

# *Gladius hispaniensis* : an archaeological view from Iberia

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The archaeological identification of the Hispanic prototype of the *gladius hispaniensis* (the Republican Roman sword from the Second Punic War onwards), and that of the *gladius hispaniensis* itself, has been the subject of debate throughout this century, without being clearly resolved. Only now, in the light of recent discoveries and research, is it possible to suggest a clear line of development from the first to the second.

## A STATEMENT OF THE PROBLEM : THE LITERARY SOURCES

The only text which explicitly mentions the adoption of an Iberian sword by the Romans is the Suda, a Byzantine lexicon compiled at the end of the 10th century B.C. The relevant paragraph reads: «The Celtiberians by far surpass other people in the fashion of their *machairai*. This has an effective point, and a powerful down-stroke with either edge. For this reason the Romans discarded their native sword after the wars with Hannibal, and adopted the Iberian weapon. They adopted the form, but the actual quality of the iron and the process of manufacture they were quite unable to reproduce». It is generally accepted<sup>1</sup> that the text is Polybianic because of its concordance with Polybius 6,23,6 (panoply of the Roman hastati), and 3,114,3 (Cannae. description of the Iberian sword). All the other literary references are indirect, and relate only to the *gladius hispaniensis* in various contexts, some of which are even anachronistic (see Table I for details). To complicate things even further, it should be added that the classical literary sources are notoriously unreliable when naming types of weapons, especially those of the barbarian tribes fighting the Greeks and Romans;<sup>2</sup> this is due both to the ignorance of these authors on barbarian customs and realia, and to the fact that they may have given more importance to stylistic consider-

rations in their writings (the desire to avoid repeating terms). Thus, we should often avoid interpreting a word in its most technical sense, and instead understand it only in the broadest sense, for example, *machaira* as 'sword' and not 'one-edged., curved, slashing sword or knife'.<sup>3</sup>

These circumstances have led some scholars, notably H. Sandars (1913:58-62), to suggest that the Romans never adopted an Iberian sword. Sandars rejected the authority of the Suda on the basis that it was a very late source dubiously described as Polybianic; he denied that the Romans had adopted either the Iberian falcata (Fig. 2.1), or the short sword of the Aguilar de Anguita type (Fig. 1, type III), too short to provide an effective cutting or slashing action. Thus this author proposed that the Romans did not adopt a type, but a form of manufacture, so the expression *gladius hispanicus* might have been a term alluding to quality just as in more recent times the term «Toledo steel» has been used; or that it could be a technical term alluding to manufacture, just as 'damascened blade' in medieval contexts. Taken together, however, the literary evidence combined (Table I) enables us to say that the Romans of the 2nd century B.C. believed their forefathers had imitated a type of sword from Hispania, and this was generally accepted by scholars in the nineteen-twenties (Couissin, 1926:220 ff., especially 223-224 is convincing).

From the set of texts we have collected (Table I) a series of specific points can be summarized:

a. Polybius tells us that by 225-221 BC the Romans were fighting with a weapon used to wound with the point. a thrusting sword very solid in comparison with the long, blunt sword of the La Tène II type used by the Gauls, which was designed to fight with the blade alone in a slashing motion. He does not specify if the Roman sword was also useful for slashing or was just a thrusting weapon.

b. Polybius and Livy claim that the Iberians who fought

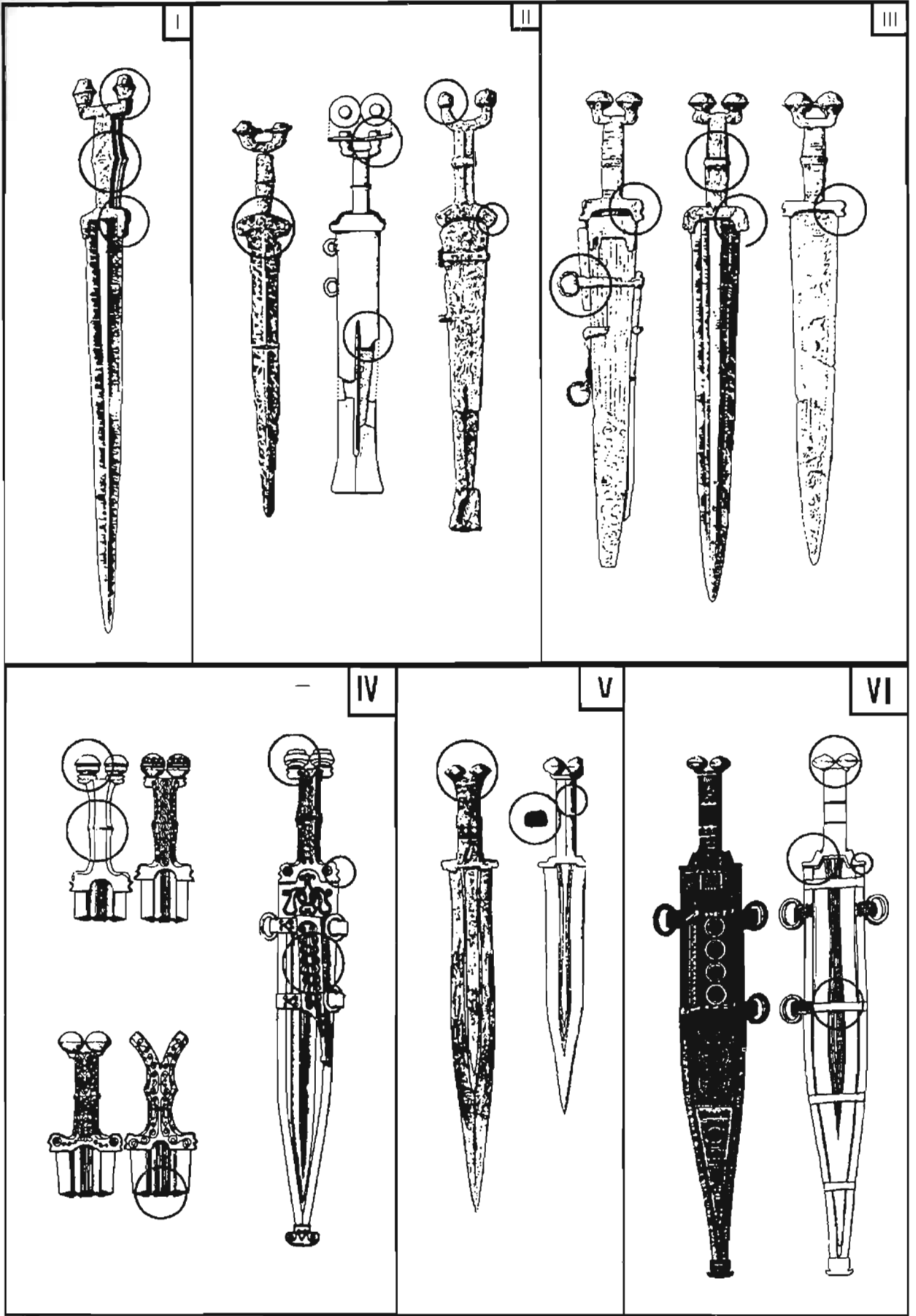


Fig. 1: Types of antennae sword in the Meseta of the Iberian Peninsula.

TABLE I. Main literary sources for the *gladius hispaniensis* problem. (English translations from the Loeb Classical Library)

SOURCE	Date of writing	Date of events referred to in the text.	Events & commentary
Suda, s.v. <i>machaira</i> . (Polybius)	10th century AD (mid 2nd century BC?)	Celtiberian wars, mid 2nd century BC	Adoption by the Romans of a Celtiberian <i>machaira</i> after the Hannibalic War (c. 200 BC). "The Celtiberians by far surpass other people in the fashion of their machairai. This has an effective point, an a powerful down-stroke with either edge. For this reason the Romans discarded their native sword after the wars with Hannibal, and adopted the Iberian weapon. They adopted the form, but the actual quality of the iron and the process of manufacture they were quite unable to reproduce" Only explicit text. From Polybius.
Polybius, 2,30-33	c. 150 BC	Battle of Telamon against the Gauls, c. 225 BC. & Later campaign against Boii and Insubres c. 224-222 BC.	Comparison between Roman and Gaulish weapons. "the Gaulish sword [ <i>machaira</i> ] being only good for a cut and not for a thrust". (2,30,8). Further comparisons: "The Romans, on the contrary, instead of slashing, continued to thrust with their swords which did not bend, the points being very effective" (2,33,6). No explicit mention of <i>gladius hispaniensis</i> . In fact, this Roman sword seems to be a primarily thrusting and not a cutting weapon, and therefore NOT a Hispanic sword, but rather like Greek <i>xiphos</i> .
Polybius, 3,114,2-4	c. 150 BC	216 BC. battle of Cannae	"The shields [ <i>thureos</i> ] of the Spaniards [ <i>Iberon</i> ] and Celts [ <i>Kelton</i> ] were very similar, but their swords [ <i>xiphe</i> ] were entirely different, those of the Spaniards thrusting with a deadly effect as they cut, but the Gaulish sword [ <i>machaira</i> ] being only able to slash and requiring a long sweep to do so". Both types are clearly different, the Gaulish sword being clearly a long La Tène type. The Iberian (or perhaps 'Celtiberian' in this context) sword could be one type in a choice: short <i>falcatas</i> (cutting and thrusting weapons, contrary to popular myth); short antennae swords, or the Celtiberian version of the La Tène I sword, shortened and broadened.
Polybius 6,23,6	c. 150-130 BC	Mid 2nd century BC. Perhaps referring back to the Hannibalic War, but not certain (Walbank, 1957: 703).	Panoply of Roman <i>hastati</i> : "they also carry a sword, hanging on the right thigh and called a Spanish sword ( <i>Iberiké machaira</i> ). This is excellent for thrusting, and both its edges cut effectually, as the blade is very strong and firm". No positive statement is made about the adoption of a Spanish sword. A few paragraphs later, however, Polybius states clearly that the Romans copied Greek lances and cavalry shields (6.25.5-11).
Claudius Quadrigarius, Fr. 10b	c. 70 BC	c. 361 BC	Single duel between T. Manlius Torquatus and a huge Gaulish warrior. The Roman carries a <i>gladius hispanicus</i> : " <i>Scuto pedestri et gladio hispanico cinctus [sc. Titus Manlius] contra Gallum cinctus... atque Hispanico [sc. gladio] pectus hausit</i> ". The text is obviously anachronistic: the <i>gladius hispanicus</i> (or <i>hispaniensis</i> ) was adopted around the Second Punic War, and this episode is dated to a much earlier period. It would seem that Quadrigarius used a well-known and evocative word without much concern with historical accuracy. The whole episode might be a myth invented to explain the <i>cognomen</i> 'Torquatus' borne by the <i>Manlii</i> .
Livy 7,10,5	c. 25 BC-AD 14	c. 361 BC	From Quadrigarius, a well-known annalist source for Livy. " <i>pedestre scutum capit, Hispano cingitur gladio ad propiorem habili pugnam</i> ". Anachronistic. Adds the remark that the Spanish sword is 'convenient for close fighting'.
Livy, 22,26,5	c. 25 B.C.-AD 14	216 BC. Battle of Cannae	From Polybius 3, 114 (see above): "The Gauls and the Spaniards had shields of almost the same shape; their swords [ <i>gladii</i> ] were different in use and appearance, those of the Gauls being very long and pointless [ <i>proaelongi ac sine mucronibus</i> ], whilst the Spaniards, who attacked as a rule more by thrusting than by slashing [ <i>Hispano, punctim magis quam caesim adueto petere hostem</i> ], had pointed ones that were short and handy [ <i>brevitate habiles et cum mucronibus</i> ].
Livy, 31,34	after 18 BC	200 BC. Against Macedonia.	After a cavalry skirmish, the Macedonians are horrified by the wounds caused by Roman swords: "for men who had seen the wounds dealt by javelins and arrows...when they had seen bodies chopped to pieces by the Spanish sword [ <i>gladio Hispaniensis</i> ], arms torn away, shoulders and all, or heads separated from bodies, with the necks completely severed, or vitals laid open, and the other fearful wounds, realized [ <i>the Macedonian soldiers</i> ] in a general panic with what weapons and what men they had to fight". Just after the Hannibalic war, Roman soldiers carried the <i>gladius hispaniensis</i> . A.C. Schlesinger, translator for the Loeb, believed that the ' <i>gladius hispaniensis</i> ' was a cavalry sabre, like the <i>falcata</i> , adapted to slashing blows; and that the ' <i>gladius hispanus</i> ' was the infantry weapon, used for both cutting and thrusting. This distinction is probably too subtle and imposes upon Livy too precise a terminology.
Livy, 38,21,13	18 BC-AD 14	c. 189 BC. Against Gauls.	"This type of soldier [ <i>velites</i> ] carries a three-foot shield and, in his right hand, javelins which he uses at long range; he is also equipped with a Spanish sword [ <i>gladio Hispaniensis</i> ]" If Polybius states that the <i>hastati</i> carried an <i>Iberiké machaira</i> (see above). Livy now also says that the lighter <i>velites</i> were also armed with a <i>gladio Hispaniensis</i> .
Aulus Gellius, <i>N.Atl.</i> 9,13,14	c. 170 AD	c. 361 BC	From Claudius Quadrigarius (see above): " <i>Scuto pedestri et gladio hispanico cinctus contra Gallum cinctus</i> " (Armed with a foot-soldier's shield and a Spanish sword, he confronted the Gaul". Anachronistic.

TABLE I: Relevant literary sources.

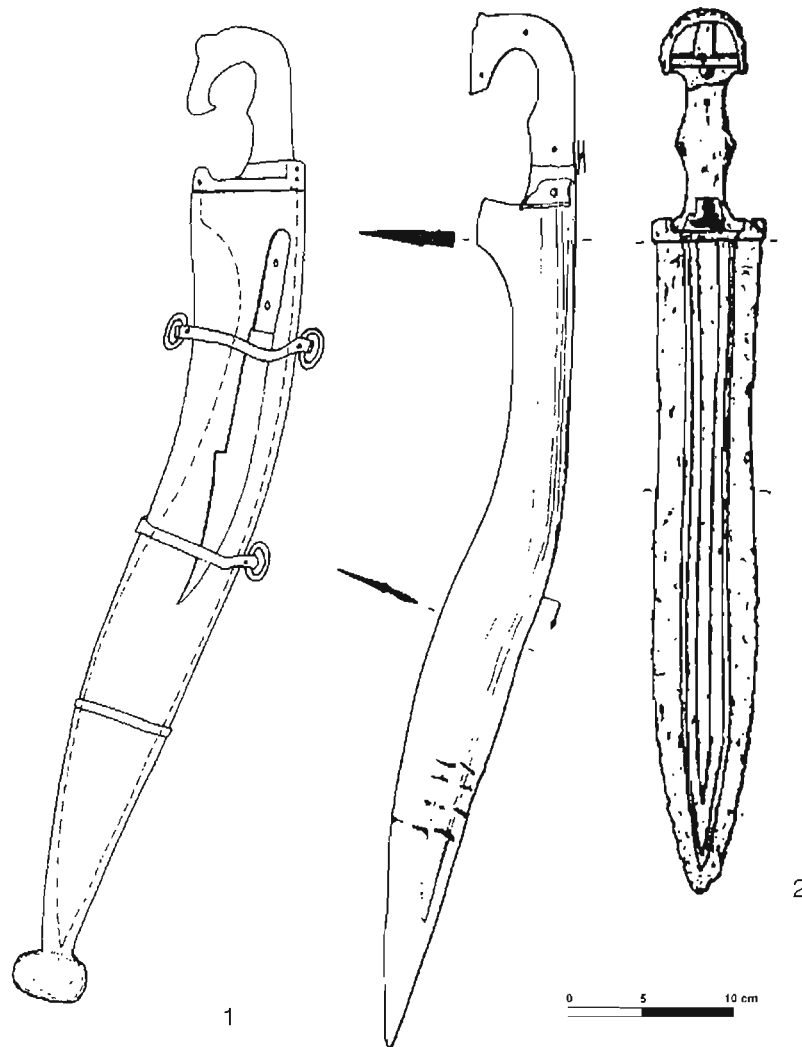


Fig. 2: Other types of Iberian Iron Age swords. 1. Falcata. 2. Frontón. They are mainly Iberian types, quite rare in Celtiberia.

with Hannibal at Cannae (216 BC) carried a solid sword, suitable *both* for thrusting and cutting. Livy called it «*gladio hispano*».

c. The *Suda* (Polybius) says that in the time of Hannibal the Romans adopted a type of sword capable of thrusting *as well as* cutting. This is the only text which states that such a sword was adopted or copied: the rest only talk about a «Hispanic sword». It seems very probable that this sword was the one used at Cannae by the Iberian soldiers in Carthaginian pay.

d. Livy says that in 200 BC the Roman cavalry carried a *gladius hispaniensis* that caused horrible slashing wounds; he also states that in 189 BC the *velites* carried the *gladius hispaniensis*. Polybius adds that in the 2nd century BC the *hastati* carried an *iberiké machaira*. Therefore, the Hispanic sword was typically used by cavalymen, and also by light

and heavy infantry.

From this data it can be inferred - although we cannot be certain - that the Roman sword before the war with Hannibal was short and pointed, similar to the Greek *xiphos*, as Couissin suggested (1926:224 ff.), and that it was replaced by one which was longer, *for cutting as well as thrusting*, taken from the Iberians.<sup>4</sup> In any case, the identification of a possible 'typical' Roman sword even before the *gladius hispaniensis* is beyond the scope of this paper.

#### POSSIBLE CANDIDATES FOR THE PROTOTYPE OF THE *GLADIUS HISPANIENSIS*

Starting from here, the task remains to identify the Hispanic prototype of the Republican Roman sword. That this is difficult can be deduced from the fact that, for example, two of

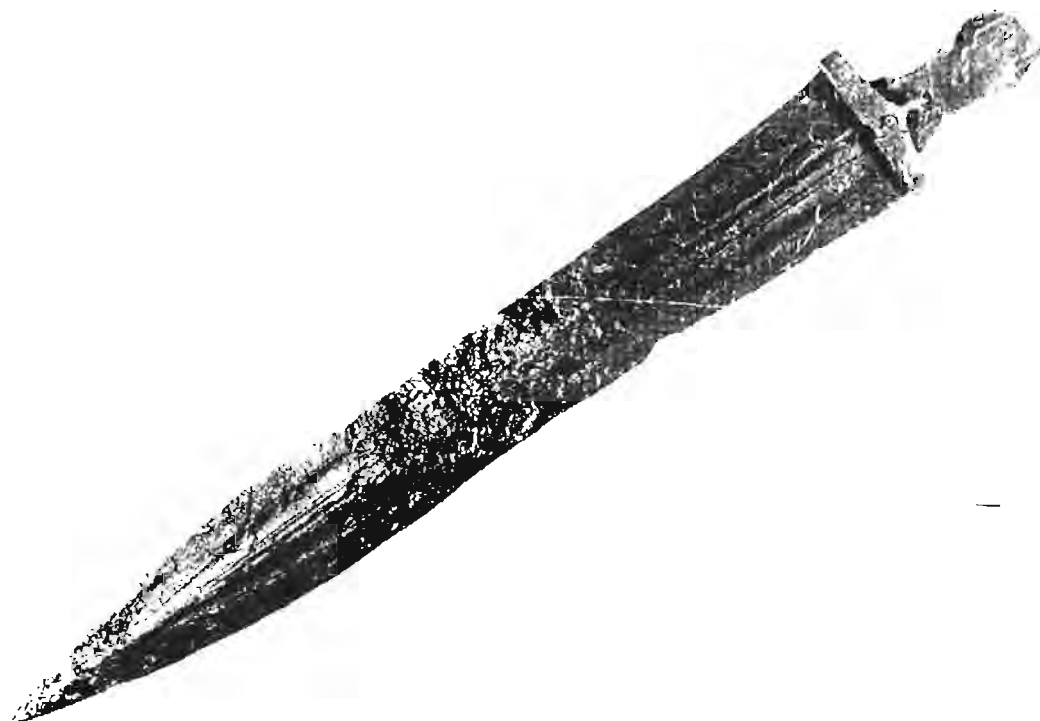


Fig. 3: This Frontón-sword from Córdoba is an example of an early type of Iron Age swords in Spain, in existence during the fifth and fourth centuries BC. Although it cannot be described as a prototype for the Roman gladius, it proves that short, thrusting and cutting swords were in existence in Iberia since the beginning of the Iberian Culture. Blade length: 36.6 cm. (photo MAN).

the most recent syntheses on Roman weapons (Bishop and Coulston, 1993:53-54; Feugère, 1993:97 ff.) are very vague on the subject.

Spanish scholars have proposed numerous alternatives for the Iberian prototype of the Roman sword, which we cannot discuss in detail here, but which we examine elsewhere (Quesada, 1997). The Iberian falcata (Fig. 2.1) has been suggested as the prototype (for example A. Arribas, 1965:58; Guadán, 1979:36; Broncano et alii 1985:97; Grangel, Nebot, Estall: 1987:217). This suggestion is obviously mistaken because the Roman *gladius* was not a curved sabre. It is the result of Polybius' imprecise use of the term *Iberiké machaira* in 6,23,6 to speak of a cutting blow from a sword, which does not necessarily imply a curved sword.

Another 'candidate' that has been suggested is the *frontón* sword (Fig. 2.2, Fig. 3) (Aguilera y Gamboa, 1916:13; Connolly, 1981:150 ill., probably taken mistakenly as an example of the 'Arcobriga type' about which more will be said later). Although its typological characteristics - a sword of medium length, designed for cutting and thrusting, with a wide blade and sometimes slightly waisted in shape - would make it the ideal candidate, the *frontón* sword cannot be considered the prototype of the Roman *gladius* for three rea-

sons: because by the end of the 3rd century BC it had hardly been used in the Iberian Peninsula for a century -it is a very old type, dated to the 5th and 4th centuries BC and no later; because the shape and size of the blade are quite different, being very wide for its length; and because the structure of the flat, rhomboid, flanged hilt is distinctive and completely different from the simpler tang of the Roman swords.

Thirdly, the most widely-held opinion is that the Romans copied an Hispanic weapon, and this must have been a variation of the antennae sword: this is the view held by De La Chica (1957:316). The only Hispanic version of the atrophied antennae sword that could have been the prototype of the *gladius hispaniensis* would be our type VI («Arcobriga») (Quesada, 1997). It was capable of a slashing action because of its waisted blade, and was used in the Meseta during the 3rd-2nd centuries BC. It also had a longer blade than usual in Iberia. (Fig. 1. Type VI). The average blade length of this type of atrophied antennae sword is 34.4 cm., while the longest known example is 50 cm. However, 61% of these weapons have a blade measuring only between 32 and 40 cm. They are therefore very short swords by European or Italic standards, and much shorter than the c. 62 cm. Roman Republican *gladii* (see Cabré and Morán, 1982;

PROVENANCE	DATE	MAX. LENGTH	BLADE LENGTH	BLADE WIDTH	COMMENTS	REFERENCES (recent or accessible)	FIG.
<b>ATROPHIED ANTENNAE SWORDS OF TYPE VI ('waisted' blade)</b>							
Mean value of 29 swords	3rd-2nd BC	44.5	34.4	4.4	Leather scabbard with metal frame and decorative plaques.	Quesada (1996 forth.)	3.1 (ex.g.)
<b>STRAIGHT BLADE SWORDS OF 'LA TENE' TYPE IN THE SOUTHEAST (IBERIAN AREA)</b>							
Cigarralejo, B. 54	c.350/300 BC	63	52	4.6	Iron scabbard with rings. No suspension loop	Cuadrado (1987, 1989) Quesada (1990)	3.4
Cabecico, B. 142	c.250/200 BC	70	64	4	No scabbard. No grooves or midrib.	Quesada (1989) Quesada (1990)	3.5
<b>STRAIGHT BLADE SWORDS OF 'LA TENE' TYPE IN OTHER AREAS</b>							
La Osera, B. 201	End 4th-3rd	71.5	60.5	4	Leather or wooden scabbard. Lost. 2 rings for suspension.	Cabré, Cabré (1933)	3.6
Gormaz, B. 'N'	3rd-2nd BC	68.4	59.7	4.4	Midrib on blade. No scabbard among grave goods.	Schüle (1969)	3.7
Gormaz, B. 'F'	3rd-2nd BC	74.4	63	4	No midrib.	Schüle (1969)	
La Azucarera	2nd-1st BC		55.5	5	Wooden (=) scabbard and iron frame. 2 rings.	Iriarte <i>et al.</i> (1996)	3.8 (ex.g.)
L'Esquerda	End 3rd BC	c. 73	c. 60	5	Deposit. No scabbard or remains of iron frame.	Ollich, Rocafiguera 1994	
<b>STRAIGHT BLADE OF LOCAL MANUFACTURE LOOSELY INSPIRED IN LA TENE TYPE</b>							
Gormaz, B. 'M'	3rd-2nd BC	43.5	33	3.9	Bronze scabbard. Grooves on blade.	Schüle (1969)	3.2
Atance, B. 12	s.d.	c.69	c.56	c.4.5	Very rare hilt. Strong, grooved blade.	Escribano (1980) Cabre de Moran (1990)	3.9
Atance, B. 66	s.d.	c.68	c.55	c.5	"	Escribano (1980) Cabré de Morán (1990)	
<b>PROBABLE EXAMPLES OF ROMAN REPUBLICAN SWORDS</b>							
Es Soumaa (Numidia)	c.130-110 BC	70-75	c. 60		Atypical bronze sheet scabbard	Ulbert (1979)	3.10
Mouriès	c. 100 BC	76.5	63.7	4.5	No scabbard	Feugère (1994)	3.14
Boyer		80.5	67.5			Feugère (1994)	
Berry-Bouy	c. 20 BC	c. 80	66.6	5.5	Four rings in suspension system. Iron frame.	Feugère (1994)	3.13
Delos	c. 69 BC	76	63.1		Leather scabbard with iron frame. Two suspension rings.	Feugère (1994)	3.12
<b>EARLY EMPIRE GLADII (1st. century AD)</b>							
Mus. Mâcon	20 BC to AD 50 ?	64.2	52.5	>4	'Mainz' Type	Feugère (1990)	3.15
Mus. Chalon	c. AD50 to AD100	58	44.7	4	'Pompei' Type	Feugère (1990)	3.16

TABLE II: Characteristics of different sword types.

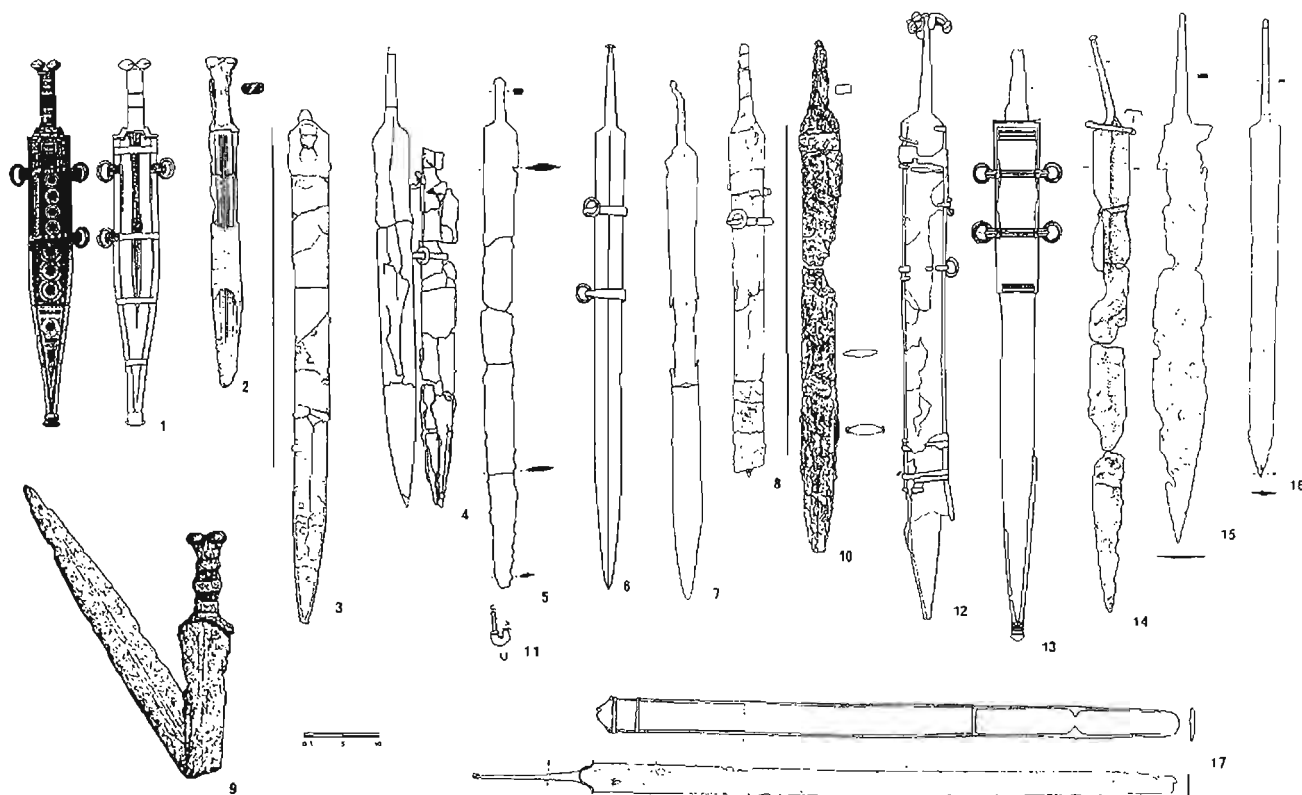


Fig. 4: Evolution of the gladius type.

Quesada, 1997). This is the alternative which P. Connolly (1981:130-131 and Fig. 7) and Feugère (1993:98) favoured recently. However, as we shall see, the examples of Republican Roman swords - *gladii hispanienses* - recently discovered have virtually nothing in common with these swords, except for the suspension system: they are much, much longer, much less waisted, have no complex grooves and the pommel is not of the antennae type.

Finally, some authors have believed that the prototype of the *gladius hispaniensis* had to be the La Tène I sword or a Hispanic imitation of it. Although this idea was attractive in principle, various authors have come up against two difficulties: chronological and cultural. On one hand, almost a century separated «real» La Tène I swords in Iberia from the arrival of the Romans; on the other, it is thought that the La Tène I sword, even if it survived in Hispania until the late 3rd and early 2nd century, would have been a rare weapon in the Peninsula, and not at all characteristic of the Iberians or Celtiberians. Schulten tried to get over the chronological difficulty with a piece of specious reasoning: the prototype would not be the La Tène I sword, but the La Tène II type, modified and shortened by the Celtiberians to look like a La Tène I sword (Schulten, 1937:5). Variations of these ideas have also been put forward by D. Fletcher (1960:59), Brühn

de Hoffmayer (1972:46, following Schulten in many questionable respects but looking for his candidate amongst the swords of La Tène II).

In his detailed study of Roman weapons, P. Couissin (1926:227) was of the opinion that at the end of the 3rd century the Romans changed their short, pointed sword of the Greek type (the kind used in Telamon against the Gauls) for a La Tène I sword which would be -in his opinion- typical of the Iberian tribes during the Second Punic War (pp. 230-231), complete with Gallic suspension system and everything else. Recent studies in Spain have clearly demonstrated this claim to be mistaken (Cabré, 1990; Quesada, 1997).

In fact, both Schulten and Brühn de Hoffmayer and also Couissin, particularly the latter, put forward suggestions along the lines we believe to be correct, although with various differences which we cannot discuss in detail here. Basically Couissin was wrong in believing that antennae swords had disappeared in Iberia by the 3rd century BC, that the La Tène I sword was predominant, and above all in the question of the weapons' suspension system which, as we shall see, is the key to this problem.

#### TOWARDS A NEW STATEMENT OF THE PROBLEM

As we can see, almost all the possible alternatives have

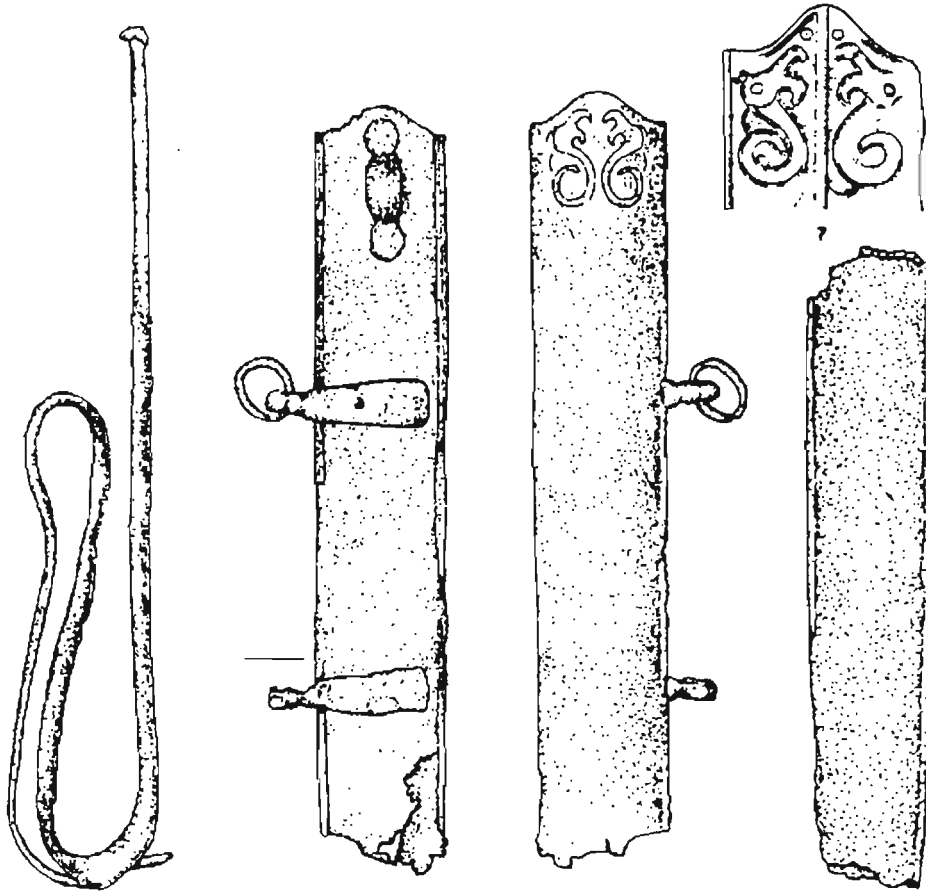


Fig. 5: Locally modified La Tène I sword from Quintanas de Gormaz (after Lenerz de Wilde, 1986).

been considered, which proves what a difficult task it is to identify the prototype of the *gladius hispaniensis*. The basic reason for this difficulty is that until very recently we have had the two ends of a chain, but not the intervening links. On one hand, we knew what the main types of sword were like in the Iberian Peninsula during the 4th century BC, but not later, in the 3rd-2nd centuries BC; on the other, we knew the main types of Roman swords of the Early Empire, conventionally referred to as 'Pompey' and 'Mainz' types (Fig. 4, nos. 15-16, also Table II), but no definite examples of Republican Roman swords datable to the 2nd-1st centuries were known. None of the types characteristic of the Peninsular panoply (*falcatas* and short antennae swords) seemed to be suitable prototypes for a Republican Roman sword which, on the other hand, was only known from sculptures and literary descriptions. The Iberian *falcata*, with its curved blade, could be discounted (Fig. 1.1); also the old frontón type; The other antennae swords were too short to be useful as slashing weapons, an essential characteristic of the Republican Roman *gladius*, according to the literary sources (Table I, Polybius 6,23,6, Livy 31,34). The La Tène

I swords were old-fashioned by the mid-3rd century BC, and moreover rare in Iberia. As a result, by the mid-eighties the situation had reached an impasse from which it could only be extricated by means of new archaeological data, as the existing literary sources had been squeezed dry.

#### NEW ARCHAEOLOGICAL DATA

In practice, very often the problem we are studying has been badly stated. The only way of answering the question: What was the Hispanic prototype of the *gladius hispaniensis* like? is...knowing first what the Roman *gladius hispaniensis* was really like. Only on the basis of that knowledge can we look for its elements of origin amongst the weapons of the Celtiberian panoply.

At one end of the chronological chain, the later one, we owe to Ulbert (1969), amongst others, the definition of the two main types of Early Imperial infantry sword. During the late 1st century BC and the first half of the 1st century AD (Augustus-Claudius period), the 'Mainz' type predominated. It had a tapering blade, with edges meeting in a long point. It was of medium length (for  $n=8$  and  $n=10$  respecti-



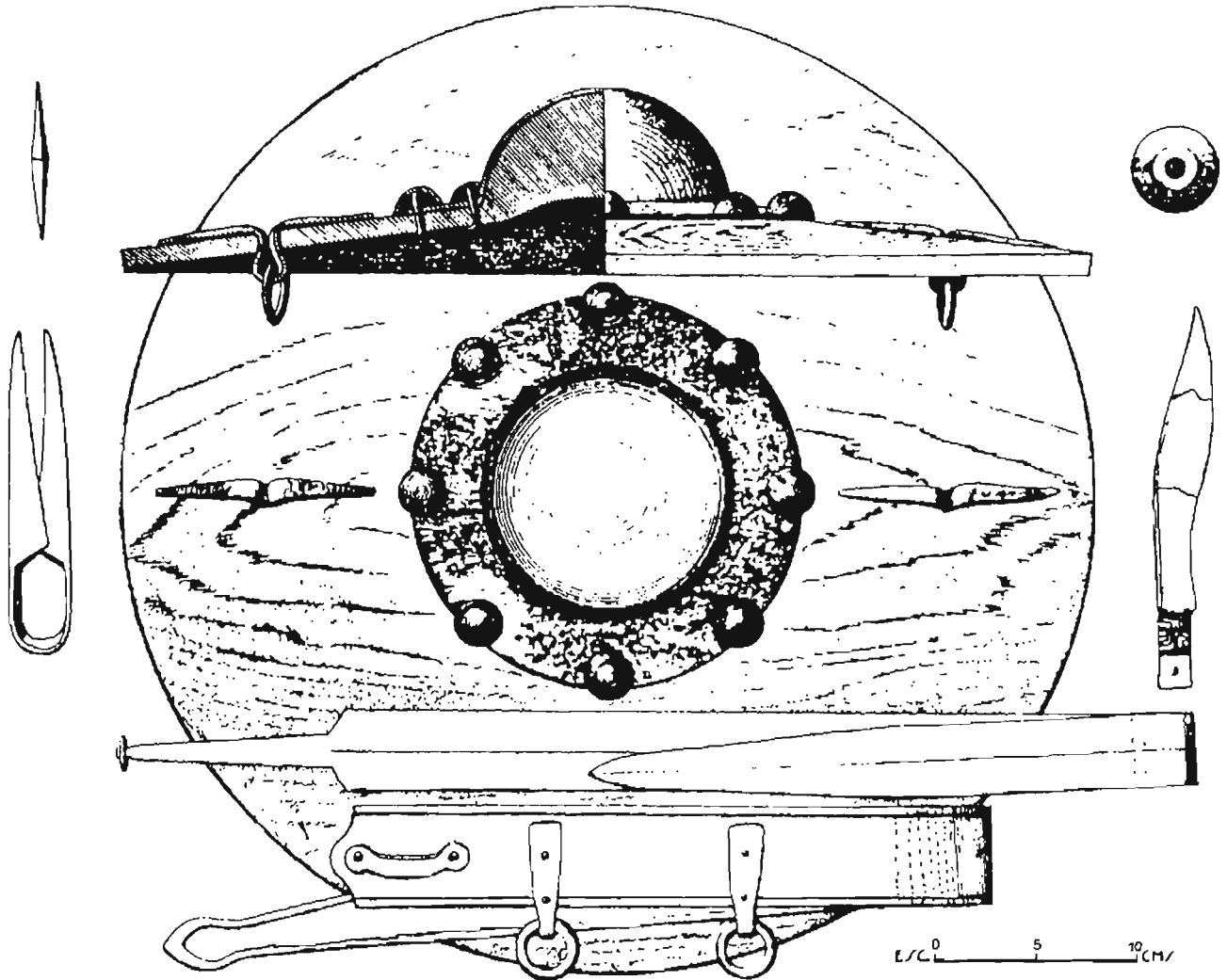


Fig. 6: Arcóbriga, burial 'D' (After Cabré Aguiló, 1939-40).

vely, with a total average length of 6.2 cm.; average blade length, 50.0 cm.; based on data from Feugère, 1993:140). From the mid-1st century AD onwards, this type was gradually displaced by the 'Pompey' type, which had a much shorter blade (42-50 cm., although only rarely as long as 50 cm., Bishop, Coulston, 1993:71, Feugère, 1993, 146), parallel edges and a very short point. It is important to emphasise that both types of sword often have a scabbard completely or partly built with a metal frame made from U-shaped ribs, like the Celtiberian ones. The scabbard itself, which could be of leather or sheets of wood (e.g. of lime and birch, see Feugère, 1990:95), was often covered by decorative embossed metal plates, also like in the much earlier Celtiberian weapons. The sword was hung using a system of three or four rings. This characteristic suspension system has presented problems, since it is not entirely understood: 'we cannot be certain of whether only two suspension rings,

three or even all four were employed' (Bishop and Coulston, 1993:74, *contra* Hazell, 1984; 74 Fig. 1). New Iberian evidence which we cannot detail here may help to resolve this question.

At the other end of the chronological *continuum* we have a wide variety of Celtiberian swords, which include six different types of antennae swords (Fig. 1), the falcata and the frontón sword (Fig. 2); the Miraveche type, imported La Tène I and II swords (Figs. 5, 13), and at least two local imitations of the La Tène I swords (Figs. 9 and 12). Only if we add to this sequence a new link will be able to try and determine which one or more of these types may have been the origin of the Roman sword.

In this respect, there have been some new finds since the beginning of this decade, and others made in the 'eighties have been evaluated, which enables us to know what the Roman *gladius* was like in the 2nd century BC. Briefly, it

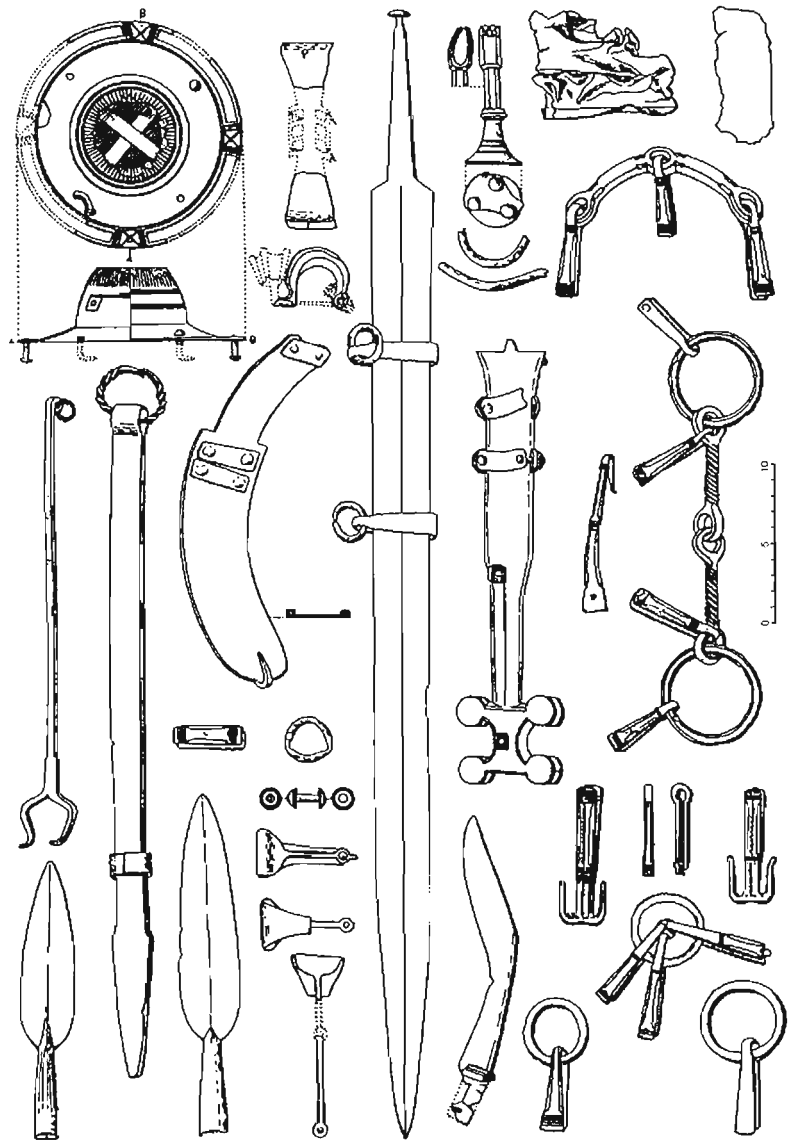


Fig. 7: La Osera (Avila).  
Burial 201. 3rd century BC.  
(After Cabré & Cabré, 1933).

can be said that in size and shape these pieces are reminiscent of the La Tène I sword, which in Gaul had disappeared in the 3rd century to be replaced by the long blunt swords of La Tène II (Brunaux and Lambot, 1987:120; Stead, 1983:490, 505), but they are not, obviously, La Tène I swords, above all because of the notable differences in length, scabbard and suspension system.

Recent studies (especially Feugère, 1994, complemented by Feugère 1993 and Bishop and Coulston, 1993) render a very detailed description of the Roman *gladius hispaniensis* unnecessary; a brief outline will suffice. In particular, the Delos sword (Fig. 4.12), discovered in 1986 but not properly evaluated until the early 'nineties, provides a good definition. It is a weapon with -apparently, since it was found in its scabbard- parallel edges<sup>5</sup> and an overall length of 76 cm,

the blade measuring 63.1 cm. (Table II and Fig. 4.12). The point is short and triangular. It has a tang hilt with a complex pommel. The scabbard is leather with an iron frame. Instead of the suspension system characteristic of the La Tène I (suspension loop to hold it vertically along the leg), this sword has a system of two metal clasps that, in addition to reinforcing the frame of the scabbard, hold in place two rings for a Mediterranean type of suspension, probably a baldric, hung from the shoulder and crossing over the chest, although not necessarily.<sup>6</sup> This system had been characteristic of the Greek world and also of the Iberian Peninsula, where, as we shall see, the Gallic system of vertical suspension was never widely used.

The other known examples of Republican *gladii* documented in France have been well studied by Feugère (1994),

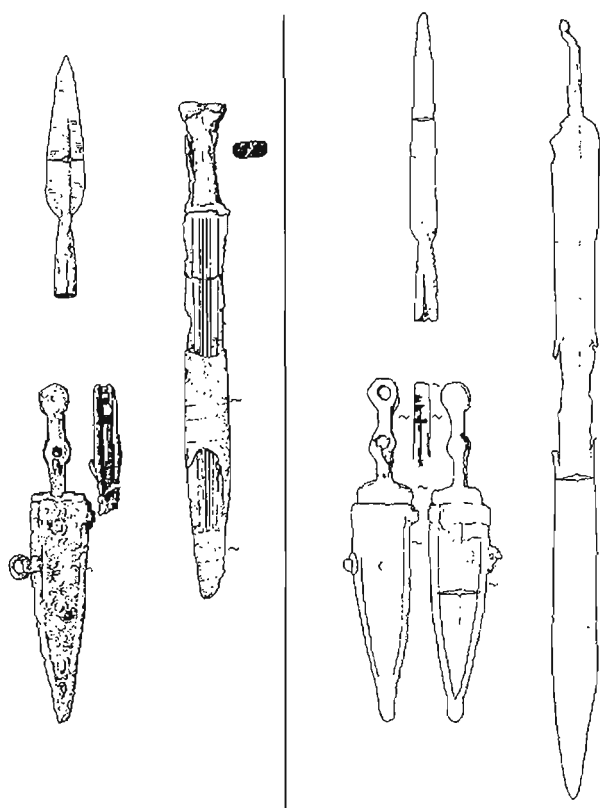


Fig. 8: Gormaz (Soria). Weapons from two different late burials. Late 3rd-2nd c. BC. (after Schüle, 1969)

and share a number of basic characteristics with the Delos sword (Fig. 4, 13-14; Table II): blade length around 60-67 cm.; straight blade with a triangular point, and iron-framed scabbard and Mediterranean type of suspension system using rings. While, in the case of the Delos sword, there were two rings (there is no need to imagine that two have got lost, as Feugère thinks, 1993:98; there are abundant earlier Hispanic parallels with two rings), the Berry-Bouy piece (Fig. 4.13 and Table II) already has four, as in the imperial *gladius* and daggers. The swords from Mouriès (Fig. 4.14, Table II) and Boyer (Feugère, 1994:14) are of the same length and appearance.

To the French examples we can add those very recently published from La Azucarera (Alfaro, La Rioja, ancient *Graccurreis*), next to the River Ebro in Spain (Table II, Fig. 2.8, Fig. 11). The swords were found in a site excavated in 1969 (Marcos Pous, 1996) together with a Montefortino helmet and shield *umbones* (today lost). Although the set has been dated to the Sertorian period, c. 82-72 BC (Iriarte *et al.* 1996:182), it could perfectly well be older, from the second half of the 2nd century BC. The swords are almost identical to those described, with a blade measuring about 55-60 cm., a scabbard possibly of wood with a metal frame and

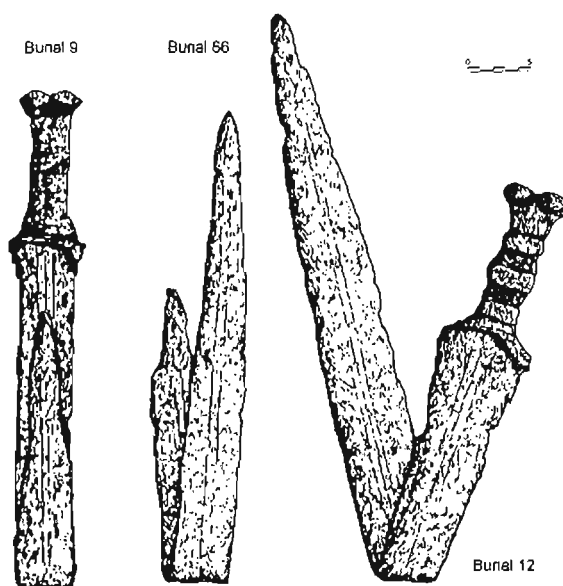


Fig.9: Atance. (after Escribano, 1980).

suspension system using two rings.<sup>7</sup> Given their context amongst other Roman weapons (the *scutum* bosses and knob-crest helmets are very rare in indigenous contexts in the Meseta), these swords can be added to the incipient catalogue of examples of the Republican Roman *gladius*. Finally, the sword from Es Soumaa in Algeria (Ulbert, 1979; Feugère, 1993, 98) (see Fig. 4.10) seems to belong to this generic type.

All these swords with their straight blade and straight edge measuring about 60 cm, and long, triangular point are suitable for cutting and thrusting blows, and thus fit well with the literary descriptions (Table I).

As for the alleged relevance of waisted blades associated to iron-frame scabbards, and of both characteristics to the Roman *gladius*, as expressed by some scholars, we should like to mention some facts. It may well be that for practical reasons waisted blades are associated with iron frame scabbards in Roman imperial *gladii*, because of the special shape of the blade, but this was not so in Iron Age Iberia. In fact, nearly *all types* of sword in Iberia, waisted or not, have the same type of framed scabbard, and we should note that parallel and tapering blades are earlier than the waisted types (see Fig. 1). Therefore, an iron frame scabbard does not necessarily imply a waisted blade, and vice versa; it then follows that we should not expect Roman *gladii hispanienses* to be waisted because they have metal-framed scabbards. This is actually what happens: the sword from Delos and the *gladius* from Berry-Bouy do not appear to be waisted at all, although their respective framed scabbards obscure the details (Fig. 4.12.13); and the *gladii* from Mouriès (Fig. 4.14) and Boyer are definitely not waisted. Some of the

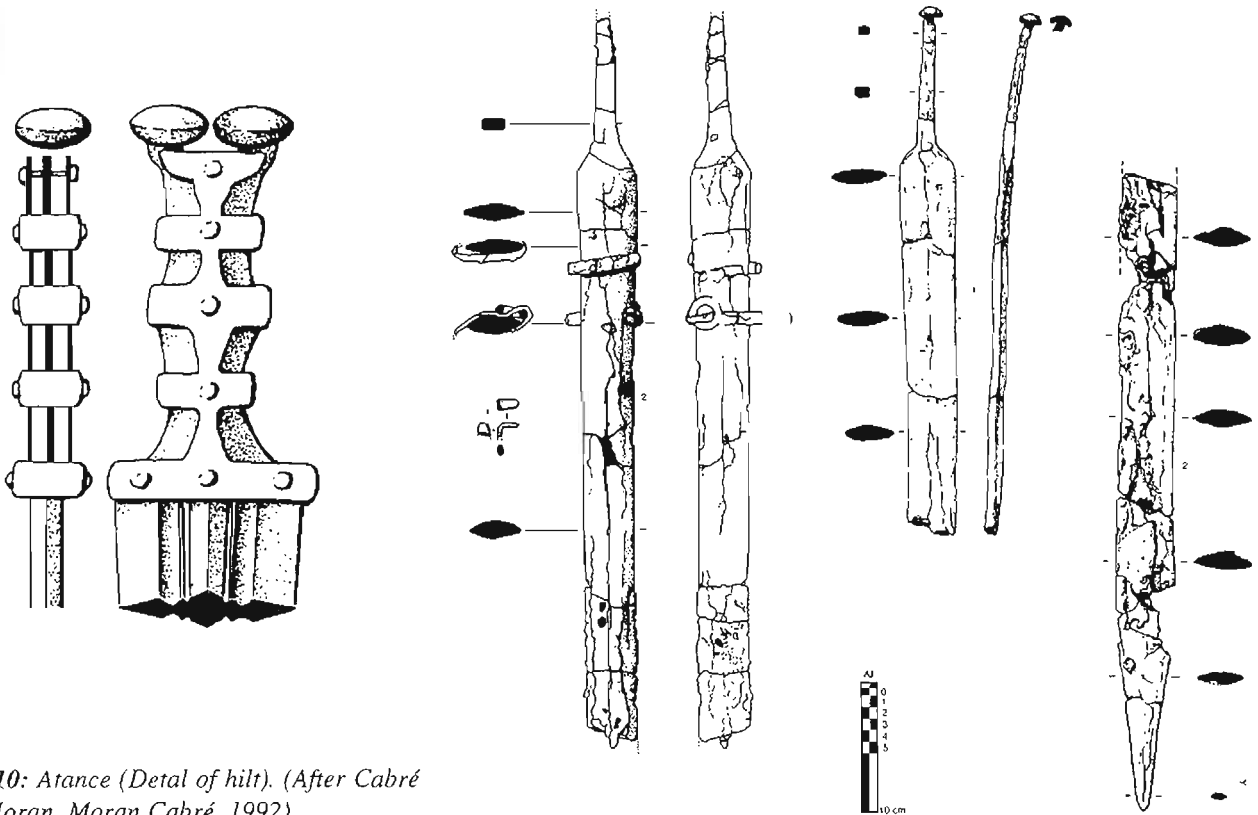


Fig. 10: *Atance* (Detail of hilt). (After Cabré de Moran, Moran Cabré, 1992).

swords from La Azucarera are very slightly, almost imperceptibly, waisted (much less so than the so-called Iberian prototypes in Fig. 1, type VI), but some are not. In all, we believe that although the Roman *gladius hispaniensis* had a metal frame scabbard along the whole length of the blade, the blade was not necessarily waisted. Some swords may have a slightly waisted profile, or more often a marked triangular point, but this can be attributed to the very local and artisanal manufacture processes, just as there are as many types of pommel and hilt as known surviving examples.

Now that we know what the *gladius hispaniensis* looked like, we can tackle with more confidence the question of its Celtiberian prototype.

The atrophied antennae and type VI waisted swords (Fig. 1, Fig. 4), have an average blade length of 34.4 cm., almost half that of the Republican Roman swords. Its antennae pommel and its very waisted blade are furthermore poor candidates for the prototypes of Roman swords we have just described. But its metal framed scabbard with embossed plates over leather or wood, and its suspension system using rings, are without doubt a forerunner of the system used by the Roman sword, which was very different from the Gaulish swords of La Tène II.

Fig. 11: *La Azucarera* (Graccurris). Republican Roman swords (After Iriarte et al., 1996)

On the other hand, if we look in the other direction, towards the imitations of the La Tène swords, we will see much closer precedents (see Figs. 4 and 16).

Some swords have been found in the Iberian Peninsula which can be classified as European imports of late La Tène I and La Tène II swords (e.g. Fig. 13). Most of them have appeared in Catalonia (Ampurias, Cabrera de Mar, Burriac, Puig Castellar, Turó dels Dos Pins, etc., see Quesada, 1997, forth.) but some have been found in the Meseta (some swords from Saragossa). The most significant fact is that these swords are not found on their own, but are systematically associated with bosses typical of oval *scuta* (Fig. 13) and sometimes Celtic-type helmets (Vallfogona de Balaguer, Ampurias, Can Miralles, etc.); that is, they belong to a panoply which is essentially Celtic or Gaulish, not Iberian or Celtiberian. These swords always use the Celtic system of an iron scabbard and vertical suspension using a loop (Fig. 13, Fig. 4.3). However, this type of scabbard and suspension system is very rare in the rest of the Peninsula.

For many years the vast majority of swords with a

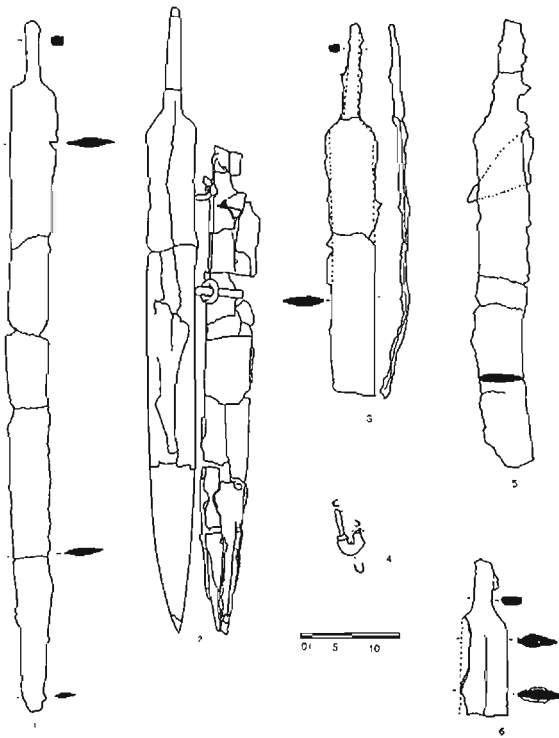


Fig.12: La Tène I-type swords from the area of Murcia (after Quesada, 1990).

straight blade and parallel edges measuring more than 50 cm. found in Iberia, such as those from Arcóbriga in Saragossa and many others from other sites (Gormaz, La Revilla, El Atance, Cigarralejo, etc.), have been classified as 'La Tène'. The discussion has centred around trying to distinguish these 'imported' swords from others supposedly locally produced (the 'Castilian' type as described by Schüle, 1969 and Stary, 1982) on the basis of their form and structure. We think that this discussion is irrelevant and that it is impossible to distinguish two types of La Tène swords in the Meseta. Instead we believe that the immense majority of them are local productions, more or less faithful to the originals from Catalonia and the Northern Pyrenees. They are obviously hand made, and from subtle marginal differences in length or shape of the point it is impossible to classify a sword into one variant or another.

But most important is that swords found in grave goods with metal scabbards of the 'true' Celtic type are extremely rare in the Meseta - even in Arcóbriga, where more than forty swords of this type were dug. In most cases no remains of a scabbard are found, and if they are these consist of an iron frame over a leather or wooden base. Since all the other types of swords (antennae, falcatas, frontón) are usually deposited in tombs with their scabbards -always framed, this absence of the characteristic Celtic metal plate scab-

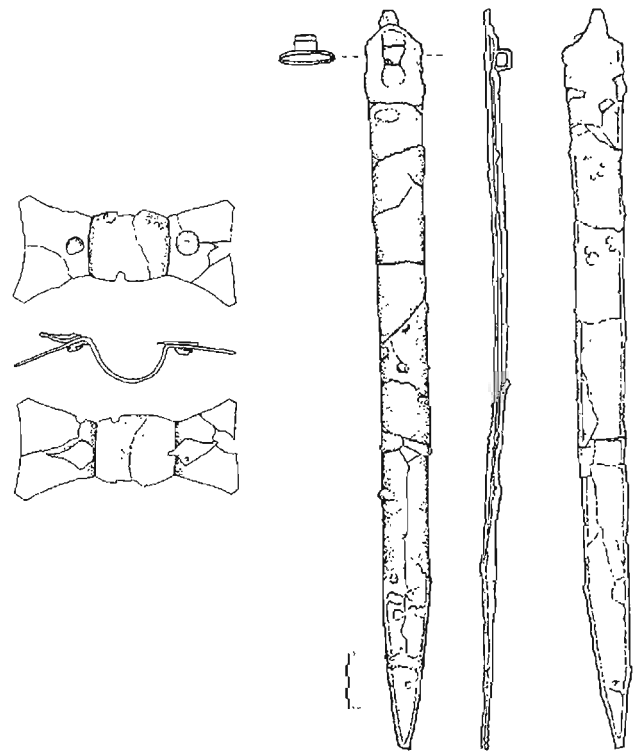
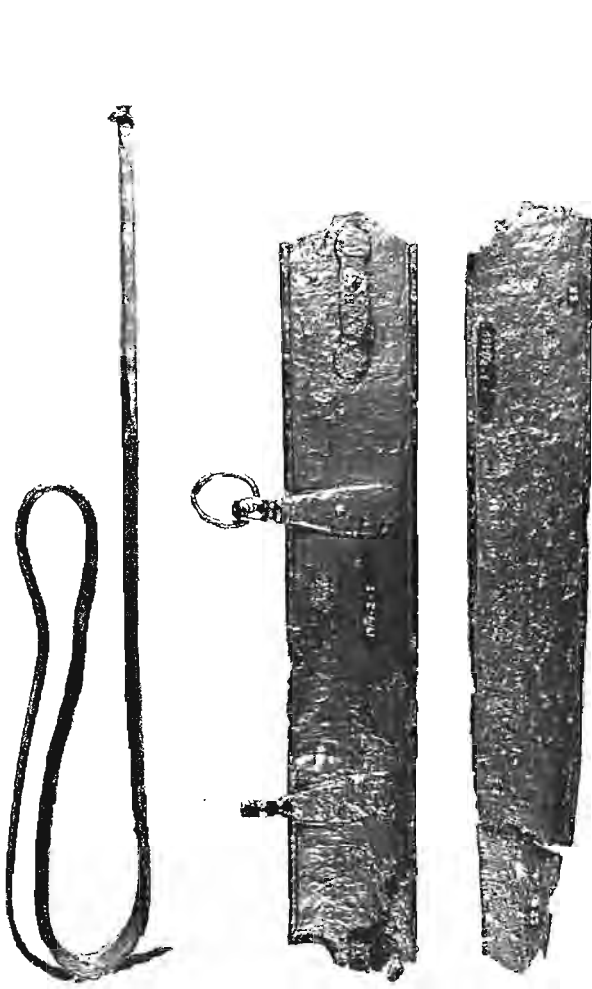


Fig.13: Real La Tène sword & umbo from Turo dels Dos Pins (Barcelona). (After García Roselló, 1993).

bards is significant: these weapons are locally produced; they imitate La Tène types, but they are shorter and have not Celtic scabbards. Instead, they were used with traditional Celtiberian type scabbards made of perishable materials, and suspended with a combination of rings and without loops.

Moreover, it is possible to document archaeologically a process of local adaptation and modification of late La Tène I Celtic swords which led to the creation of a model almost identical to the Republican Roman *gladius* in shape, size and suspension system. We shall now describe this process, which took place in *three phases*.

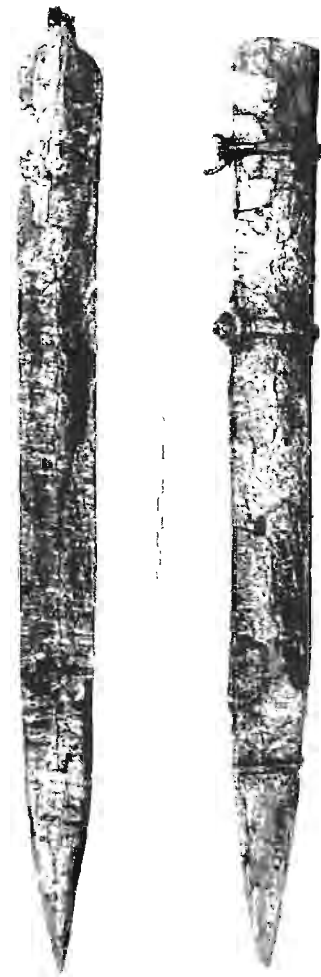
1.- A sword found in Quintanas de Gormaz (Soria) (Figs. 5 and 14) is dated to the latter decades of the 4th century BC. It is - in this particular case - an imported European piece dating from the late La Tène I with a scabbard of iron sheet decorated with a dragon-pair of De Navarro's type II (Lenerz de Wilde, 1986, De Navarro, 1972; Stead, 1984). However, it has a very peculiar characteristic: to the Gallic suspension system ('pontet' or 'suspension loop') have been added a pair of horizontal metal clasps holding two rings, probably for a baldric. This is the traditional system throughout the Iberian Peninsula in the Iron Age (in Iberian falcatas, Fig. 2, and also in Celtiberian antennae swords, Fig. 1).<sup>8</sup> In the Arcóbriga cemetery in Saragossa at least one



*Fig. 14: Modified La Tène sword from Quintanas de Gormaz (Soria). Late 4th-early 3rd centuries BC. It is an European weapon decorated with a dragon-pair, but the scabbard has been modified with the addition of two clasps fitted with rings, probably for a baldric. The original Celtic pontet is still there, however. End of the 4th century BC.(photo MAN).*

other example with a scabbard modified in the same way has been documented (Fig. 6). This is a clear indication that the Celtic suspension system was not popular in the Peninsula.

2.- The next step in the process of transforming Celtic weapons taking place in the Peninsula can be seen in Grave 54 at El Cigarralejo (Murcia), in Iberian territory (Figs. 4.4, Figs. 12.2, and 15), dated towards the end of the 4th century BC. Here a step further from in Quintanas de Gormaz has been taken. The scabbard is metal, iron plate, but the suspension loop has disappeared and only the two rings of the Iberian system remain. The scabbard is not decorated, and



*Fig. 15: Modified La Tène-type sword from El Cigarralejo, grave 54 (Murcia). Here the Celtic suspension system has been disposed of, and only the 'Iberian' or 'Mediterranean' rings remain. (photo author). Second half of the 4th century BC.*

it is possible that here we have a locally made sword very similar to the European prototypes, but with the suspension system changed.

3.- The third step in the process of transformation can be seen in a sword of the Sep. 201 of La Osera in Avila (Fig. 4.6 and Fig. 7), possibly datable to the first half of the 3rd century BC. Here the iron scabbard has disappeared, and must have been substituted by one made of leather or wood. Only the two clasps for the suspension rings have been preserved.

The swords of La Osera 201 (Fig. 4.6), Gormaz (Fig. 4.7) and Murcia (Fig. 4.5-11 and Fig. 12), all with blades nearly

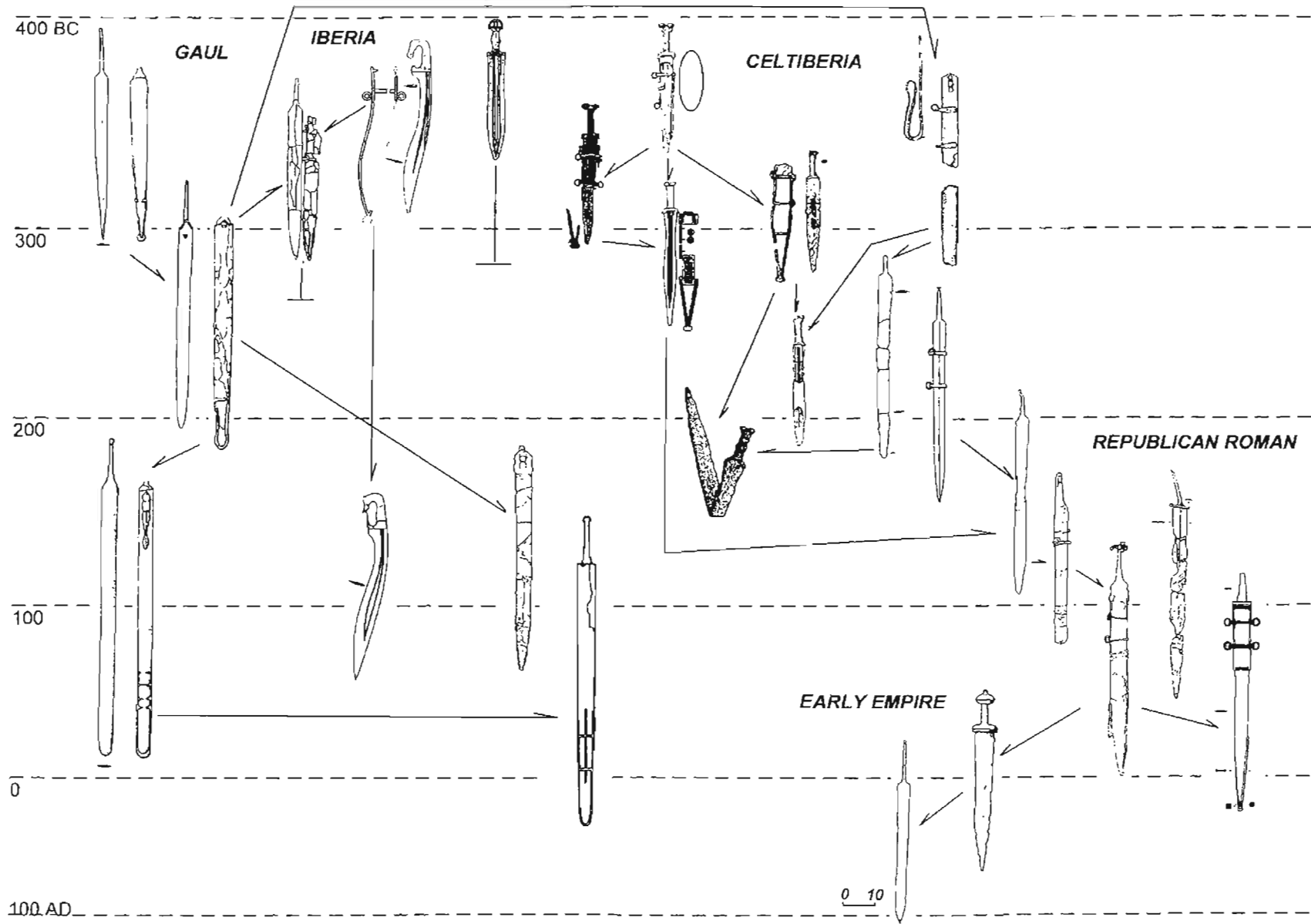
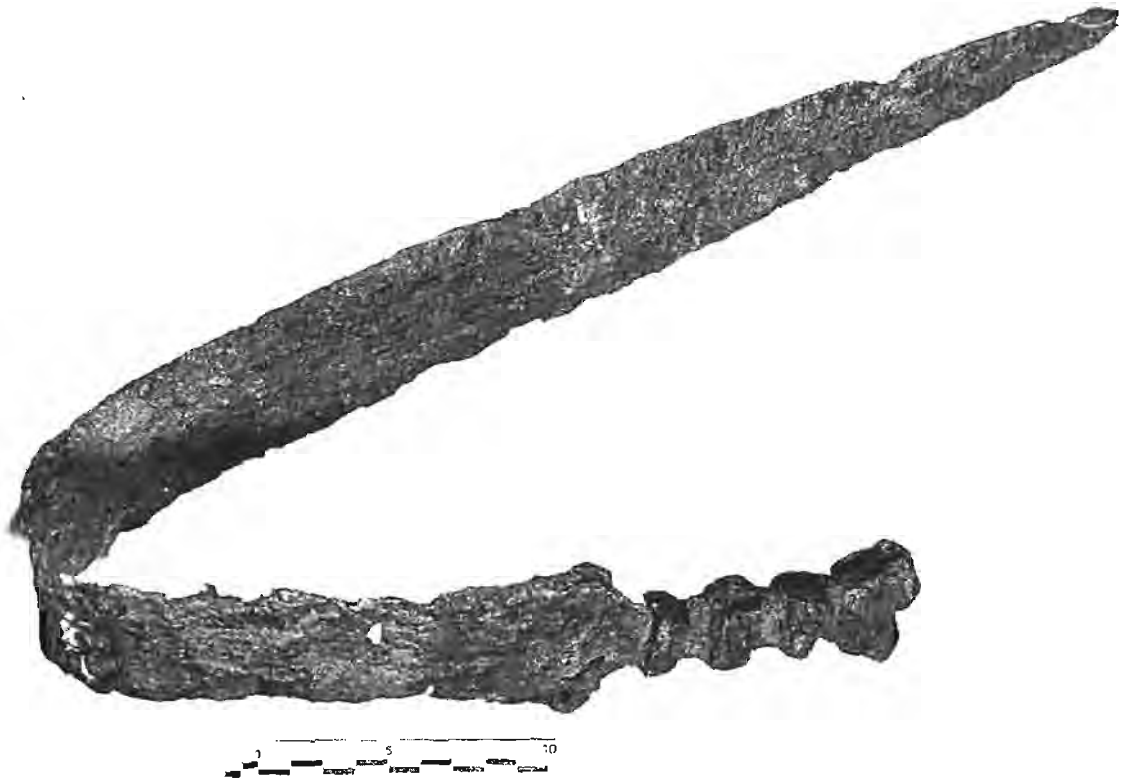


Fig. 16: Suggested evolution of Celtiberian and Iberian sword types and the origin of the gladius hispaniensis.



*Fig. 17: Local La Tène type sword from El Atance, burial 12. The scabbard, probably made of leather, was not preserved among the grave goods. Notice the peculiar hand grip and pommel and grooved blade.(photo author).*

60 cm long (Table II), with parallel edges and a short point, a scabbard of organic material and metal frame, and a suspension system of two rings held in place by clasps, are now very similar to the *gladii hispanienses* of La Azucarera (Fig. 4.8), Delos (Fig. 4.12) or Berry Bouy (Fig. 4.13); so much so that they could be considered to be their direct prototypes. The La Tène II sword used by the Gauls at this time (Fig. 4.17; Fig. 16) has now clearly departed from it in size and shape.

Parallel with this line of development of the primitive La Tène I swords in Iberia, a similar line of swords was produced which were rather more solid, with a grooved blade or one with a midrib (Fig. 9, 15 and 16). The most characteristic examples come from El Atance (Fig. 4.9) and Gormaz (Fig. 4.2), and some of them have a scabbard made of a single piece of metal. Their hilt and pommel are distinctive, reminiscent of the atrophied antennae types (Fig. 10), and also of some depictions of Roman *gladii* with biglobular pommels.

There is only one possible objection to our proposal: the apparent scarcity of La Tène swords in the Iberian Peninsula: it seems odd that the Romans adopted a type of sword very rare among the Celtiberians. In fact, if we were looking for the imported European swords, we would find that they are very scarce, and most of them are confined to

Catalonia. In contrast, from the early 3rd century BC onwards, local imitations of the La Tène sword type are increasingly frequent in Meseta sites, and become predominant in later 2nd century contexts, when they were associated with daggers with a biglobular hilt (in turn undoubtedly the prototype of the Roman *pugio*). Starting from some modified European imported swords, it is possible, as we have seen (Fig. 16) to follow a process of local modifications which led in the 3rd century BC to the creation of a sword which was fairly frequent in later sites. This sword is almost identical to the Republican *gladius*, which was thus a true *gladius hispaniensis*.

#### CONCLUSION (TABLE III AND FIGURE 16)

If we accept that there was a Roman imitation of a peninsular sword, there are at present two possibilities with regard to the date:

a. the *gladius hispaniensis* already existed before 225 BC and was thus the Roman sword described by Polybius (II.33) as used by Romans during the battle of Telamon. This is not very likely, because on one hand that text does not mention the essentially multi-purpose character of the Hispanic sword (cutting and thrusting) and on the other because the Suda insists that the Romans adopted the Hispanic weapon after the war with Hannibal.



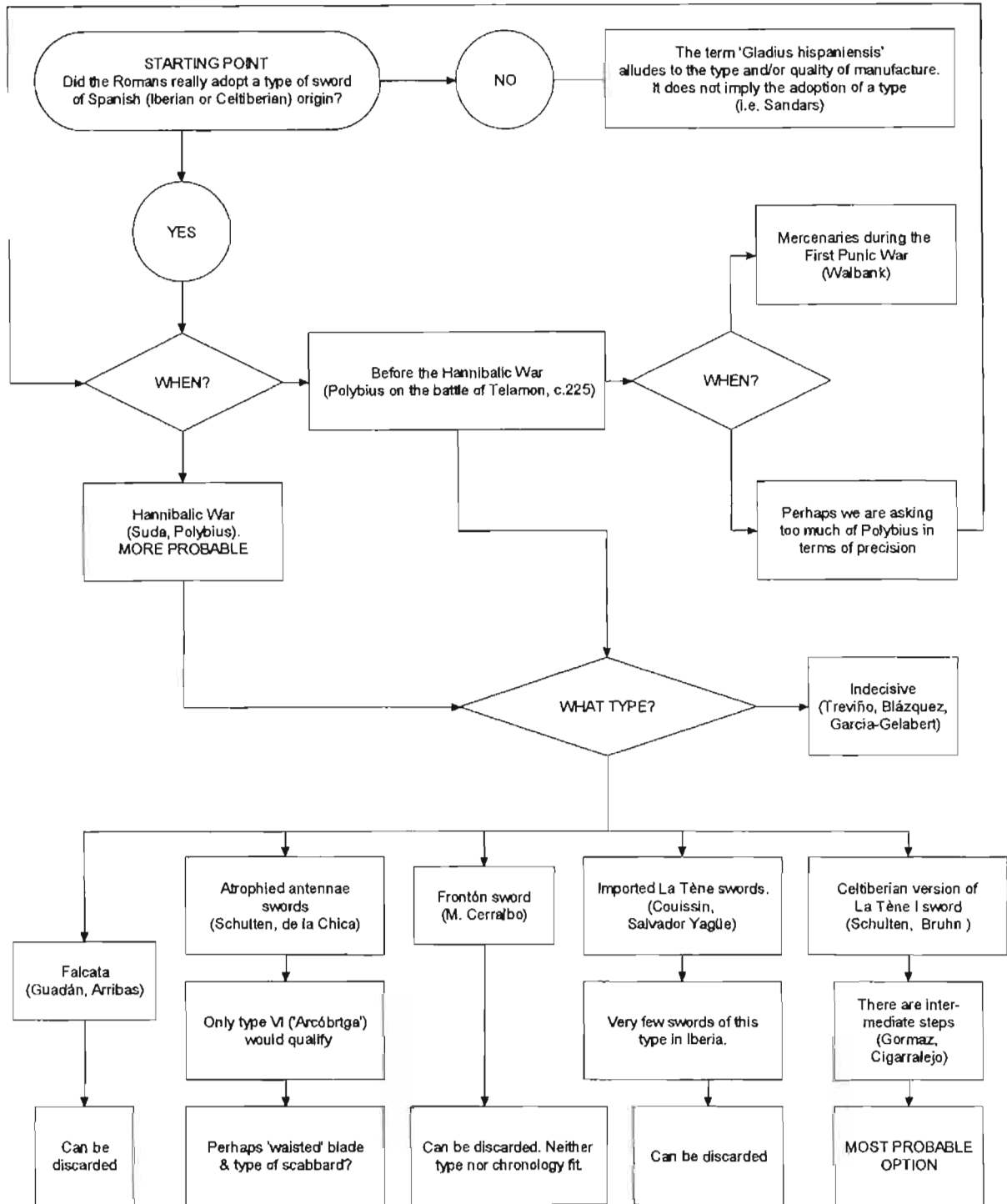


TABLE III: Summary of discussion.

b. it appeared during the Second Punic War, perhaps between 216 (Cannae) and 209 (the fall of Cartagena), or perhaps just after the war. This option fits the evidence of the literary sources and is the one we have followed.

The recent discoveries which have made it possible to define archaeologically the Republican Roman *gladius* also enable us to discard some of the old proposals on the possible Hispanic prototype of the Roman sword, such as the *falcata*, the fronton sword or antennae weapons.

The modifications of early La Tène I swords imported from Europe which took place throughout the 3rd century BC led to a model virtually identical with the Republican Roman swords recently discovered in Delos, France and the Iberian Peninsula itself. These modifications particularly affected the length of the blade (which remained at about 60 cm., instead of being made progressively longer as it was in France during La Tène II); the material used for the scabbard (metal scabbards were replaced with ones made of leather or wood with a frame of iron ribs); the suspension system (two or three rings instead of the vertical fastener); and finally the decoration (embossed plates on the scabbard).

As a result, the prototype of the *gladius hispaniensis* is a Celtiberian sword whose remote origin is not in the characteristic Iberian types of the 5th-4th centuries BC, but in the Celtic La Tène I sword substantially modified in accordance with local tastes from the late 4th century BC in the Meseta and the Southeast.

Nevertheless, the term *hispaniensis* or *hispanicus* came in time to refer to any short, multi-purpose and robust double-edged sword with a straight blade, as a kind of byword for quality, and it was used in this sense by later authors to describe anachronistically the episode of the single combat or duel of T. Manlius against a Gaul set in the 4th century BC (see Table I).

## NOTES

1. Some authors did cast doubts on the Polybius-Suda line of transmission (see SANDARS, 1913:59; DÉCHELETTE, 1927:636 n3), but the 'polybianic' line was generally accepted from COUISSIN (1926:223 ff.) to WALBANK (1957: 704).
2. Thus, Polybius often called the straight sword of the Gauls *machaira* - possibly because of its slashing action, (e.g. 2,33.5); similarly, the Roman sword is sometimes referred to as *xiphos* (2,33,4) and sometimes *machaira* (6,23,6).
3. See QUESADA, 1994 for the case of *machaira* and *kopis* in the sources.
4. An alternative is to assume that the short and pointed Roman sword described by Polybius in the battle of Telamon (2,30-33) was already the *gladius hispaniensis*. In this case, we would just have to accept the position of Walbank, for whom «it is clear from ii.30.8 and 33.3 that the sword used during the Gallic tumultus of 225 was virtually the same cutting and thrusting weapon, and the Romans may have adopted it from Spanish mercenaries fighting for the Carthaginians in the First Punic War...» (1957:704). The third possibility is that we may be trying to extract too much from the brief descriptions in Polybius, who was not after all writing a treatise on the evolution of Roman weaponry.
5. FEUGÈRE (1993:98) also speaks of 'tranchants parallèles'.
6. The rings could also be part of a suspension system with a belt, although different from the Celtic type.
7. The authors cited (IRIARTE *et al.* 1996) make a distinction between two types of swords: the La Tène and the *gladius hispaniensis* types. Since we have been unable to examine the pieces at first hand, despite our attempts, we cannot confirm this opinion. From the drawings and photographs published such a clear typological distinction cannot be deduced, mainly because all the swords are more or less fragmented and in a poor state of preservation.
8. This is the system also employed in Greek swords. Baldrics are well documented in Iberian iconography, such as the sculptures from Porcuna (early 5th century BC), bronze votive figures (5th to 2nd centuries BC) and painted pottery (late 3rd century BC). See QUESADA, 1997. Incidentally, the Iberian case proves A. Rapin wrong when he states that Greek hoplites used baldrics because their style of hand-to-hand fighting did not involve much running and forced movements, and could therefore afford 'du flottement de l'épée sous son aisselle gauche' ('combattant statique'); while the Celts needed a system that kept their scabbards steady while running, jumping and slashing with their long swords (RAPIN, 1991:351-352). The Celtiberians used hit-and-run tactics and wild charges more similar to the Celtic ways of fighting than to the Greek hoplite tactics; but they also used the supposedly loose fitting baldric. We believe that the reason lies not in tactics but in sword lengths: Greek, Iberian and Celtiberian swords are all very short, and not very cumbersome; Celtic swords are much longer and demand a system of suspension that does not get into the way while fighting. In hand-to-hand fighting (when *gladii res geritur*) violent and quick motion is the norm, independently of the tactical system employed, be it phalanx or warband.

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