

Andreas Lippert, **Die zweischaligen ostalpinen Kammhelme und verwandte Helmformen der späten Bronze- und frühen Eisenzeit**. With contributions by Christine de Vree, Martina Weber, Joachim Lutz, Mathias Mehofer, and Erich Marx. *Archäologie in Salzburg*, volume 6. Salzburg Museum, Salzburg 2011. 157 pages with 47 figures, 34 plates, 4 tables.

Deposits of bronze objects in places that are neither settlements nor graves are among the most intriguing and potentially informative kinds of archaeological sites in later prehistoric Europe. Such deposits are frequently associated with special features of the natural environment. The most familiar are water deposits, which are well documented all over Europe, where weapons, tools, vessels, and ornaments were dropped into swamps, ponds, lakes, and rivers. Also widespread throughout the continent are deposits of bronze objects in pits in the ground; these are commonly called »hoards«. Less familiar to archaeologists who do not work in mountainous regions are deposits made at special locations in the mountains. Research conducted in the Alps and in their foothills have yielded rich information about cultural practices in these important environments.

The three helmets that form the central subject of this attractive new book were all recovered in or close to pass routes through the Austrian Alps, and all are thought to have been parts of votive deposits offered to supernatural powers to request, or to express gratitude for, safe passage through potentially hazardous mountain trails. The book provides documentation about each of the three finds, extensive discussion of related helmets, and, of most

interest to the largest number of archaeologists working in Europe, consideration of the meaning of the deposits in relation to ritual practices, trade, and developing social structures in Late Bronze Age Europe.

The immediate inducement for this book was, in the summer of 2006, the recovery of a fragment of a helmet on the bank of a brook in Böckstein near the town of Bad Gastein. This fragment typologically matched the well preserved helmet of the crested type found at Pass Lueg in 1838, as well as the half of a similar helmet discovered in 2001 at Moosbruckschrofen in the Upper Inn Valley of North Tyrol. The Pass Lueg helmet has been much discussed in the literature. The two recent discoveries provided an ideal context in which to reevaluate that earlier find and at the same time to demonstrate its connections with the two recently recovered fragmentary specimens.

The helmet at Pass Lueg was found in the course of clearing stone from near the road that led through the mountain pass. The report by the discoverer asserted that the piece was found together with other bronze objects. Among the items mentioned by different commentators are two lance points, an axe, and two pick points. Finds that are currently associated with the helmet are three socketed picks (two in the Salzburg Museum and one in the Naturhistorisches Museum in Vienna), a flanged axe, three bronze rods of rectangular section, and two lumps of bronze metal. Today a pilgrimage chapel stands near the site at which the bronze objects were found. The phenomenon of a modern Christian church or chapel situated on a site at which objects were deposited in prehistoric times is not unusual, and the conjunction shows that places can be of special religious significance to people for very long periods of time, in this case from at least the Late Bronze Age to today.

Half of a similar helmet was found in May of 2001 at Moosbruckschrofen, about 230 kilometers west-southwest of Pass Lueg. It was with more than 350 bronze objects that had been deposited on a high point of ground known as the Pillerhöhe overlooking a pass that led through the mountains to the valley of the Inn River. The objects were found in a large coarse-textured ceramic vessel and included in addition to the helmet four swords, lance points, daggers, axes, sickles, pins, spiral pendants, and other ornaments. The majority of the objects showed signs of intentional damage, some also traces of fire. The helmet had been battered, and attachments had been torn off it.

The fragment from the edge of the valley of the Anlauf Brook, about sixty-five kilometers southsouthwest of Pass Lueg, was discovered in August of 2006. Damage to the fragment seems to indicate that it was transported by the stream and knocked against stones. The piece is likely to have been washed up onto the edge of the valley at a time when the water was high, presumably during the summer months when Alpine streams are in full flood. The original situation of the object is unknown, but the author supposes that this object was part of a water deposit. Just south of the brook is a pass through the

mountains, and it is possible that the fragment had been washed out of a deposit higher up in the pass.

The author provides a full description of the complete helmet from Pass Lueg, including its shape, measurements, and details of structure. Excellent drawings of five views are included (front, back, both sides with cheek pieces, and top). Similar drawings show the large fragment from Moosbruckschrofen, both in the bent condition in which it was found and in a reconstruction of its original shape. The fragment from the Anlauf valley is also shown, both in the crumpled form in which it was discovered and as a reconstruction drawing.

The three helmets are very similar, but there are minor differences between them. For example, the helmet from Pass Lueg has three circles on each side, each consisting of three concentric rows of repousse dots with a repousse boss in the center. The other two both have just one such circle, also formed by three concentric rows of dots with a repoussé boss in the center. Enough of the very fragmentary Anlauf specimen has survived to determine that there was just the one circle. The author suggests that the number of circles on each helmet may indicate the status of the owner but does not cite direct evidence to support this idea. It would be interesting to explore this suggestion further by examining correlations between numbers of circles on bronze helmets and status implied by wealth in burials that contain such objects.

Most of the helmets of this type and of closely related types have been recovered in deposits rather than graves, a situation that limits the possibilities of this kind of analysis. The lack of such helmets in burials north of the Alps (the situation is different in Italy) also makes it difficult to place them chronologically on the basis of associated objects. The author approaches the problem of chronology through two different methods. One depends upon comparing the decoration on the helmets with decoration on other, well dated, specimens, including helmets in the Aegean region. The discussion of other helmets includes examples from other parts of central Europe, eastern Europe, northern Europe, and the Aegean region, including Knossos. To aid in working out the relative chronology of the crested helmets, Lippert presents a seriation chart that includes helmets from 104 sites all over Europe, from Spain to Italy and Greece, from the Austrian Alps to the northern regions of the continent.

Regarding function, Lippert notes that few helmets of the period show damage from battle. Among the crested helmets found in Italy, which have been recovered mainly in graves, none shows traces of battle damage, leading the author to suggest that these objects were primarily for display there, an idea that would accord well with opinions of other scholars who believe that Bronze Age defensive weaponry may have been intended mainly for display rather than for protection in actual combat.

A diagram on page 36 illustrates a correspondence analysis of crested helmets based on characteristics of their shape and decoration. The purpose of this exercise is to identify groups of helmets that are linked by

similarities in construction details and thus perhaps by workshops. A map on page 37 provides an excellent overview of the distribution of the four major types of crested helmet that the author identifies, sorted by character of each context – river find, land deposit, single find, grave. Only the three helmets that form the central subject of this book belong to what Lippert calls the »Pass Lueg Type«, and they form a tight cluster near the center of the map of Europe.

In a general discussion of deposits with defensive weapons, Lippert notes that this type of deposit developed in the latter part of the Middle Bronze Age (Bronze Age C2 in the standard chronology of central Europe). Early in the sequence, many deposits containing helmets, armor, shields, and greaves are known from throughout the Carpathian region. Later, during the latter part of the Urnfield Period, the geographical situation changes, with the principal distributions of defensive weapon deposits in the eastern Carpathians and in northern and western Europe.

Christine de Vree is the author of a section on water finds of weapons in the Salzburg region (pp. 47–59), of which she identifies a total of 105. A catalogue lists and documents the finds in detail, and a map shows their locations along the Saalach and Salzach rivers. The best represented periods of weapon deposition are the Neolithic and early Urnfield. A series of twelve bar graphs shows quantities of objects deposited in different kinds of places, during different periods, divided by category of object (such as axes, swords, and pins). Even lumps of bronze metal have been recovered from both rivers and bogs. All of this information is useful and very well presented, and it provides an instructive complement to the discussion of the deposits in mountain passes.

In her evaluation of the results of her study, de Vree makes several important points. She concludes that the objects recovered from watery sites were not lost accidentally, nor were they lost as a result of battlefield activity. Instead, they were purposely deposited in watery places. While bronze deposits in pits on land are sometimes interpreted as stored metal, this explanation can be excluded from consideration of the water finds. She suggests that the performance of special rituals involving swords and axes is likely. It would be interesting to learn more about this specific kind of association and what it might tell us about the cosmological meaning of these objects to the Late Bronze Age participants.

In the last part of Lippert's discussion, he relates the crested helmets to issues of trade and social structure in the Late Bronze Age. Two categories of objects play special roles in our understanding of this complex period – weapons and vessels. Both required highly skilled, specialized craftsmanship to make, and both categories are mainly associated with elite individuals and groups, as we know from burials. Lippert notes that regions in which bronze vessels were commonly placed in wealthy burials are different from regions where weapons were frequently deposited in rivers, suggesting that in different communities, different practices were employed to

express special status. The three helmets that form the basis of this book are special in that they were recovered in or close to mountain passes.

This geographical aspect of these finds leads the author to suggest that they were deposited under the auspices of local elites, since all contextual evidence connects elaborate bronzes such as these helmets with elites. A map on page 61 shows the distribution of graves containing wagons, deposits with wagon parts, sites of Bronze Age copper mining, finds of socketed picks, and the three helmets. In the immediate region of the places at which the three helmets were recovered, no exceptionally rich burials have been found. But a few tens of kilometers to the north are a number of outstanding rich burials with wagons, bronze weapons, and bronze vessels, of which Hart an der Alz and Poing, both in Bavaria, are among the best known. And fortified hilltop settlements of the period are also documented in these regions to the north. It is this »warrior aristocracy«, identified through the rich burials and the hillforts, that Lippert posits as being behind the copper trade through the mountains and the bronze deposits, including those with which the three helmets were associated, that have been recovered along the passes. In this way, Lippert uses these helmets as a means of tying together the themes of copper production and trade, social status, and ritual offerings at difficult and dangerous passages through the mountains.

A catalogue of all of the helmets mentioned by Lippert in the text is included (pp. 63–76), along with twenty-five plates, both drawings and photographs.

The volume concludes with a section by Martina Weber on the palynology of plant remains recovered in the folds on the Anlauf helmet, one by Joachim Lutz on material analysis of the three helmets, and one about the metallurgical techniques of production of the three by Mathias Mehofer. These three sections include a total of five figures, nine plates, and four tables. At the end are summaries in three languages (German, English, French) and a section by Erich Marx about how the Pass Lueg helmet found its way into the Salzburg Museum.

The book presents an excellent overview of the crested helmet type, as well as solid documentation of the three helmets that form the focus of the study. In his discussions of typology, chronology, function, and depositional practice, Lippert offers a broad consideration of this category of objects. Drawings, photographs, and maps are excellent throughout and provide rich visual documentation of objects and places. The specific presentation of the three helmets and the discussion situating them in the larger context of other helmets of the period will be valuable for specialists in Bronze Age archaeology. For the larger community of researchers working in later prehistoric Europe, the discussion of the nature of the finds as pass deposits and the contextualization of them in the larger picture of social and economic dynamics of temperate Europe will be especially welcome.