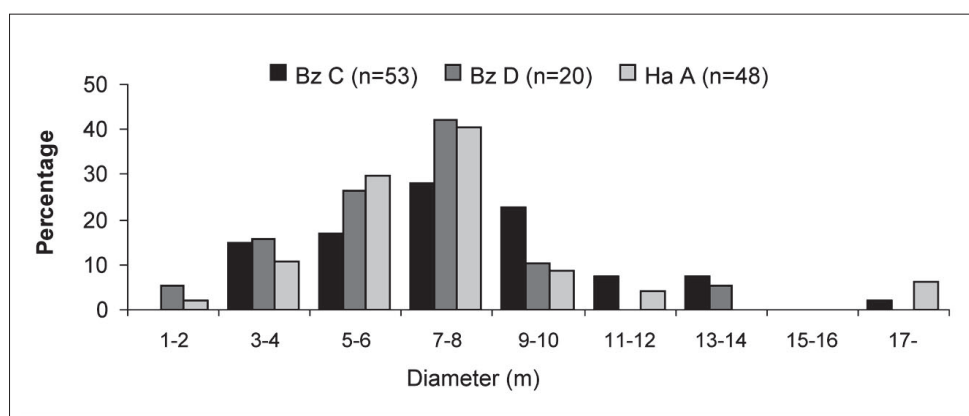


Fig. 4 – Percentages of the diameters of tumuli from the Middle to the Late Bronze Age in southern Central Europe.

The experimental construction of a tumulus with a diameter of 7m using wooden implements required building materials amounting to 21.5 tonnes of soil and 4.5 tonnes of stones, as well as a human labour input of 130 hours (Schulze-Forster, Vorlauf 1989, p. 261 *sq.*). From these data it can be seen that the erection of a tumulus of ordinary dimensions could easily be managed within a few days by a small group of people, for instance a core family or a clan. Given that the Bronze Age society was organized into larger kinship groups there could even have persisted a ritual precept that the heaping up of a barrow had to be accomplished in no more than one day. In that case the size of a tumulus would have depended on the number of mourners involved in the particular interment. Thus, the diameter of the tumulus may indirectly serve as an authentic indicator for estimating the social prestige of the buried person.

PRIMARY AND SECONDARY BURIALS IN TUMULI

Graves in tumuli can generally be differentiated into primary and secondary burials. Setting up the primary grave, usually in the centre of a tumulus, gave cause for heaping up the entire barrow. In contrast, secondary burials were dug into the filling of an existing tumulus, thus in a way resembling flat graves, and the beginnings of the flat grave tradition of the Late Bronze Age can consequently be seen as an inherent concept of the tumulus practice.

The diagram (*fig. 5*) shows the alteration of the proportion of primary to secondary burials. Of the two transitions that are obvious, the first comprises the transition from the Middle to the Late Bronze Age and the second marks the border line between the Hallstatt A1 and A2 periods.

Already in the Middle Bronze Age, tumuli appear to have been constructed originally as monuments for single burials (primary graves). However, there were clearly no defined restrictions for the addition of secondary burials into a tumulus. On the contrary, the close spatial relations between primary and later graves indicate that secondary burials were not only tolerated but in fact desired. Tumuli could thus be used over several generations as a burial place and focus of identification of a ritual community, most likely a kinship group. In this context, both men and women could be buried in primary and secondary graves in the tumuli, whereas graves of children are recorded nearly exclusively from secondary burials.

As opposed to the Middle Bronze Age, a new tendency is observed in the Bronze D and Hallstatt A1 periods, namely, the function of the heaped up monument is increasingly restricted to the representation of a single person. Instead of inserting secondary graves in the barrow, the later burials are now rather arranged at the foot of the mound. Finally, by the time of Hallstatt A2, secondary burials in tumuli have nearly disappeared altogether. Thus, despite unchanged dimensions and layout, the tumuli were virtually converted from burying places of a kinship group to funerary monuments of individuals.

A further change in burial practice affects the position of the primary grave in the barrow (*fig. 6*). While secondary burials were at all stages naturally placed in grave pits dug into the filling of the tumulus, primary graves could be set up either on the flattened surface, embedded in the slightly deepened surface, or deposited in pits that were dug about 1m into the ground. Whereas placing the burial onto the surface thus proves to be an inherent feature of primary graves in tumuli of the Middle Bronze Age, the digging of a burial pit into the ground is a characteristic of flat graves. The increase of flat grave burials in the Bronze D period coincided with a more frequent usage of burial pits for primary graves in barrows, which finally prevail in Hallstatt A.

The custom of digging burial pits into the ground thus contradicts the original concept of primary tumulus burial placed on the surface and this means that, in a way, the tumulus grave was discontinued in favour of the concept of the flat grave. This process can, again, be seen as an indicator for the gradual obliteration of the boundaries between tumulus and flat grave, primary and secondary graves.

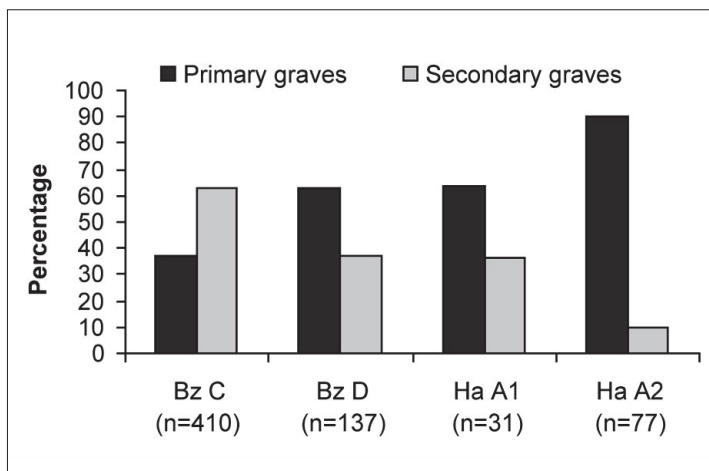


Fig. 5 – Percentages of primary and secondary graves in tumuli from the Middle to the Late Bronze Age.

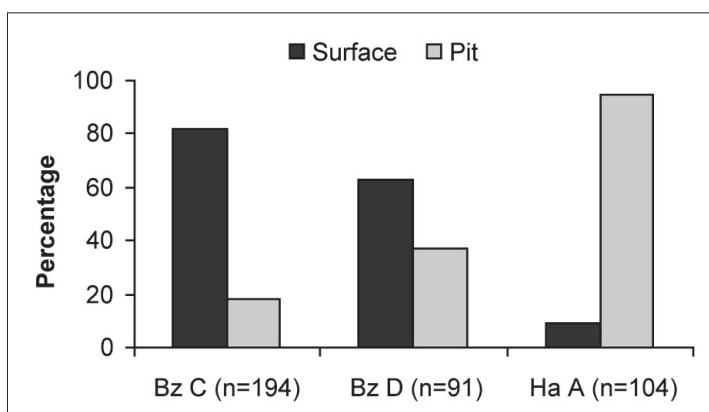


Fig. 6 – Percentages of the position of primary graves in tumuli on the original surface or in pits.

FROM INHUMATION TO CREMATION BURIAL

In the late Tumulus culture a marked proportion of cremation burials is already discernable (*fig. 7*). The final transition from inhumation to cremation burial took place in the 13th c. B.C. (Bronze D), when the proportion shifted nearly to the reverse. From the Hallstatt A1 to A2 periods onward the number of cremations further increased until reaching 100 percent. Clearly divergent from the first appearance of urn burials, the introduction of cremation practice proved to be a process of long duration that was already widely initiated in the Tumulus culture and continued until the Hallstatt A2 period.

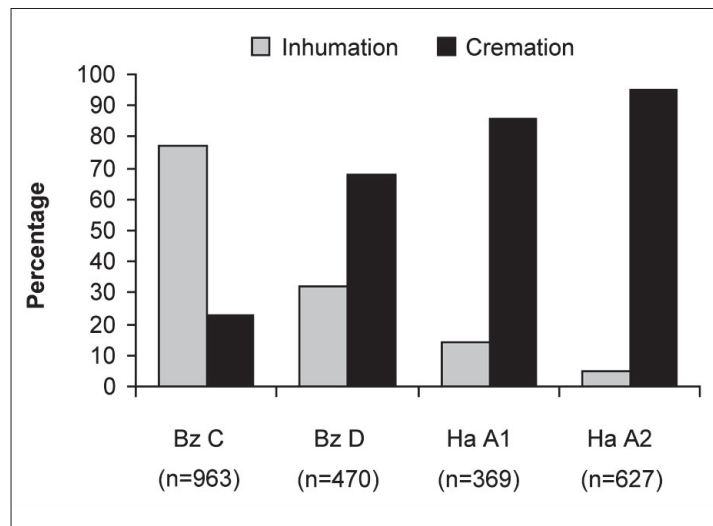


Fig. 7 – Percentages of inhumation and cremation graves from the Middle to the Late Bronze Age.

Inhumation burials of the Middle Bronze Age typically have the dead placed flat on their backs with stretched legs. In terms of their grave goods, men and women are endowed with weapons and ornaments respectively as well as implements and pottery. The combusted or unburned grave goods recorded from the cremation burials of the Late Bronze Age still reflect an unchanged spectrum of functional objects. It appears, therefore, that the ostentatious arrangement of the inhumation practice of the Middle Bronze Age – comprising the laid-out corpse in his/her dressing and the grave goods arranged nearby – was in the Late Bronze Age transferred from the location of the grave to the pyre. Laying the dead either in the grave or on a pyre therefore represented equivalent stages of the inhumation and the cremation rite. The collection of the bone ash from the burnt down pyre and its final deposition in the ground should be conceived as prolongation of the burial rite by means of an innovative element.

As regards the grave goods, an obvious change from the Bronze C to the Bronze D and Hallstatt A periods is, however, the increasing number of pottery vessels in the cremation burials. This circumstance should at least partly be explained tentatively by a twofold donation of pottery, namely a first set of pottery was deposited at the pyre and a second set in the grave.

In the case of the inhumation burials, the spatial arrangement of the pottery in the graves – at the feet, the head or the lateral sides of the buried body – remains statistically very similar from the Tumulus period until the developed Urnfield periods.¹ This observation is consistent with the general fact that in the Urnfield culture inhumation burials were practised by minorities of the population, namely groups who were steadily decreasing but who preserved the traditional inhumation custom in many of its facets over a long period of time.

1. Percentage of pottery placed at the feet: Bz/Br C 49%, Bz/Br D 58%, Ha A 49%; at the lateral sides: Bz/Br C 15%, Bz/Br D 14%, Ha A 11%; at the head: Bz/Br C 36%, Bz/Br D 28%, Ha A 40%.

It is generally presumed that the Bronze Age cremation rite in southern Central Europe had its origin in the Carpathian basin from where it diffused along the Danube corridor to the alpine foreland.² However, in the Bronze Age of southern Central Europe there seems to have prevailed a latent predisposition for the practice of cremation for non-standard burials. As the map (*fig. 8*) indicates, in the late Tumulus culture the cremation rite was already widely spread in almost all regional subgroups. The period-specific type of inhumation rite and the newly spreading cremation rite in the later Middle Bronze Age actually emerge side by side and contemporaneously in tumuli and cemeteries. The specific proportions of cremation burials in cemeteries, however, permit a distinction to be made between characteristic regions. In the alpine foreland, particularly at the Danube and its tributaries and along the upper course of the Rhine, cremation burials obviously prevailed. On the other hand, in the lower mountain ranges like the Swabian Alps, Franconian Alps and the Fulda-Werra highlands inhumation burials were still predominant. In the late Middle Bronze Age the populations settling along the fluvial landscapes of the Danube, the Rhine and perhaps the Main consequently seem to have adopted more willingly the innovation of cremation practice. Populations inhabiting the mountainous areas instead tentatively adhered more strongly to the traditional inhumation rite.

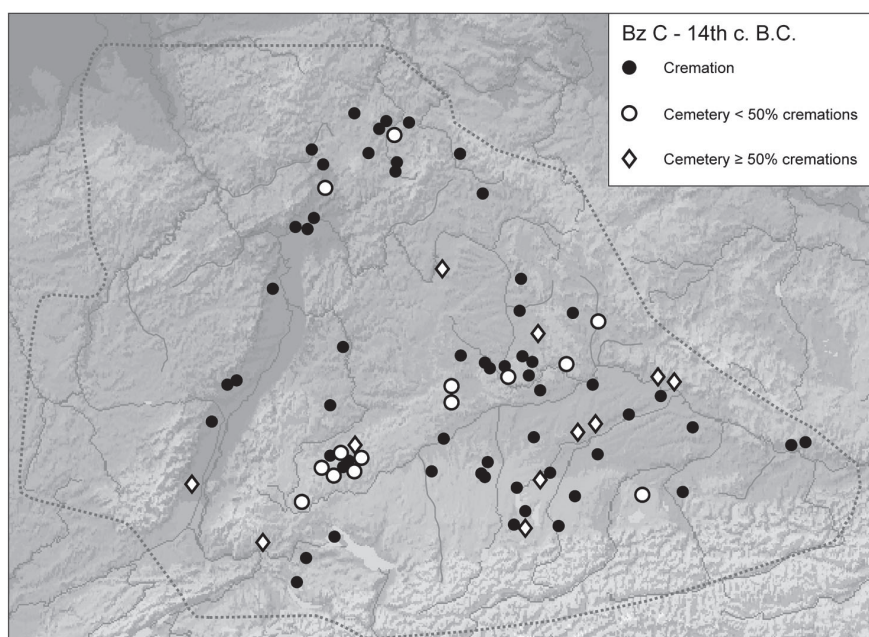


Fig. 8 – Distribution of cremation burials in the Bronze C period in southern Central Europe and percentages of cremations in cemeteries.

Tumulus and cremation burials allegedly constitute opposed and more or less exclusive components of the funerary practice. Cremation burials are, however, attested in tumuli as primary as well as secondary graves while the proportion and relative pattern of cremations change drastically from the Middle to the Late Bronze Age. In the Bronze C period the proportion of cremations is still rather small but ranges significantly higher in secondary than primary graves (*fig. 9*). For this, social or functional reasons could prove responsible. A social aspect would be that the cremation rite was possibly associated with persons of either higher or lower prestige and status than persons buried in the tradition of the inhumation rite. In that case, cremation graves, in comparison with inhumation burials, ought conceivably to display clear differences in terms of the quantity and quality of the grave goods or the variable age and sex of the deceased. However, the statistical data at present do not support any such conclusion. Hence functional and not social causes of the observed disparity appear altogether more plausible.

2. An important site for the diffusion of the cremation rite from the Carpathian basin to the subalpine region is the tumulus necropolis of Pitten in Lower Austria (Hampel *et al.* 1978-1981; Hampel *et al.* 1982-1985; Benkovsky-Pivovarov 1991; Blischke 2002).

A series of experiments have shown that a cremation burial required much more effort in terms of human labour input than was the case with the inhumation practice (Lambot 1994; Leineweber 2001; Becker *et al.* 2005). In order to achieve the complete combustion of a human body a considerable quantity of wood of a special quality had to be provided and stacked to a pyre.³ The amount of human labour connected with a cremation burial can be estimated as roughly comparable with that of building a tumulus. A cremation burial as primary grave in a tumulus thus conceivably meant a reduplication of the manpower required for accomplishing the tomb. Consequently, in the Middle Bronze Age people would, in practice, have made a choice either to conduct an inhumation burial in association with heaping up a barrow, or to arrange for a cremation burial as a secondary grave in an existing tumulus.

In the Bronze D period the proportions of the preferred burial practice had already shifted in favour of the usage of cremation for primary burials in tumuli (*fig. 9*). However, it has to be kept in mind that at this stage the flat grave custom was still prevalent and tumulus graves were in the minority. The spectacular combustion on a pyre in the Bronze D period certainly implicated continuously increasing value and prestige, as can be seen also from the circumstance that the combined rite requiring duplicated manpower, namely cremation burial as primary grave combined with the heaping up of a barrow, was by now more frequently performed.

Finally, in Hallstatt A the combustion of the dead was considered an obligatory standard rite, and the customs of tumulus or flat grave, primary or secondary burial were then practised independently from cremation.

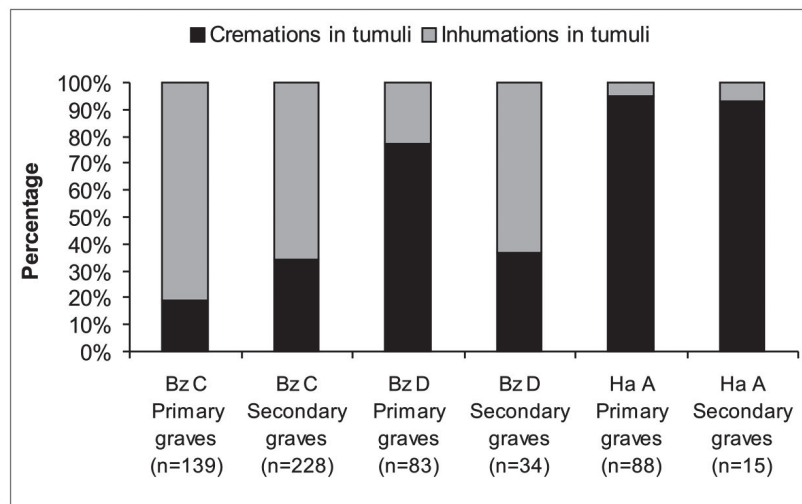


Fig. 9 – Percentages of cremations and inhumations in primary or secondary graves of tumuli.

THE IMPLEMENTATION OF THE URN GRAVE CUSTOM

In the late Tumulus culture and earliest Urnfield culture, cremation burials comprised various types of rites (*fig. 10*).⁴ The term pyre-grave (*Brandflächengrab*) signifies that the combustion and burial of the dead was performed on the same spot. In general, the burnt down pyre was endowed with some grave goods and then covered by a tumulus. Pyre-graves were typical of the alpine foreland and continued until the Bronze D period. Thereafter this form of cremation grave became extremely rare but survived into

3. Experimental combustion of four pyres by Becker *et al.* (2005, p. 128 *sq.*) required 3.2 to 4.1 cubic metres of wood. This quantity comes up to a one or two years per capita consumption of wood in preindustrial societies.

4. The classifications used in the following are based on the archaeological evidence that is relevant here. There are conformities and differences in relation to the classifications of cremation burials presented by other authors (Kostrzewski 1925; Wilke 1929; Seger 1911-1913; Filip 1966).

the late Urnfield period. Unseparated cremation graves (*Brandschüttungsgräber*) and bone ash graves (*Leichenbrandschüttungen*) emerge side by side and contemporaneously in the same cemeteries. Both types are interconnected by several intermediate forms and therefore appear to represent two variants of a rite that was altogether less specific. In bone ash graves, the separated bone ash was either dispersed in the grave to form a heap or a scatter. Alternatively, and more rarely, in unseparated cremation graves the unsorted remains from the pyre, consisting of bone ash, charcoal and grave goods, were poured into the pit. Finally, urn graves (*Urnengräber*) are here defined as intentional depositions of collected bone ash in pottery vessels that were especially made or selected for this purpose (*ossuarium*). A few genuine urn graves occur already in Bronze C, but this type of burial custom had not become particularly prominent before the end of the Bronze D period. At the beginning of Hallstatt A1 the urn grave rite spread rapidly and superseded the other cremation customs which then became infrequent forms of burial. This process lasted until Hallstatt A2.

As is evident from the map (fig. 11), the earliest distribution of urn graves in the late Tumulus culture was still restricted to the alpine foreland, and the custom by that time yet represented an uncommon, special form of cremation burial. Similar to the cremation rite as such, the urn grave custom was apparently communicated from the region of the western Carpathian basin where it had emerged since the Early

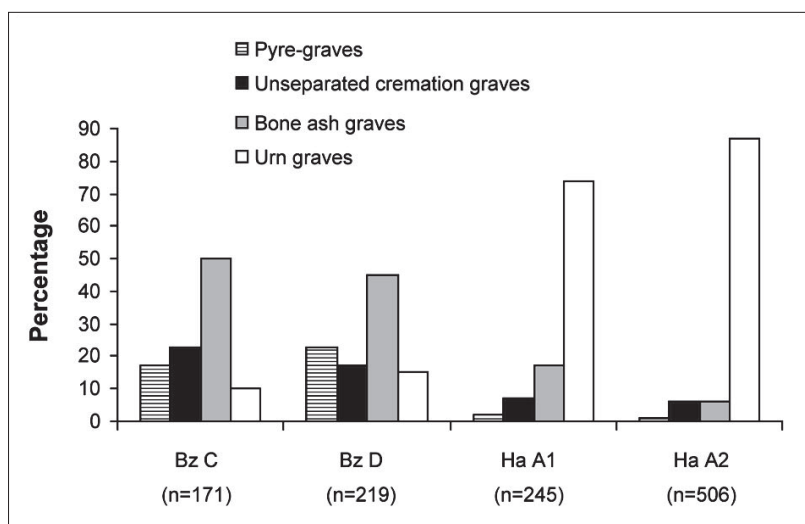


Fig. 10 – Percentages of different types of cremation graves.

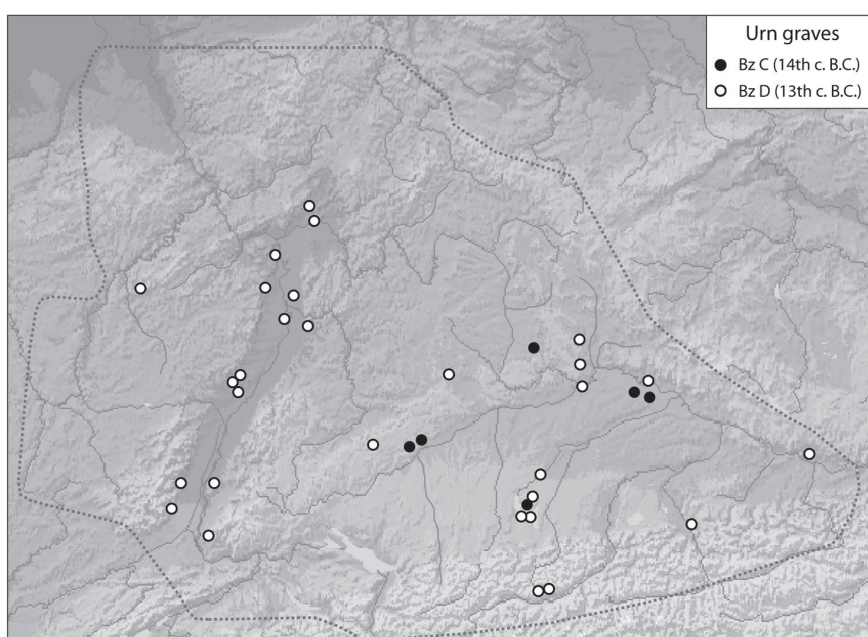


Fig. 11 – Distribution of urn graves of the Bronze C and D periods in southern Central Europe.

Bronze Age (Kalicz 1968, p. 78 *sq.*; Bóna 1960; Bándi 1984, p. 269 *sq.*; Kovács 1984; Furmánek *et al.* 1999, p. 167 *sq.*). In the Bronze D period the urn graves became gradually established in the subalpine region but were still only a minor proportion. At the same time the practice expanded to the west, thus giving rise to a secondary central region of the urn rite in the area of the Upper Rhine valley.

In Hallstatt A1 the urn grave custom spread rapidly over the entire area settled by the so-called Urnfield culture (*fig. 12*). Within a short period during the 12th c. B.C., the urn rite thus experienced a complete breakthrough as the standard burial practice of the Late Bronze Age. Probably in the course of a subsequent colonization process during the Hallstatt A2 period, new urnfield cemeteries were also founded at the peripheries of the regional Urnfield groups.

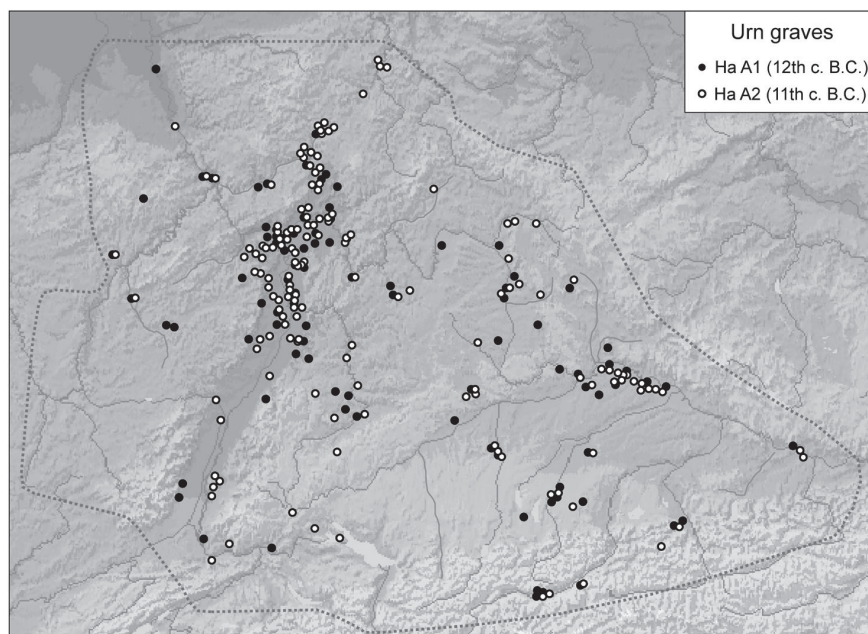


Fig. 12 – Distribution of urn graves of the Hallstatt A1 and A2 periods.

CONCLUSION

Inhumation burials in tumuli and cremation burials in flat graves at first sight appear to reflect opposite concepts of Bronze Age funerary customs. However, the results of the statistical investigation indicate that there was more an indirect and coincidental exclusiveness than a pronounced dichotomy of practices.

In the later Tumulus culture the cremation rite had already diffused into most of the regional groups. The adoption of the cremation practice was a continuous process lasting at least from the 14th c. until the 11th c. B.C., with a marked period of transition in the 13th c.

A crucial point to consider in assessing the significance of the burial types is that the heaping up of a tumulus and the combustion of the dead each required extraordinary efforts in terms of material and human labour input on the part of the mourners, and the combination of both measures consequently demanded a reduplication of the labour invested. Inhumation burial in a tumulus was, on the one hand, less spectacular than the combustion on a pyre but generated a long-lasting visible monument of the deceased. On the other hand the cremation process on a pyre ensured an impressive funerary ceremony but barely left any visual memorial. With the adoption of the cremation rite the focus of the funeral shifted from a material monument to non-material commemoration of the dead, in that the impression of the spectacular combustion was preserved mainly in the memory of the mourners.

During the late Tumulus culture (Bronze C) it appears that people, due to practical necessity, had the choice of either inhumation in a tumulus or, alternatively, cremation as a secondary burial in a tumulus, that is, as a flat grave. Only few persons would, however, have had sufficient prestige and power to have their funeral conducted with a considerably increased labour input by the mourners, namely in the shape of ostentatious cremation *and* the heaping up of a barrow for long-lasting commemoration.

The increasing popularity of the cremation practice in the 13th c. B.C. (Bronze D) had the inevitable secondary effect of the abandonment of the tumulus rite in favour of flat graves. The gradual disappearance of secondary burials in tumuli and the increase of primary graves in pits indicate that the transition from the tumulus to the flat grave custom was a complex process with mutual interrelations. The eclectic combinations of elements of the inhumation and cremation rites that are to be observed in burials, especially of the Bronze D period, point to a gradual change in mental attitude without a dichotomic effect. If by this time the cremation custom was linked to a specific religious concept this must still have been an indistinct ideology. Possibly therefore, the change in mentality concerning funerary behaviour came about in a way that was detached from a determinant religious background.

A different case seems, however, to apply to the adoption and distribution of the urn grave custom. In the 14th c. B.C. this rite was an unusual, special type of interment, and also ranged chronologically after the other kinds of cremation practice. In contrast to the diffuse spread of the cremation rite in general, the inauguration of the urn grave custom appears to have been concentrated on the alpine foreland and the Rhine valley. At the transition from Bronze D to Hallstatt A1 an intensified expansion is discernable. Within a few generations the various cremation rites were then superseded over the entire geographical area adhering to the practice. The large-scale standardization of burial customs only seems possible through strong regimentation due to persisting religious precepts. The diffusion of the cremation practice in general thus paved the way for the concerted implementation of the urn grave custom. As this rite was most probably reinforced by a specific and effective religious idea, we can in the 12th c. B.C. discern a radical paradigmatic shift in religious perceptions.

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