## **CONCLUSIONS**

The preparation of this book, »Cascos hispano-calcídicos. Símbolo de las elites celtibéricas«, began nearly three years ago. In November 2010 an outstanding assemblage of helmets from somewhere in Castilla y León (Spain) was put on sale by the Berlín auction house Hermann Historica. Our involvement in the matter was, in principle, aimed at bringing the need to reclaim these exceptional pieces to the Spanish authorities, adding our voices to those of Prof. Dr Markus Egg and Dr Michael Müller-Karpe of the Römisch-Germanisches Zentralmuseum of Mainz (RGZM). This request had been made several times since the beginning of the 1990s, when these and other pieces first appeared on the international antiquities market, and, more recently, when some of them once again surfaced after the death in 2001 of the well-known collector of antique weapons, Axel Guttmann, who had acquired them and exhibited them in his private museum in Berlín.

According to the information given to us by the RGZM team, which they obtained directly from the antiquarian, the assemblage of helmets came from Aranda de Moncayo, in the extreme east of the province of Zaragoza, close to its border with Soria, right in the heart of Celtiberia. This expanded on the details gleaned from the world of collectors (H. Born and the auction houses Hermann Historica and Christie's), which said they had been found in the region of Soria.

Collaboration was indispensable for recovering this assemblage. So the RGZM asked for the assistance of Spanish institutions and its government. The diligent action of the Real Academia de la Historia, through the negotiations of its Curator of Antiquities, Prof. Dr Martín Almagro Gorbea should be emphasised. Because of the assemblage's value in terms of heritage and the danger of it being dispersed, making subsequent research difficult, the academy asked the Ministry of Culture to take decisive action. However, at the time of writing these conclusions (April 2013), the dispersal of the helmets is a lamentable fact. The lack of an immediate response by the Spanish Government soon made us realise that research into what is, without doubt, one of the most outstanding archaeological finds of Spanish prehistory in recent years, and its recovery would, against all logic, take entirely different routes.

We started our research in January 2011, initially focusing on producing the most complete catalogue possible in order to gain a detailed insight into this new type of helmet. We had the photographic documentation deposited at the RGZM after an attempt to sell some of these helmets in the early 1990s, and also the magnificent photographs frequently published in auction house catalogues. With the kind collaboration of the Musée d'Art Classique de Mougins, which acquired the first six helmets sold by Hermann Historica, we were able to inspect the pieces at first hand and obtain some very high quality photographs from the museum, although we were unable to study them directly, essential for determining fundamental aspects, such as the attachment systems, visible on the inside, the thickness of the dome, dimensions, etc. Neither was it possible to undertake analyses to obtain information about how they were made or, equally important, to determine which parts had been replaced, one of the major difficulties that this research has come up against. The documentation continued to be collated until November 2012, adding photographs of some of the helmets in the Guttmann collection taken by Hermann Historica when the Ministry of Culture commissioned an expert's report to value the acquisition; the dossier on the helmet in the ancient Várez Fisa collection, acquired by the Museo Arqueológico Nacional de Madrid in 1999; and the dossier on the example kept in the museum of the Fundació Privada per l'Arqueologia lbèrica in Figuerola del Camp.

At the same time, a detailed review of contexts and museum collections revealed that several Spanish museums were housing the remains, some of them very fragmentary, of another five helmets similar to the new

type identified. These have proved critical for determining the model's characteristics, its development and the authenticity of the bulk of the examples of unknown provenance, which, although excessively restored and reconstructed, display features that are recognisable in the examples cited. Two of these helmets are in the Museo Numantino de Soria, while the other three are, respectively, in the Museo Arqueológico Nacional, the Museo de Teruel and the Museu de Belles Arts de Castelló. These pieces have provided us with some information about the contexts in which they have appeared, much more varied than that gleaned from the incomplete and unreliable information available on the assemblage of Aranda de Moncayo, which came from the antiquarian market.

The find of these helmets and their sale on the antiquities market was reported in the national and Aragon regional press in March 2012, bringing them to the attention of the public, resulting in pressure to avoid an irreparable loss to the country's archaeological heritage, as in fact subsequently happened.

The appearance of this news in the press and the lack of any effective response by the Spanish authorities brought us into contact with people who were interested in recovering this exceptional archaeological assemblage. They confirmed facts known since the beginning of the 1990s: the find came from Aranda de Moncayo, very probably from inside an important Celtiberian *oppidum* in the area, which had been the site of clandestine activities for several years. This led, in addition to the process of compiling data, to a visit to Aranda de Moncayo to obtain more complete information about the presumed find-site *in situ*. Our visit could not have been more productive, since in addition to confirming the importance of the site, we identified an extensive area within it where the earth had been continually disturbed, although we were unable to confirm that this was the find-site of the assemblage of helmets. The need to intervene in the site and document any remaining material that would help to identify the find-site was entrusted to the Committee created by the Aragon Government's General Directorate of Heritage in order to recover the pieces. It met for the first time in mid-April 2012, although by 2013 it had not met again nor had it taken any decisions, apparently in order to avoid interfering with the police investigations that have led, as part of Operation Helmet, to the police seizing a major haul of more than 4,000 items, most of them from a Celtiberian necropolis in the area.

Surprisingly, despite the Ministry's assertions about its on-going efforts to recover the assemblage of helmets, another three examples from the Guttmann collection, already known, were auctioned by Christie's in late October 2012, confirming our worst fears: the assemblage had been completely dispersed, which makes it impossible to organise their complete study, and also makes their recovery even more difficult. The sad history of these helmets goes on. This study is the most complete that the research and the professional archaeologists involved are able to offer, although we are still waiting for the authorities to provide the public with access to the heritage these helmets represent. A heritage which, remember, belongs to the society from which it has been stolen.

The first information on the find of a Hispano-Chalcidian helmet goes back to the publication by J. Cabré and Ma. E. Cabré, in 1933, on the grave furnishings of burial 201; zone II/III of the Vettonian necropolis of La Osera (Ávila). It was an aristocratic burial, one of the most outstanding in the cemetery, and consisted of a large assemblage of weapons, horse trappings, banqueting elements and adornments. It also included the very fragmentary remains of a helmet in which it was possible to recognise the crest holder and what appeared to be the remains of the dome, bent and very distorted, and the reinforced rims. The damage can almost certainly be interpreted as ritual destruction, and curiously this helmet is one of the few items from the burial that had been subjected to the practice.

The fragmentation of the piece meant that it was not appraised, even when new finds of this particular type of helmet were made at the end of the 1970s. In 1976, P. Atrián published a cheek piece found in sec-

tor 12 of the Celtiberian settlement of El Alto Chacón (Teruel). The piece was mistakenly identified as part of a Montefortino type helmet, and has only recently been related with these Hispano-Chalcidian helmets. In 1978 another helmet of the same model was found by chance, in relatively good condition, in the bed of the river Avión, near its source at Muriel de la Fuente (Soria). The plume holder was broken at the base and the serpentine adornments were missing, perhaps torn off as part of votive rituals. These elements are probably the most significant features of the type, and their absence probably contributed to it going unnoticed until recently.

The 1980s were a crucial decade for identifying this type of helmet, since somewhere in the district of Aranda de Moncayo (Zaragoza) one of the most outstanding finds of Celtiberian archaeology in recent years was made, very probably with the illegal use of a metal detector. It was a hoard consisting of an indeterminate number of helmets, 17 according to some sources, although others suggest fewer (10) or even more (20), all of the same model. The helmets were apparently accompanied by singular items such as disc cuirasses and perhaps swords and tripods. The helmets were found deliberately crushed in fissures in the rock, according to some reports, piled up in wooden crates, according to others, perhaps inside a building and very possibly within an important Celtiberian *oppidum* in the area. All the evidence suggests they were part of a ritual hoard whose true significance we are only now beginning to assess, perhaps related with a sanctuary that, had it been identified as such and studied scientifically, would have provided us with important information on such varied fields as religion, society, technology and even the economy, contributing to substantially enriching our knowledge of the Celtiberian culture. But, above all, it would have opened the doors to a historical knowledge of war and its symbolism for the different *populi* of the Celtiberian world.

The finds were apparently made in the late 1980s, although it is possible that they continued during the 1990s. That is, after the existence of the helmets was first reported by the German museum.

In the final decade of the 20<sup>th</sup> century two new helmets were documented, this time as part of scientific work. In 1991, in underwater surveys at the mouth of the river Seco or Rambla Cervera, in Castellón, at the place known as »Piedras de la Barbada«, a fragment of the dome of a helmet was identified, whose fragmentary nature meant that it was not recognised as a Hispano-Chalcidian helmet until this present study. In 1993 another very partial fragment of a helmet of the same type appeared in the necropolis of Numancia, in Soria, whose publication in 2004 was a major advance in the research into the type.

The nature of the finds at Aranda de Moncayo was analysed by H. Born in 1993 when he published details of the restoration of one of these helmets, which he catalogued as "lberokeltischen Type" (indicating the provenance of the helmet), a previously unknown model, an interpretation shared by M. Egg, who also differentiated them from any other type of known helmet. However, the finds made at La Osera in Ávila, El Alto Chacón in Teruel and Muriel de la Fuente in Soria would not be correctly interpreted until the early years of the 21<sup>st</sup> century, coinciding with the publication of the Celtiberian necropolis of Numancia in 2004. There, the find of a cheek piece and part of the dome of a helmet of this type in burial 39, a relatively insignificant grave were it not for the fact that it was the only one in the cemetery containing a helmet, permitted A. Jimeno and his team to relate this piece with the one from Muriel de la Fuente, interpreting them as helmets of the Attic-Samnite type. For his part, J. M. Pastor, on publishing the Numantine fragment in 2005, associated these pieces with the helmet from La Osera, suggesting that they were related to Greek helmets of the Chalcidian type, although he believed they had been produced locally. At the same time, F. Quesada was writing about some of the pieces in the Guttmann collection in response to the news that about 20 helmets had been found in the province of Soria, some with rich damascene decoration. They had been deposited among the rocks after being crushed, and he interpreted them as of the Italic type with local modifications.

More recently another helmet has been discovered, found in 2007 as part of an aristocratic burial in the necropolis of Los Canónigos (Arcas del Villar, Cuenca), in a good state of preservation despite being crushed and incomplete. The piece is of undoubted interest since, as well as providing information about the characteristics of the model, it has been possible to determine its age and its context is known.

This is, therefore, a large collection of at least 30 helmets, excluding the occasional doubtful piece. 6 of them come from a known context, such as those from La Osera, El Alto Chacón, Numancia and Los Canónigos, or their provenance is certain, such as the one from Muriel de la Fuente and that of Piedras de la Barbada; 22 have been attributed, in one way or another, to Aranda de Moncayo, of which at least 17 would have formed part of the same hoard and another 2 have been related with a possible burial. We have absolutely no information about the provenance of the remaining two, although their characteristics are similar to the Aragon assemblage.

Although the number of Hispano-Chalcidian helmets is relatively high, only a few of them permit the chronology of the type to be determined. On one hand, the examples from Los Canónigos-3 and La Osera-201 confirm the antiquity of the model, whether from the mid- or late-4<sup>th</sup> century BC, in the first case, or the beginning or even mid-3<sup>rd</sup> century BC in the second. On the other hand, the helmets of Numancia-39 and El Alto Chacón provide evidence that the type continued to be used in the 2<sup>nd</sup> or even the 1<sup>st</sup> century BC, respectively, although possibly by that time with substantial modifications, the extent of which can only be guessed at because of their fragmentary character.

Within this chronological framework, both the pieces attributed to Aranda de Moncayo and those without a context or of unknown provenance are similar to the first two helmets discussed, although there are some slight differences, which may be explained by their later date, but they are quite different from the latter two, which represent a final stage in the model's evolution. This dating largely coincides with the other elements that may have accompanied the helmets of Aranda de Moncayo, such as disc cuirasses, similar to a model dated to between the 5<sup>th</sup> century and the mid-4<sup>th</sup> century BC, documented in Celtiberian and Vettonian cemeteries and those of the Iberian area, where we also find them depicted in sculptures that can even be dated to the mid-5<sup>th</sup> century BC. Much the same can be said of the apparent presence of iron tripods, of which only one is known; it is an item that appears to more typical of an aristocratic funerary context, as the find of similar pieces in the Celtiberian and Vettonian area confirms, such as burial 514 of La Osera, dated to around the late 4<sup>th</sup> or the first half of the 3<sup>rd</sup> century BC.

Although the data available are insufficiently complete to determine the chronology of each helmet, they do permit the existence of chrono-typological groups to be discerned, without ruling out the possibility that they were individual productions associated with specialist craftsmen and workshops.

Group 1 consists of two helmets, which can be dated to the second half of the 4<sup>th</sup> century BC, the earliest possible date for the example from Los Canónigos (cat. no. 28). They display some of the characteristic elements of the type, such as the carinated dome, with a short, adapted neck guard; serpentine decoration and lateral plume holders, directly attached in their usual position; the reinforced strip around the rim; and the hinges with three hinge-plates, a detail that is difficult to detect in the piece from Los Canónigos because it has been poorly restored. The hinge has a row of short indentations along the upper and lower edge, perpendicular to it, possibly related with how it was attached, since it serves little decorative purpose, and is an element present in all the helmets in Groups 2 and 3. Of note is the absence of the *lophos* mounting and associated elements in the form of clips and rings in the example from Aranda de Moncayo-24 (although the photograph shows it with a moulded holder that belongs to another helmet, cat. no. 25; the helmet from Los Canónigos must also have had a plume holder, if we look at the holes that would have been used to attach it), which could be explained by a local tradition in which these elements were absent.

On the other hand they do have supports for attaching lateral adornments. These differences would be related with the fact that these helmets were produced by individual craftsmen, and possibly with the fact that they were "prototypical" at the time, and the standard pattern that would characterise the type had not yet become firmly established.

Certain details distinguish them from the other Hispano-Chalcidian pieces, such as the rectilinear cheek pieces, the shape of the hinges, notably narrower, and the way they were attached, by means of three or four rivets hammered directly onto the cheek piece, unlike the other helmets, where they are always on a reinforcing bar; the thick iron strip, with two bosses, on the nasal, in the Los Canónigos helmet, compared with the more usual ones of bronze present in the other models, with one or two bosses; the presence of serpent protomai in lateral perspective, differing from the heads in zenithal perspective that characterise the other pieces studied; or their decoration, with a series of circles with a central impressed point covering the body and even the head of the animal, a common decoration on the lateral support, on the hinges or on the cheek pieces of many of these helmets, like the helmet from the purported necropolis of Aranda, although not in the one from Cuenca. The damascene decoration on the Aranda helmet is also notable, both in the part of the dome immediately above the hinge, and on the upper part of the cheek piece. And we should also mention the presence of a metal wing, with openwork decoration on the base, in the form of three strips, very similar to those that appear on another example from Aranda de Moncayo, as in the case of the damascene decoration, which demonstrates the close relationship of all these helmets and their homogeneous design.

Most of the helmets studied belong to Groups 2 and 3, two quite distinct groups although difficult to date, although it is possible that the one from La Osera could be assigned to Group 2 and the late chronology of Groups 4 and 5, which display substantial modifications, allows us to defend a chronology for them between the late 4<sup>th</sup> century and the whole of the 3<sup>rd</sup> century BC. Nevertheless, it could be asserted, at least in theory, that the helmets in Group 2 are older, closer to their apparent prototypes and those in Group 1, which would explain their carinated domes and in general the greater presence of decoration, both in terms of technique and the motifs used, and the elements decorated, such as holders, hinges and appliqués. In any case, their differences do not appear to affect structural elements or the »symbolic composition« of their decoration, unlike Groups 1, 4 and 5.

Group 2 consists of the carinated helmets, although they now have the standardised elements of what we might call the »classical« model, such as the rounded cheek pieces or hinges with three hinge-plates with a reinforcement strip fixed with two rivets. The helmet from Muriel de la Fuente is interesting, since it could be associated with those in Group 1, as its narrow, slightly curved neck-quard and the presence of strips of iron for reinforcement would suggest, so we have treated it separately, as subgroup 2A (cat.no. 2), leaving the rest of the carinated pieces, with extended neck guards and bronze trims, as subgroup 2B (cat. nos 1?, 9-10, 16-18, 21-22, 26-27 and 30c?). A characteristic of Group 2 is the abundant and varied decoration displayed by these helmets (principally subgroup 2B): domes with turned lines around the lophos mounting, patterns of incised lines or damascene decoration; lines of circles with a central point either on the dome, next to the hinges, on the hinges themselves or on the lateral supports; or on the lophos mountings of the more complex models, with moulded reliefs, incised decoration on the central ring and indentations on the edge of the hinge-plates. The rings for attaching the crests are mostly of the type with a clip that appears to be covered with a decorative stud, intended to form a pair with pieces of the same type at the back; they are always above or between the serpentine appliqués. Another interesting feature is the openwork wings identified in a single example, very similar to those found in Group 1, so it could be a relatively ancient feature. The zoomorphic finials are in the form of serpents, either of a simple type, sometimes with the mouth indicated and sometimes not, or more complex, with eyes and mouth, although there are no canines, possibly because these were a later development. The cheek pieces all have rounded contours, and the hinges have three hinge-plates, of varying widths, either formed by sheet metal folded onto itself and then cut to produce the corresponding barrels, and then attached to the plate from which the helmet was made, or formed by two sheets riveted to the outside of the helmet, with the hinge-plates embracing the pin, a tendency to symmetry being observed in both models.

Group 3 includes a large assemblage of pieces with plain hemispherical domes (cat. nos 5-6, 7-8, 11-15, 19-20 and 22-23), in which (unlike Group 2) there are fewer decorative elements, which are restricted to the lateral plume holders, generally with simple impressed or stamped circles, and occasionally to the hinges and serpentine ornamentation. However, two of these helmets have metal horns, with no decoration, openwork in other models; the holes at the end suggest decorative ribbons were attached, although it is possible they were used for attaching the lophos. The other helmets presumably had perishable elements, probably plumes, as in the case of the helmets in Group 2. The lophos mountings are in general of the simplest type, with rings that are generally narrow, in some cases decorated with impressed circles or incised parallel lines on the upper rim, although the only decoration is usually on the edge of the hinge-plates, and consists of simple indentations. The frontal rings are fixed with a thin metal plate that is exclusive to this group, although the type previously referred to in Group 2 are also used, but with a preference for placing them where the finials of the serpentine adornments meet, complemented at the back with simple systems. In some cases, the rings for fixing the lophos are missing, and this is also observed in one of the Group 2 helmets, which could indicate the possible evolution of the system – although their absence may just be due to careless restoration – with the longitudinal crest disappearing and the mounting remaining as a purely decorative element, or being replaced by plumes, which would no longer need the rings to hold them in place, those at the front sometimes being retained simply for decoration, perhaps following the example of the Montefortino models, an influence that can also be seen in the smooth hemispherical domes.

The zoomorphic finials in general represent simple, schematic ophidians, without anatomical details, although one that has been engraved to show its mouth open but with no eyes has also been documented. There are cases of protomai of possible canines, with a differentiated snout and ears, exclusive to Group 3, which should be seen as a late innovation, perhaps coinciding with the inclusion of these animals in other items such as fibulae in the late 3<sup>rd</sup> century BC, certainly during the second half or even at the end of the century. The cheek pieces are of the same type as in Group 2, and so are the hinges, although there is a greater tendency towards an asymmetrical arrangement than in the previous group. The reinforced rims are also of bronze with one or two bosses.

Groups 4 and 5 include the final evolution of the type, which is defined by the two helmets found in Numancia and El Alto Chacón. The first was recovered from a burial dating to the mid-2<sup>nd</sup> century BC (Group 4), while the second (Group 5) comes from a mid-1<sup>st</sup> century BC workshop context, and could be a discarded piece intended to be recycled as scrap, which suggests that both pieces were older. The fragmentary nature of these two pieces means that these groups cannot be fully defined, but the elements preserved are sufficient to distinguish them from other helmets of the same type, while the substantial differences between them make it advisable to treat them separately.

The helmet from Numancia (cat. no. 3) displays typical elements of the Hispano-Chalcidian series, such as the shape of the cheek pieces, the reinforced rim and the holes for attaching something to the dome, on the cheek pieces. However, it displays a distinct evolution of the previous groups, certainly due to its more recent date. Some of the modifications detected are purely structural, such as the complete integration of the strips reinforcing the hinges into the rim around the edge of the dome and the cheek piece, which curiously has no holes for the chin strap; or the actual structure of the hinge, which is also narrower, has four hinge-plates instead of the usual three and is fixed by three rivets rather than the two found in the previous

groups. These modifications eliminate the decorations on the hinges or the parts of the dome and cheek piece closest to them, which was already detected in the helmets in Group 3. Some of these modifications could be more significant, since they have a marked effect on the symbolic elements, such as the serpentine adornments, although the partial information offered by the Numantine example does not allow more precise conclusions to be reached in this respect.

The El Alto Chacón cheek piece (cat. no. 4) should be considered a later example of the Hispano-Chalcidian model. It displays considerable differences compared with the other helmets attributed to the type, such as its more angular profile, which is curiously reminiscent of the pieces in Group 1, or the absence of reinforcement strips, having instead a line of impressed circles, clearly exceptional in this model. In any case, it coincides with the classic pieces of this type both by being fixed to the hinges by two rivets, and in the decorative motif chosen, a line of impressed circles with a central point, and their arrangement parallel to the hinge, although not with the line around the rest of the piece, and also in the presence of a hole for the chin strap, absent in the Numantine piece.

In short, the chronology of the type dates from the 4<sup>th</sup> century BC onwards (Group 1), possibly the late second half of the century, a time to which burial 3 of Los Canónigos can be attributed, and perhaps also the possible »burial 2« of Aranda de Moncayo, in both cases prestige burials. The greater part of the Hispano-Chalcidian examples probably date to the 3<sup>rd</sup> century BC, including those attributed to the Aranda de Moncayo hoard, or that of La Osera-201, which dates to the transition between the 4<sup>th</sup> and 3<sup>rd</sup> centuries BC or even the first half of the 3<sup>rd</sup> century BC. Groups 2 and 3 can also be ascribed to this period; they are the most evolved, with differences that can be attributed to their chronology, without ruling out the possible existence of workshops, which would explain the different types of zoomorphic protomai or the use of two different types of hinges. Group 2 displays characteristics such as carinated profiles, so it may be somewhat older. The profiles of Group 3 helmets are plain, perhaps influenced by the Montefortino type helmets, which appeared at this time.

The most modern examples have been recovered from a Numantine burial dating to the mid-2<sup>nd</sup> century BC (Group 4) and a workshop context dating to the first half of the 1<sup>st</sup> century BC in the settlement of El Alto Chacón, and this fragment could even be interpreted as scrap intended for melting down (Group 5), so they could be older, although their substantial modifications in comparison with the other groups leaves no doubt that they were of a late date.

The appearance of the Hispano-Chalcidian helmets was a major advance for the peoples of the Meseta, who were already used to using metal helmets, but of the hemispherical type belonging to the Alpanseque-Almaluez series, with several examples in the Celtiberian area, characterised by two halves formed by fine sheets of metal riveted together, decorated with repetitive embossed motifs and strengthened with strips of iron, a model dating to the 5<sup>th</sup> century BC or, at the latest, the early 4<sup>th</sup> century BC, although innovations found in the example in the Torkom Demirjian collection, with a facial aperture and lateral supports for movable elements, suggests a rather more recent chronology for this example. A singular helmet is the one from the »king's« burial in Aguilar de Anguita, also dating to the 5<sup>th</sup> century BC, which inherits the riveted bivalve structure and is covered by a strip of iron. It is made of extremely fine sheet metal, typical of the previous series, although it now includes a »gorget« and also the facial aperture and cheek pieces. Finally, another helmet from the antiquities market apparently comes from the »Numantia area«. It is conical in shape, with an oval structure, which is reminiscent of the ancient Alpanseque-Almaluez models, although it includes more advanced elements, such as the nape protector and cheek pieces, in which two holes remain on each side to attach them. The helmet, without a context, could date to the 4th century BC, although it may be slightly more recent, since its decoration is based on the Hispano-Chalcidian model, with which it doubtless coexisted.

It is difficult to establish possible connections between the helmets of the Alpanseque-Almaluez type and its derivatives, the helmet from Aguilar de Anguita and the Hispano-Chalcidian series, but it should be remembered that the use of an extremely fine bronze sheet in the Hispano-Chalcidian types is a recurrent characteristic of Celtiberian helmets, but is atypical of the Italic types, which are more solid.

We lack information about a large proportion of these helmets, particularly with regard to the conditions and precise location of their find spots. Even so, we can give a general overview of the relative variety of contexts in which they have appeared, although in most cases they come from ritual spaces, in which the helmet has a strong symbolic meaning, such as finds in necropoleis and votive or religious hoards, those recovered in singular river contexts or those found in possible sanctuaries within settlements. The importance, singularity and selection of the objects deposited in similar contexts allow us to see how the inclusion of a helmet, sometimes even an isolated one (Muriel de la Fuente or Numancia), confirms the important role of the helmet in pre-Roman Hispanic society. In two cases, for example – those of La Osera and Los Canónigos – they were deposited in aristocratic equestrian burials, while a good proportion of the others can be interpreted as offerings in Celtiberian sanctuaries. There are only two examples that can be interpreted differently, that from the settlement of El Alto Chacón, where a cheek piece was recovered from a section with evidence of metallurgical activity, and the helmet recovered in Piedras de la Barbada, which perhaps formed part of a scrap heap, together with other helmets, although its interpretation as a votive offering cannot be entirely ruled out, since it was found at the mouth of a river, a typical practice in the Iberian Peninsula. Although few helmets have come from necropoleis, at least with any certainty, the ones that have are extremely informative, confirming their character as a prestige object, a tradition that in Celtiberia goes back to the 5th century BC, with examples such as the exceptional helmets of Alpanseque, Almaluez and Aguilar de Anguita, generally amongst the richest grave goods of their respective cemeteries. From the 4th century BC onwards the custom of depositing helmets in burials became less common in Celtiberia for, although we know of a large number of burials dating to that time, only assemblage 2 of Aranda de Moncayo and that of Numancia-39 contained helmets. Despite the doubts raised by finds of this type, the »burial« at Aranda is very interesting, both because it includes two helmets, in itself extremely unusual, and because of the complex decoration on the one that is most complete; it is also interesting that one of the disc cuirasses and more probably the tripod may come from this cemetery, perhaps even from the same burial, in which the damascene plagues were also found. »Burial 2« at Aranda, can be dated c. late 4th century BC, and there are other similar burials in Celtiberian territory, such as Los Canónigos-3, in the extreme northeast of the Southern Meseta, perhaps in the lands of the Olcades, and La Osera-201, in the Western Meseta, an area associated with the Vettones, two outstanding burials associated with aristocratic equestrian elites. The context is different in the case of the Numancia-39 burial, in which only a fragment of helmet was found, although it was a much more recent burial, dating from between the mid-2<sup>nd</sup> century BC and 133 BC. This was the turbulent period of the Celtiberian Wars, and the necropoleis display important changes, including the scarcity and even complete disappearance of weapons in certain parts of Celtiberia. Burial 39 is ascribed, because of its peripheral position, to the later phase of the cemetery, whose grave goods are characterised by fewer weapons and an increase in adornments. Despite the heterogeneous composition of the grave goods, a common feature of all these helmets is that they were subjected to complex rituals, such as their intentional destruction and the selection of certain parts for placing in the burial.

Another assemblage of helmets could be related with votive practices in possible cultic places or sanctuaries, like the helmet found in Muriel de la Fuente, interpreted as an offering because of its association with a sacred body of water. The helmet was recovered about 200 m downstream from La Fuentona, a karst spring of variable volume that emerges from a pool surrounded by scree-covered slopes at the bend in a steep

limestone canyon where the river Avión begins, so the helmet was probably deposited at the place where the spring rises or very close to it, since Fuentona, as a spring and source of a river, would be associated with the subterranean world and the Beyond. These »magical« characteristics would be accentuated by the fluctuations in its level, which demonstrates the depth of La Fuentona. The helmet from Muriel de la Fuente, ritually damaged, is a typical example of the practice of throwing valuable objects, preferably weapons, into rivers and lakes, a custom documented in Central and Western Europe from the Bronze Age, although its history is even older, and it continued to be practised throughout the Iron Age and into the Roman and medieval periods.

Interpreting the possible Aranda de Moncayo hoard is more complex. The fact that the helmets came from the antiquities market and certain information about the place and circumstances of the find is absent means we have to consider various possible interpretations, although the most probable is that they were related with ritual or votive practices in cultic places. Other possible interpretations, such as coming from a necropolis, can be excluded in view of their large number – between 10 and 20 according to the various sources consulted – very much higher than that recovered from any pre-Roman cemetery in the Iberian Peninsula, or seeing the assemblage as an arsenal, given the selective nature of the finds. The items recovered, helmets and pectorals, appear to confirm this, although reference is also made to swords being found, and even tripods. The clearly intentional damage to all the finds would also indicate their ritual destruction. The helmets had been crushed, with the cheek pieces torn off and the »horns« bent, and the other objects that supposedly formed part of the assemblage, such as the pectorals, had been broken, as the photographs show. The minimal data that we have about how these objects were found, difficult to prove in any case, supports the same interpretation. They had apparently been deposited in cracks in the rock, although other information suggests they were found in piles, perhaps in barrels, with traces of hoops and wood remaining, which would mean that they were had been stored and not exposed, explaining the absence of »corrosion through contact with the soil«, according to the documentation that accompanied some of the helmets in the former Guttmann collection. It is more difficult to determine where the find was made, although all the information available points to the helmets coming from inside an important settlement, the Celtiberian oppidum of El Castejón, which has been identified with the mint of Aratikos. They appear to have come from an area close to the settlement's main gate, where there has been considerable disturbance to the soil, which took place from at least from the early 1990s. This area is not far from a large masonry construction, which could be interpreted as a water cistern, possibly associated with a natural spring.

All these details suggests that the helmets can be interpreted as offerings to a deity after one or more battles, which gives the assemblage a ritual and votive significance, although it is more difficult to establish the reasons for a deposit of these characteristics. A key factor is to determine whether the pieces were deposited at the same time or were successive deposits that took place over the course of time, as this affects how we should interpret them. The series proposed for the helmets of Aranda de Moncayo confirms that at least one example, or possibly two if we take into account the possibility of this being a closed assembly, could be ascribed to Group 1, although it would be a funerary find that came from the *oppidum's* cemetery, which was outside its walls and was also systematically looted. The other helmets from Aranda de Moncayo, including the pieces presumably found in a single hoard, are classified into Groups 2B and 3, in order to make clear certain differences between them that may be due to their chronology, and better reflects the way in which they were used over a long period of time. However, the existence of different workshops cannot be ruled out, and this would explain some apparently minor details more convincingly.

The assemblage of helmets and pectorals of Aranda de Moncayo could be considered an offering in the form of a military trophy, a votive offering made after a victory in which the victors plundered the weapons of their defeated enemies and offered them to their deities as a sign of their gratitude for divine favour and

a public and permanent display of their feat, a standard practice in Antiquity, as shown by the fact a large proportion of the weapons recovered from sanctuaries were dedicated to the gods in the course of rituals to commemorate victory, which included offering up some of the weapons used by enemies defeated on the battlefield. Neither should it be ruled out that the hoard of helmets from Aranda de Moncayo could be the weapons of the victors and not those of the defeated. In either case this would mean that the Aranda de Moncayo hoard would have been deposited on a single occasion, although this is impossible to determine given the lack of stratigraphic data, and the scarce information we have on the internal evolution of Groups 2 and 3, to which, as we have said, all the helmets from the Aranda hoard belong. If we confine ourselves to the information provided by the Celtiberian and Vettone necropoleis, we can see that the metal helmet was clearly considered an exceptional item in these societies, as shown, for example, by the fact that only a single helmet was recovered out of approx. 2,200 burials excavated in the La Osera necropolis. Moreover, helmets only appeared in the richest burials, in cemeteries such as Alpanseque, Aguilar de Anguita, La Osera or Los Canónigos, which can be associated with important figures, members of the warrior aristocracy who were knights, so the army that fought alongside these helmet-wearers would have been very large, a fact in keeping with total mobilisation in the conflicts against the Mediterranean powers at the end of the 3<sup>rd</sup> century BC, a date which is perhaps rather late for the Aranda assemblage.

In any case, interpreting the finds at Aranda de Moncayo as offerings of personal weapons would agree with the funerary record, since the virtual disappearance of helmets from the Celtiberian necropoleis from the 4<sup>th</sup> century BC onwards coincides with their appearance in sanctuaries, perhaps in considerable numbers, with such significant examples as the helmet from Muriel de la Fuente, an offering made by consigning the helmet to water, or those recovered in Aranda de Moncayo, which appear to have been a votive offering. This practice would have extended to other defensive weapons, such as disc cuirasses, absent from Celtiberian cemeteries from the 4<sup>th</sup> century BC onwards, and also documented in large numbers in the Aranda assemblage. In this way, the changing rituals that emerged in late Celtiberian society would imply that defensive weapons, in many cases of a sumptuary nature, were no longer being deposited in burials but instead became offerings made in sanctuaries, both in urban settings and natural spaces, preferably rivers and springs, either by their owners or their owners' descendants.

The helmets of Los Canónigos and La Osera confirm that the custom of depositing helmets in burials was still followed on the periphery of the Celtiberian world, and perhaps also in the Celtiberian world itself, as the possible »burial« at Aranda de Moncayo would indicate, in the 4<sup>th</sup> and early 3<sup>rd</sup> century BC, although it was not widely practised. They are also essential for determining the chronology of the type. The Numancia burial would be no more than an relic of these practices. These helmets were prestige objects, related with equestrian elites, as the aristocratic grave goods in which they are documented confirm, following the tradition seen in the ancient Celtiberian burials of the 5<sup>th</sup> century BC.

The high symbolic value of the Hispano-Chalcidian helmets is also reflected by their presence in cultic places or sanctuaries, a tradition that appears to go back to the 4<sup>th</sup> century BC, as demonstrated by the helmet of Muriel de la Fuente, a votive offering recovered from a river, an interpretation that should be extended to other helmets of types that display a clear Celtiberian filiation and which date to this period. This would also be the case of the Aranda de Moncayo assemblage, associated with a possible urban sanctuary close to the main gate of the *oppidum* of El Castejón, on the settlement's main street, a privileged position which we can observe in other pre-Roman sanctuaries in the Iberian Peninsula, both of in Iberian and Celtic areas.

Although all these helmets are of the same type, we should acknowledge that they are not identical, differing in their details because they were produced in different workshops. These differences are evident in the shape of the dome, which varies from plain hemispherical and with a more or less evident ridge, with the

ridge situated at different heights from the lower edge following the shape of the skull. In the same way, there are many variations of the appliqués or serpentine shapes on the front of the dome, both in relation to their position and the form of the finials, which are always zoomorphic. The plume holders or movable elements, invariably located at the sides of the helmet, are similar in most of the helmets, although they vary in height, always in direct relation to that of the serpentine appliqués, which reveals the close interrelationship of the various elements that characterise the type, subject to strict functional and symbolic codes. Differences can also be observed in the supports for the *lophos* and the way it is attached to the rings. The hinges vary, both in their characteristics and in their decoration, with five different types, although most of them follow two well-defined models.

All these variations are an expression of internal variation and the development of a single polymorphic type, designed and reproduced in an organised way on the basis of a predetermined design. Its characteristics are: a dome with apertures for the ears, a long nape defence, articulated cheek pieces, the edge reinforced with a riveted rim of pseudo-hemispherical cross-section, serpentine strips soldered to the front and systematic application of a complex structure of decoration consisting of plumes inserted into lateral appliqués and a vertical *lophos* held by the forked crest holder on the cylindrical extension fixed by three rivets to the top of the dome and the rings fixed in various ways to the front and back of it.

The helmets were made from a fine sheet of hand-beaten binary bronze, whose thickness varies substantially from one part of the piece to another. It is usually no more than 1-2 mm thick, or even less in the cheek pieces, although the protective brow area is sometimes as much as 6 mm thick. The bronze sheet is reinforced at the edges by a riveted rim that helps reduce its weight, which is less than customary in helmets of the period, making it relatively light for its volume. In any case, they vary in weight, between 800/900 and 1300 g, although the weight seems to respond to certain patterns, a matter of great interest about which we need to be cautious since the pieces have been restored or are incomplete. Their total height ranges from 36 to 39 cm plus the crest, made of organic material which would substantially increase the total height of the helmet, if we look at images of helmets that date to this period.

Essential elements are the support structures, moulded from ternary bronze, and mountings for the vertical lophoi and movable parts, sometimes metallic, similar to Apulian models, and the soldering of serpentine strips to the dome; these always terminate in zoomorphic heads, usually snakes (vipers, in many cases), mainly seen from above, but occasionally from the side, although a few can be interpreted as protomai of canines, possibly wolves. Their correlation with the riveted plume holders attached to the sides allows the relationship between the serpents and these movable elements to be established: they could be interpreted as the wings or horns of snakes, which suggests that they may represent horned serpents, a well-known subject of Celtic mythology and iconography, emphasising the symbolic nature of these Hispano-Chalcidian helmets. The elements described are present in almost all the known examples, although the possible absence of the lophos mounting from cat. no. 24, perhaps for chronological reasons, should be noted as an exception. Data is obviously missing in incomplete pieces, such as those from Numancia and Alto Chacón, although it is possible that some of these elements were altered with the passage of time. All this gives the series a unique personality, with a complicated range of movable and interchangeable appurtenances whose symbolic, psychological and military significance are difficult to determine today, but which deserve attention when comparing them with other models of helmet. The notable uniformity of the type suggests that the group that wore them was homogeneous, indicative of an organised military elite, either as the result of internal development or imposed by the complicated context in which the great Mediterranean armies operated. But far from seeing this duality as divergent, we should consider it complementary.

The importance of "war" was demonstrated long ago to be a dynamic and structuring element that shaped "politics" and the "economy". The dominant figure of the warrior is well documented in some societies of

ancient Hispania during the 5<sup>th</sup>-4<sup>th</sup> centuries BC, such as the Celtiberian, and this is especially evident in the funerary world. Grave goods document a hierarchical society based on a warrior aristocracy evidenced by rich panoplies. The value of war in these communities would have implications in the social structure as a factor of control, demographic stability and social mobility that would ultimately lead to the acculturation of the indigenous communities. The relationship between war and social organisation means that their development would be inseparably linked within the same cultural system. Thus the evolution of war affected weaponry and had profound socio-ideological implications, although the transformation of Celtiberian communities cannot be directly related with external influences that arrived during the course of armed conflict, irrespective of its nature, so this conflict was expressed by certain objects, such as the helmets we have examined here, and elitist social groups.

The precursors of the Hispano-Chalcidian helmets and their structural details are to be found in the helmets produced in Southern Italy. The weight of the dynamic pre-Roman Italic world is fundamental in military history. Not only because all the types of helmets that served as prototypes for Hispano-Chalcidian helmets are documented there, but also because that is where most of the innovations in warfare and weaponry of the ancient Mediterranean were developed during the 5<sup>th</sup>-4<sup>th</sup> centuries BC. There are various reasons for this: the instability and economic interests of the world of Magna Graecia, which constantly generated new combat techniques, forms of military organisation and innovation in siege warfare; the restless Italic world, which suffered from constant internal conflict and disputes with neighbouring powers, such as Rome and Taranto, leading to deep-seated and continual warfare, with the consequent developments in military panoplies, mainly of a defensive nature such as breastplates and helmets. The consequences of Carthaginian presence in the Sicilian colonial wars also played a part, bringing the first contingents of Hispanic mercenaries to the island at the beginning of the 5<sup>th</sup> century BC, mercenaries who subsequently and for various reasons also came to form part of the Greek armies. This situation connects the two areas as a logical theatre for the adoption of new weapons. But, despite these points favouring dispersion, the distribution of the Hispano-Chalcidian helmets is limited to the eastern part of the Iberian Peninsula, and they are exclusively associated with local elements of the panoply and the collective imagination of that area, mainly Celtiberian. The absence of finds through the Western Mediterranean that might act as a bridge connecting the Celtiberian situation, the morphology of these new helmets and the southern Italic models requires us to seek an explanation in companies of mercenaries.

This Hispano-Chalcidian model of helmet was created within the framework of probably extended Celtiberian involvement in these conflicts as mercenaries. The chronologies offered by the contexts of the accurately dated helmets are no earlier than the mid-4<sup>th</sup> century BC, so the helmets testify to a structured military organisation, a political organisation capable of managing its human resources to generate income and Celtiberian *populi* that played an active part in Mediterranean conflicts from at least the second half of the 4<sup>th</sup> century BC. What we now need to know is how Celtiberian mercenaries came into contact with the prototypes for these Hispano-Chalcidian helmets.

It has been suggested that mercenaries under the orders of Greek or Punic armies in Magna Graecia, mainly in Sicily, would have been engaged for long periods in which their contact with different *populi* would permit expressions of philia and, as a symbol of this interaction, the exchange of prestige goods characteristic of each group would take place. But directly copying the weapons in use could also be a factor that should be taken into account. For this purpose, the circulation of helmets in Southern Italy, clearly evidenced by the presence of examples of the Samnite type in the neighbouring territories of Peucetia, Mesapia and Apulia, has complex interpretive implications that could help us to understand the development of the Hispano-Chalcidian helmets: on one hand, in relation to ethnicity and the circulation of weapons in military situations (original equipment, *spolia hostium*, exchange, etc.), and on the other hand, it enables us to understand

how the circulation of these items would contribute to transmitting and developing technical/ergonomic improvements and innovations. But, in practice, what it indicates is the uninterrupted circulation of armed local or mercenary groups, which led to the development of tactical and technical innovations by generating professional military knowledge.

This context, Southern Italy and Sicily, where the participation of mercenaries was particularly extensive and where various Italic contingents had fought side by side with Hispanic groups, enables us, for the first time, to propose a scenario for the engagement of Hispanic mercenaries in which they would be active agents, capable of learning, assimilating and creating a new type of armour: the Hispano-Chalcidian helmet. In short, the data analysed permit us to identify a new type of helmet with its own personality, which should be considered a genuinely Hispanic creation, probably Celtiberian, as a result of intensive and active mercenary participation in the South of Italy.