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Italy, its Interconnections and Cultural Shifts During the Iron Age

The papers of this session concentrate on relations and exchange networks between Italy and specific regions, such as central Europe, the Levant, Sardinia or Euboea, from the 10th till 8th century BC. By selection, imitation and revision, these relations led to specific forms of cultural adaptations that seem to differ per region and often even per major site.

The participants of this session include:

- Annette Rathje who discusses the orientalising phenomenon in Central Italy.
- Franco Campus, Valentina Leonelli and Fulvia Lo Schiavo, who concentrate on aspects of the cultural transition from the Bronze to Iron Age in Nuragic Sardinia and its relations with Italy, especially northern Etruria.
- Ferdinando Sciacca writes about the transition from the Iron Age to the Orientalising Period examining sites such as Torre Galli and Veio.
- Cristiano Iaia focuses on relations with Central Europe and subsequently with the Mediterranean based on an intricate reading of bronze vessels during the Early Iron Age of North/Central Italy and finally
- Bruno d'Agostino was so kind to elaborate his comments on the relevance of this session while also referring to the impact of early contacts with the Euboeans from ca. 800 BC onwards.

The networks referred to by these colleagues and myself are primarily documented in the circulation of specific types of artefacts, creating countless distribution maps of, for example, Sardinian finds in Italy, crested helmets or particular Levantine bowls (fig. 1). What do all these distribution maps imply?

For me, they indicate that Italy had become a core-region for the Mediterranean and beyond from the 9th century BC onwards, assisted by a network of emerging Iron Age centres from Calabria to the Veneto. These centres appear to have had an open economy with freedom of trade and few restrictions in transfer, relocation and communication. This network of rising centres could also accommodate various groups from elsewhere such as Sardinians, people from the Balkans, Phoenicians and Euboeans who arrived in Italy during the Iron Age, as is documented in the papers of this session. It is noteworthy that none of these incoming groups became dominant, functioning within existing and thriving communities¹. The input of these

¹ The Greek colonization of southern Italy falls outside the framework of this session. Prior to the 7th century BC there is no clear evidence of Greek control over a hinterland around the settlements that were founded. The exploitation of a hinterland within an urban context is the criterion that distinguishes for me a colony from a village, trading settlement, emporium, port of call etc.

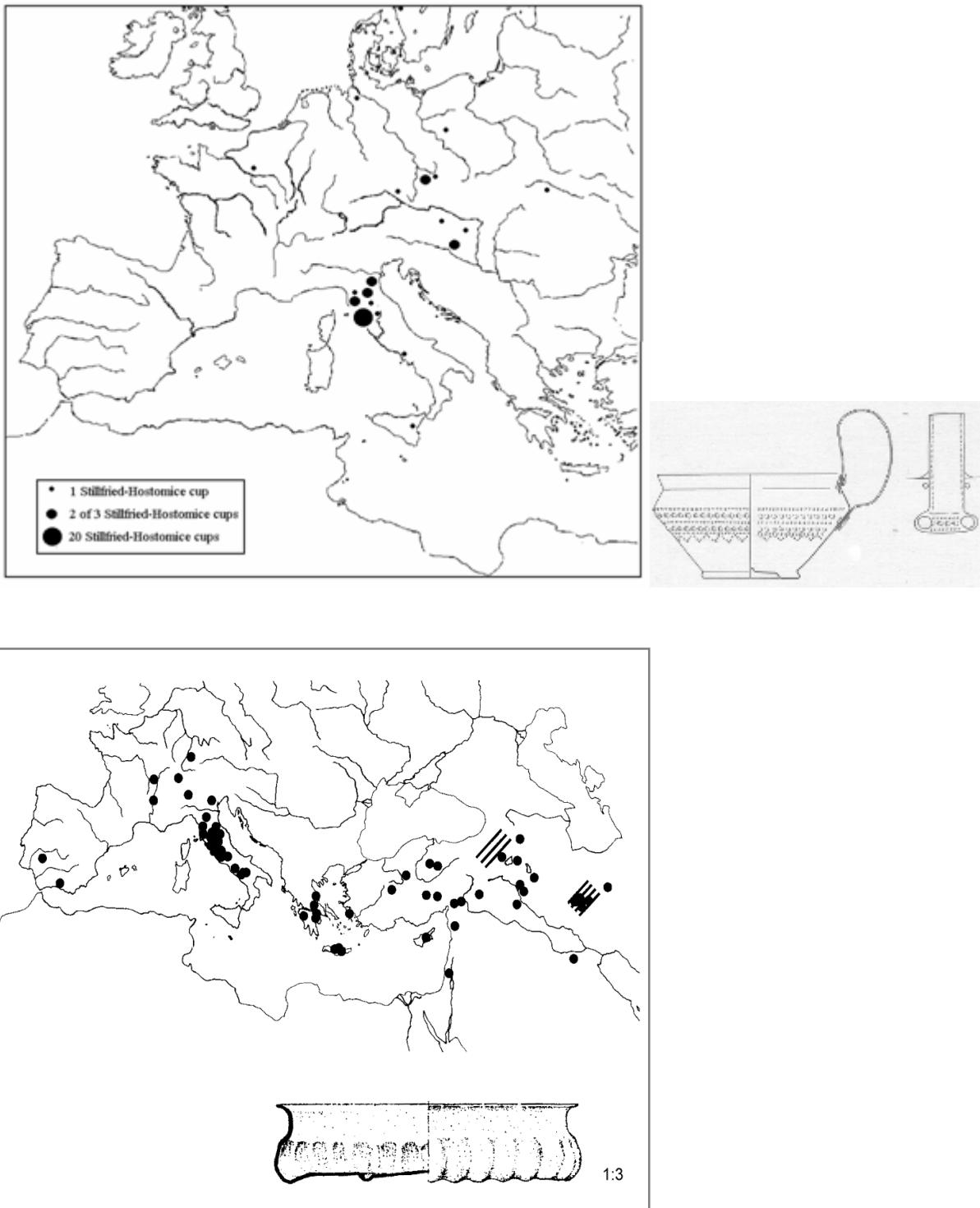


Fig. 1 – Distribution maps of various types of artefacts mark the relations between Villanovan Italy and Urnfield Europe, for example, the distribution of Stillfried-Hostomice cups from Sicily to south Sweden: mainly found in Villanovan II tombs and Hallstatt B2/3 and C contexts (After: OLDENBURGER 2005). Ribbed bowls from ca. 800 to 650 BC have an East-West distribution (After: SCIACCA 2005).

newcomers seems to have led to a melting pot of creativity, since ideas and models were elaborated and reworked, resulting in the end in what is known as the Orientalizing period (725-580 BC)².

Another characteristic of the period is the striking regional diversity that we encounter on the Peninsula from the Early Iron Age onwards as each centre constructed its material culture by selecting, adjusting and incorporating explicit artefacts and habits from their neighbours and their interregional or overseas contacts. Thus close study of most Iron Age centres in Italy demonstrates that they have certain aspects in common with nearby settlements but also that their archaeological record is unique in the sense that the cultural character of the settlements is the result of both a local and adopted repertoire of customs. We seem to deal with various routes of selection and with cultural processes that are local and diverse though at the same time congruent; they led in large parts of Italy to the definition of class distinctions and to increasing centralization.

Italy's position in the numerous Mediterranean and European distribution maps also implies that we are dealing with well-established routes, crossing the whole peninsula overland from north to south and from east to west. This exchange network intensified considerably from the second half of the 9th century BC onwards due to increasing mobility, centralisation, forms of early urbanisation and growing population. Within this network the Villanovan centres had become dominant though other groups could join³.

The reconstruction of the character of these interconnections immediately raises topics such as synchronisation and absolute chronology⁴. The correlations given in this session make it clear that any alteration in the absolute chronology of Iron Age Italy will have repercussions for surrounding areas. Absolute chronology, though not an integral part of this session, looms above each paper⁵. All participants seem to agree that during the 8th century BC we are dealing with a transitional phase from Late Villanovan to Orientalizing, which for some of us lasts 3 to 4 generations and which in the conventional chronology lasts 2 generations of 25 years. The 8th century BC does not just represent a stylistic transition but records for central Italy a rearrangement of society with early state formation, the establishment of social class, the rise of the *primus-inter-pares* principle and the formation of various aspects of urbanization. It is difficult to imagine that these all-embracing processes and their lasting effect, took place in just 50 years (780/770 to 725 BC in the conventional chronology, referring to Latian period III and Villanoviano Evoluto/PFII in Etruria).

Hopefully, one of the results of this session will be to show the significant role of the overland exchange network that became fully established during the Iron Age for the centralisation processes. Therefore this paper concentrates on the internal, trading patterns in Italy using the distribution of two distinct materials:

- Amber imported down the line, ultimately originating in the Baltic and
- The introduction of Iron that appears to go the opposite direction, from South to North.

Both materials represent 'interconnection' while in between and in the epilogue, I will discuss the 'Cultural Shift' that is reconstructed as a process of the *longue durée*, of at least a century, in which Villa-

² Iaia in his paper for this session elaborates on terms such as hybridization and the creative reworking of models that arrived from many directions into Iron Age Italy.

³ Villanovan centers include sites such as Pontecagnano, Capua and Fermo that are labeled Villanovan but which are located outside the Villanovan heartland that stretches from Bologna to South Etruria (cf. BIETTI SESTIERI 2005). See also the comments by d'Agostino in his contribution to this session.

⁴ Cf. BARTOLONI, DELPINO, 2005.

⁵ The topic of absolute chronology is raised in the contribution by d'Agostino to this session. I just would like to add that in the debate on absolute chronology I am definitely not the only one who is being persistent. Moreover I use a range of + or - 25 years per absolute date given, which is more flexible than most of my colleagues who maintain the conventional absolute chronology. I fully agree with him that a discussion of who came first, Phoenicians or Euboeans, is tedious because the conventional method of dating, using the Greek Geometric pottery as guide fossil for arriving at absolute dates, results in the outcome that the Greeks will always be among the first to arrive anywhere in the Mediterranean during the Iron Age. Thus the method employed dictates the conclusion reached. Both Rathje and d'Agostino object to a suggestion recently made by me (NIJBOER 2008a), indicating that Late Villanovan = Proto-Orientalizing. To some extent I can see their objections, based mainly on the teleological character of any 'proto-phase', but the only solution we could think of during this session, is a regrouping of the existing terminology. In line with the phasing of *Latium Vetus* one could work out for Etruria periods I, II, III and IV, differentiating for South and North Etruria. There are definite advantages to do so but as Rathje said, this would require another conference.

novan culture is gradually superseded by an Orientalizing one (cf. fig. 1)⁶. Primarily based on the rich and evocative funerary record of Iron Age Italy, one can detect a cultural change of Villanovan communities with their orientation towards Urnfield Europe into Early State societies with an Oriental idiom, as if the traditional perspective was slowly redirected from North to East in the mean time altering the structure of society⁷.

Before discussing amber and iron, a brief account is given of the relations between East Italy and the Balkans since the Adriatic is not covered in the other papers, and appears to have remained closed during much of the Iron Age to incoming groups such as Phoenicians and Euboeans.

A short account on the relation between East Italy and the Balkans

For over 30 years various scholars on both sides of the Adriatic have commented on the close relations between East Italy and the Balkans based on similarities in the material and funerary record⁸. Some reconstruct a cultural *koiné* for the coastal sites along the Adriatic, revealing a tight network of communication from the Early Iron Age onwards. Artefact groups that document this network are various types of bronze fibulae, fine ceramic wares decorated with Geometric, Daunian motives, while there are strong resemblances in the impasto pottery. Revealing is the slow advance of Hellenic groups into the Adriatic that might be explained by the strong ties that existed between the coastal Balkan regions and their Italian neighbours. While some Euboeans can be traced in Southern Italy from 800 BC onwards, the presence of Hellenic groups in the Central and Northern Adriatic can not be detected during the 8th and most of the 7th century BC. Only the establishment of trading centres such as Spina and Adria around 550-500 BC resulted in the import of significant numbers of Greek ceramics in towns such as Bologna. Prior to the late 6th century BC, there was hardly any demand for Greek pottery in northern Italy⁹.

Close links on both sides of the Adriatic were documented by Yntema who examined the matt-painted pottery of southern Italy and demonstrated that there are resemblances between the decoration and vessel forms of ceramics from the Salento and the Devoll region in Albania. Imported Albanian wares are present in nearly every context excavated at Otranto, though in limited quantities. This and the mimicking of decorative motives, indicates that overseas contacts between the Salento and southern Albania were regular and frequent during the 9th and 8th century BC¹⁰.

The similarities in impasto pottery are another marker for these Adriatic relations. Gatti recently examined the impasto pottery on both sides of the Adriatic, concentrating on ceramic assemblages of the central Italian east coast and of Dalmatian sites such as Nin, Radovin and Zara¹¹. Especially the impasto pottery from Nin and the Picene region have in common both decorative and formal elements. Noteworthy is the correspondence in enhancing ceramics with bronze knobs, which became typical for the 8th and 7th century BC in North-East Italy. Specific sites on the central Italian Adriatic, such as Martinsicuro, have a remarkable affinity with the trans-Adriatic material and indicate more direct and intense trading contacts¹².

These trading links between the coastal sites of the Balkan and their Italian partners that became established during the Iron Age continued into later periods. The distribution patterns of artefact types such as

⁶ Or South Etruria period II gradually altering into South Etruria period IV, being the Orientalizing Period of 725-580 BC. Etruria period III is thus the transitional stage from Villanovan to Orientalizing in line with *Latium Vetus* phase III.

⁷ Iain in his paper to this session discusses the relation between Urnfield Europe and Iron Age Italy.

⁸ cf. BATOVIĆ 1976; PERONI 1976; BIETTI SESTIERI, LO SCHIAVO 1976.

⁹ 8th and 7th century BC Greek ceramics in Northern Italy are known in extremely limited quantities and arrived there by down-the-line trade from Etruria (cf. SHEFTON 2003). It appears that Greek commodities are hardly distributed in Northern Italy prior to the period 550-500 BC. Take as example, an important site as Verucchio that emerged during the 9th century BC and that faded around 650 BC. No Greek ceramics were found at Verucchio while the site fully participated in what is known as the Orientalizing phenomenon (cf. NIJBOER 2008a).

¹⁰ YNTEMA 1985, 76–85.

¹¹ GATTI 2005.

¹² GATTI 2005.

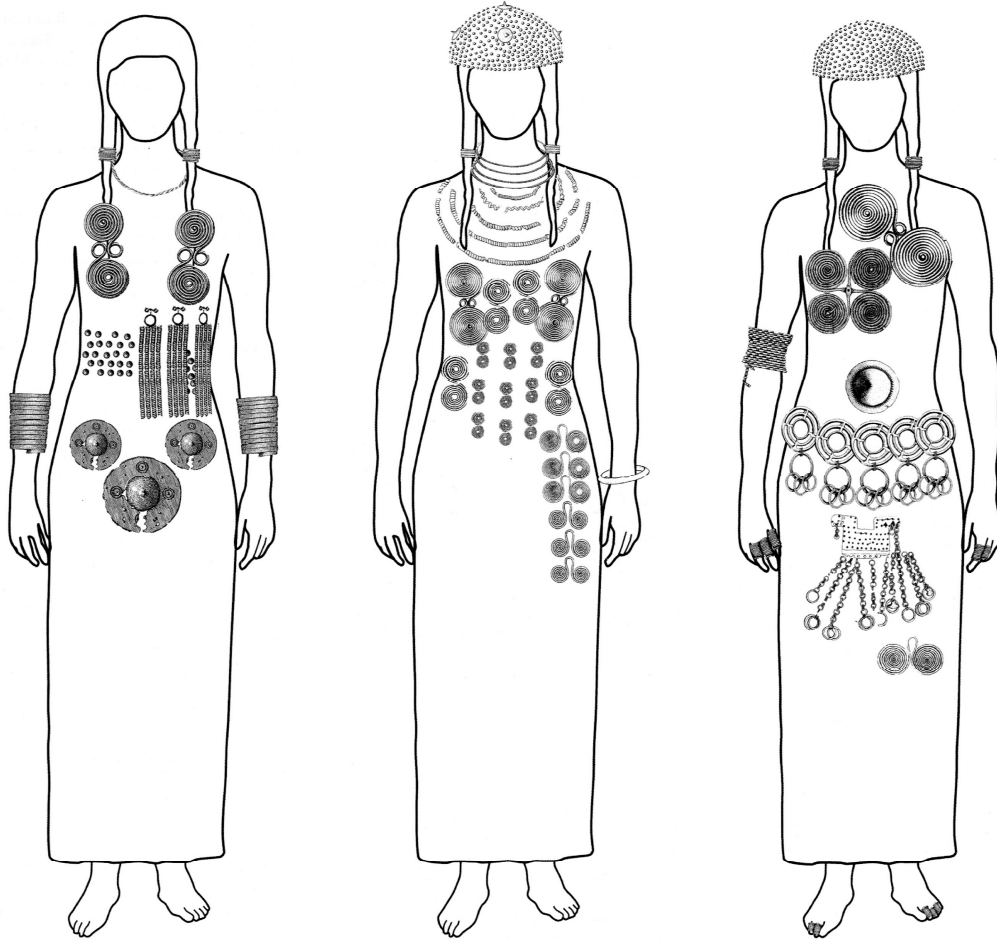


Fig. 2 – Typical, female ceremonial dresses and ornaments; Tomb at Vergina, Macedonia, probably 10th/9th century BC; Tomb 155, San Canziano-Skocjan (Slovenia), possibly 9th cent. BC; Tomb 468 at Inoronata (Metaponto), early 8th century BC (After: IAIA 2007).

Apulian geometric craters, ‘Dreiknopffibel’ and Etruscan ‘Schnabelkannen’ document that certain goods from the Italian homeland had a wide distribution from the 8th till 6th/5th century in the Balkan and in Europe North of the Alps¹³. Countless artefact types travelled across the Adriatic and reveal close exchange networks. This is not just expressed in the distribution patterns of goods but also in cultural customs such as funerary practices or female dress codes; of women covered with bronze ornaments (fig. 2). Close links can especially be noticed between the central/south Balkan region, South-East Italy and the Oenotrian settlements in southern Italy. Figure 2 gives some reconstructions by Iaia¹⁴ of the position of bronze ornaments on typical female, ceremonial dresses based on the excavation:

- of tombs at Vergina, Macedonia, probably assigned to the 10th/9th century BC.
- of Tomb 155, San Canziano-Skocjan (Slovenia), possibly assigned to the 9th century BC and
- of tombs at Inoronata (Metaponto), early 8th century BC¹⁵.

Comparable ornaments and ceremonial dresses were also excavated in the Picene region such as the finds from:

- Tomb 7/1902 of the Cardeto necropolis at Ancona allocated to the early Iron Age/PFI and
- Tomb 85 of the Servici necropolis at Novilara assigned to the advanced Iron Age/PFII¹⁶.

¹³ cf. FREY 1999, 18–23.

¹⁴ IAIA 2007.

¹⁵ CHIARTANO 1996, Tomb 468.

These ornaments and the way they decorated female dresses (fig. 2) indicate that we are dealing with a cultural phenomenon that involves more than just the transmission of goods. With these data we can no longer exclude the possibility of the arrival of individuals or groups from the Balkans into Italy during the late 9th and 8th centuries BC within a 'panadriatic' context. One can think of marriage alliances but also of treaties with a wider significance such as gentilital, religious or tribal bonds. The settling of people from the Balkans into southeast Italy coincides with the reconstruction of the arrival of Sardinians, Phoenicians and Euboeans into western Italy during the 9th and 8th century BC¹⁷. However, all these groups were accommodated in well-established local communities since the archaeological stratum of Iron Age Italy shows a remarkable continuity in material culture from the Late Bronze Age onwards, exemplified in terms such as Proto-Villanovan/Villanovan and in the phasing of *Latium Vetus* from Period I (Late Bronze Age/Early Iron Age) to phase IV (closing around 580 BC).

The archaeological data give the impression of an independent, trans-Adriatic exchange network in which numerous ethnic groups on both the Balkan and the Italian side participated during the Iron Age. This network documents some cultural resemblances or, in Peroni's words a '*trasmissione culturale selettiva*', a transmission of selected customs and artefact types from elsewhere¹⁸. Thus specific habits and goods were favoured and adopted in one region or settlement while neighbouring regions/settlements borrowed and reworked other elements from elsewhere.

Women clad in bronze, as found in the Balkans, have been excavated in considerable numbers all over Italy, for example in

- Tomb 81 at La Rustica (Rome) and
- Tomb 235 Inconronata – San Teodoro (loc. La Cappella, near Metapontum)¹⁹.

These tombs are mainly assigned to the 8th century BC. Often numerous amber beads and fibula-beads accompanied them, as illustrated in fig. 3 by Tomb 81 at La Rustica (Rome). It is thus recorded that the demand for amber increased significantly during the 8th and 7th centuries BC and their trade is reconstructed as a route overland from North-East Italy along the Adriatic to western and southern Italy, an exchange network in which Verucchio and coastal Picene settlements, played a major role²⁰.

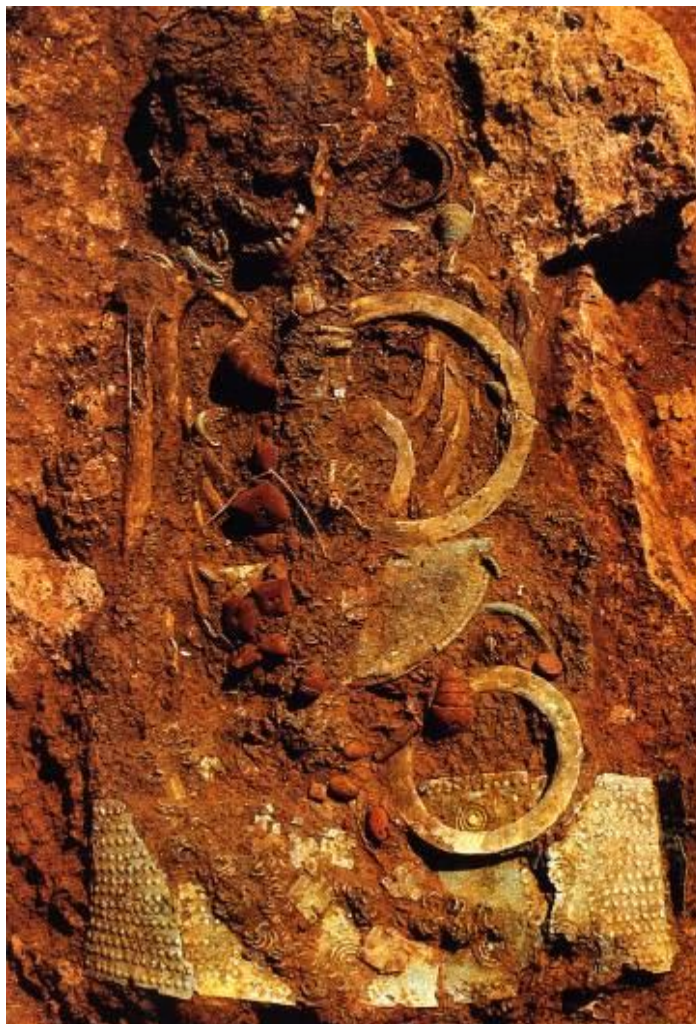


Fig. 3 – Example of a woman 'clad in bronze', Tomb 81 at La Rustica (Rome), 8th century BC. Often numerous amber artefacts accompanied the funerary dress of these women (From: DE SANTIS 2007, Fig. 4).

¹⁶ BERGONZI 2007.

¹⁷ As examined in the other papers of this session.

¹⁸ PERONI 1976.

¹⁹ DE SANTIS 2007; PACCIARELLI 2007.

²⁰ Negrone Catacchio provides an account on amber from the Picene area and its Adriatic network (NEGRONE CATAACCHIO 2003).



Fig. 4 – Amber routes during the Late Bronze Age. Overland route in Italy changed during the Iron Age on account of the string of 'Villanovan' centres from Bologna in the North to Sala Consilina in the South (After: NEGRONI CATAACCHIO ET AL., 2006, 1466, fig. 8).

Trade routes overland; the role of amber

Amber can derive from different sources. There are various local amber deposits in Italy that were exploited occasionally from the Copper Age onwards but the major deposits of amber are found along the shores of the Baltic and the North Sea.

Figure 4 illustrates the reconstructed amber routes during the Late Bronze Age (LBA), overland and overseas²¹. For example, the distribution of Stillfried-Hostomice cups from Sicily to south Sweden, as presented in fig. 1, is in line with one of the routes in fig. 4²². Negroni Catacchio, who has studied in detail the pre- and proto-historical amber in Italy for decades, points to the wide distribution of the LBA Tyrins and Alunniere amber beads in Italy and the eastern Mediterranean and to the fact that both types do occur simultaneously on many sites. She has the impression that they were mainly traded as finished products and that amber ornaments were made in a restricted number of production centres in Late Helladic Greece but also in Northern Italy, for example at Frattesina²³. The distribution of LBA amber ornaments makes it likely that amber travelled overland from North-East Italy to Etruria, after which it was shipped to Sardinia already during the Late Bronze Age²⁴. This overland route continued to be used during the Iron Age but the rise of the Villanovan centres from Bologna in the North to Sala Consilina in the South, extended the internal exchange network considerably into Campania and Calabria.

The provenance of amber can be established relatively easily by various scientific methods such as infrared spectrometry and its derivatives (FTIR and DRIFT). Baltic amber will give a typical spectrum and the

²¹ Overseas exchange towards Sardinia is documented by the distribution of Tyrins and Alunniere amber beads.

²² Iaia in his paper for this session discusses briefly the Stillfried-Hostomice cups.

²³ NEGRONI CATAACCHIO ET AL. 2006.

²⁴ See also the paper by Franco Campus, Valentina Leonelli and Fulvia Lo Schiavo in this session.

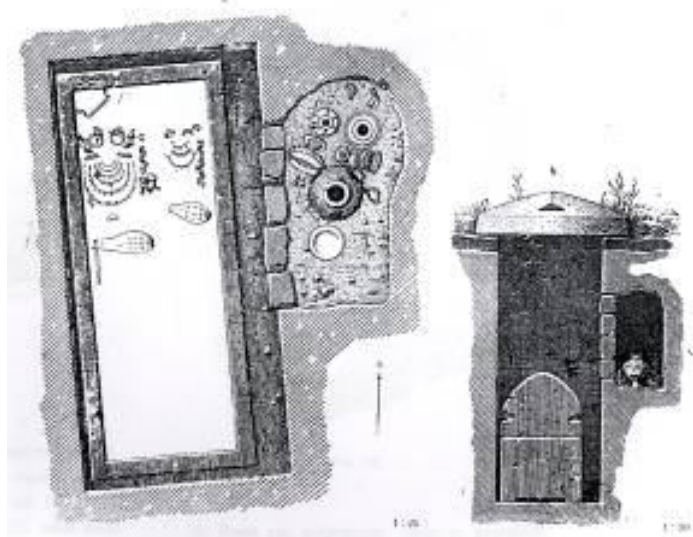


Fig. 5 – Examples of female tombs with their upper body covered with amber beads; Narce Tomb XXXII (COZZA 1894, 139, fig. 56; BARNABEI and PASQUI 1894, 381-384) and beads from Tomb VI at Satricum with over 500 amber beads and ornaments (After WAARSENBURG 1995, 399-492).

technique has been applied in Italy on archaeological amber since 1970²⁵. These studies establish that Baltic amber was imported in increasing quantities into Italy from the Middle Bronze Age onwards but also that local amber deposits were exploited well into the Iron Age²⁶. It has to be noted that the majority of the Bronze and Iron Age amber that was analysed in Italy, derives from the Baltic though there are indications that, especially in Southern Italy, local amber deposits were used as well²⁷.

Starting during the final Bronze Age, amber became more widely employed for ornaments, which is best expressed by amber necklaces such as those from Early Iron Age Torre Galli in Calabria²⁸. The growing deposition of amber during the Iron Age in South Italy has been documented particularly for female tombs, though the quantity of amber per site seems to have differed significantly²⁹. The apex of amber consumption is represented by the hundreds of amber beads and ornaments per tomb occasionally found all over Italy from the 8th century BC onwards (fig. 5). Negroni Catacchio has described these extraordinary female tombs comprehensively and labels their attire as 'vesti sontuose', sumptuous dresses with amber beads and ornaments covering almost the whole upper part of the deceased³⁰. Much of this amber will have been transported overland from northeast to southwest Italy. Verucchio, near Rimini on the Adriatic, stands out as one of the nodal points of this Iron Age amber trade. Figure 6 presents a limited selection of amber artefacts from Verucchio.

The trade inland will have been mainly in raw amber since the distribution of some of the local, highly worked, amber artefacts from Verucchio, appears to be limited. The site itself has been described as a Villanovan proto-urban centre with specialised crafts in metal and amber working³¹. Its material culture is fairly distinct, meaning that various artefact combinations and types are quite typical for the site. What stands out is the wealth in the tombs at Verucchio when compared to other Villanovan centres. 500 tombs from the 9th till mid 7th century BC have already been excavated, according to Von Eles, and the excavation continues. The site contained a population of a few hundreds from 750 to

²⁵ cf. GUERRESCHI 1970; 1975; 1999; MILLS, WHITE 1987.

²⁶ ANGELINI, BELLINTANI 2006.

²⁷ ANGELINI, BELLINTANI 2006, 1488–1489; CICIRELLI ET AL. 2006.

²⁸ PACCIARELLI 1999.

²⁹ BENEDETTI, CARDOSA 2006.

³⁰ NEGRONI CATAACCHIO 2007.

³¹ cf. BOIARDI ET AL. 2007.

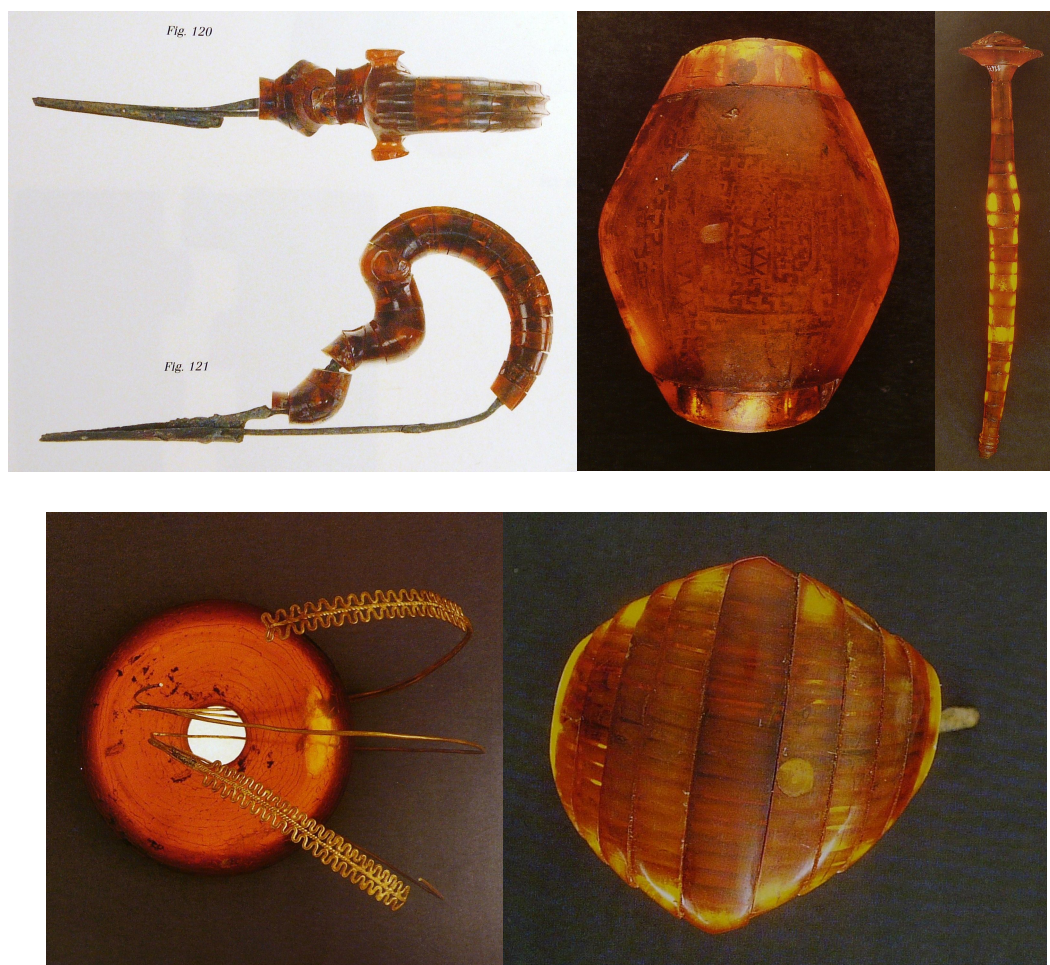


Fig. 6 – Some examples of amber artefacts from Verucchio (After: FORTE 1994).

675 BC and the tombs indicate a clear hierarchical structure of gentilital families. Four of these gentilital groups are now recognised at Verucchio. There are some extremely rich tombs of men, women, and children. For example, 5 tombs at Verucchio contained, amongst other artefacts, a wooden throne; two of these were female tombs³². It is stressed here that at Verucchio, we have no artefacts that indicate Hellenic influences though some goods and symbols have a Levantine, Oriental origin, found also at other Late Villanovan sites in, for example, Etruria³³. Thus Verucchio, which is geographically well-positioned for trade towards the interior of Italy and along the Tiber, functioned as a nodal point for the exchange of amber from the 9th till the 7th centuries BC, after which it seems to have lost its significance as a centre. This amber is mainly of Baltic origin and will have come down through various East Hallstatt centres into Croatia after which it was shipped to the other side of the Adriatic, to Verucchio³⁴. Subsequently much of the Baltic amber that entered Verucchio, will have been distributed down-the-line to other sites to western and southern Italy³⁵.

³² VON ELES 2007.

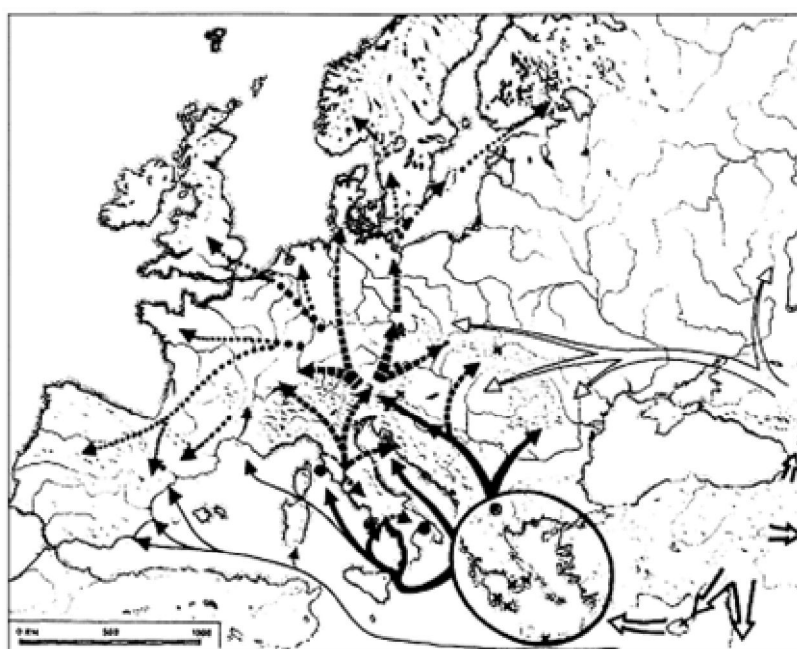
³³ Icons and materials at Verucchio referring to the Levant are the footstool of Ceri type, representations of monkeys, intricate glass beads and ivory used during the manufacture of weapons and other artefacts (NIJBOER 2008a).

³⁴ Another option is that there was also an overland route from North-East Italy, the Veneto, towards Emilia-Romagna and subsequently Verucchio.

³⁵ cf. FORTE 1994; ORSINI 2004.

Having briefly illustrated the exchange routes for Baltic amber crossing the Peninsula from northeast to southwest, the next section of this paper concentrates on the introduction of Iron. This shows an opposite pattern since it is deposited in South-West Italy from the 10th century BC onwards while it seems to become common in other parts of Italy slightly later.

Communication routes overland; the role and adoption of iron in Italy from 950 BC onwards



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|--|---|
| The spread of iron technology | ← Primary directions of spread into Europe |
| X Occurrence of early iron objects | ← Phoenician impact in the Mediterranean |
| • Early metallurgical activity | ← Scythian and Cimmerian influences |
| ← First spread from Anatolia and the eastern Mediterranean in the second half of 2nd millennium BC | ← Central Europe and Italy in the Late Bronze Age and earliest Iron Age: east central Europe 900-800 BC and west central Europe c. 700 BC |
| ○ Greece as the main mediator of the technology in the late 2nd and early 1st millennia BC | ← Northern and western Europe c. 500 BC |

Fig. 7 – Often used model: Greece was the ‘main mediator of the iron technology in the late 2nd and early 1st millennium BC’ (Vandkilde 2007, 159; Kristiansen 1998). This model is not correct since iron was worked in Italy from the 10th century BC onwards prior to arrival of Euboeans or other Greek groups to the peninsula.

Since we are mainly dealing with the Iron Age in this session, the introduction of the metal iron into the various regions, we examine, requires discussion. The early employment of iron in Italy must have constituted one of its attractions for people living to the east and north of the Peninsula. Iron working became introduced in Italy during the 10th century BC while in Urnfield Europe the Iron Age starts with Hallstatt C, around 800 BC, though it was deposited occasionally during the previous Hallstatt B2/3 period. This indicates that iron was available in Italy more than a century prior to its adoption in Europe North of the Alps. Iron was also available in Italy prior to the arrival of some Euboeans to the Peninsula, around 800 BC. The introduction of local iron-working in Italy from the 10th century BC onwards will have assisted its agriculture and the development of its exchange networks with other regions to the north and east since the demand for Iron will have increased significantly during the 9th and 8th centuries BC. The archaeological data indicate that iron was first worked in Southern Italy from ca. 950 BC onwards while it

was adopted in other regions during the 9th century BC³⁶. The spread of iron technology in Italy is illustrated, starting with the evidence for the 10th century BC and subsequently the data for the 9th and the 8th centuries BC. First, however, I need to address a model that is still employed to visualize the advance of iron as a metal for tools (fig. 7). In a recent publication, Vandkilde, following Kristiansen, presents briefly the introduction

³⁶ The introduction of iron is examined by using the rich funerary record of Iron Age Italy that can be studied well due to some recent publications referred to. Thus it is based on a compendium of substantial numbers of iron artefacts that are found in Italy at specific sites. Others have discussed the introduction of iron in Italy using different data: Cf. DELPINO 1988; NIJBOER 1998; VANZETTI 2000, 149–150; Pearce mentions early iron at Frattesina (PEARCE 2007, 103), unfortunately this could not be confirmed so far.

of iron technology in Eurasia³⁷. In her model Greece was the 'main mediator of the (iron) technology in the late 2nd and early 1st millennium BC³⁸. I cannot comment on the other regions of Eurasia, but the representation in this model of the spread of iron to Italy is incorrect. Iron was worked in Italy from the 10th century BC onwards, prior to the arrival of Euboeans or other Greek groups to the peninsula.

The Phoenicians were probably an important mediator in the spread of iron technology towards the western Mediterranean since they were also the main Iron Age traders crossing the Sea from Tyre to Tartessos from the second half of the 10th century BC onwards³⁹. Recent excavations in Huelva on the Atlantic in South-West Spain, demonstrate that the earliest iron working in Spain, dating to the first half of the 9th century BC if not before, is associated with an indigenous-Phoenician emporium⁴⁰. Thus in Spain the introduction of iron and the Phoenicians go hand in hand. The use of iron in Spain also one of the characteristics of its Orientalizing phenomenon⁴¹.

In Italy as well, there are indications that the early encounters with Phoenicians are associated with the introduction of iron. The finds at Torre Galli in Calabria are in this context important since it is the only site in Italy with a significant quantity of iron from the earliest phases of the Iron Age onwards while the site has clear links with the Levant⁴². The catalogue of the necropolis contains 205 Early Iron Age tombs that could be assigned to either Torre Galli phase IA (89 tombs) or phase IB (116 tombs) roughly dated here from 950 to 900 and from 900 to 850 BC⁴³. From these 205 tombs, 56 contained one or more iron artefacts. Thus more or less 25 % of the Early Iron Age tombs at Torre Galli contained iron, amongst other goods. From Table 1 with its variety of iron artefact types, it can be deduced that iron was not a novel material at Torre Galli during phase 1A and that it was probably introduced in southern Italy or Sicily during the final stages of the Bronze Age⁴⁴.

Phase	Fibula <i>Serpeggiante</i>	Other fibula types	Knife	Shaft	Lance point	Sword, mainly short ones
1 A	5	2	9	2	2	8
1 B	11	2	14	-	2	4

+ A few iron ringlets/rings.

Table 1 – Iron in tombs at Torre Galli.

Local iron-working in Calabria from the 10th century BC onwards is furthermore implied by the regional artefact types that were made in iron such as the *fibula serpeggiante meridionale*⁴⁵. Elsewhere I have noted the imports from the Levant at Torre Galli⁴⁶, while the site is not associated with early imports from Greece. Its Aegyptiaca belong to the oldest found on the peninsula⁴⁷. At Torre Galli, faience beads, scarabs, semi-precious, cut stones and ivory were recovered as well as some other Levantine artefacts that were most likely carried by Phoenicians, who crossed the whole Mediterranean from the 10th century BC onwards⁴⁸.

In other parts of Italy, iron was deposited to a much lesser extent during the 10th and 9th centuries BC though it is suggested that iron was worked locally in central Italy from the Early Iron Age onwards, looking at the repertoire of iron artefacts available. At Tarquinia, for example, some fibulae, spears, a bracelet, sword

³⁷ VANDKILDE 2007; KRISTIANSEN 1998.

³⁸ VANDKILDE 2007, 159, Fig. 54.

³⁹ NIJBOER 2008a; 2008b.

⁴⁰ GONZÁLEZ DE CANALES CERISOLA ET AL. 2004; 2006; NIJBOER, VAN DER PLICHT 2006.

⁴¹ cf. MORGENROTH 2004; NEVILLE 2007.

⁴² PACCIARELLI 1999, 61–62, 101–102. Thus quite a few iron artefacts at Torre Galli were associated with ivory (PACCIARELLI 1999; see the paper by Sciacca in this session).

⁴³ PACCIARELLI 1999, 62–65.

⁴⁴ cf. GUALTIERI 1977.

⁴⁵ PACCIARELLI 1999, 133.

⁴⁶ NIJBOER 2008a; Sciacca this session.

⁴⁷ DE SALVIA 1999, 213–217.

⁴⁸ NIJBOER 2008a; 2008b; Sciacca this session.

and dagger are assigned to its phase I, while in its phase II the range of iron artefacts becomes significantly larger⁴⁹. An example of a context with early iron at Tarquinia is the recently excavated Tomb 73 of the Villa Bruschi Falgari (VBF) necropolis (fig. 8). This tomb was dated using the ¹⁴C method and it clearly pertains to the 10th century BC, probably to its second half, 950 to 900 BC⁵⁰. VBF Tomb 73 is at the moment allocated to Tarquinia phase 1A-1B1 and contains a fragment of an iron fibula. So far there are hardly any indications for Phoenician influences during Tarquinia phase I and thus the presence of early iron at the site is reconstructed as a local affair. Another option is that iron was imported overland from southern Italy.

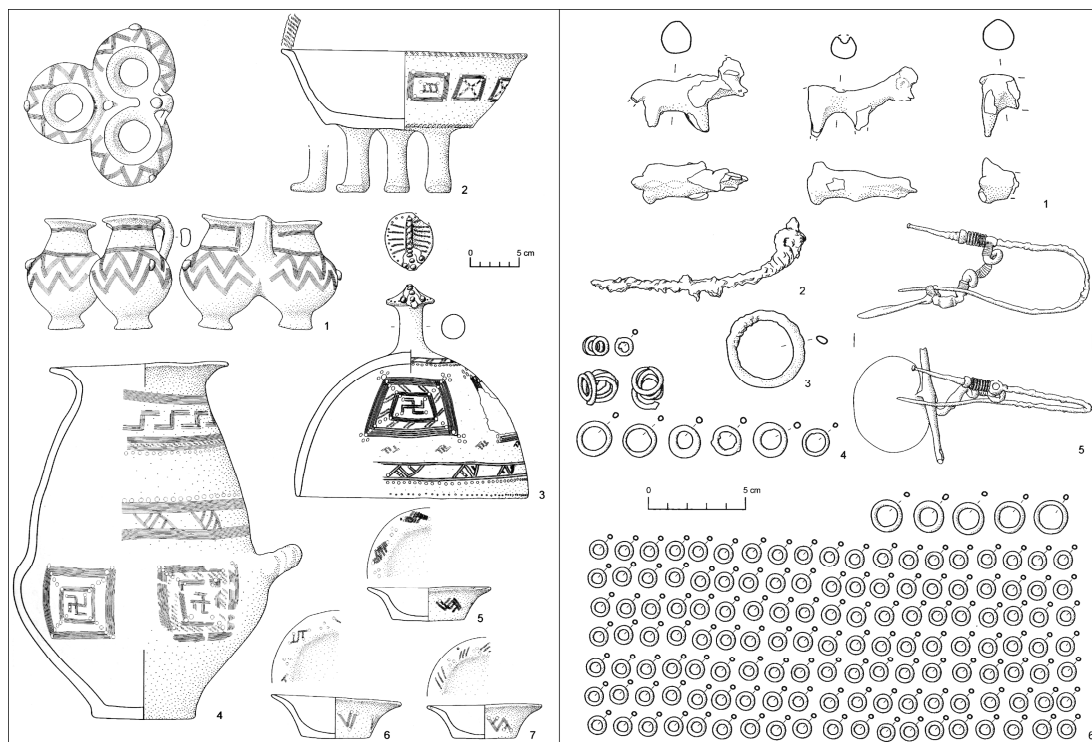


Fig. 8 – An example of early Iron at Tarquinia: Tomb 73 Villa Bruschi Falgari with iron fibula assigned to the transition of Tarquinia phase 1A to 1B1; early phase of Iron Age with radiocarbon date 2820 ± 60 BP (GrA-16430). VBF Tomb 73 is assigned to the period 950-900 BC (After: TRUCCO ET AL. 2005, 363 and 364).

Continuing with the 9th century BC.

A fine illustration of the wide adoption of iron in Italy during the 9th century BC derives from the publication of the oldest tombs at Fossa in the Abruzzo, a site in the interior of Italy and not along its coasts (fig. 9). Twelve tombs could be assigned to its earliest phase, Fossa phase 1A, and they all contain iron. The repertoire consists of various types of fibulae, amongst which fibulae *serpeggianti*, knives, lances, shafts, short swords, pins, cut-out discs, bracelets, rings, hooks and plate. Local iron working is demonstrated by the wide repertoire of iron artefacts of which some are typical for central-eastern Italy, such as the cut-out discs. Fossa 1A coincides with Phase 2A1 in Etruria and IIIA in *Latium Vetus* and is dated here around 825-800 BC⁵¹. Since the range of iron artefacts in Fossa phase 1A is so large, it is likely that iron was worked in

⁴⁹ HARTMANN 1982.

⁵⁰ In collaboration with Flavia Trucco we have dated some tombs of the VBF necropolis using the ¹⁴C method. We obtained for this necropolis a useful sequence in time from 1000 to 800 BC as we did for *Latium Vetus* (NIJBOER, VAN DER PLICHT 2008; BIETTI SESTIERI, DE SANTIS 2008). The ¹⁴C-research for Tarquinia awaits full publication pending the seriation of all tombs excavated in the VBF necropolis. The radiocarbon sequence and the associated tombs imply that the transition of Tarquinia phase I to II is dated around 800 BC as is the transition of Latian phase II to III.

⁵¹ COSENTINO ET AL. 2001, 7, 174–177.

this region prior to the late 9th century BC. One also has to note that at Fossa no Greek artefacts are found during the Iron Age while only occasionally Levantine materials such as ivory were excavated. Thus it appears that iron working as a technology reached Fossa overland without direct input of overseas groups.

Ivory and faience beads were also recovered at Osteria dell'Osa from Latian period IIA onwards though in extremely limited quantities. At this site, the number of iron artefacts in Latian period II is small and consists of two *fibulae a gomito* and two knives. In Latian period III, from the late 9th century BC onwards, the repertoire of iron artefacts increases and includes other types of fibulae, ringlets/rings, shafts, nails, knives, spits, tweezers, axe, short swords, lance points and hooks⁵². Though the number of iron artefacts deposited in the tombs remains restricted at Osteria dell'Osa, the repertoire that includes knives from the earliest phases of Latian period II onwards, is considerable and indicates that iron was worked in the region during the 9th century BC. Bietti Sestieri stresses that all knives at Osteria dell'Osa are of iron from Latian period III onwards⁵³. Nonetheless iron ornaments, tools and weapons were less deposited during the Early Iron Age in tombs at Osteria dell'Osa than at sites such as Torre Galli or Fossa.

As mentioned before, local funerary customs varied considerably in Italy during the Iron Age and this limits the possibilities for a more detailed account regarding the introduction of iron. Thus we know that in the Picene and nearby regions, males were often buried with a substantial number of weapons, many of iron⁵⁴ while at Bologna and Este, for example, with their thousands of Iron Age tombs, weapons were hardly ever

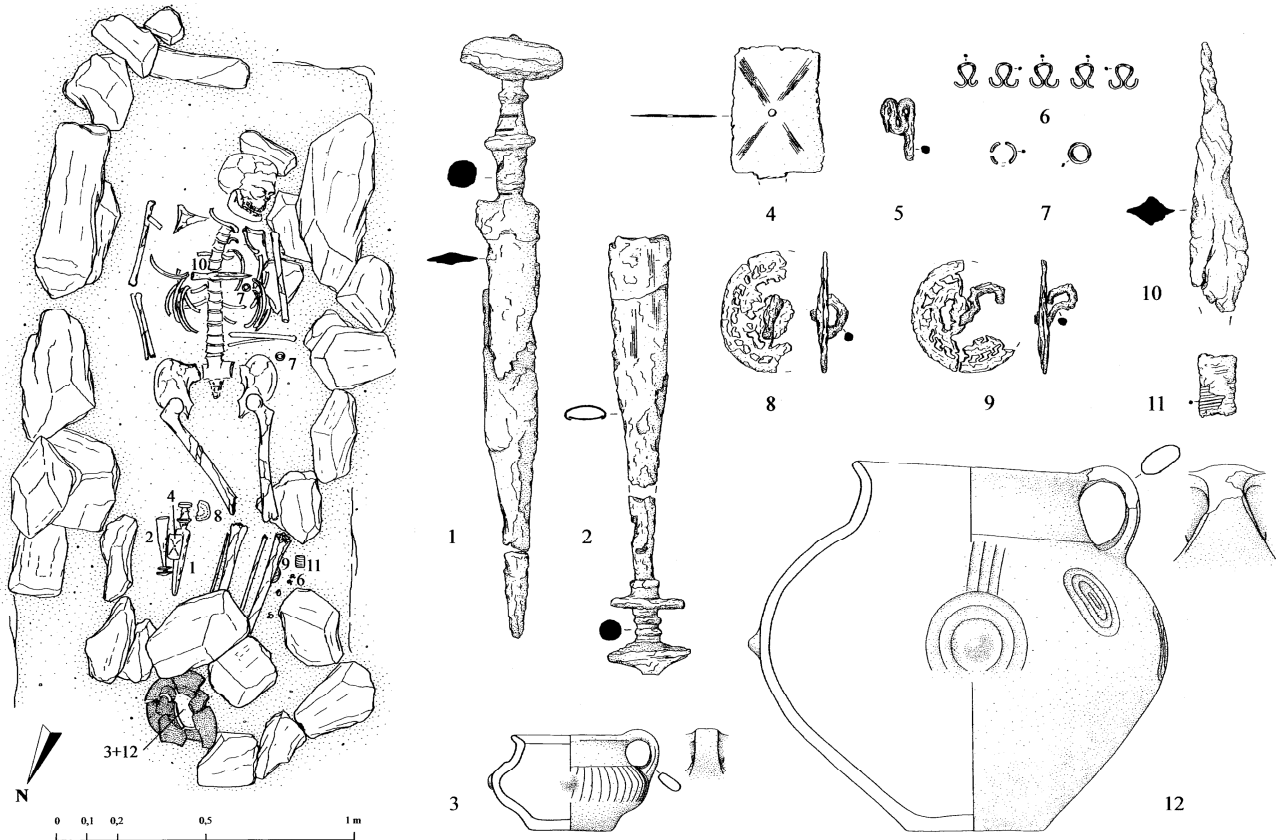


Fig. 9 – Tomb 15 at Fossa with range of iron artefacts assigned to the earliest stages of Fossa phase 1A
(After: COSENTINO ET AL., 2001; 68-69, fig. 17 + Tav. 16.)

⁵² BIETTI SESTIERI 1992.

⁵³ She also suggests that knives during Latian phase II had a cultic function since they are found in tombs with a ritual significance (BIETTI SESTIERI 1992, 398).

⁵⁴ MURA SOMMELLA 2005, 255–257; D'ERCOLE ET AL. 1990, 123ss., 229 ss.

deposited⁵⁵. Another complication is that in many regions of Italy, Early Iron Age tombs are not as abundant as those assigned to the 8th and 7th centuries BC. Thus at Este, based on the *Monumenti Antichi* volumes Este I and II, there are only 8 tombs assigned to phase Este IIA. The repertoire of iron tools during Este phase II is restricted to mainly knives while gradually the range of iron artefacts increases during subsequent periods. Table 2 records that iron is hardly deposited in Este II tombs but that the majority of Este III tombs contain iron⁵⁶. According to Pare, Este III corresponds with Hallstatt C1b⁵⁷ while Capuis and Chieco Bianchi maintain Peroni's periods and match Este III A and III B to Hallstatt C⁵⁸. As mentioned above, Hallstatt C represents, in Europe North of the Alps, the Early Iron Age. Also at Este there are no direct links in this period with the Levant or Greece and therefore it is concluded that the adoption of iron technology is the result of an inland, regional progress.

Este phase IIa	1 tomb out of 8 contains iron; knife.
Este phase IIb	1 tomb out of 2 contains iron; small knife.
Este phase IIc	1 tomb out of 9 contains iron.
Este phase IIc-IIIa	7 tombs out of 12 contain iron.
Este phase IIIa	16 tombs out of 21 contain iron.

Table 2 – The number of tombs with iron artefacts: from *Monumenti Antichi*, Este I + II.

The evidence presented above implies that iron-working spread across the Peninsula during the 9th century BC starting in the South during the 10th century BC. There are no indications in the tombs and sites discussed, that Euboeans were involved in the spread of iron technology since they arrived in Italy from ca. 800 BC onwards. However there are hints that, as in Spain, iron-working in Italy was originally triggered by contacts with the Levant as demonstrated by the archaeological record of Huelva and Torre Galli. Subsequently the network of Iron Age centres covering the whole Peninsula ensured that the technology of iron-working became locally known and adopted during the 9th century BC.

Increasing demand for iron during the following 8th century BC is illustrated by some high status, male tombs from Veio that document the advance of the Orientalizing phenomenon (fig. 10). At Veio there

⁵⁵ cf. PANICHELLI 1990; CAPUIS, CHIECO BIANCHI 2006; CHIECO BIANCHI, CALZAVARA CAPUIS 1985.

⁵⁶ In the context of local differences in burial customs, it is interesting that other types of iron artefacts were deposited in Iron Age tombs at Este and Bologna when compared to those at Verucchio.

⁵⁷ PARE 1998, 352; 1999, 187.

⁵⁸ CAPUIS, CHIECO BIANCHI 2006, 485. According to Pare, Este II coincides with Hallstatt C1A (800 to 730/720 BC; PARE 1998, 352) while Capuis and Chieco Bianchi maintain Peroni's phasing and match Este II to Hallstatt B3 (800 to 700 BC; CAPUIS, CHIECO BIANCHI 2006, 485). According to Pare, Este III corresponds with Hallstatt C1b (730/720 – 660/650 BC; PARE 1998, 352; 1999, 187) while Capuis and Chieco Bianchi match Este III A and III B to Hallstatt C (700 to 600 BC; CAPUIS, CHIECO BIANCHI 2006, 485). These positions are incompatible and it is therefore unfortunate that Pare could not present a paper on the relations between Northern Italy and central Europe around 800 BC though we enjoyed his presence during our session at the AIAC meeting in Rome, September 2008, where he presented a paper on horned helmets, Herzsprung shields, horns/trumpets/lurs and other matters. Este II A and IIB coincide with Bologna II A. According to Pacciarelli, the transition of Bologna IIA1 to IIA2 should be dated around 800 BC (PACCIARELLI 1999, 63). The absolute chronology of Iron Age Italy has been debated intensely the past decades mainly on account of higher dates obtained through methods such as dendrochronology and radiocarbon research. Pare and other colleagues North of the Alps, by raising the beginning of Hallstatt C with almost a century to 800 BC, a date that I also consider to be correct for various reasons, affected the whole structure of Iron Age chronology in Italy. It is at sites in Northern Italy, such as Este and Bologna, where contacts with central Europe are most noticeable. Since these sites in this period do not have direct links with Greece and neither revealed MGII or LG ceramics, except for two bowls from Bologna, a rise of their absolute chronology does not necessarily have to affect the dates assigned to the Greek Geometric pottery though it does affect the reconstruction of events taking place during the 9th and 8th century BC in Italy by stretching the time frame just before the Orientalizing period (725-580 BC). In this paper the chronological tables by Pacciarelli are used for the Iron Age because the interpretation of the radiocarbon dates obtained during my research has more in common with these tables than with the conventional absolute chronology (PACCIARELLI 1999; 2000; NIJBOER 2005; NIJBOER & VAN DER PLICHT 2008). I also would like to stress that Trachsel independently arrived at a similar conclusion (TRACHSEL 2004, 230–242). In our opinion the transition Este IIC to Este IIIA should date around 800 BC.

are four male tombs, assigned to the Late Villanovan period or PF II and dating to the 8th century BC, which stand out. They are presented in chronological order and are marked by a growing deposition of 'wealth' until they become almost like the better known *Tombe Principesche* such as the tombe Bernardini and Barberini at Palestrina and the Regolini Galassi Tomb at Caere, a phenomenon that essentially belongs to the late eighth, early seventh century BC.⁵⁹ The four Veian tombs are:

- Quattro Fontanili T. AA1, Veio phase IIB,
- Quattro Fontanili T. Z15A, Veio phase IIB,
- Casale del Fosso T. 1036, Veio phase IIC,
- Casale del Fosso T. 871, Veio phase IIC⁶⁰.

Fig. 10 illustrates that these rich, late Villanovan, male tombs, increasingly contained artefacts with an Orientalizing connotation. They are therefore suitable predecessors of things to come during the subsequent Orientalizing period (ca. 725-580 BC) and thus reflect the transition from the Villanovan into the Orientalising period. During Veio phase IIB at Quattro Fontanili, there are 11 male warrior tombs (tombs with weapons such as lances, axes, shields, swords, breastplates, javelins and helmets) of which 2 contain an extremely rich *corredo*: Quattro Fontanili Tomb AA1 and Tomb Z15A⁶¹. As such the 4 tombs of fig. 10 illustrate the *primus-inter-pares* principle⁶². Both Veian IIB tombs include the following artefacts with a Levantine connotation: chariot/cart, scarab, *impasto rosso*, gold foil and wire, specific glass beads, silver wire, spits, bronze bowls, fan and possibly a breastplate, ivory and sceptre⁶³.

During the subsequent period, IIC, it is more difficult to find comparable evidence at Veio due to the poor publication of the Casale del Fosso and other necropolises. The Quattro Fontanili necropolis seems to have lost its predominant position since only three tombs with weapons are assigned to Phase IIC⁶⁴. However the most significant male, high status tombs assigned to Veio phase IIC, are Casale del Fosso Tomb 1036 and Tomb 871. Only the last tomb contains a Late Geometric *kotyle* amongst many other artefacts, most of which local and Levantine status markers⁶⁵. Both tombs include the following artefacts with a Levantine connotation: cart, *impasto rosso*, copper-alloy mixing bowls, basins on tripod, pilgrim flask, foot rest of Ceri type, sceptres, gold wire and foil, spits, a silver hemispherical bowl, bronze ribbed bowls, ivory and fan⁶⁶. Besides many other artefacts recovered in these four Villanovan tombs, Table 3 presents those made of iron, illustrating that iron was used during the 8th century BC at Veio for a whole range of artefact types and that it had somewhat lost its exclusive character because it was also employed for construction as indicated by the iron nails and the iron reinforcing parts of wagons.

⁵⁹ The *Tombe Principesche* are better known for their Levantine *keimelia* than for their Greek pottery.

⁶⁰ DE SANTIS 2005.

⁶¹ DE SANTIS 2005.

⁶² DE SANTIS 2005; NIJBOER 2008a.

⁶³ *Notizie degli Scavi* 1965, 171–184; *Notizie degli Scavi* 1970, 292–308. The ivory listed here needs to be confirmed since some authors cannot distinguish between ivory and bone (Cf. VAGNETTI ET AL. 2005). I have used the term ivory only in case the author did. In both tombs some of the ceramics are listed as having a burnished, red slip, which has to be described as *impasto rosso* (*Notizie degli Scavi* 1965, 176; *Notizie degli Scavi* 1970, 297). Boitani recently published Tomb AA1 in detail (BOITANI 2004). The ceramic bowls on raised foot depicted in fig. 10 are also found in Phoenicia: Cf. CHAPMAN 1972; ANDERSON 1979. The Italian *impasto rosso* ware is considered to be the local imitation of the Phoenician burnished red-slip ware. *Impasto rosso* is during the 8th and 7th century BC one of the most common ware groups in central Italy. Sadly, thus far the *impasto rosso* tradition is not studied as meticulously as the Greek pottery and the Greek imitation ceramics found in Italy. Dr.ssa S. ten Kortenaar finished in 2006 a PhD on *impasto rosso* with Prof. G. Bartoloni under the title '*La ceramica in impasto rosso. Le fasi iniziali della produzione e della circolazione. Alcuni contesti dell'Orientalizzante antico e medio dell'Etruria Meridionale e del Latium Vetus*'.

⁶⁴ DE SANTIS 2005.

⁶⁵ DRAGO TROCCOLI 2005.

⁶⁶ Cf. COLONNA 1991; DRAGO TROCCOLI 2005. The metal ring shaped flask from Casale del Fosso tomb 871 finds parallels in rare, ceramic, ring shaped flasks from the Levant: FINKELSTEIN ET AL. 2000, 269; KARAGEORGHIS 1983, 29, 37.

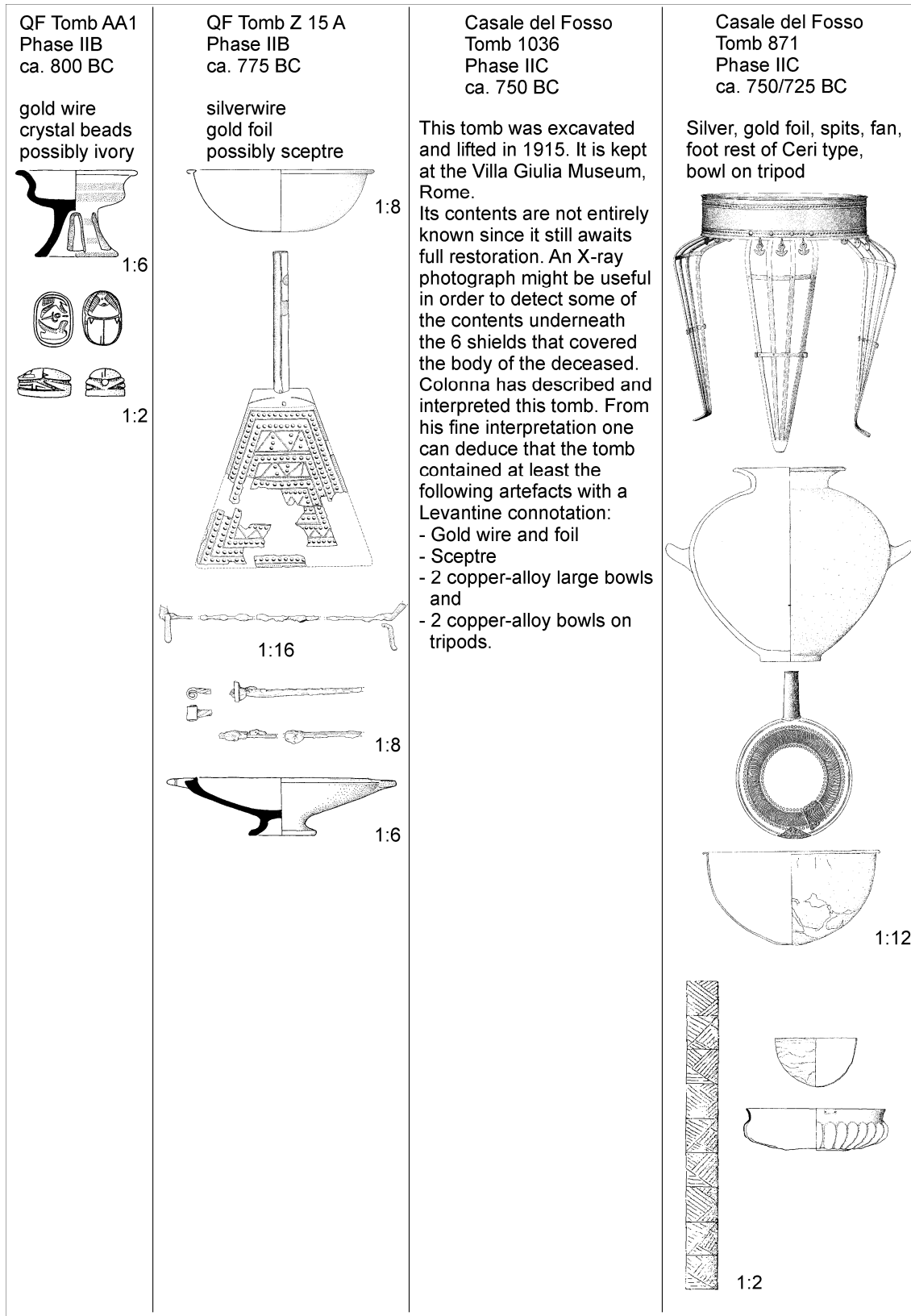


Fig. 10 – Important PFII/Late Villanovan warrior tombs at Veio presenting only artefacts with an Orientalizing connotation; an 8th century BC sequence illustrating the gradual change from the Villanovan into the Orientalizing period.

QF Tomb AA1	Serpentine and Elbow fibula, sword, 2 horse bits, shaft and nails (Hartmann 1982; De Santis 2005).
QF Tomb Z15A	Shield handle, 3 spits, firedog, 2 horse bits, a bimetallic <i>Fibula a due pezzi</i> and various iron fragments that can not be identified (QF necropolis in NSc 1965, 171-182; De Santis 2005).
Casale del Fosso Tomb 1036	Short sword, lance, 3 <i>fibula a drago</i> with gold, iron rod for sceptre, <i>mazza/club</i> (Bianco Peroni, 1970, cat. no. 374, p. 133; Colonna 1991; Drago Troccoli 2005, 101; De Santis 2005).
Casale del Fosso Tomb 871	Sword, , iron rod for sceptre, 2 disks, lance, spits, firedog, knife, fragments of harnessing and structural fragments of a chariot/ <i>currus</i> (Hartmann 1982; Drago Troccoli 2005).

Table 3 – Iron objects in four warrior tombs, Veio phase IIB and IIC.

From the above, it is concluded that iron was locally worked in centres covering the whole Peninsula during the 9th century BC and that it was widely employed during the subsequent century, the 8th century BC. The adoption of iron during the 9th century BC is reconstructed as a regional development on account of typical artefact types such as the *fibula serpeggiante meridionale* in the South and the cut-out discs in east-central Italy. The spread of iron is also given as an overland, internal development and the increasing demand for this metal in various parts of Italy will have assisted the expansion of the domestic exchange routes during the 9th and 8th century BC as did the increasing demand for amber illustrated above.

Epilogue

In this paper I have stressed the pan-Adriatic exchange relations but also the increasing relevance of the Italian overland trading routes from the 10th century BC onwards by documenting the growing demand for amber and iron. These exchange routes are reconstructed as down-the-line trade in which the various Villanovan centres from North to South acted as collecting and distribution hubs. Other groups besides those labelled Villanovan, such as Oenotrians, Latins or the Este and Golasecca communities, could join in⁶⁷. ‘Villanovan’ centres on the higher plateaux near or on the coast such as Fermo, Verucchio, Tarquinia, Caere and Pontegagnano suggest an interest in overseas trade. In this context it is also relevant to note that in North and Central-East Italy we find during the Iron Age, occasionally artefacts with a Levantine connotation, reworking Oriental models but no Hellenic acculturation while in South Italy it becomes increasingly more difficult by the 8th century BC to distinguish between Phoenicians and Euboeans. It is almost as if the Villanovan exchange network prevented Hellenic goods from entering North and Central-East Italy till the 6th century BC. Another option is that people of these regions were not interested in Greek ceramics since it was not valued as a prestige commodity, being just pottery.

The role of the Villanovan centres in the overland, Iron Age exchange network is best illustrated in the richly furnished male and female tombs containing artefacts with a wide distribution⁶⁸. For the Villanovan/Iron Age warrior tombs, it has often been implied that these males controlled resources and exchange. Clear evidence for such a relation, as the Warrior-Trader tombs in the Eastern Mediterranean dating to the period 950-900 BC, is not available for Italy⁶⁹. However, some archaeological facts do support elite involvement in exchange such as the disproportionate amount of tack/harness for horses found at Verucchio, implying a preoccupation for long-distance travels and exchange as is also suggested by the role the site played in the amber trade from the 9th till mid 7th century BC. Thus more than 10% of the tombs excavated at Verucchio contained horse-bits while several tombs held elements of wagons, carts or chariots⁷⁰.

⁶⁷ cf. BIETTI SESTIERI 2005.

⁶⁸ cf. NIJBOER 2006.

⁶⁹ NIJBOER 2008b.

⁷⁰ VON ELES 2002, 83–132.

A fine example of someone that can be identified as a sort of Warrior-Trader is the warrior tomb of Capena, presented in detail by Mura Sommella⁷¹. It is known as Capena Tomb XVI and dated around 700 BC. The tomb is extremely rich in its associated finds and the identification as warrior trader is based on its 21 iron weapons and the presence of 2 ceramic, miniature boats. Mura Sommella interprets these ceramic boats as truthful imitations in miniature of vessels to navigate and cross rivers. She therefore considers them as symbols of the mercantile interests of the deceased⁷². This reading of Capena Tomb XVI is fully supported here⁷³. The tomb and its associated finds also reflect the acculturation process mentioned before. Starting from 850-800 BC, the elite of Italy became buried with a growing amount of artefact types that refer to the Levant and the Eastern Mediterranean (fig. 10). The Orientalizing idiom of the artefacts and symbols of power supplemented and replaced those of Villanovan origin with their links to central Europe, north of the Alps. This cultural shift was not just restricted to goods but also affected architecture, burial customs, religion and politics⁷⁴. Contacts with the Levant became to shape several aspects of society in central Italy and were important for the rise of Early States, which were formed on the sound foundations of stratified Iron Age/Villanovan centres. This cultural shift of *longue durée*, lasting at least a century, is characterised by hybridization⁷⁵. Established contacts with other cultures, in our case with groups from the Levant and the eastern Mediterranean, led during the period 850 to 700 BC to alterations in Villanovan customs and those of the other Italic groups involved. This process is not presented here as a unilateral affair since the stimuli came from all directions during the Iron Age, as recorded in this session, creating a dynamic unfolding of ethno-genesis in which each group, selected, adopted and adjusted concepts, customs and goods from those with whom they were engaged. This process of appropriation unfolded a wide-spread creativity by generating Italic forms of models that came from elsewhere⁷⁶. By the Iron Age, Italy had become a proper core-region since its tight internal network of Iron Age centres maintained close contacts with Sardinians, Phoenicians, Euboeans, groups in the Balkans and with communities in central Europe, as is hopefully demonstrated by this and the other papers of the session.

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⁷¹ MURA SOMMELLA 2004-2005.

⁷² MURA SOMMELLA 2004-2005, 283–4.

⁷³ The correspondence between Capena Tomb XVI and the earlier warrior-trader Tombs of the Eastern Mediterranean discussed elsewhere, is striking in my opinion (Nijboer 2008 b). We not only have a significant number of weapons in these tombs but also a funerary ritual that incorporated drinking and eating as if the Marzeah, Symposium or Symposium accompanied exchange activities.

⁷⁴ See the paper by Rathje in this session.

⁷⁵ In the conventional absolute chronology this process of cultural redirection lasts 50 years. See also the paper by Cristiano Iaia for this session.

⁷⁶ Appropriation is especially noticeable in a whole range of Orientalising artefacts in the Late Villanovan period that are based on Levantine models while the actual imported goods are missing. One can think for example of the bronze-sheet pilgrims' flasks, the fan or the footstool (cf. NIJBOER 2008a; the papers by Iaia, Sciacca and Rathje in this session). D'Agostino in his comments to this session mentions the appropriation of Euboean ceramics and models from 800 BC onwards.

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