

Limes XX. Proceedings of the 20th Intern. Congress
of Roman Frontier Studies. Leon, 2006.
Anejos de Gladius 13, Madrid, 2009, pp. 339 ff.

PUGIO HISPANIENSIS BETWEEN CELTIBERIA AND ROME.
CURRENT RESEARCH AND ANALYSIS
OF THE CONSTRUCTION OF THE SHEATHS

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The aim of this paper is twofold. Within the context of research on the adoption by Republican Roman armies of foreign weapons, we present the case of the Iberian *bidiscoidal* dagger, the prototype of the Roman *pugio*. Specifically, we analyze the differences and similarities in sheath construction and suspension system between Iberian daggers and their Roman counterparts.

IBERIAN *BIDISCOIDAL* DAGGERS AND ROMAN *PUGIONES*: A RESEARCH OVERVIEW

As early as the early years of the 20th century, both Spanish and German historiography embraced the idea of a hypothetical relationship between the pre-Roman Celtiberian Spanish dagger (the so-called *bidiscoidal* dagger)¹ and the Roman *pugio* or military dagger (e.g. Sandars, 1913; Schulten, 1914).

The close typological similarities between both weapons, and the very close historical contact between Roman and Celtiberian armies during the conquest of the Peninsula –including the presence of strong contingents of Celtiberians acting as Roman auxiliaries since Hannibal's War– were the main arguments which supported this theory, even if no ancient literary source specifically states that Romans adopted or copied the Celtiberian dagger, as they do in the case of the *gladius Hispaniensis* (see recent reviews of these aspects in Quesada, 2006; 2006b).

The Celtiberian *bidiscoidal* dagger emerged around the end of the fourth century BC, or slightly after, and is first documented in the eastern part of the Spanish central plateau, or Celtiberian area. It survived, with little change, until the end of the first century BC, a moment in which it was already in use by the Roman army (Ulbert, 1984 for a Sertorian date; then the stele of Minucius Lorarius, Keppie, 1991, c. 49–42 BC). It is now generally accepted that the origin of the Roman *pugio* lies in Iberia (Quesada, 1997: 301; 2000: 100-101; 2006; 2006b;

¹ In fact, the peninsular type is widely known in Spanish literature as “biglobular” or “doblegobular”, a misleading term as the hilt has two flat discs, not spheres.

Feugere, 1993:163; Bishop & Coulston, 1993: 54; Filloy & Gil Zubillaga, 1997:148; Connolly: 56-57; Luik, 2002: 90).

A discussion still rages, however, over the precise moment of the adoption of this type by Roman soldiers. The finds on the Northern *limes* of the Roman Empire demonstrate that the military dagger was used at least from the second half of the 1st c. BC onwards. But some daggers –probably of native manufacture– from the Iberian Peninsula but in Roman contexts (such as Roman military camps) date from a much earlier period, even mid-second c. BC (Quesada, 2000: 100-101; 2006; 2006b; Quesada & Kavanagh, 2006: 71).

From these facts we could suggest a possibly earlier adoption of the Celtiberian dagger, at some moment between the 150s BC (Celtiberian Wars) and c. 50 BC (Caesar): during this period Celtiberian daggers, often elaborately decorated with silver, copper and even gold inlay, could have been individually taken as booty –or purchased– by Roman officers or fortunate soldiers. After the latter date the daggers –even some of the original ones– would gradually have been exported to the rest of the Roman world, being copied and finally becoming a popular piece of equipment at the time of the emperor Augustus (Scott, 1985), perhaps even as an required element in the standard panoply. Therefore, after a somewhat haphazard start, the Roman production of *pugiones* would probably not have been synchronic throughout the Empire.

One of the main problems concerning the *bidiscoidal* dagger is the very early date of the archaeological digs in which the most important and best preserved pieces were found. Most known examples were discovered in the decades between 1900 and 1930, a period in which the archaeological methodology – and standards of publication were still in their early stages so that a lot of information about the context in which these pieces were discovered was lost forever. To this fact we must add the problem of the provenance of a great number of pieces in private collections, the context of their discovery being completely unknown. So, a precise cultural and chronological identification of the whole series of Celtiberian and of Roman *pugiones* in Iberia before Caesar's time is impossible on the basis on context, and relies heavily on typology, which increases uncertainties.

SWORD AND DAGGER SUSPENSION SYSTEMS IN ANCIENT WORLD

The general side weapon suspension systems in pre-Roman Iberia can be reduced to a few types, one of them much more popular than the rest. This obviously goes in relation with the model of sheath.

The typical suspension system throughout the Mediterranean, including the Iberian Peninsula, consists of a baldric, that is, a belt worn over the shoulder and across the chest. The baldric is connected to the sheath or scabbard by a variety of means, typically a series of mobile metal rings connected to a metallic structure that frames and strengthens the wooden or leather sheath (see Rapin, 1991 and Quesada, 1997: 251 ff. for details). This system is consistently shown in Archaic and Classical Greece, Republican and Early Rome, and Iberia, although there are variations in points of details, specially the number and arrangement of suspension rings, not really well understood in the Roman case (see Bishop & Coulston, 2006: 82-83; *contra* Hazell, 1984: 74, fig. 1).

A second system, not as popular in Iberia as the previous one, consists in a fixed ring at the back of the scabbard, through which some sort of organic strap is looped. This back ring resembles a bridge, and that is why this system is also called “pontet”, the French word for

“bridge”. It is believed that this strap was bound around the waist. As a result, the scabbard takes a completely vertical position. Its origin is Gallic, and is only rarely found in the Peninsula, mainly in the far north-east (modern Catalonia), that which is geographically – and in some ways culturally closest to the Gallic culture (on Iberian weapons with La Tène suspension systems see Quesada 1997: 250 ff. Now García Jiménez 2006: *passim*) Throughout the rest of the Peninsula the tendency was to use the ring system, even to the point of transforming “pontet” suspended scabbards into ring-suspended scabbards.

On the other hand, the typical Late Republican and Early Imperial Roman scabbard is formed by a metallic frame and held by means of four rings, two on each side of the scabbard. As in the case of the dagger, all evidence for the Roman republican sword points to a Celtiberian origin, in particular from local variations of *La Tène* swords (Quesada, 1997b: 251-270), of the Roman republican sword called, not in vain, *gladius Hispaniensis*. The swords of Roman type found in the Gallic cemetery at Giubiasco are later –probably first century BC– and their ring suspension systems are proof of Roman influence and not the other way round (for them see Tori *et alii*, 2004: 42 ff.).

There are some other peculiar suspension methods since the second half of the fourth century BC, such as the lateral “handles” system employed in some northern daggers (see Filloy, 1997) that probably were linked to a baldric by means of a mobile metal flat piece similar in function to the more common ring, but more rigid. A later variant of this system found in a sheath fragment of Early Imperial Roman date at the camp of *legio IIII Macedonica* at Herrera de Pisuergra has been considered a link between Celtiberian and Roman suspension systems, but this remains to be proved with more definite data (see Fernandez Ibáñez, 1999).

As to the way this model of scabbard was suspended, there are still many doubts. Two hypotheses occupy the centre of the discussion. The first one defends a baldric suspended scabbard, using only three of the four rings. The second theory believes in a strap of leather crossed across the back of the scabbard and hitched on the four rings. Through the space between the leather and the scabbard a belt would be passed, thereby holding the scabbard from the waist. The question is still open, and it is even possible that both systems were used at the same time. During the Late Empire, of course, the suspension changed radically into a combined system of baldric and “pontet” quite different from the Gallic model (e.g. see Bishop & Coulston, 2006: 134; Lebedynsky, 2001: 109 ff.)

IBERIAN DAGGERS

Some types of Iberian daggers (there are basically six groups, see Quesada 1997: Fig. 164) show certain peculiarities which in many cases render them useless from a military point of view, probably due to the fact that they were mainly worn for status display, which probably accounts for some huge and rather extravagant sheaths of the Monte Bernorio group (Quesada’s type III).

In the case of the southern (properly “Iberian”) daggers, some types (I, IIA) are perfectly functional –they resemble in shape short swords– but some of them (types IIB-IIC) are too wide and short to be functional (Quesada, 1997: plate VIID), and in the case of the daggers from the central plateau (type III) their small dimensions and huge hilts and scabbards make them little more than militarily useless. All of which demonstrates that their representative function had far more importance than any practical utility. As a consequence, the dagger sheath occupies a very different position from the sword. The tendency is towards a horizontal position, and more

towards the front of the body, where it can be clearly seen. This is clearly visible in the Porcuna sculpture group, where daggers are suspended by means of two straps, probably made of leather, crossed over the sheath (see Negueruela, 1990: fig. 25, and plates XIV, XXVIII).

Nevertheless Celtiberian daggers as a whole evolved into more practical weapons through time, becoming simpler, probably cheaper, less decorated and more functional. The bronze elements are gradually substituted by, not as fanciful, but stronger and probably cheaper, iron pieces. Inlay decoration remained popular, however, and we can find some quite richly decorated daggers in the Late Celtiberian days, and even in Roman times. As a matter of fact, dagger and sheath decoration experiments a revival in the Roman period (1st–2nd c. AD), long after Celtiberian daggers had nearly completely abandoned decoration. This could be proof of the change of function of the dagger through time and in different environments.

Iberian daggers evolved from a very long tradition of longer weapons. The “Frontón daggers” of type Quesada I (1997: fig. 164, 165) originated in the fifth century BC as a sideshow of the “frontón sword” that was also exported to Celtiberian territory. Eventually a new type appeared, (Quesada Type IV) during the fourth century BC in which we can already trace many of the characteristics of what would eventually become the true *bidiscoidal* Celtiberian dagger (Quesada type VI) and the Roman *pugio*. The main coincidence lies in the construction system of the hilt. In both cases the hilt is formed by five pieces superposed one over another. The central metallic plate is an extension of the blade; the remaining four are alternate pieces of organic material (wood, bone, antler) and iron sometimes decorated with silver or copper inlay. All five pieces are kept together by means of a variable number of nails from a minimum of two to a maximum of eight. Although highly uncertain, there seems to be a relation between the higher number of nails and a later date of the dagger.

The distribution of the finds of the *bidiscoidal* dagger concentrates into two main areas, from which the type spread to the rest of the Peninsula. These two areas correspond to different cultural societies, the Celtiberian group in the Eastern Meseta around Soria and Guadalajara provinces—a group which links several peoples closely related to each other—, and the Vettones to the west along the Duero river, also related to the Celtiberians but a different people. Smaller groups are found in the territory of the Vaccaeii, to the south of the Vettones, and even in Iberian lands towards the Mediterranean.

IBERIAN DAGGER SHEATHS: THEIR METHOD OF CONSTRUCTION

Celtiberian and the later Roman sheaths share the basic layout and structure and also the basics of a suspension by means of rings. They also share many other external features, such as the incised and inlaid decoration and its motifs, and the flat disc-shaped terminal button or chape. Nevertheless, they differ markedly in a decisive point: the method of construction. The typical Iberian dagger sheath (Fig. 1) is made of a minimum of five pieces: first of all two thin inner wooden plates, flanked by a metallic frame made of two “U” shaped pieces or “gutters” that enclose the sheath at both sides. These two rims or gutters are kept at the proper distance from each other (that which correspond to the width of the blade of the dagger) by means of two thin metal plates named *abrazaderas* or brackets. One of these brackets is fixed at the mouth of the sheath, a second one at its middle length. The loops that hold the suspension rings are an extension of the embracing metal brackets (Fig. 1A to C). All these pieces are held together by four metal rivets.

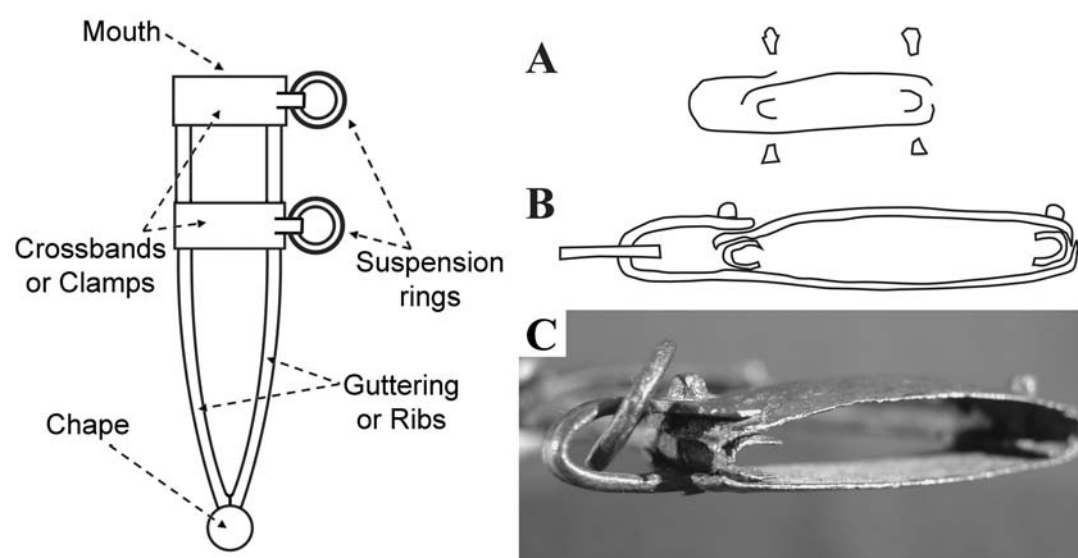


FIG. 1.

Left: the structure of the typical Celtiberian dagger-sheath

Right: section of the Celtiberian sheath

A) schematic representation of the section; B) drawing of the same section; C) picture of the mouth of the sheath depicted above

Finally, both rims are linked together at the bottom of the sheath by a flat, discoid and independent piece, the chape, which is identical in both Celtiberian and early Roman daggers. In some cases, the front and back are covered by thin metal plates decorated with geometric drawings. It is generally quite easy to distinguish the front from the back of the sheath, the first one decorated and the joints between the different pieces only found at the back. It is obvious, therefore, that the main and structurally most characteristic piece of this construction method is the lateral rim. As we will see, this piece is absent in their Roman counterparts – except for a few “transitional” examples such as the Titelberg dagger (see below).

The Roman sheath, on the other hand, alternatively presents two very different construction methods. They can be divided roughly into three types, although all three of them use four rings for suspension. The first, and apparently the earlier one, was named “sheath type A” by Scott (1985; 1989). It is made of two thin metal plates, for the front and back of the sheath, with inlays at the front, and leather or wood liner. The front plate simply bends its borders in order to reach the back plate. Both plates are fixed together by nails which also serve to hold the suspension rings. Between the front and back plates there is a small space, large enough to accommodate the blade.

Therefore by the simple expedient of bending the front plate back at its borders, there is no more need to use lateral rims, so typical of Celtiberian products. This is therefore the most significant difference between Iberian and Roman sheaths. This Roman “A type” method would be used again in 2nd and 3rd c AD models, but with an odd detail that we will discuss later.

A second method of sheath construction was developed in Roman workshops during the reign of Tiberius. Scott’s “B type” is a completely different system; it simply consists of a leather or wooden structure, probably two pieces fixed at their borders, and a metal plate, usually richly decorated, fixed only to the front of the sheath.

So, in none of the basic Roman models do we see any traces of the Iberian “rim type” construction system, a fact that raises the question whether they are at all related to each other. On the other hand, the ring suspension system, and the discoidal ending are shared both by Iberian and Roman sheaths.

As we have already pointed out, a very intriguing event took place in the second and third centuries AD as dagger sheaths again resemble early first century AD “type A” models. But these later sheaths now show big portions of the full metal plates cut off to show the leather or wooden plates underneath. But what is most intriguing is that these cut offs in the Roman sheath plate are found precisely in the same places where one would expect to find no metal in the Celtiberian sheaths. Also, the metal plate is spared and preserved at the same spots where one would find metal in the Iberian model, that is, at the lateral rims and the two brackets. This process is repeated in both sides of the sheath, front and back. As a consequence, the Roman sheath of the second and third centuries AD very strongly resembles the Iberian sheath, and, if not analyzed in detail, could be mistakenly taken as one, although their construction method and structure are radically different.

It would seem as if at this late period the old models –not the early Roman, but the late Celtiberian ones were being imitated in outward appearance, although not structurally– we wish to emphasize this last point: only personal exam or a good drawing can avoid confusion. There is however a problem which makes this theory unlikely, namely the large time gap between the disappearance of the Iberian sheaths (around the end of the 1st century BC) and the appearance of this Roman sheath model (around the 2nd c. AD). Although possible, it is difficult to believe that memory of the Iberian sheath survived at such a late date.

A second explanation of this peculiar fact could be an attempt to make the sheath lighter, by cutting off fragments of metal from the plates. Following this reasoning, the coincidence between Roman and Iberian examples in the choice of the portions of the plates to be cut off and those to be left untouched could be explained by the strength requirements of the structure. In other words, the presence or not of a metal covered surface at a particular point is determined by the need to strengthen that specific point of the structure. These points that required strengthening were the mouth, the bottom, the borders and the middle of the sheath. This could explain the coincidence in choosing the same places to be covered by metallic pieces in both Iberian and late Roman sheaths.

SUSPENSION SYSTEMS COMPARED

The main problem comes in determining the way Celtiberian sheaths were suspended, as iconography is regrettably imprecise. Different hypotheses have been proposed, but we still have many doubts as to which are more feasible: a baldric across the chest? hanging vertically from the hip? Across the waist? Or hanging from frogs at the waist? Also, different Roman systems have been identified.

We find strange coincidences and perhaps even greater differences. The suspension system was somehow similar between Iberian and Roman sheaths, as we shall discuss. In both cases we find examples that could be interpreted as the system already referred to as “frog”, that is, two small straps of cord or leather hanging from a belt down to hold the sheath. The problem is that there is nearly no iconography. The closest is a series of sculptures from Galicia in north-eastern Spain depicting Galician-Lusitanian warriors carrying swords and daggers (Quesada, 2003). But there

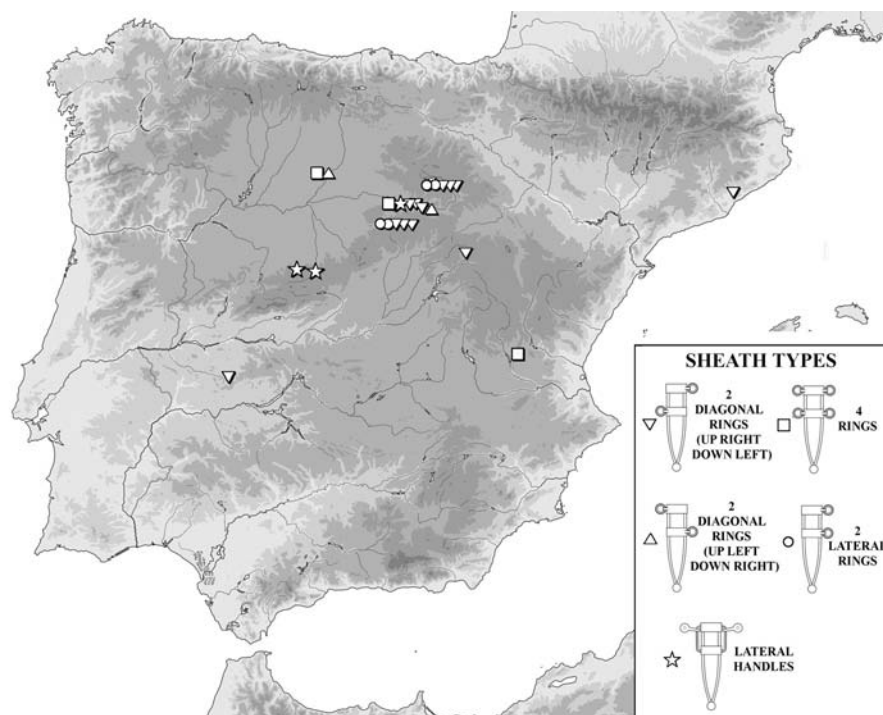


FIG. 2: Distribution of Celtiberian *bidiscoidal* dagger sheaths and their types in the Iberian Peninsula

is no complete certainty about the date of these representations, and they could be even as late as the Flavian period. In these sculptures we can see warriors with a dagger suspended on the right side of their bodies by means of what seems to be a frog, that is, two side straps hooked to the belt.

The earlier Roman examples show also different suspension systems, some of which are interpreted by us as transitional stages between the Celtiberian origins and the later Roman peculiarities. The case of the funerary stele of the centurion Minucius Lorarius (Keppie, 1991: 115-121) is particularly interesting as it reveals a completely horizontal suspension from the belt, very similar to one of the Iberian suspension systems. The already cited sculptures from Porcuna, in Spain, show Iberian warriors from the fifth century BC bearing daggers in a very similar way, and this system seems to have lasted in Iberia for a long period.

A very interesting case comes from Titelberg, Luxembourg (Vanden Berghe & Simkins, 2001–2002: 75-84). This is a dagger found in a clearly Imperial Roman context that belongs to the Celtiberian dagger tradition. Its construction method and shape, both of dagger and sheath, are perfectly comparable to the Celtiberian examples. It has been dated around 30–12 BC which means it is one of the earliest examples of Roman military daggers preserved. Its early date goes in accordance to its transitional characteristics in the evolution chain; or it could even be a true product of peninsular artisans that finally found its way into the northern *limes*. It is curious to notice that in this case, apparently, the position of the suspension loops has been inverted, the left one being closer to the mouth and the right one closer to the bottom of the sheath. This is precisely the opposite of the Celtiberian manner, suggesting that the Roman dagger would be hanged from the left side of the body, instead of the typically Celtiberian position at the right side.

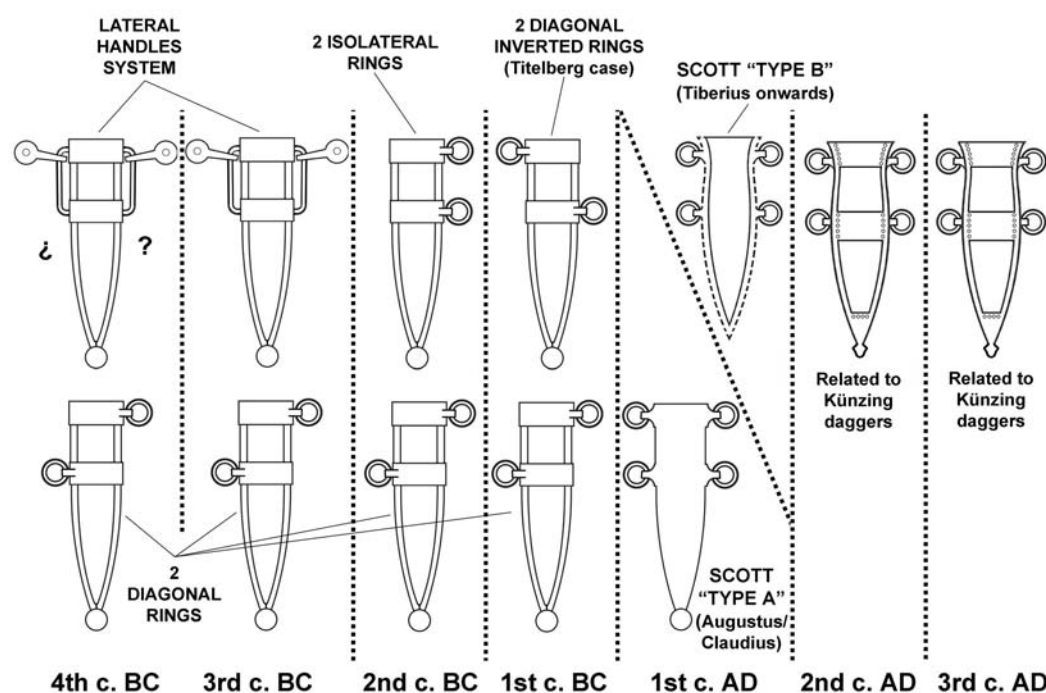


FIG. 3. The predominant sheath models in each century, including both Celtiberian and Roman examples

Iconography combined with epigraphical analysis could help us understand the Roman dagger and suspension system but this also introduces some problems. As it seems, it was a common practice for soldiers to hang it from their right side of the body, while the centurions and the rest of the officers would hang it from their left side. Whatever position the dagger occupied, the sword would hang at the other side, in order to maintain a balance.

If we come back to study the peninsular archaeological evidence, we will see that the Celtiberian sheaths show a variety of suspension systems as an obvious consequence of the equally heterogeneous family of sheaths they belong to. The Iberian dagger sheaths are divided into different groups according to the number and position of their suspension rings (Fig. 2 and 3). The most common variety, as we have already stated, is the one with two rings placed diagonally. In the Iberian case, the left ring is placed down and the right ring up. This has been interpreted as an evidence of a diagonal hanging suspension for the sheath altogether. But we do not know the exact way this was achieved, perhaps from a baldric or from a belt.

In another case we find two rings, both placed on the same side of the sheath. We could guess a horizontal suspension system from a belt as the most probable solution.

But the case that arises most interest for our analysis is that of the Celtiberian “lateral handle” system (see above). We can trace its existence to the latter part of the fourth century BC. It is defined by two metal vertical handles, one on each side of the sheath (Filloy & Gil Zubillaga, 1997). From each of the handles clings an independent piece of metal that bends on one of its ends embracing the sheath handle and clasping a leather strip in the opposite. So, we can summarize it as a suspension system by two metal pieces attached to leather strips. This system of suspension is named a “frog”. And this is precisely the most interesting feature of this model.

Both this particular Celtiberian system and all the Roman systems are based on the same principle: the frog suspension. In the Celtiberian lateral handle sheath the leather frog has been transformed in two metal pieces that work the same way as the Roman example.

We could therefore deduce that, perhaps, the same system was used by subsequent Iberian sheaths up to those that the Roman legions came to know, which could have finally had an influence on the first Roman manufactures.

But we still don't know whether this frog is part of a baldric or of a belt. If we are to believe the iconographic representations of soldiers, apparently in the Roman army the sword could be hung either from the waist (from a belt) or from a baldric across the chest. But the Roman dagger would always be hung from a belt. We have nearly no representations of the Iberian case, excluding the Galician warriors and some much earlier Iberian examples, as in the Porcuna relief. In the first case, the suspension of the dagger is from a belt, while in the second it is from a baldric. Perhaps both solutions were applied indistinctly.

On the other hand, all Roman sheaths present the same single suspension system based in four rings, two on each side of the sheath. The most striking fact is that sculptural iconography seems to show that only two of the rings were actually used², those being the ones closest to the mouth of the sheath (upper ones). Therefore, although the Roman sheath has four rings, it is again suspended from two leather straps, as in the Iberian case. As a consequence, we can interpret the Roman frog suspension system as a possible, although in no way proven, influence from Celtiberian culture.

CONCLUSIONS

A relationship between the Celtiberian *bidiscoidal* dagger and the Roman military dagger (*pugio*) is the only possible explanation to the very strong similarities and other coincidences observed in both, and is now generally accepted.

But the relationships between the sheath types is not so clear. As we have seen, there are certain similarities between them, but also a very significant difference regarding the structure and method of manufacture. The similarities lie in suspension system using rings and perhaps a frog. Furthermore, there is a coincidence between the external shape of the 2nd and 3rd century Roman sheath and that of the Celtiberian sheath. But, as we have discussed, this could be accidental. In any case, the radically different methods of manufacture –the Roman system being cruder and simpler, but very effective– demonstrate that Roman sheaths simplified and got rid of the complexities of the early Celtiberian manufactures.

² Except perhaps in the case of the funerary stele of *imaginifer* Genialis (CIL XIII, 11868) where a possible second strap of cord seems to fasten to the inferior rings of the sheath.

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