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Contents

Between the Po plain and middle-Danubian Urnfield cultures: Codroipo and the Friulian plain in 12th century BC

Giovanni Tasca – Cristiano Putzolu – David Vicenzutto

Abstract

The contribution brings basic results of excavation of the hillfort Codroipo-Gradiscje, located in the central part of Friulian plain near the river of Tagliamento, with the settlement from the Late Bronze Age. The excavations have been conducted since 2004 by the Archaeological Museum of Codroipo and the University of Padua in collaboration with Centro di Catalogazione of the Friuli Venezia Giulia Regional Administration. The excavation has brought very important results from the phase of the transition between the Late Bronze Age and Final Bronze Age. Its importance resides also in the fact that it represents the first modern research activity focused on the mentioned period.

Key words

Coidropo-Gradiscje – Friulian plain – Late Bronze Age – Final Bronze Age – transitional period

1. Introduction

The site of Codroipo-Gradiscje is located in the centre of the Friulian Plain, on the upper limit of the Spring Belt and near the river Tagliamento, the major Friulian river (fig. 1). The site retains traces of a hillfort, which is a late Bronze Age settlement surrounded by defensive embankments, locally named *castelliere*[1]. Since 2004 the site has been excavated by the Archaeological Museum of Codroipo and the University of Padua in collaboration with Centro di Catalogazione of the Friuli Venezia Giulia Regional Administration. The stratigraphic sequence obtained through the site excavation documents, in an uninterrupted series of different pottery assemblages, the transition from the Late Bronze Age (also labelled Recent Bronze Age in some Italian texts) to the Final Bronze Age (fig. 2) in Friuli, and allows the reconstruction of the main relations of the middle Friulian Plain with external cultural cores. The Codroipo sequence is highly important because hitherto in Friuli the Late Bronze Age to Final Bronze Age transition has been documented only by old excavations and surface findings.

2. Geomorphological setting of the Friulian Plain

The Friulian Plain is located on the eastern edge of the Po-Venetian Plain and is bordered eastward by the massive limestone Karst plateau, from which it is separated by the river Isonzo (fig. 1). The Friulian Plain has alluvial origin; it was created mainly during the Ice Age and

1. Càssola Guida et al. 2004, 77–89; Borgna – Càssola 2009, 89–104; Càssola Guida – Susi Corazza 2009, 273–287; Simeoni – Corazza eds. 2011.

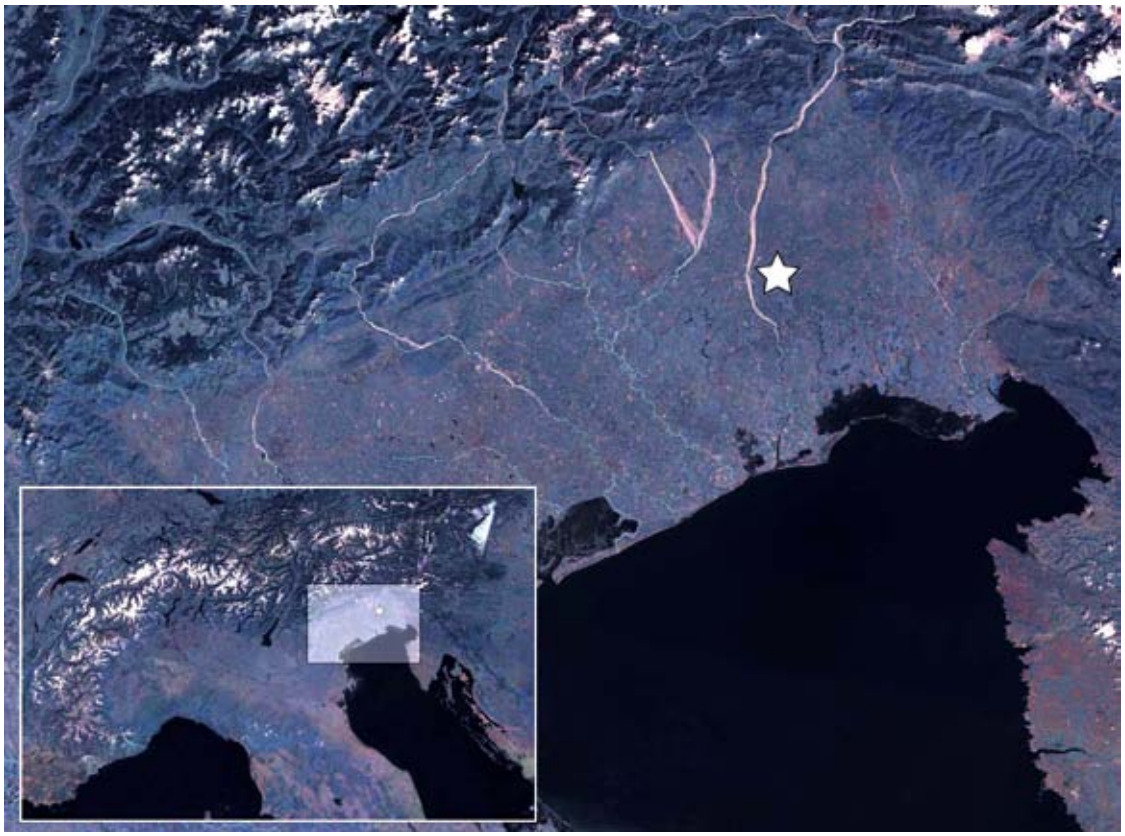

Fig. 1. Localization of the site of Codroipo Gradiscje in north-eastern Italy.

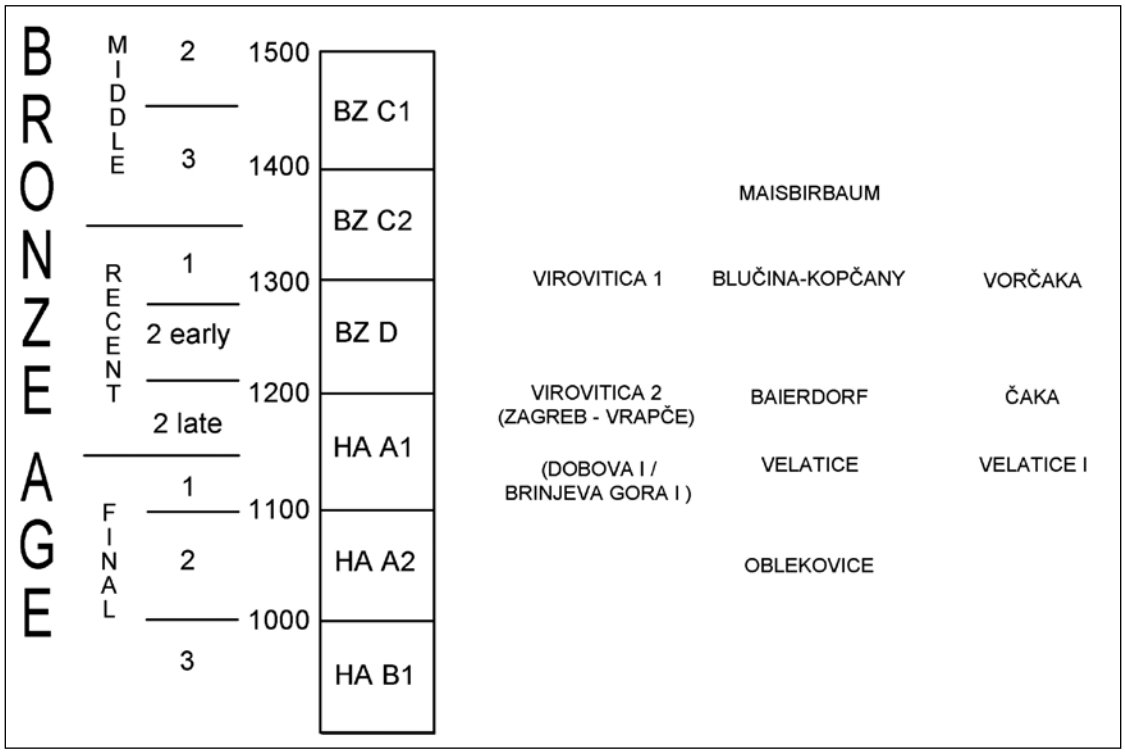

Fig. 2. Chronological frame used in this work; the chronological table is based, for the middle-Danubian area, on Janez Dular's chronology (Dular 2002, 141-228, Abb. 48) and, for north-eastern Italy, on chronology defined in Bernabò Brea – Cardarelli – Cremaschi 1997, with a formalized further division of Late Bronze Age 2 in an „Earlier" and a „Later" stage after the Codroipo evidence and correspondences with other sites in north-eastern Italy.

supplied by glacial Megafans. Due to the different size of the glaciofluvial deposits dragged from the water flows, the Friulian Plain can be divided into two areas: north, the permeable gravelly High Plain, and south, the silty and claylike Low Plain. In the border area (the so-called Spring Belt) the water flows under the gravelly High Plain and emerges where it meets the Low Plain clays. This phenomenon creates a dense network of rivers that run through the lowlands[2].

3. Ancient cycles of population in the Friulian Plain

After the last glacial maximum, and particularly in the Holocene, there have been several cycles of population in the Friulian Plain[3]. During the Early Bronze Age and the Middle Bronze Age the Friulian Plain shows relationships with the two major cultures in north-eastern Italy: in the west, the so-called pile dwelling-Terramare culture[4] (*cultura palafitticolo-terramaricola*) spread over the Po-Venetian Plain, with an initial core area situated nearby Lake Garda, while to the east, the so-designated Hillfort Culture (*cultura dei castellieri*) spread over Karst and Istria[5].

The evidence in Friuli during this period is still very scarce and seems relate to an actual phase of scant population[6]. At any rate, the influence of the Karst Hillfort culture in pottery production[7] and that of central Europe in bronze production[8] is quite evident.

In this stage, the first hillforts, enclosed by earth embankments, appear in the Friulian Plain, likely related to the contemporary hillforts made of drystone walls (*Castellieri/ Gradine*) situated in Istria and in the whole Classical Karst, where these kinds of dry masonry settlements show a dense distribution during the Bronze and Iron Age, while in the Friulian Plain the Bronze Age hillforts surrounded by earth embankments are fewer and with an almost regular distribution pattern in the High Plain and in the Spring Belt (fig. 3).

The particular kind of fences in reinforced earth embankment appearing at the beginning of the Middle Bronze Age in the Friulian high plain recall the Terramare of the Po-Venetian plain, conceding that Friulian hillforts, in some cases, seem to be older: in fact, the Sedegliano hillfort appears to be founded at the end of the Early Bronze Age[9].

4. A focus on Po-Venetian Terramare

The Po-Venetian Terramare features are properly recognizable down from the Middle Bronze Age 2, while a settlement pattern is previously noticeable in the Middle Bronze Age 1 (firmly documented cases are Gaggio di Castelfranco Emilia near Modena and Camponi near Verona[10])

2. Fontana 2006; Fontana – Mozzi – Bondesan 2008, 71–90 (see fig. 2).
3. Vitri – Tasca – Fontana 2014, 217–236; Pessina – Tinè 2008; Ferrari – Visentini (eds.) 2002.
4. Bernabò Brea – Cardarelli – Cremaschi (eds.) 1997; Bernabò Brea – Cremaschi (eds.) 2004; Bernabò Brea – Cremaschi (eds.) 2009; Cardarelli 2009, 450–520; Frontini 2011; Vanzetti 2013, 267–282.
5. Cardarelli 1983, 87–104.
6. Montagnari Kokelj 1996, 63–66; Borgna – Càssola Guida 2009, 89–104; Simeoni – Tasca 2008, 245–248; Simeoni – Corazza (eds.) 2011.
7. Simeoni – Corazza (eds.) 2011; Vitri et al. 2009, 46–57; Mariutto – Pettarin – Tasca 2007, 223–224; Borgna–Corazza 2008, 174–181.
8. Moretti 1983, 69–80; Bianchin Citton–Serena 1992-1993, 56–60; Tasca 2008, 13–28; Tasca 2011, 115–138.
9. Borgna–Càssola Guida 2009, 89–104; Simeoni – Corazza (eds.) 2011.
10. Balista et al. 2008, 113–138; Salzani – Chelidonio 1992, 53–104.

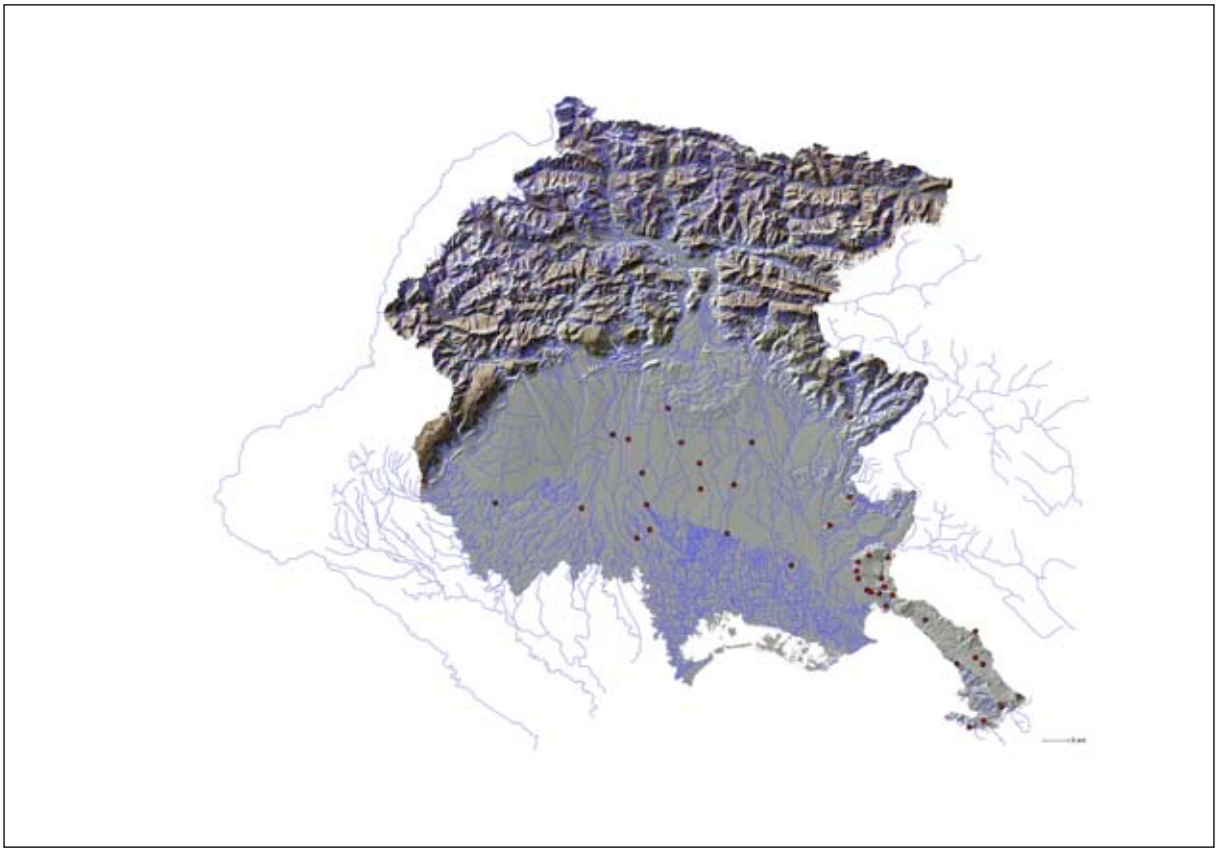

Fig. 3. Distribution of hillforts in the Friulian plain during the Bronze Age.

carrying therefore a systematic spread[11].

In this context the Terramare are villages with certain characteristics such as:

· High position on ground level;
· Settlements protected by earthworks/embankments;
· Internal wooden structures supporting the embankment;
· Ditches;
· An artificial canal connecting the ditch to the nearby hydrology network;
· Internal roads dividing the space into orthogonal neighbourhoods;
· Internal wooden platforms on which the houses were built;
· Access across the ditch over a wooden bridge;
· Smaller inner core surrounded by its own embankment and ditch.

Nevertheless this model is not to be taken rigidly as revealed in the Fraore and Beneceto sites where perimeter structures have not been recognized.

Currently, the primary model of Terramare settlements suggests a relation to two different cultural areas: on one hand, there may be a spin-off from the Early Bronze Age lake-dwellings of the Polada culture, near Garda Lake. On the other hand, as Andrea Cardarelli recently suggested, their prototype may be found in the so-called Tell civilization, which developed in the Early Bronze Age up to the beginning of the Middle Bronze Age (*Bronzezeit* B) in the Carpathian-Danubian area: indeed both in the Po-Venetian Plain and in the Carpathian-Danubian area (at the end of Early Bronze Age - Middle Bronze Age) several common indicators are to be found; the increase of Sauerbrunn-Boiu swords, cheek-pieces made of deer antler, *Brotlaibidole*

11. Bernabò Brea – Cardarelli – Cremaschi (eds.) 1997; Cardarelli 2009, 450–520.

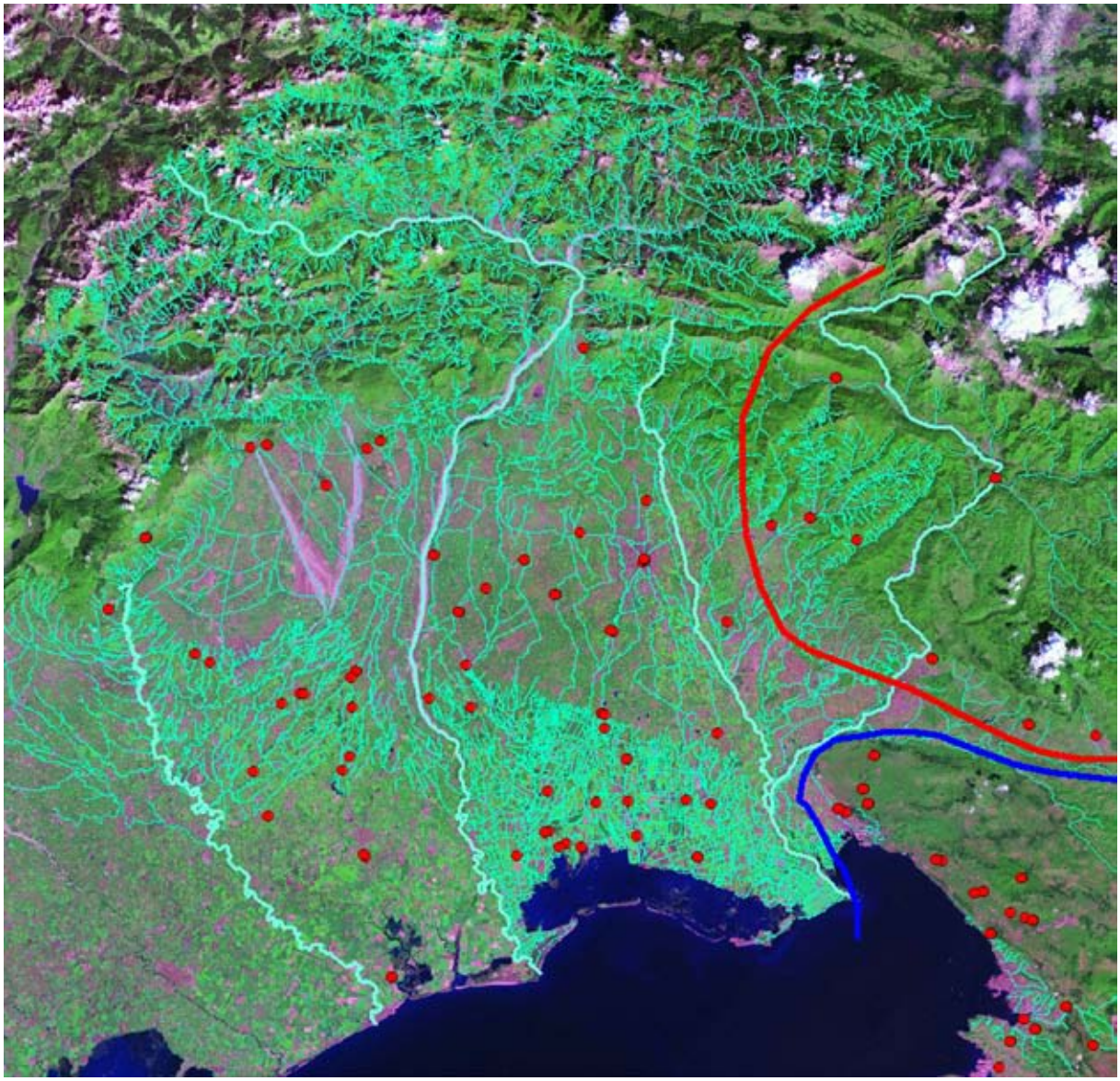

Fig. 4. Major sites active in the Friulian plain and in the Karst during the Middle Bronze Age and Late Bronze Age. Eastward of the red line: Alto Isonzo type hillforts. Eastward of the blue line: Triest Karst type hillforts.

and fine ceramic ware decorative motifs.

The geographical location of Friuli must have played a significant role in light of the above-mentioned indicators.

5. The Late Bronze Age in the Friulian Plain

Let us return now to the Friuli region. With the end of the Middle Bronze Age and the passage to the Late Bronze Age (14th century BC: transition BzC2-BzD), the eastern Veneto region and the Friulian Plain, as well as the Slovenian and middle Danube areas, are marked by an impressive phenomenon of agrarian colonization (fig. 4). This particular population cycle affects all physiographic sectors of the Friulian Plain, witnessing as it does, the increase in number of hillforts in the medium and high plain, mainly defined by a regular distribution on the territory (see fig. 3). Settlements not characterized by embankments are found spread all over the terri-

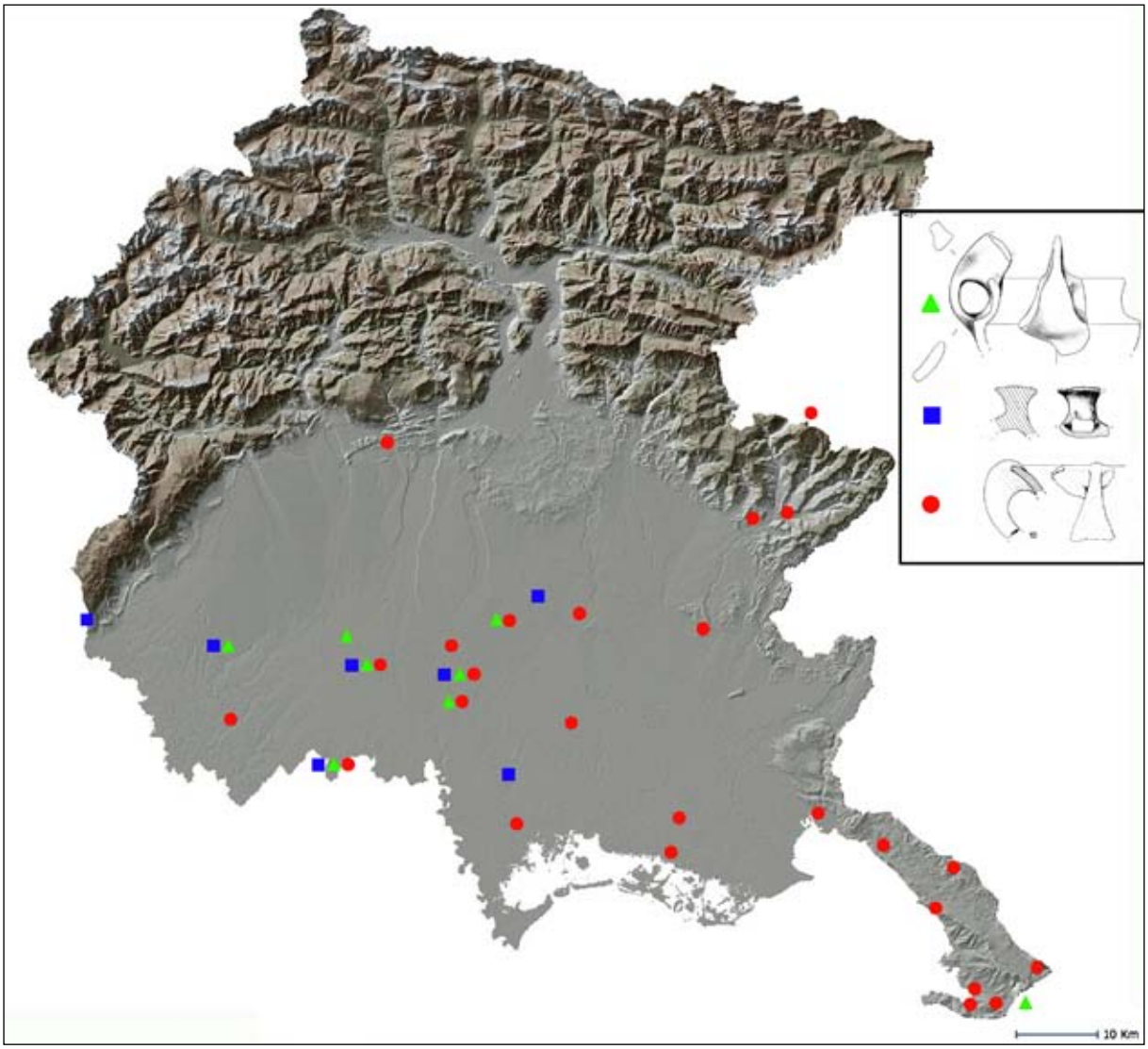

Fig. 5. Distribution in the Friulian plain of handles with cylinder- (triangle) and lobo-expansion handles (square) and of triangular front handles (dots).

tory, with particular frequency in the lowlands, southwards of the Spring Belt.

In 1983 Andrea Cardarelli dedicated a (still) seminal paper regarding chronological and typological pottery assessment of Friulian and Istrian hillforts to these precise stages[12].

The research progress made since 1983 allows us to confirm that the population cycle of Late Bronze Age 1 and early Late Bronze Age 2 (the late 14th and 13th century, according to the chronological phases of the Po-Venetian Plain), is characterized by a compelling relationship in pottery assemblages to the Venetian area and the Adriatic coast, as demonstrated by the presence of cylindrical and lobe shaped handles, related to the „Subappenninico" culture (fig. 5)[13].

However, some elements such as triangular front handles, typical of Istrian and Karst hillforts in the Middle and Late Bronze Age, allow us to distinguish the Friulian assemblages from the Venetian ones (fig. 5)[14].

Elements matching with the first phase of the Virovitica archaeological group of eastern Slo-

12. Cardarelli 1983, 87–104.
13. Damiani 2011; Botti 2006, 45–98; Leonardi – Cupitò 2013, 27–34; Bianchin Citton – Bietti Sestieri 2013, 35–43; Botti – Tasca 2006, 317–326; Lambertini – Tasca 2006, 113–184; Vitri – Tasca – Fontana 2014, 217–236.
14. See the type 111 in Cardarelli 1983, 87–104.

Fig. 6. Aerial image of the hillfort of Codroipo Gradiscje.

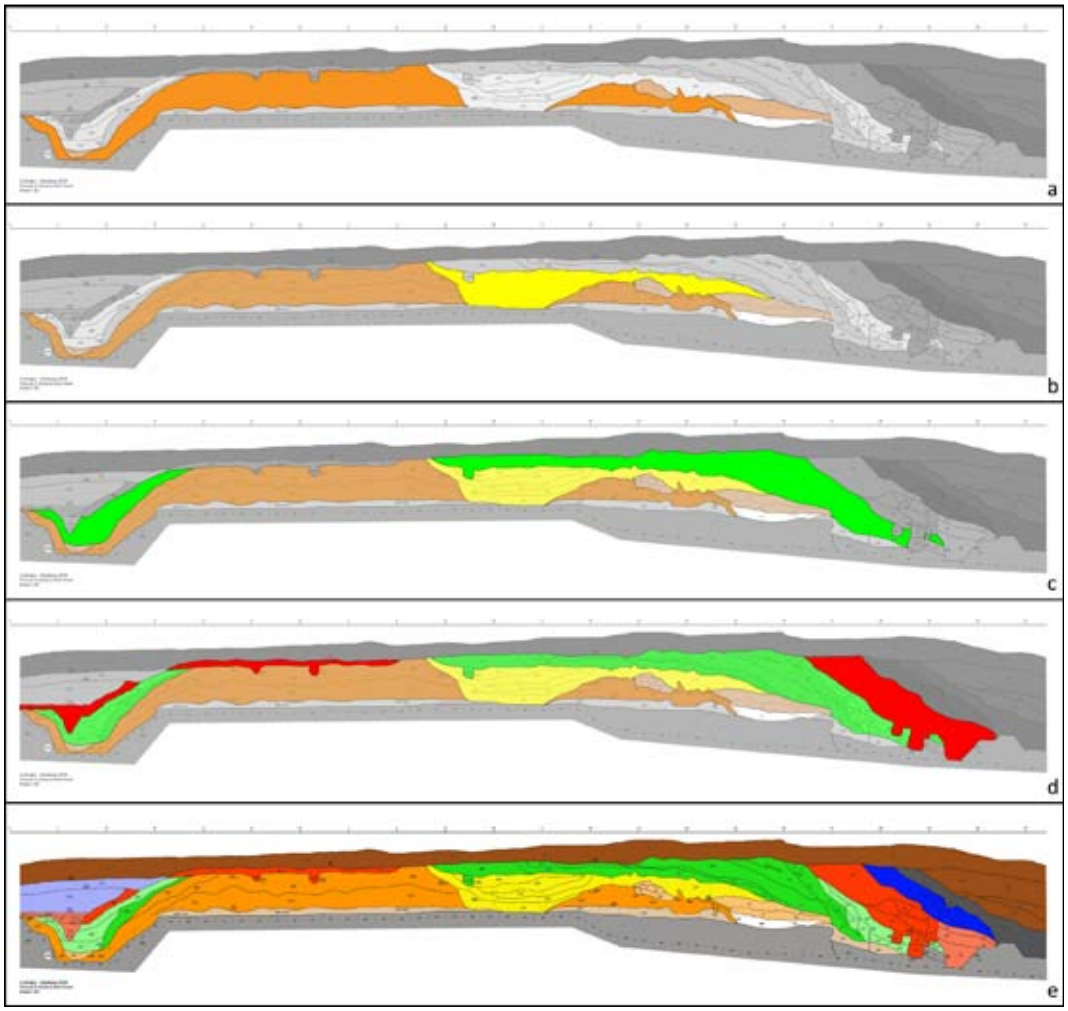

Fig. 7. Codroipo Gradiscje 2005-2006: Trench D, section through the embankment and the inner ditch on the eastern edge of the site; a: 1st structural phase; b: between 1st and 2nd structural phase; c: 2nd structural phase; d: 3rd structural phase; e: all the structural phases.

venia, with specific correspondence at Oloris (Dolnji Lakoš) and Rabelčja vas (Ptuj)[15], are also recognizable in the pottery.

Two lightly separated ceramic aspects seem to increase in the high and the low Friulian Plain respectively: the northern marked by T-shaped rims, the southern distinguished by rusticated surfaces. The two aspects coexist along the Spring Belt. These three areas seem to form an autonomous cultural unit, clearly distinct from the Venetian area, the Istrian and Karst hillforts, and the first phase of the Virovitica group, whilst at the same time participating in all of the three horizons.

At the end of this stage (early Late Bronze Age 2) the cycle of population in Friulian low plain abruptly terminates, but continues in the Spring Belt and in the greater part of the High Plain sites. The passage to the late Late Bronze Age 2 (corresponding to the transition BzD2-HaA1) testifies the diffusion in Friuli of typological elements belonging to the second phase of the Virovitica and Baierdorf -Velatice archaeological groups[16].

This transition is evidently documented by the stratigraphic sequence of Codroipo-Gradiscje hillfort.

6. The hillfort of Codroipo-Gradiscje: excavations 2004-2013

The hillfort of Codroipo-Gradiscje lies on a slight morphological elevation, at the north boundary of the Spring Belt (fig. 5). The perimeter elevated edges, actually delimiting the site, seem to have been utilized considerably on the eastern edge; modest traces of embankment settings are visible on the ground.

Discovered in 1983, the site has been excavated since 2004. The archaeological excavations focused on the embankment traces, on the village inner ditches and on the remaining parts of activity areas, which, as a result, destroyed the inner part of the site[17]. So far, an actual external ditch has not been recognized, but would, however, be a fair presumption. After various archaeological context investigations it was possible to recognize up to seven major stratigraphic phases, which were later attributed, on the basis of pottery recovered, to 5 chronological stages.

The foundation stage has been detected, only in a few trenches, at the bottom of the interior ditches, and in only one location outside the first embankment core. In this first stage the embankment seems to be a mild silty height: unstructured, trapezoidal in section and about 8 m wide at the base. The interior ditch is trapezoidal in section and flat bottomed, 2.5 meters wide at the top deep 1 meter deep (fig. 7a). The scarce materials associated with this first phase of the site (Codroipo 1: fig. 8) include pots with undistinguished thickened rims and tapered vertical ribbon handles[18], comparable to the Friulian Late Bronze Age 1 or to the transition to Late Bronze Age 2 (hereafter RBA).

Already in the next stage (Codroipo 2), the first renovations of the embankment were probably made: the eastern edge of the site was rebuilt and enlarged. The new embankment had internal structures made with wooden caissons and slopes made of earth and gravel. The eastern internal ditch, partially filled, is re-cut (structural phase II: fig. 7c) and contains large discharges of sherds. In a later stage (structural phase III) a V-shaped incision filled with pebbles is cut through the inner ditch (fig. 7d): it may be a foundation related to the embankment restructuring.

15. Dular 2002, 141–228; Dular 2011, 111–130.
16. Dular 2002, 141–228.
17. Tasca (ed.) 2009, 182–195; Tasca 2011, 203–209; Vitri – Tasca – Fontana 2014, 217–236.
18. In describing the Codroipo pottery types are used literal translations from Italian terminology.

On the western side of the site, this stage correlates with the excavation of a large depression, which impacts the first inner ditch and is feasibly indicative of a groundwater collapse episode.

The materials correlated to the Codroipo 2 stage (fig. 9) show significant traditional components with the emergence of elements typical of the early RBA2. There are pots (fig. 9:1, 10- 11) with matches in Oloris, eastern Slovenia, in the first phase of the Virovitica group[19]; other pots have matches in the Venetian RBA2[20]. These elements indicate types present in a huge area and especially numerous in the RBA2 of central plain of Friuli (e.g. T-shaped rims: fig. 9: 6, 9-10).

In the inner ditch, at the top of these interventions, everted rims (fig. 9:12) typical of early Venetian RBA 2, and a decoration made by recurved bow shaped strings with a little clew in the center (fig. 9:16) appear. This particular decoration is spread across a wide area between the central Alps and western Hungary[21]. A great number of recurrences are referred to transitions BzD-HaA1 and from Early RBA 2 to Late RBA 2. The distribution of this decorative motif is one of the indicators of cultural element movement in the wide area encompassed between north-eastern Italy and western Hungary.

At the next stage (Codroipo 3) one again witnesses, on the east side, one or more structural renovations and embankment upgrades (caisson structure with earth and gravel layers; fig. 7c) and the reshaping of the internal ditch, in relation to levels of ceramic fragment discharges alternated with thin layers of earth. On the western side of the village a complex sequence of earth carryovers with alternated traces of building and cultivation episodes, in which a new internal ditch was dug, is recognizable. This structural stage (structural phase V) is clearly recognizable in this sector (sector 2) by a soil level poor in ceramic materials (US 359, 501) from another earth carryover (US 373). On the top of this carryover a structural stage with several postholes is recognizable (US 348 etc.), named structural phase VI, which unfortunately cannot be referred to as a complete arrangement.

The ceramic assemblage of the stage called Codroipo 3 (fig. 10) is characterized by the spread of brim-shaped rims often decorated with notches (fig. 10:6-8), typical of advanced RBA 2 in the Venetian Plain[22], and by lenticular cups (fig. 10:2-3). In association with these types, some of the common elements are to be found in the middle-Danubian area about BzD-HaA1 transition, i.e. in the Čaka – Baierdorf horizon and in the second phase of the Virovitica group (Zagreb-Vrapče)[23].

At that precise moment, spherical pots with cylindrical neck and double edged everted rim, and the bent rib decoration of different cup and bowl forms notably begin to increase with varying intensity all over the region between the eastern Alps, Croatia and Balaton. These are all very well attested in the Codroipo 3 sequence (fig. 10:2-3, 10-15, 19).

Identification of the precise origin of eastern influences is not an easy task, but it seems rational to suppose the arrival of single elements with an intense circulation in the middle-Danubian area. It seems more obvious to consider that during this phase the Friulian middle plain gained patterns and trends of the surrounding lands to the east and to the west, encompassing them easily in an original typological ceramic assemblage, rather than assume massive population displacement.

If compared to the previous stage (Codroipo 2) it now seems possible to recognize a tendency towards the renewal of the pottery assemblage.

19. Dular – Šavel – Tecco Hvala (eds.) 2002.
20. E.g. Sabbionara a Veronella US 27 (Salzani1993).
21. In Eastern Slovenia in Rabelčja Vas, J. 17 (Strmčnik-Gulič 1988-1989, 147 –170, T. 7, n. 7); Hungarian necropolis of Balatonmagyaród-Hidvégpuszta, Gr. 3, and Vörs-Battyány (Dular 2002, 141–228).
22. E.g. Fasani – Salzani 2009, 259–281; Bianchin Citton – Martinelli 2005, 239–253.
23. Vinski-Gasparini 1983, 547–646.

Fig. 8. Codroipo Gradiscje. Pottery typical forms of the phase Codroipo 1, ascribed to Late Bronze Age 1. 1 US 251; 2-4, 6 US 252; 5 US 629 (drawings by Irene Lambertini, Giovanni Tasca; scale 1:4).

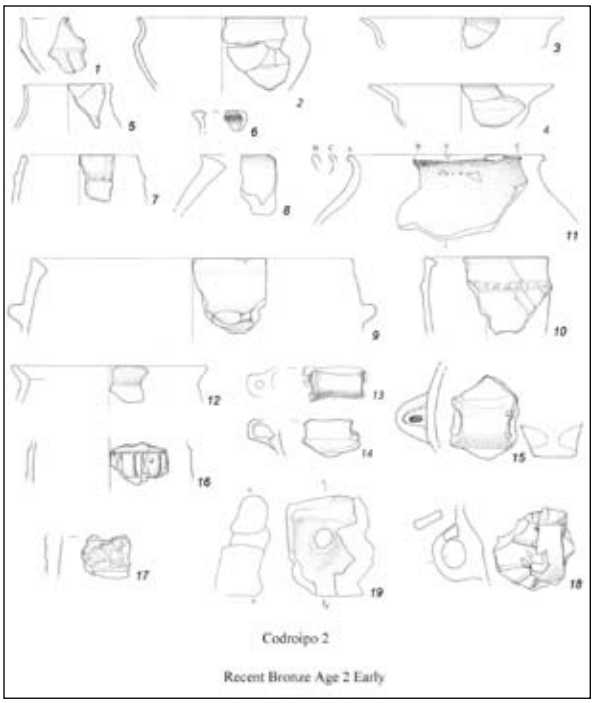

Fig. 9. Codroipo Gradiscje. Pottery typical forms of the phase Codroipo 2, ascribed to the beginning of Late Bronze Age 2 Early. 16, 17 US 161; 3, 12 US 180; 6 US 217; 13 US 218; 18 US 228; 15 US 244b; 1, 8, 11, 19 US 247; 5, 7 US 546; 14 US 606-616; 2, 9 US 614; 4 US 621 (drawings by Irene Lambertini, Giovanni Tasca; scale 1:4).

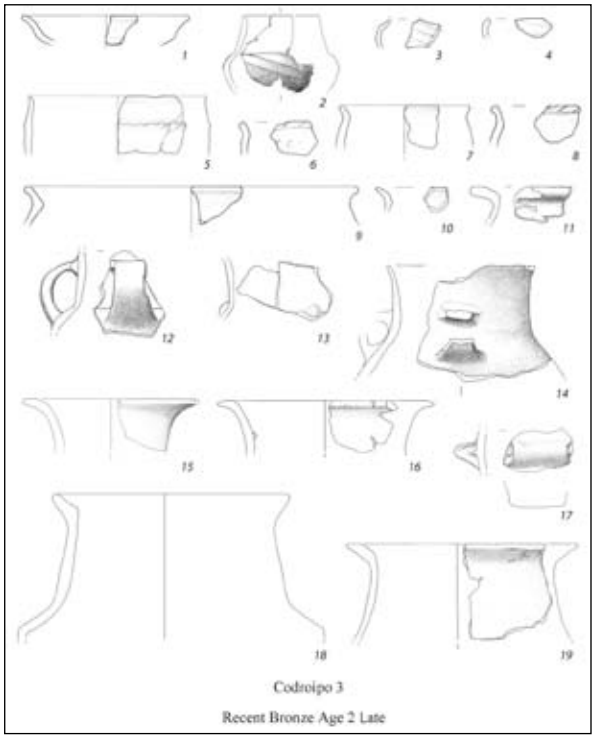

Fig. 10. Codroipo Gradiscje. Pottery typical forms of the phase Codroipo 3, ascribed to the Late Bronze Age 2 Early. 13, 16 US 216; 18-19 US 348; 1, 7-10, 17 US 356; 3-4, 12 US 359; 14 US 503B2; 11 US 526; 2, 6, 15 US 532; 5 US 606-616 (drawings by Irene Lambertini, Giovanni Tasca; scale 1:4).

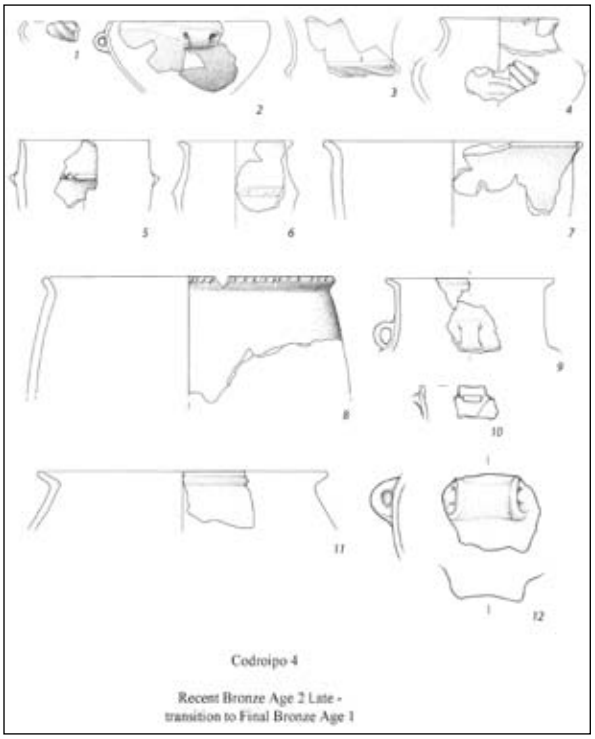

Fig. 11. Codroipo Gradiscje. Pottery typical forms of the phase Codroipo 4, ascribed to the Late Bronze Age 2 Late – transition to Final Bronze Age 1 . 2-3 US 50; 1,4-5, 7 US 61-50; 8 US 61; 6, 9-12 US 157 (drawings by Irene Lambertini, Giovanni Tasca; scale 1:4).

Of great importance appears to be the stratigraphic association of pots which have precise matches; on the one hand, in the Late RBA 2 of the area of the Venetian plain and of the Terramare culture and, on the other, in the middle-Danubian Groups of Baierdorf and Virovitica 2, at transition BzD-HaA1. We can cite, as an example, from a little ceramic sherd discharge (US 348) a bi-conical vase (fig. 10:18) with precise comparisons in graves 29, 36, 40 of the necropolis of Casinalbo, near Modena[24], and another bi-conical vase (fig. 10:19), for which we find comparisons in the first layer of Brinjeva Gora (Slovenia)[25].

The following stage (Codroipo 4) encloses, on the eastern side of the village (Trench C), large discharges of ceramic fragments related to dwelling bedding planes containing few apsidal houses. As far as ceramics are concerned (fig. 11-12) the presence of indicators considered typical of the transition from last RBA to the Final Bronze Age 1 in the Venetian Plain is recognizable, as is the gradual disappearance of other cultural indicators such as Baierdorf and Virovitica 2 groups – e. g. double edged rims and bent rib decoration[26].

A pot likely belonging to this stage, but unfortunately recovered in an unreliable stratigraphic position, has a precise match in the Grave Mound 1 in Velatice[27].

A particular handle decoration, consisting of small tongues or perhaps horns (fig. 11:10), is to be looked at as a distinctive local input, presently known only in Friuli and exclusively in this chronological phase.

Immediately after Codroipo 4, follows Codroipo 5, chronologically marked by the transition to the Final Bronze Age 1, and documented by the highest preserved pottery discharges where, in comparison with Codroipo 4, a substantial simplification of the typological repertoire may be observed (fig. 13).

This recent horizon finds equivalent comparison in the Brinjeva Gora first stage (Slovenia)[28] and in the Venetian plain[29].

At the end of this stage (which seems traceable to the half / second half of the 12th century BC) destruction caused by ploughing ruined the overlaying stratigraphic sequence.

However potsherds found in secondary deposition, like a ceramic fragment decorated with dots and grooves (comparable to Montebello Vicentino[30]), indicate site continuity in Final Bronze Age 2 (11th century).

7. Conclusions

The stratigraphic sequence of Codroipo thus allows, for the first time in Friuli, a clear ceramic evolution focus of the entire Late Bronze Age development up to the beginning of the Final Bronze Age (BzD-HaA1) along with stratigraphic systematic relations between ceramic assemblages typical of north-eastern Italy (Venetian Plain) repertoire and those pertinent to initial and early stages of middle-Danubian Urnfield groups (fig. 14).

The first phase of the site, dating back to the Late Bronze Age 1 and culturally tied to the Po

24. Cardarelli 1997, 689–696, fig. 396:1, 397:4, 398:6.
25. Brinjeva Gora, layer 1 (Oman 1981, 144–216, T. 2/2).
26. This stage (Codroipo 4) finds precise correspondance in the pottery association found under the collapse and fire of a hut of the beginning of the 12th century in Montereale Valcellina-western friulian highplain (Corazza 1999, 117–130).
27. Furmánek 2006, 127–149, fig. 7:3.
28. Oman 1981, 144–216.
29. E.g., Fasani – Salzani 2009, 259–281; Salzani 1976, 155–162; Salzani 1977, 543–561.
30. Bagolan – Leonardi 1998, 231–258; Bagolan – Leonardi 2000, 15–46.

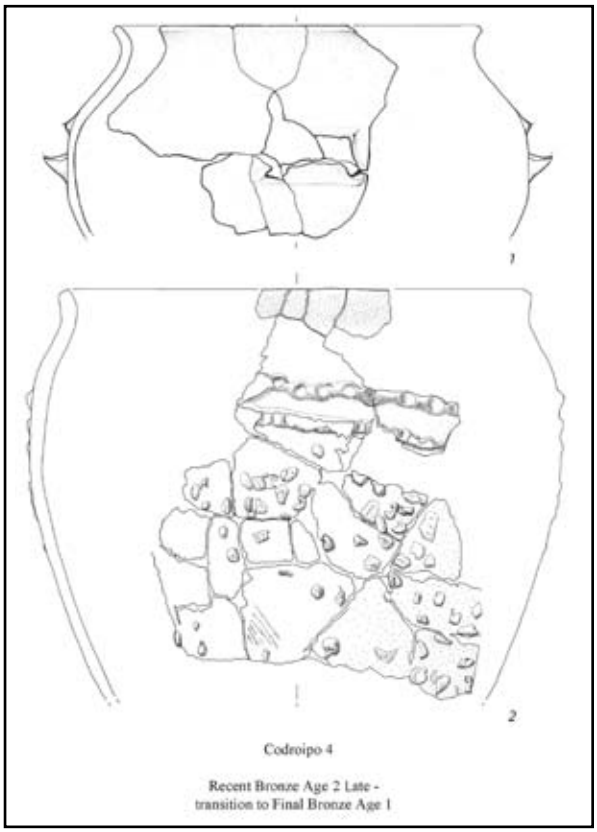

Fig. 12. Codroipo Gradiscje. Pottery typical forms of the phase Codroipo 4, ascribed to the Late Bronze Age 2 Late – transition to Final Bronze Age 1. 1 US 157; 2 US 61 (drawings by Irene Lambertini, Giovanni Tasca; scale 1:4).

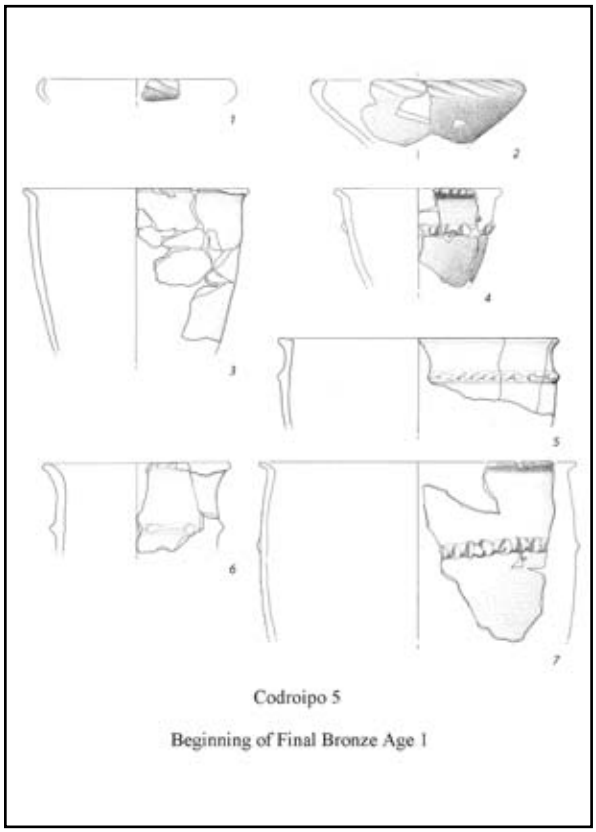

Fig. 13. Codroipo Gradiscje. Pottery typical forms of the phase Codroipo 5, ascribed to the beginning of the Final Bronze Age 1. 1-2, 4-7 US 310; 3 US 311 (drawings by Irene Lambertini, Giovanni Tasca; scale 1:4).

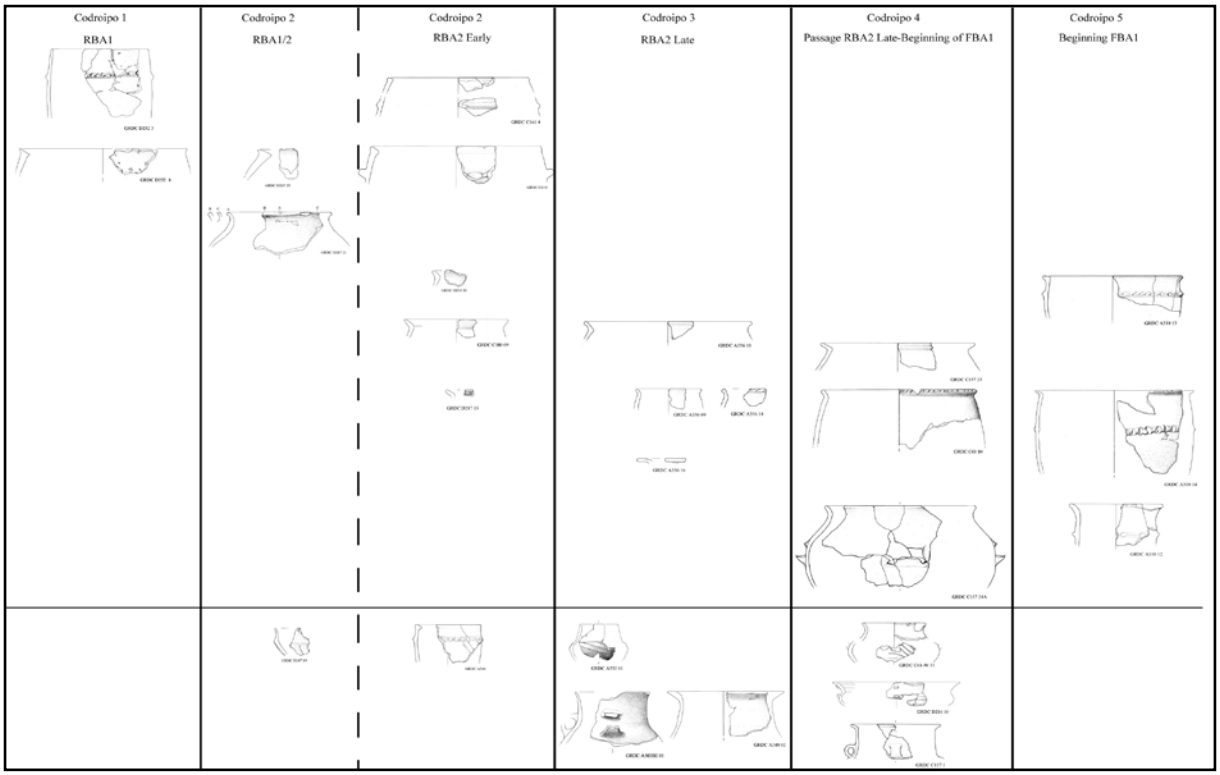

Fig. 14. Codroipo Gradiscje. Synthesis of pottery forms typical of the 5 stages defined; bottom are evidenced the types related with the second phase of Middle Danube Urnfield cultural groups.

and Venetian plain, is followed by a rich early Late Bronze Age 2 phase, with relations with both the Venetian plain and the early stages of middle-Danubian Urnfield groups (Virovitica I).

The Codroipo 3 stage, documented by a distinctly large stratigraphic sequence, seems to evidence a long episode of settlement renewal; this stage shows elements typical of Venetian plain Late Bronze Age 2 along with the rise of middle-Danubian BzD-Hallstatt A1 elements (Baierdorf and Virovitica 2 groups). The two traditions coexist in an organic synthesis, which does not seem to favour the hypothesis of massive population displacement; instead, a movement of small groups and the consequent sharing of formal and stylistic models could be a more valid hypothesis.

Finally the Codroipo 4 and Codroipo 5 stages hold late Late Bronze Age 2 and very beginning Final Bronze Age elements. They particularly find comparisons within the first stage of the Slovenian site of Brinjeva Gora, and in sites (north of the River Po) that witness the passage to the beginning of Final Bronze Age.

The 5 different stages identified on the basis of the analysis of excavated ceramic assemblages are easily recognizable in our stratigraphy. The Codroipo chronological sequence allows us to reassess a great number of other Friulian ceramic complexes deriving from old excavations or surface collection.

The previewed continuation of research is aimed at: first, gathering new environmental data, which may be perhaps useful in contributing to the mid-12th century BC climate crisis debate[31], a phenomenon that was presumably related with the abandonment of the Friulian lowlands; second, at integrating the sequence of the local evolution of the pottery production of the Late Bronze Age; and finally, to generate a better definition of the still problematic aspects of the stratigraphic sequence and of the structural contexts.

Appendix A. Surveying the complexity: the photo-based 3D scanning approach

One of the most problematic aspects of the Codroipo stratigraphic sequence is the thinness of many of the Stratigraphic Units (SU).

It is demonstrated[32] that human activities, such as the building, destruction, rebuilding and maintenance of living areas or the digging and hoeing of vegetable gardens together with natural events, for instance heavy rains, floods, and the fluctuation of groundwater levels, play a dramatic role in terms of provision/removal/displacement/transformation of the deposits.

The wide range of post-depositional processes (both active and passive[33]) resulted in many northern Italian 2nd millennia BC sites having extremely thin SU; in the Friulian plain it has to be added that deep mechanical ploughing resulted almost universally in the destruction of the upper portion of the archaeological sequences.

Living surfaces are therefore extremely difficult to identify, and archaeologists need to investigate the sequence through thin cuts focused on clusters of sherds and other materials and, it is to be hoped, results of previous activity areas loosened by post-depositional processes.

The problematic excavation of the Codroipo-Gradiscje deposit affected our surveying methodology.

After a pre-digital survey phase (2004-2008 campaigns) we started using the total station and monoscopic photogrammetry in 2009, but from the beginning we did not find this approach

31. Cremaschi – Pizzi – Valsecchi 2006, 87 –98; Przybyła 2006, 103–174.
32. Leonardi 1992, 13–47.
33. Leonardi 1992, 13–47.

(used in other excavations with good results[34]) accurate enough to grasp the complexity of the sequence.

Planning the following campaign we decided to adopt the photo-based 3D scanning approach tested in the Bronze Age site of Mursia (TP) by Andrea Fiorini[35].

The work of Andrea Fiorini showed great accuracy in the rendering of some floors of a hut, which he surveyed using this new (at least for us!) methodology, and we immediately planned to test it in our excavation.

The photo-based 3D scanning is a surveying methodology that obtains a dense point cloud of a given surface using photogrammetry techniques; it can be divided into two main phases: fieldwork involving the full coverage of the area of interest with a number of pictures that share a good degree of overlap (see below) and the total station survey of some ground control points (a), and post-processing with the creation of a georeferenced point cloud from the different pictures using specific software[36] (b). Once generated, the point cloud can be imported into a GIS environment and transformed into a DTM (c) that can be used as a meaningful raster base for further analyses.

a) On field data acquisition

The first step is the placement on the surface to be surveyed two different sets of control points: Ground Control Points (GCP) and Ground Points (GP).

Though they differ only in colour[37], GP and GCP play a different role in the post-processing phase: the first are scattered across the area of interest (in our experience best results are obtained with a quite regular pattern of 8 GP per square metre) to be recognized as homologous points in different pictures allowing the software to generate the point cloud, while the other (from 3 to n depending on the dimensions of the area of interest) are used in the point cloud geo-referencing process and need to be placed at the edge of the scene and surveyed by the total-station survey.

Pictures are taken using a compact digital camera[38] mounted on a telescopic pole that allows us to get nearly zenithal images (from a height ranging between 2 and 9 meters according to the dimensions of the area, but that must be fixed for the survey session): each photo needs to have at least an overlap of 60% and 8 GP in common with the adjacent images.

b) 3D point cloud generation

The entire set of pictures are imported into PhMS software which, after a first correction for radial distortion in the different photos followed by homologous GP recognition, generates a point cloud using a dense image matching algorithm. The processing of the photos also produces an ortho-photo that can be exported into a GIS environment and used as a base for vector digitization of the different SU perimeters and related materials.

34. Laurenza – Putzolu 2006; Laurenza – Putzolu 2009, 107–122.
35. Fiorini 2009, 175–186; Fiorini 2010, 1–14.
36. We used a demo release of PhotoModeler Scanner (PhMS).
37. We used small metal discs (diameter about 2 cm) of two different colors: green for GP and red for GCP.
38. Instead of requiring expensive metric cameras, PhMS allows, after an easy calibration, the use of each digital camera.

The density of the point cloud depends on the number of pictures; increasing the number of the pictures improves the density of the point cloud but at the same time lengthens the entire IT process. Only direct experience on the field can help the surveyor in the choice of the correct scale: different experiments covering the same area with sessions made of different numbers of photos suggested to us a rate of about 45 photos every 100 square meters.

Finally the point cloud can be geo-referenced by assigning to GCP the x, y and z values surveyed on the field.

c) From 3D point cloud to DTM

Once exported as an x,y,z ascii file the point cloud can be imported to a GIS environment[39] and transformed into a raster DTM using an algorithm of interpolation[40]: „filling the gaps" between the point of the clouds the algorithm generates a continuous digital surface.

The precision of the first interpolated surfaces was checked by comparing the z value of different cells of the DTM to the z value of control points previously surveyed by the total station: the resulting average error of 5.8 mm can absolutely be considered acceptable for our purposes.

The DTM is the starting point for a wide range of metric, volumetric and topological analyses easily performable in a GIS environment and, at the same time, draping upon it the orthorectified photo processed by PhMS and the vector features drawn from it.

The use of a PC on the field allows us to start the post-processing phase immediately after the acquisition of photos and GCP and gives us the chance to use these 3D models as meaningful decision support when elaborating excavation strategies day by day.

Focusing on the spread of GIS in the archaeological framework during the second half of the 1990s, David Wheatley and Mark Gillings wrote that „unfortunately, the growth in availability of GIS software has not always been accompanied by a corresponding increase in the knowledge and technical capabilities of archaeologists. All too often, archaeological research or cultural resource management projects begin with the vague idea of „GIS-ing" the data and undertaking some „GIS-ish" analysis with it later. When the latter arrives, it becomes clear that poor decisions taken in ignorance about recording have been compounded by a lack of understanding of the capacities and limitations of the technology. The inevitable result is, at best, analysis that fails to live up to expectations and, at worst, flawed data-sets, poorly documented resources and misleading conclusions[41].

After more than 10 years we think that these few lines still hold a fundamental point; in Codroipo we were forced to re-think our surveying procedures by the difficulty in understanding of the stratigraphic sequence (complicated by post-depositional processes) and this improved our control upon the topographical record; if, for example after the refitting of some sherds, SU that were excavated as being different will show up as being the same we will easily have the chance to select the different point clouds and create a new DTM for the newly recognized SU. In our experience the topographical survey using photo-based 3D scanning is extremely useful for the ease of recording SU as blocks of 3D points that can later be analyzed in the digital 3D environment of a GIS, helping the archaeological research to go „*beyond the map*"[42].

39. In our case ESRI ArcGIS 9.3.1
40. In our case 3D Analyst Natural Neighbor interpolation.
41. Wheatley – Gillings 2002, 1.
42. Lock (ed.) 2000.

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Late Bronze Age exchange and interaction in the northern Circum-Alpine region: not only across the Alps

Benjamin Jennings

Abstract

Studies of Late Bronze Age exchange and communication networks in the northern Circum-Alpine region, and central Europe as a whole, have typically focused on routes across the Alps and the circulation of high-value manufactured goods from the Italian peninsula to central Europe. Some artefacts certainly support such a movement from north to south, such as amber from the north or *Pfahlbauperlen* from the Po Plain. However, such objects are far outweighed by the evidence for regional exchange routes in central Europe north of the Alps. Some of these routes extended as far as northern Germany and southern Scandinavia. Whether such exchange routes were direct or down-the-line is open to debate, but it is possible that specific objects known from Switzerland represent the personal possessions of migrant individuals. Over all, it is evident that Late Bronze Age lake-dwelling communities in Switzerland were significant bronze work manufacturing centres, exporting goods to varied communities and regions across central Europe, but with potentially limited exchange, transfer, and cross fertilization of styles and equipment between eastern and western Switzerland.

Key words

Late Bronze Age – Circum-Alpine region – Central Europe – communication – interaction

1. Introduction

Some of the earliest attempts to identify prehistoric exchange routes flowing through continental Europe focussed on the role of amber, transported as a raw material from northern Europe across the Alps to the Mediterranean region[1]. In many ways, studies such as these, interpreting the movement of raw materials from north to south–and manufactured goods in the opposite direction–can be considered as precursors to the many studies following a perspective based around World Systems Theory[2]. Such models are well known and well discussed within archaeological publications[3], and summarily, following the core principles of World Systems Theory, prehistoric Europe has effectively been divided into two (or three[4]) temporally variable zones: the Core, the Periphery, and the Margin. Throughout the Bronze Age the Core can be considered as occupying the eastern Mediterranean and a large portion of the Aegean, with the Periphery extending to northern Italy[5], and the Margin including central Europe north of

1. E.g. De Navarro 1925; Cleland 1927.
2. E.g. Sherratt 1993; Kristiansen – Larsson 2005.
3. E.g. Harding 2013a; Harding 2013b, 136.
4. As per Sherratt 1993.
5. With imported Mycenean ceramics and local colonisation. See Jones – Levi – Bettelli 2005; Vianello 2005.

the Alps[6]. Thus, discussions of interaction between the „Mediterranean“ or „civilized“ south and „Barbarian“ north have focussed on the procurement of raw materials by the former from the latter in exchange for manufactured goods[7]. It is typically assumed that these exchanges occurred on a basis of prestige, with manufactured products from southern Europe having an exotic and „foreign“ nature, giving them a value of status and otherworldliness. Such south-north models have perpetuated at the expense, to some degree, of the theorization of local or regional exchange systems linking the multifaceted cultures of central and northern Europe.

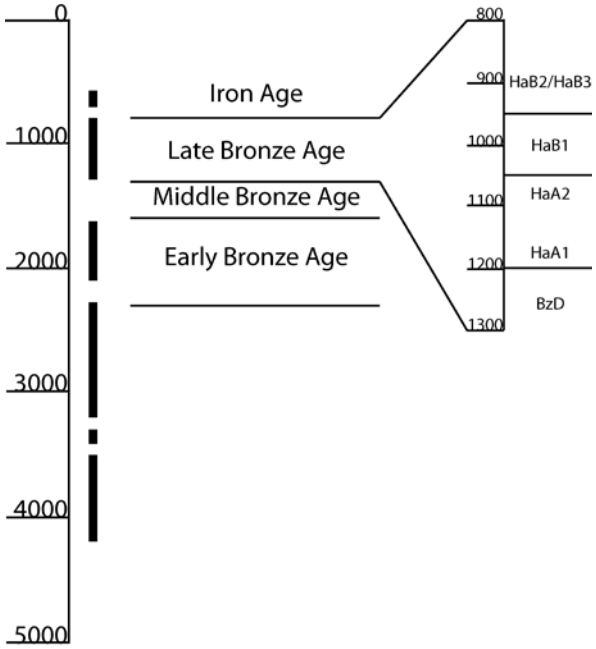

Fig. 1. Chronological divisions used in Switzerland. Years BC black bars to the inner-left indicate periods of lake-dwelling occupation (after Rychner 1998; Seifert 1996; Suter – Schlichtherle 2009).

Attempts to identify such local and regional exchange systems north of the Alps were undertaken by the research project „The end of the lake-dwelling phenomenon: cultural vs. environmental change“ run at the University of Basel[8], with the aim of identifying potential cultural influences linked to exchange systems for the decline of the lake-dwelling tradition at the Late Bronze Age and early Iron Age transition. In addition to identifying such cultural aspects[9], the research highlighted a number of factors regarding the exchange partnerships of the Late Bronze Age lake-dwelling communities inhabiting the northern Alpine forelands.

2. Background

During the Neolithic and Bronze Age, settlements were established along the shorelines of most of the large lakes in the northern (and southern) Alpine forelands, and in wet- and marshland areas further afield in southern Germany and eastern France[10]. This practice was, however, far from continuous, and several hiatuses are observed in the archaeological record, possibly influenced by climatic changes[11], but the lakeshores were always re-occupied; until a widespread abandonment occurred at the end of the Late Bronze Age, typically interpreted as around 800 BC in Switzerland (fig. 1).

Following discovery of the first lake-settlement in the mid-19th century, significant public interest led to an intensive search for these pile-dwellings and the subsequent „excavation“

6. But the definition of core, periphery, and margin is, of course, dependent upon the region of interest and perspective see Thrane 2013, 748.
7. As would become typified by the circulation of Attic ware ceramics in the mid first millennium BC, e.g. Guggisberg 2011.
8. The project was funded by the Swiss National Science Foundation, and ran between 2009 and 2013 (http://ipna.unibas.ch/wetarch/index2.html)
9. See Jennings 2013.
10. For summary and references see Menotti 2013; Menotti (ed.) 2004.
11. E.g. Menotti 2001; Magny 2004.

ofmany hundreds of artefacts from lakes throughout the northern Alpine region[12]. Large scale excavations throughout the 20th century[13] have continued to expand the vast quantity of objects known from this type of sites, and enabled the creation of typological catalogues for the region[14]. Despite the excellent levels of organic preservation encountered at many of these lake-dwelling sites, there remains a dearth of information regarding organic materials which may have been imported from regions in northern (or southern) Europe and, therefore, bronze artefacts (along with glass beads and amber, see below) remain one of the primary indicators for exchange interaction within these wetland sites. The dichotomy between the widely held assumption that various organic materials were exchanged in prehistory[15] and the general absence of evidence for such materials in the archaeological record (even in wetland sites)[16] suggests that preservation is not the sole issue affecting their archaeological visibility. Instead, usage and deposition practices have ensured that the organic materials-which were effectively consumable goods used as either foodstuffs or in other consumptive actions such as wax in bronze casting, salt in preservation, oils in perfume, or furs in clothing eventually destroyed in combustive funeral practices or re-used until their disintegration, were largely used in technical or social practices without any form of deposition.

3. Lake-dwellings and Late Bronze Age trans-Alpine exchange systems

Despite the pre-eminence of bronze work as indicators of exchange, some of the best indicators for interaction in the northern Alpine forelands are provided by amber-fossilized organic tree resin-and manufactured glass beads. As previously detailed, amber has been used to reconstruct trade routes because of its abundance in the Baltic region and relative scarcity in southern Europe-although the exploitation of deposits in southern Europe during prehistory is evidenced[17]. Archaeometric analysis has confirmed that much of the amber from central and southern Europe did indeed originate from the Baltic region[18]. It is also possible to use specific forms of processed amber-manufactured into beads-to infer exchange events; *allumiere* type amber beads in Switzerland at Hauterive-Champréveyres[19] and Montlingerberg[20] provide indications of the limited occurrence of such bead forms outside of their main region of distribution in the Mediterranean zone[21]. Thus, the communities which evidently rejected the symbolism of the *allumiere* beads in preference of more local styles may have been involved in the circulation of the basic raw material to bead production centres at, for example, Frattesina[22] and Campestrin-Grignano[23] in the Po Plain (fig. 2).

12. The „Pfahlbaufieber“, see Menotti 2012, 3–9.
13. E.g. Hauterive-Champréveyres (Rychner-Faraggi 1993), Zurich-Alpenquai (Künzler Wagner 2005), Wasserburg-Buchau (Kimmig 1992), Greifensee-Böschen (Eberschweiler – Riethmann – Ruoff 2007).
14. Rychner 1979.
15. E.g. Kristiansen 1998, 180; Nash Briggs 2003; Artursson – Nicolis 2007, 336.
16. But see Bergfjord et al. 2012.
17. E.g. on Sicily (Beck – Hartnett 1993; Angelini – Bellintani 2005; Murillo-Barroso – Martinón-Torres 2012) and in Romania (Teodor et al. 2010).
18. E.g. De Navarro 1925; du Gardin1993; Beck – Stout 2000; Angelini – Bellintani 2005; Stahl 2006.
19. Rychner – Faraggi 1993.
20. Steinhauser – Primas 1987; Steinhauser-Zimmermann 1989.
21. Negroni Catacchio 1999; Negroni Catacchio – Massari – Raposso 2006; Jennings 2014, 25 –31.
22. Bellintani 1997; Bellintani 2002; Bellintani 2013.
23. Salzani 2009.

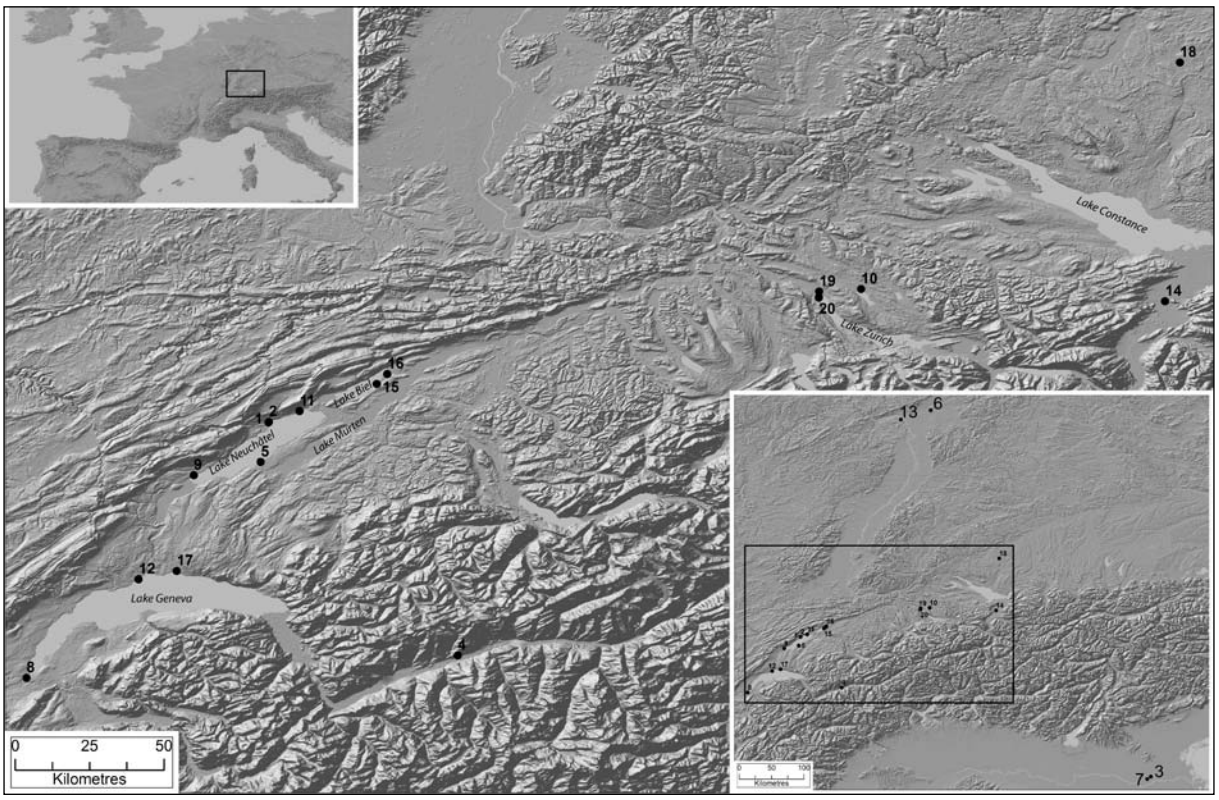

Fig. 2. Location of sites mentioned in text. 1 Auvernier-Bréna; 2 Auvernier-Nord; 3 Campestrin di Grignano Polesine; 4 Chelin (Lens); 5 Estavayer-le--Lac; 6 Frankfurt; 7 Frattesina; 8 Geneva; 9 Grandson-Corcelettes; 10 Greifensee-Böschen; 11 Hauterive-Champréveyres; 12 Le Boiron; 13 Mainz; 14 Montlingerberg; 15 Mörigen; 16 Nidau; 17 Vidy-Chavannes; 18 Wasserburg-Buchau; 19 Zürich-Alpenquai; 20 Zürich-Wollishofen.

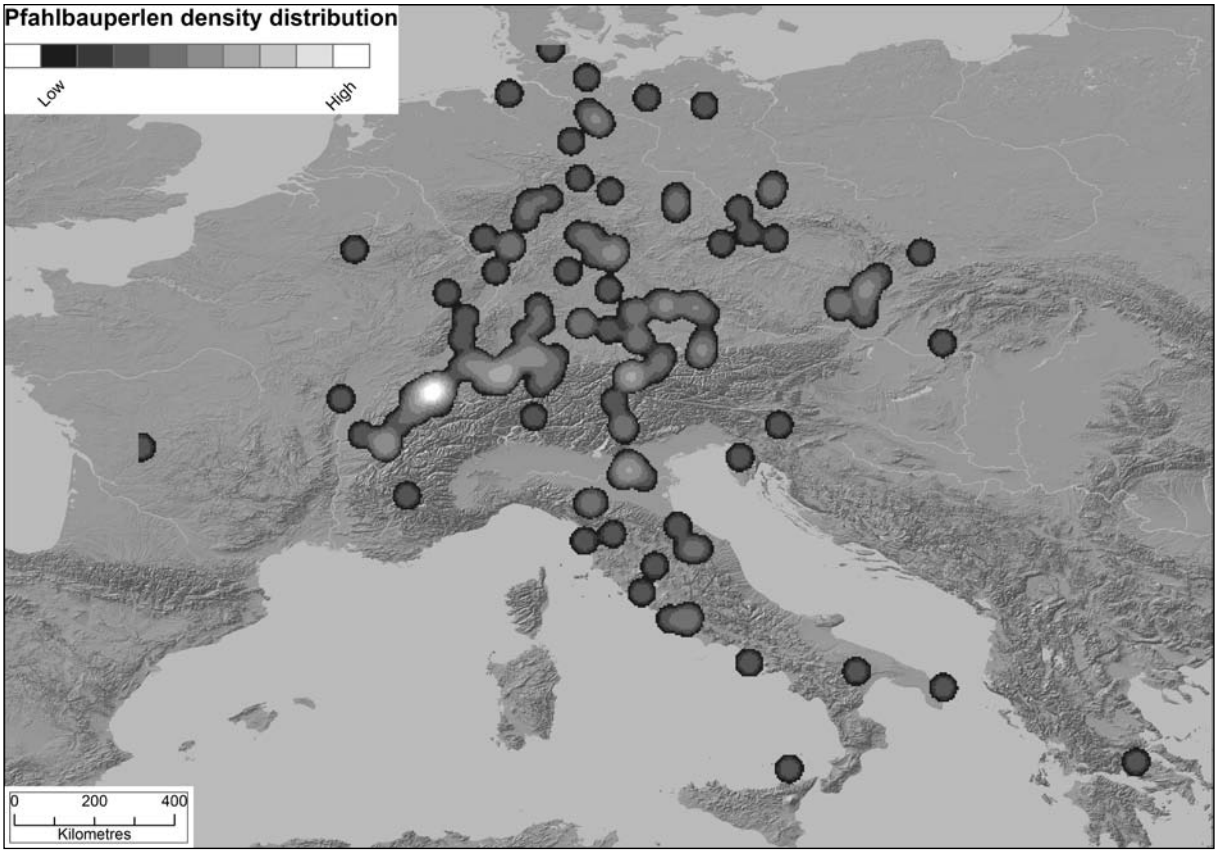

Fig. 3. Density distribution of Late Bronze Age Pfahlbauperlen. An extremely high density is evident around Lake Neuchâtel.

Similar interaction networks between the northern Alpine lake-dwellings and communities in the Po Plain, particularly Frattesina, are evidenced through the distribution of blue and white spirally decorated, or blue with white „eyes", glass beads; the so called „*Pfahlbauperlen*"[24]. The presently known production sites for these beads occur in the Po Plain[25], despite their well-documented occurrence north of the Alps, with an extremely high density around Lake Neuchâtel[26]. Evidently these glass beads were more acceptable to systems of fashion and symbolism in the northern Alpine forelands than the *allumiere* amber beads, and were occasionally included in burials within the region, for instance at Le Boiron[27] and possibly at Vidy-Chavannes[28], but the majority of finds are recorded from lake-settlements (fig. 3).

Considering bronze objects, there is a generally low prevalence of north Italian style artefacts in the northern Alpine lake-dwelling assemblages, but there are some significant exceptions across a range of object types. For example, from the lake-settlement Mörigen a collection of five fibulae are known[29], which were most likely produced in northern Italy and traded across the Alps[30]. Single instances of *Matrei* and *Fontanella* type knives from Mörigen, Hauterive-Champréveyres, Estavayer-le-Lac, and in the Alpine Rhine valley link the lake dwellings-and inland sites-to production zones in northern Italy[31]. Similarly, low intensity exchange is suggested through the distribution of *Zerba* and *Pourrières* type ring jewellery, broadly relating to the HaA period, and found in north-western Italy, eastern France, and occasionally in the northern Alpine region[32]. Occasional razor finds, such as a *„Villanovan"* type at Mörigen[33] and a *Herrnbaumgarten* type from a burial in the Alpine Rhône valley[34], show distinct similarities to forms circulated in central and northern Italy[35]. Fragments of *Brentonico* and *Terramare* type sickles from Auvernier-Nord, Geneva, and Grandson-Corcelettes[36] may indicate the circulation of bronze fragments as an exchange medium, or the movement of sickles themselves.

One of the most enigmatic objects of Italian style known from a northern Alpine lake-dwelling is the horse shaped bridal equipment cheek piece from Zurich-Alpenquai[37]. This object is stylistically similar to-but not directly comparable with-many forms of horse shaped cheek pieces from Late Bronze Age and early Iron Age contexts in central and northern Italy[38], and may represent an imported item or a locally manufactured piece in emulation of styles and forms known from contact with communities south of the Alps. Similarly, the many antenna

24. Haevernick 1978 or „*perle a botticella*" and „*perle a occhi*" after Bellintani – Residori 2003; Bellintani – Stefan 2009.
25. Angelini et al. 2009 but see also Mildner et al. 2013.
26. Jennings 2014, 32–39; Bellintani 2011.
27. Beeching 1977.
28. Kaenel – Klausener 1990; Moinat – David-Elbiali 2003.
29. Typologically named after this site, see Bernatzky – Goetze 1987.
30. Putz 2011, 157; Betzler 1974, 76; Primas 1970, 92.
31. Bernatzky-Goetze 1987; Jennings 2014, 95–111.
32. Paltineri – Rubat Borel 2010; Pászthory 1985; Cordier 2002, 26–28.
33. Bernatzky-Goetze 1987; Jockenhövel 1971.
34. Jockenhövel 1971; Nicolas 2003.
35. See Bianco Peroni1979. The *Herrnbaumgarten* type is predominantly found in eastern central Europe and the Carpathian Basin, but this razor also shows similarities to northern Italian styles, see Jockenhövel 1971; Nicolas 2003.
36. Primas1986.
37. Mäder 2001.
38. Von Hase 1969.

form swords[39] known from the northern Alpine forelands[40] may have been imported from central Italy, or locally manufactured drawing influences in style of prototypes-particularly the *Tarquinia* type-imported from the Italian peninsula[41].

Combining all of the forms of material culture evidence, it is clear that some of the northern Alpine lake-dwelling communities were involved in exchange partnerships with regions south of the Alps, but it is also clear that different modes of exchange were involved, with certain objects travelling greater distances than others. It is well recorded that certain objects were exchanged over large distances: amber is a perfect example of this; the *Pfahlbauperlen*, various types of ring jewellery, and weapons provide other examples (see below). In contrast, some forms of bronze work were distinctly regional - or „local" - in their distribution: for example, razor forms are found in relatively defined clusters[42], and sickle types do not appear to have travelled particularly far[43]. It may, therefore, be possible that many of these small or personal objects did not cross the Alps as exchange items, but rather as the equipment of individuals moving from one region to the other. Such movement is not a novel aspect of the Late Bronze Age, and ceramics, bronze working crucibles, and architectural construction methods suggest such human mobility during the Neolithic and early Bronze Age, in addition to the potential exchange of goods, for example in the form of flint and jewellery pins[44]. However, the Late Bronze Age material indicates neither intensive nor regular exchange between communities in northern Italy and those inhabiting the northern Alpine forelands and lake-dwellings therein.

4. Lake-dwellings and northern Alpine regional exchange systems

The role of lake-dwellings in the regional economy and social system of the northern Alpine forelands has yet to be fully conceptualised-largely due to a relatively limited number of excavations of inland settlements when compared to wetland sites-but there have been some suggestions that there were systematic relationships between lake-dwellings, hill forts, and open lowland settlements[45]. With this in mind, the quantity and range of casting moulds-and also half fabricated objects[46]-provide direct indicators for manufacture of numerous forms of bronze object in/near the lake-dwelling settlements, but not at inland sites.

Numerous types of ring jewellery are recorded from various lake-dwellings in eastern[47] and western[48] Switzerland, but there appears to be some segregation between the two regions with different preferences evident in the choice of rings used[49]. This pattern is observed across other forms of bronze work, and material culture in general, with different ceramic forms and styles, architectural designs, and settlement arrangements used between the two regions[50]. One of the best examples for style preference in bronze work is provided by knife forms: in the western

39. I.e. types *Tarquinia*, *Weltenburg*, *Corcelettes* and *Zurich*.
40. Krämer 1985.
41. Bianco Peroni 1970.
42. See Hennig 1986, fig. 12.
43. See distribution maps in Primas 1986 and also Jennings 2014, 112–116.
44. See Köninger – Schlichtherle 2001.
45. Primas 2008, 33–35.
46. E.g. ring jewellery Pászthory 1985, no. 1610 a.
47. Around Lake Zurich and Lake Constance.
48. Around Lakes Neuchâtel, Biel, Murten, and Lake Geneva.
49. See Pászthory 1985; Jennings 2014, 124–44.
50. Rychner 1997; Seifert 1996.

regions both socketed[51] and *Phantasie* solid handled[52] knives-and evidence for the production of-are recorded; in the eastern region only the *Phantasie* knives are recorded[53] (fig. 4). Further indications for eastern and western regionalisation of production and circulation are provided by the distribution of different sickle forms[54], and even of sickles identified as being cast in the same mould[55]. These sibling sickles suggest a relatively high intensity movement of these artefacts between sites on Lake Neuchâtel, Lake Biel, and Lake Murten, with no such interaction between this region and Lake Zurich or Lake Constance (fig. 5). Compositional analysis of numerous Late Bronze Age bronze artefacts provided similar evidence of the movement of objects with statistically highly similar elemental characteristics[56] (fig. 6). Further differentiation may be seen in the relative absence of *Auvernier* and antenna type swords from eastern Switzerland, but the occurrence of the *Mörigen* type across both the eastern and western regions[57].

Razors pose an interesting situation, with types and forms prevalent-proportionately more in the west than the east, but there are more bronze objects recorded in the west due to the numbers of sites excavated-across both regions[58]. *Pfahlbauperlen* are also present across eastern and western Switzerland, suggesting that exchange practices occurred between the two zones. Given the high concentration of these beads at Hauterive-Champréveyres and around Lake Neuchâtel, it is possible that this site and area formed a regional distribution centre for these beads, importing them from northern Italy and then circulating them throughout the Alpine forelands[59].

Exchange networks within the northern Alpine region appear to have been somewhat limited to „local" systems of broadly stylistically similar groups, definable as regional flavours of the Urnfield culture[60]. Some cross regional interaction did occur, but was not so prevalent that distinctions between the eastern and western regions cannot be observed. It is not clear whether much of this interaction took the form of exchange, with objects effectively being traded between the two zones, or the movement of individuals between the areas taking equipment with them. The sibling sickles may suggest the latter situation, with settlements and house locations occupied on a shifting rotational basis[61]. Alternatively, these objects could indicate that certain settlements formed regional centres of production from where bronze artefacts could be obtained, or that bronze casting was undertaken by migrant bronze smiths, moving from village to village. However, known sickle moulds and evidence from cast sickles themselves indicate that such items were cast in stone moulds, and it would appear unlikely that smiths would travel with a range of stone moulds between sites. Thus, the two former explanations for the distribution of these artefacts are more likely, which is also supported by the archaeometric analysis and identification of compositional „twins"[62].

51. *Tüllenmesser.*
52. *Phantasiemesser.*
53. Jennings 2014, 95–111.
54. Jennings 2014, 112–116; Primas 1986.
55. Primas 1986.
56. Rychner – Kläntschi 1995.
57. Krämer 1985; Jennings 2014, 53–71.
58. Jennings 2014, 80–94; Jockenhövel 1971.
59. Jennings 2012; Jennings 2014.
60. See Rychner 1998.
61. Under a *„Siedlungsplatz"* and *„Hausplatz"* model, see Ebersbach 2013.
62. Rychner – Kläntschi 1995.

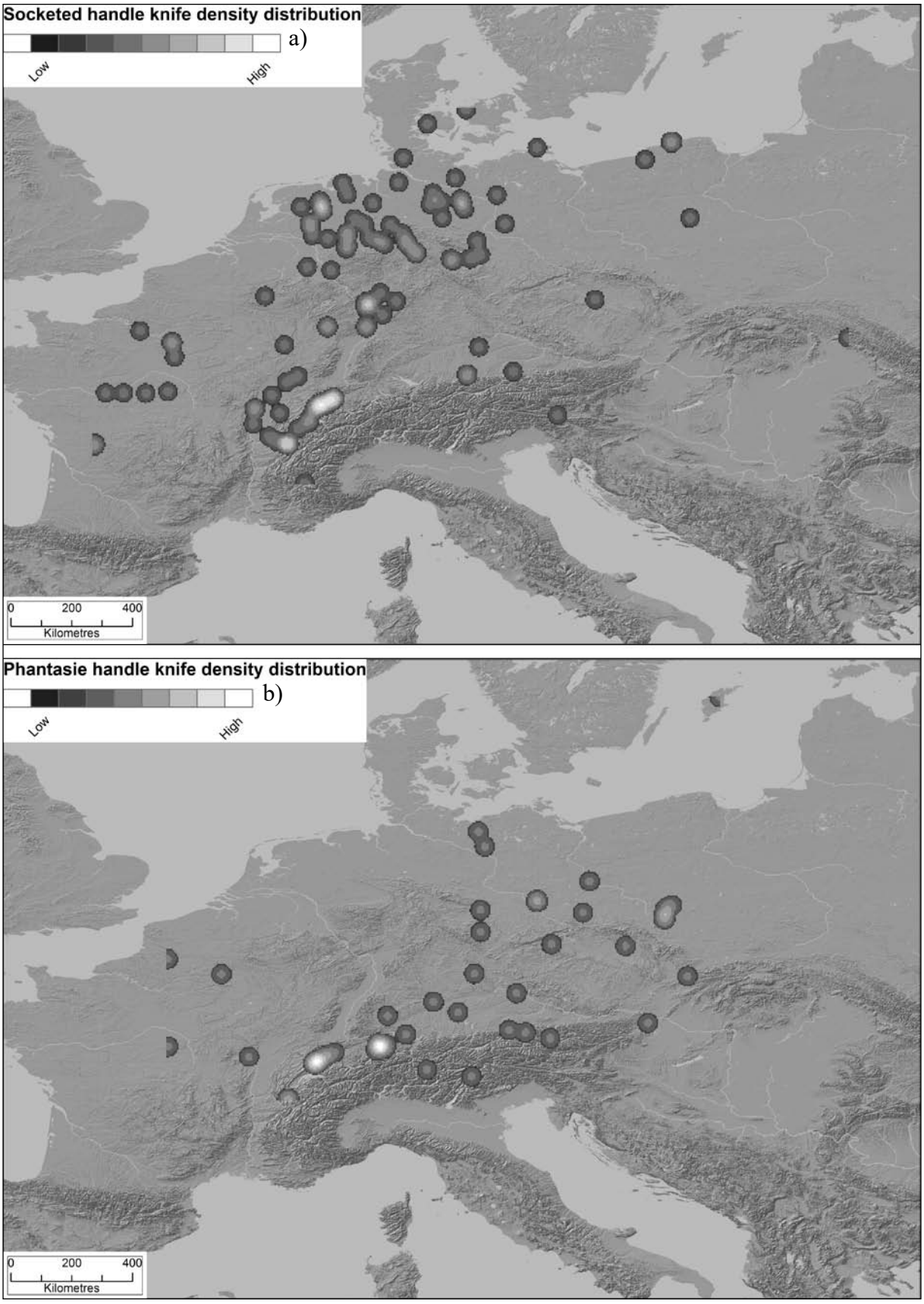

Fig 4. Density distribution of socket handle knives-Tüllenmesser (a); density distribution of Phantasie handle knives (b). It is clear that the two forms moved in different exchange regiemes, despite their co-occurrence around Lake Neuchâtel.

5. Lake-dwellings and central European exchange systems

Ring jewellery provides some of the best indicators for systems of exchange linking central Europe[63] and the northern Alpine lake-dwellings. Several of the forms which display a high density in the lake-dwelling regions, such as the *Corcelettes*, *Balingen*, and *Homburg* types, show continuation of distribution along the Rhine valley and clusters of high concentration around Mainz and Frankfurt, and even extending, in typically decreasing number, to central and western France, and north-eastern Germany and Poland. In the northern Alpine region the *Corcelettes* type is found primarily around Lake Neuchâtel, while *Balingen* and *Homburg* types are found in high numbers in both the eastern and western regions. This distribution pattern extending along the Rhine valley with a high concentration around Frankfurt and Mainz, mirrored in various other types of objects, such as swords of the *Mörigen*, *Auvernier*, and antenna form, *Pfahlbauperlen*, and „lake-dwelling" spearheads[64], is indicative of interaction links between both the eastern and western lake-dwelling regions of Switzerland and Mainz/Frankfurt[65].

It is also possible to suggest that some interaction occurred with communities in south-eastern central Europe, in Austria, southern Germany, and along the Danube valley. The distribution of *Pfahlbauperlen*, *Homburg* rings, *Pfahlbaulanzen*, and swords all indicate such a route[66].

Directionality of exchange is again provided by the distribution of socketed and *Phantasie* handled knives: as within the Circum-Alpine region, socketed knives follow a westward route, extending along the Rhine valley towards northern Germany, the Netherlands, and across France; the *Phantasie* knives continue an eastwards trend, flowing through southern Germany and Austria, the Czech Republic, and Poland. The distribution of these objects is relatively exclusive, with the exception of western Switzerland, suggesting that this region may have been a „melting pot" not only in terms of production, but also in how objects were conceptualised and „sold" or „translated"[67] into the material assemblage of other regions.

As for objects circulating from central Europe into the Alpine region, it is unclear where the *Balingen* and *Homburg* rings originated, and it is possible that they represent imports into the Alpine region. Jewellery needles found at Zurich-Alpenquai and Hauterive-Champréveyres also support the principle of exchange routes linking the regions of Lake Zurich and Lake Neuchâtel to the area of Mainz and Frankfurt[68]. A *Vénat* type spearhead from Auvernier-Bréna[69] , and *Vénat* type arm-rings from Nidau (Lake Biel) and Lake Geneva, fall outside their main distribution in central France and may represent the origin regions for those Alpine type objects which travelled across France to be deposited in hoards such as that at Vénat[70]. The previously mentioned *Herrnbaumgarten* razor from Chelin in the Alpine Rhône valley may have originated from northern Italy, but may also have come from the Czech Republic or Carpathian basin where they are predominantly recorded[71]. Connections between lake-dwellings, particularly those around Lake Zurich, and southern and eastern central Europe

63. Here taken to extend from France to Poland.
64. „*Pfahlbaulanzen*" see Baudou 1960, 14.
65. Jennings 2014.
66. Jennings 2014.
67. Jennings 2014, 15–17.
68. Mäder 2001; Rychner – Faraggi 1993.
69. Tarot 2000.
70. Coffyn – Gomez – Mohen 1981.
71. Jennings 2014, 82–83.

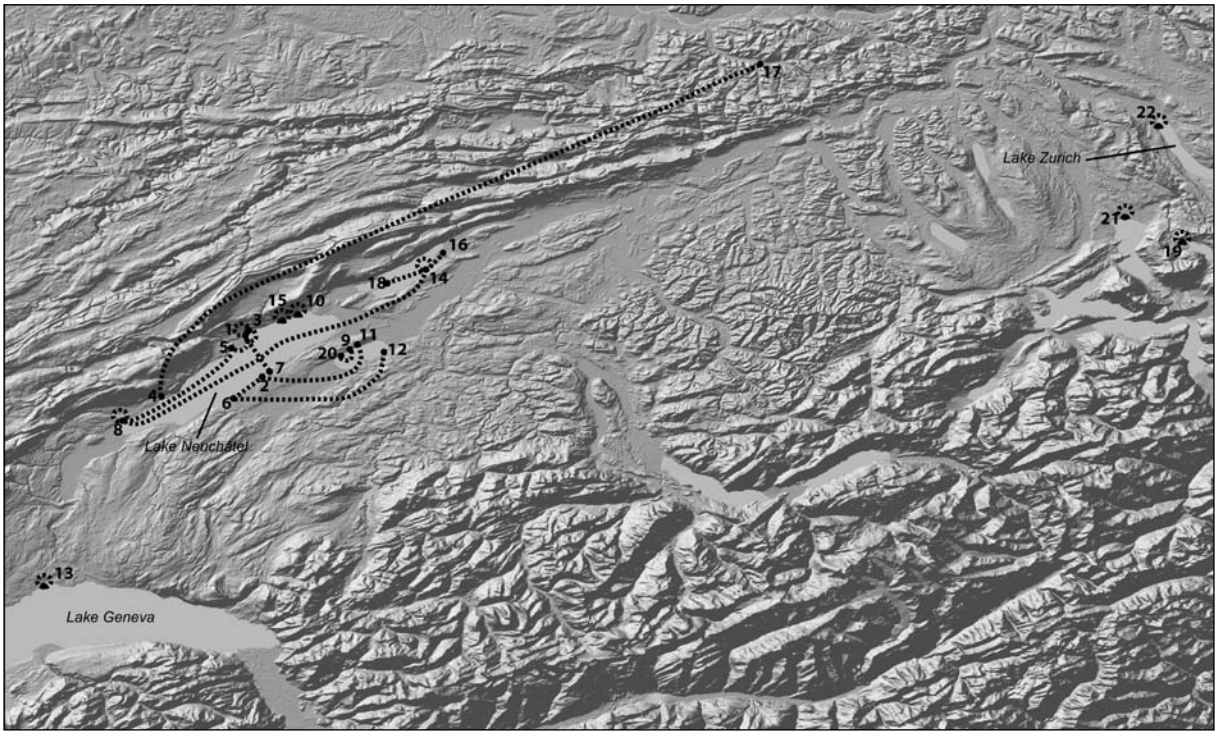

Fig 5. Distribution of 'sibling' sickles in the northern Circum-Alpine region. Dashed circles represent intra-site siblings. 1 Auvernier; 2 Chevroux; 3 Colombier; 4 Concise; 5 Cortaillod; 6 Estavayer-le-Lac; 7 Gletterens; 8 Grandson-Corcelettes; 9 Guevaux; 10 Hauterive-Champréveyres; 11 Haut-Vully; 12 Montilier; 13 Morges Grande Cité; 14 Mörigen; 15 Neuchâtel Le Crêt; 16 Nidau; 17 Sissach; 18 Twann-Petersinsel; 19 Unterägeri; 20 Vallamand; 21 Zug-Sumpf; 22 Zürich-Wollishofen (after Primas 1986).

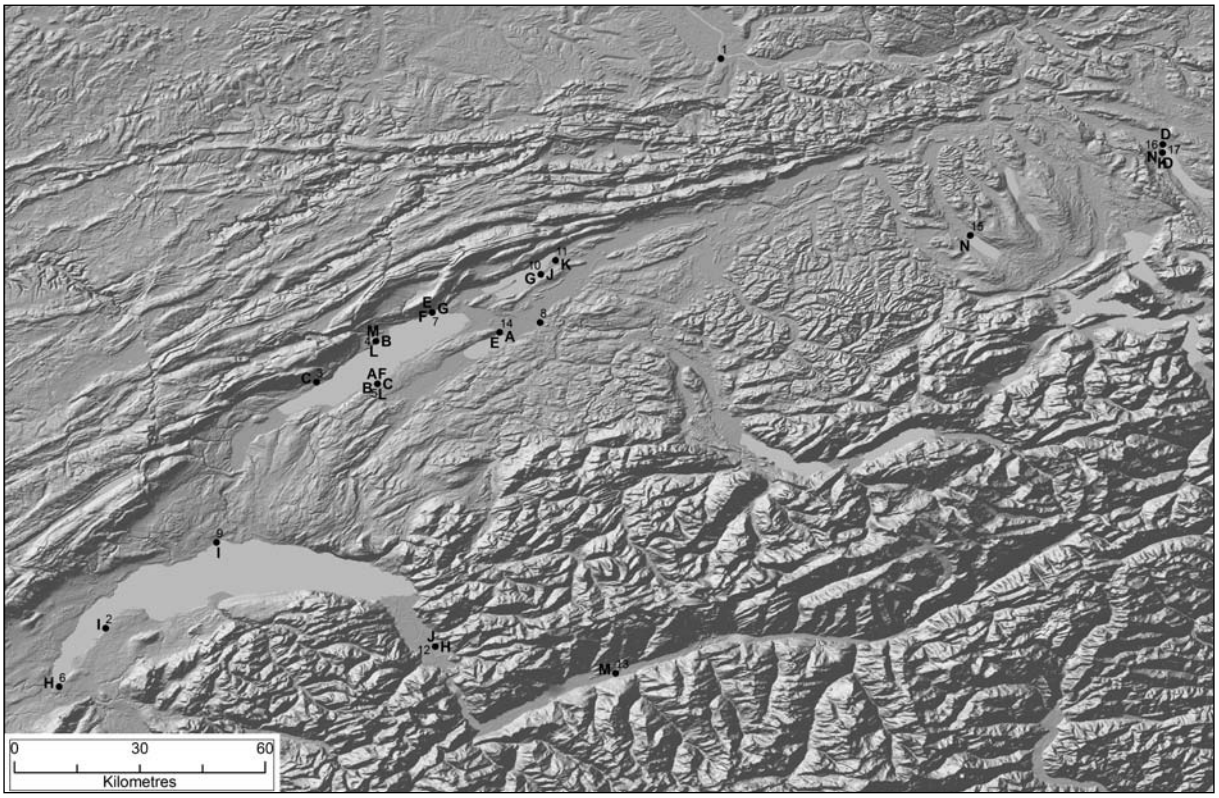

Fig 6. Metal objects manufactured from the same ingot or in the same casting event. Letters link sites together, i.e. A ↔ A. Sites without letter only have internal 'siblings'. 1 Basel-Elisabethenschanze -; 2 Chens-sur-Léman I; 3 Concise C; 4 Cortaillod B, L, M; 5 Estavayer-le-Lac A, B, C, F, L; 6 Genève-Eaux Vives H; 7 Hauterive-Champréveyres E, F, G; 8 Kerzers -; 9 Morges I; 10 Mörigen G, J; 11 Nidau K; 12 Ollon-Charpigny H, J; 13 Sion – Kapuzinerkloster M; 14 Sugiez A, E; 15 Sursee – Zellmoos N; 16 Zürich-Alpenquai D; 17 Zurich-Wollishofen D, K, N (after Rychner – Kläntschi 1995).

are also attested through other forms of material culture, including the so called „moon idols“[72], *„Stangentrichter“*[73], horse equipment[74], an axe mould from Zurich-Alpenquai[75], and fragments of sheet bronze vessels from Zurich-Wollishofen which may have been circulated as scrap bronze[76].

Combining all of the evidence for „exports“ from and „imports“ to the northern Alpine forelands it would appear as though the lake-dwelling communities were primarily circulating their products to central Europe rather than acquiring products from there. Such exchange systems appear to follow, to some extent, major river routes such as the Rhine. It is also striking that despite an apparently limited interaction between eastern and western Switzerland, both zones were communicating with the Mainz and Frankfurt area. It may be that there was sufficient separation between both the eastern and western lake-dwelling regions and Mainz/Frankfurt for the objects from there to remain novel, whereas the relative proximity of the Lakes Neuchâtel and Lake Zurich lake-dwelling regions to each other meant that different styles of objects were preferred in attempts to retain specific regional identities and cultural distinction.

6. Lake-dwellings and northern European exchange systems

Typological identification of bronze artefacts has clearly identified objects typical of the northern Alpine forelands in regions as far north as Denmark, Sweden, Finland, and the United Kingdom. One of the best examples of this is the „lake-dwelling“ type spear, with a considerable number of items found in Denmark and southern Sweden where they may even have been substituted for locally produced *West Baltic* type spearheads in deposition practices[77]. Further evidence of interaction can again be seen in *Mörigen*, *Auvernier* and antenna type swords, but forms of ring jewellery did not reach Scandinavia, even though several *Balingen* type rings crossed the English Channel and were deposited in south eastern England[78]. Such cross Channel connections also resulted in several one-sided razors from the Alpine region being deposited in southern England[79]. Why these razors travelled so far out of their home region is unclear, particularly given the general regional nature of razors; it is possible that they represent the personal equipment of migrants from the Alpine region.

Considering objects/materials which may have flowed from northern Europe to the Alpine region, then amber is one that has been well discussed in the archaeological literature (see above), and the density distribution of Late Bronze Age amber artefacts may indicate routes along which this material circulated; the Rhine Valley, Mainz/Frankfurt, and Lake Neuchâtel stand out as particularly high concentrations (fig. 7). However, amber was not the only material to have travelled from northern regions to the Alps.

From the lake-dwelling Grandson-Corcelettes a small collection, not in association and unfortunately not all with find context information, of Nordic style objects is known, including a *West Baltic* spearhead[80], a *Platten fibula*[81], and a *hanging vessel*[82]. Each of these objects is primarily

72. Primas et al. 1989, 126–48.
73. Mäder 2001, 41–45.
74. Van Willigen – Mäder 2012.
75. Primas 2004, 125.
76. Primas 2004, 125.
77. Jennings 2014, 72–79.
78. O‘Connor 1980.
79. Types *Mörigen*, *Auvernier*, and untyped piece see Jockenhövel 1971; Hennig 1986, fig. 12.
80. Tarot 2000; Jacob-Friesen 1967.
81. Sprockhoff 1966; Laux 1973; Gedl 2004; Sprockhoff 1956.
82. Sprockhoff 1966; Fischer 2005.

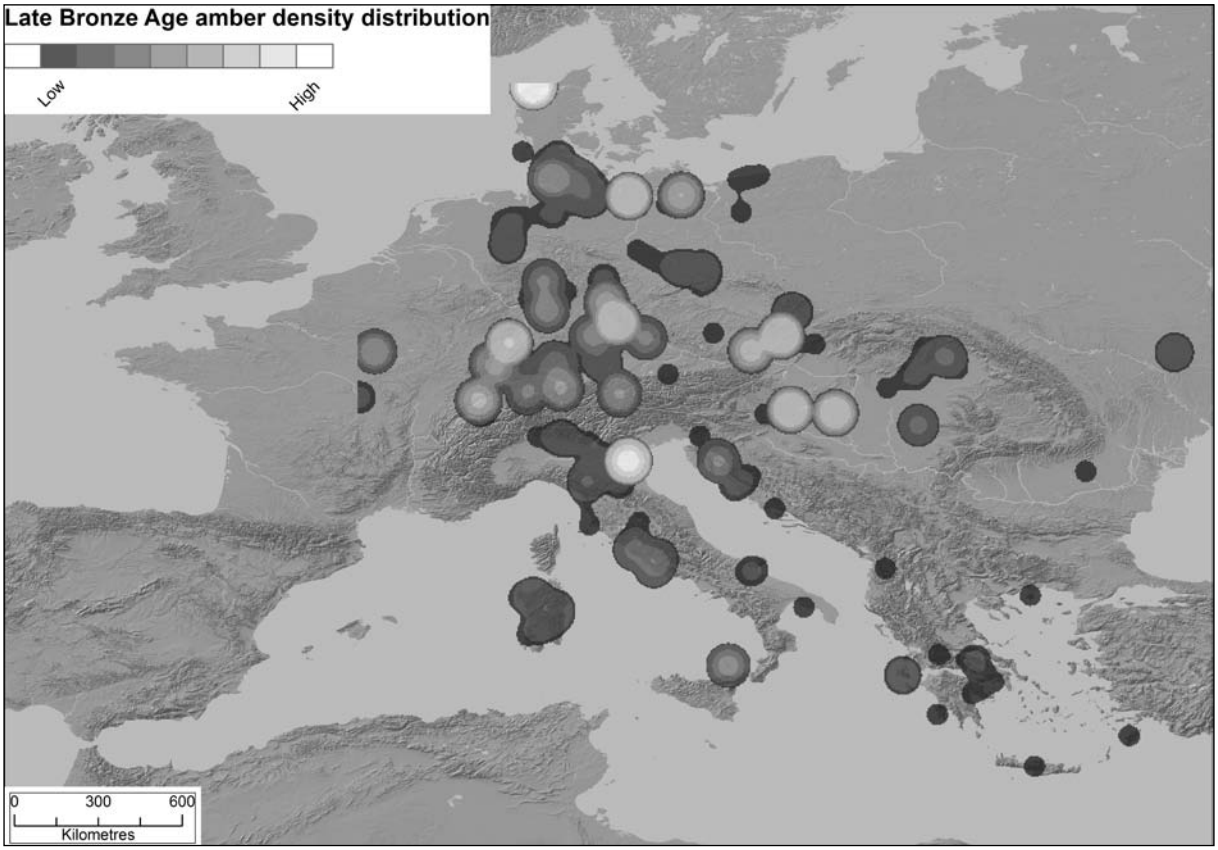

Fig. 7. Density distribution of Late Bronze Age amber beads in Central Europe. Only Allumiere and Tiryns beads detailed for the Italian peninsula and Mediterranean region (after Stahl 2006).

distributed in northern Germany and the Baltic region, with some extension to the area of Mainz and Frankfurt[83]. Given the almost intact deposition of these objects, and relative proximity of Grandson-Corcelettes to copper bearing regions in the Alps, it would appear unlikely that they were circulated as bronze for recycling; rather they may have travelled as the personal equipment of migrants from the north, or formed a gift partnership between individuals in the two regions.

7. Conclusions

Considering the evidence for interaction networks flowing through the northern Alpine lake-dwellings, it appears that the influence of communities inhabiting the southern Alpine regions and northern Italy was relatively limited. In contrast, the connections between different areas of Switzerland and central Europe appear to be particularly strong, especially in the distribution of products which were manufactured in the lake-dwelling regions. These indications for relatively intensive interaction reflect communication and exchange. At the limits of this macro-regional Urnfield exchange network some products from the Circum-Alpine region were translated and incorporated into the local material culture assemblage of communities of different cultural background, for instance in the Nordic region. It is also possible to suggest that individual-or possible paired or familial-migrations occurred between northern Europe and the Alpine region, and vice versa. This does not preclude the potential for intra Urnfield community migration within central Europe, as has previously been suggested by Albrecht Jockenhövel for the Middle Bronze

83. Jennings 2014.

Age[84], but such events are more difficult to identify given the widespread distribution of many lake-dwelling style artefacts and the generally poor representation of bronze objects in Urnfield burials[85]. It is, however, interesting that there appears to be relatively limited regional interaction between the eastern and western lake-dwelling regions within Switzerland, with groups in the two areas using material culture to retain identities and differentiate themselves.

Thus, although it does appear to be a general south-north flow of manufactured bronze objects from the lake-dwellings to Scandinavia, this system is largely defined by the route of the Rhine river, which was likely used as a direct (boat) or indirect (following river plain, using the river as a locational marker and guide) means of transport. The spread of various objects away from the river valley and across France, central Germany, Poland, the Czech Republic, and Austria clearly indicates that interaction was occurring as a web, and not confined to a south-north route. It is however clear that some raw materials, particularly amber, were flowing from the north, through the lake-dwelling region, and across the Alps into northern Italy. Travelling in the opposite direction were, amongst other objects, manufactured glass beads[86], again finding routes of interaction and exchange in the lake-dwelling communities, and potentially „tagging along" with bronze objects on their route to central and northern Europe. It is clear, however, that not only objects but also concepts and ideas travelled across the Alps from northern Italy, with weights identified at several lake-dwellings classified as belonging to the *Terramare* system[87]. This suggests that interaction between the lake-settlements and „advanced" communities in the Po Plain may have initiated changes to the manner in which exchange was conducted in the northern Alpine region.

Returning to the issue of north-south exchange across the Alps under models of „core-periphery-margin", „civilized–barbarian", or „manufactured goods–raw materials", it is uncertain whether communities at either end-or intermediary points-of the trade routes knew the primary source of the objects exchanged. Of course, tales of strange and distant places and people may have filtered along the exchange route, potentially giving an exotic value to objects procured from there[88], but it is also clear that objects were translated, re-contextualised and given new social significance and values different to those they possessed in their region of origin as they moved along widespread exchange networks and were intermittently re-interpreted as „local" objects[89]. It is only with our privileged position of hindsight that we are able to identify „cores" and „peripheries" and observe the movement trends of raw materials and manufactured goods. During prehistoric exchange actions such a position of oversight did not occur; more important to the communities was the exchange and procurement of materials and objects which held significance and relevance for use in social practices of micro-and macro-regional identity creation and differentiation.

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84. Jockenhövel 1991.
85. But the *Herrnbaumgarten* razor in a burial at Chelin (Switzerland) provides one potential example cf. Nicolas 2003.
86. Primarily identifiable as *Pfahlbauperlen*, but a several blue and red beads from Augsburg-Haunstetten (Germany) are similar to other beads found at Frattesina. See Mildner 2008, 114–115 Wirth 1998; Bellintani – Stefan 2009.
87. Pare 1999; Pare 2013.
88. Cf. Helms 1988; Helms 1992.
89. Jennings 2014.

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Tarquinia and the north. Considerations on some archaeological evidence of the 9th-3rd century BC

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Abstract

This paper reports the preliminary results of an on-going project concerning contacts between Tarquinia and central and northern areas of Europe, including the southern Scandinavian peninsula. Material evidence of objects imported from, or influenced by, the northern regions (Northern Italy, central Europe, etc.), in both metallurgy and pottery production identified in ancient Tarquinia from the Villanovan period onwards, shows the crucial role of the city as a contact point in the transmission of such influences to southern Italy.

Key words

Tarquinia – monumental complex – villanovan urns – lures – bronze cups – fibulae

1. Introduction (Giovanna Bagnasco Gianni)

The following four papers explore the invisible aspects of cultural transmission through selected case studies observed in their archaeological contexts, considering evidence from the „monumental complex“ on the Civita *plateau* of Tarquinia and from the necropolis.

Excavations performed at the „monumental complex“ since 1982 have revealed a sacred area existing from the 10th century BC to Romanization; evidence that the area was inhabited during the Iron Age, corresponding to the Proto- and Villanovan phase (end of the 10th-8th century BC), covers more than a quarter of a hectare. The continuity of its sacred and institutional destination is shown by a series of votive deposits revealing cultic practices performed around a natural cavity for approximately nine centuries[1]. A number of discoveries suggest an articulated situation of contacts and a foreign presence, which can also be perceived through the funerary equipment of the necropolis[2].

In assessing the development of the relationships in and among different communities, a crucial aspect is the function and purpose of iconographies related to cosmological topics that were first absorbed and reworked during the Villanovan period[3], enhanced during the Orientalizing period, and continued further.

On the one hand the function of such images is clear and immediately recalls cosmological concepts through the voyage of the sun; on the other hand it is difficult to distinguish their role from a pragmatic perspective. Were they symbolic and just meant to recall the concept of cosmos, qualifying objects, or monuments and topographic patterns belonging to that semantic sphere? Or did they perform–on objects, monuments and topographic patterns–an active role

1. For recent contributions see the bibliography listed in Bonghi Jovino 2010; Bagnasco Gianni 2012.
2. For recent contributions see the bibliography listed in Bagnasco Gianni 2008; Bagnasco Gianni 2010.
3. See Piazzi’s contribution below.

in influencing specific actions and behaviours related to the general setting of a site within its related „landscapes"?

For example, *sigla* formed by a cross inscribed in a circle, identified in the „monumental complex", suggest a positive answer to the second proposal. According to M. Pallottino's studies on limitation, orientation, and partition of sacred space, this kind of *sigla*–which divides the space first into two, and then four parts and frequently occurs on pottery from Etruscan sacred areas–is probably connected to the Etruscan religion. At the „monumental complex" *sigla* come along with such a partition of space that we may suggest consistent cultic practices connected to divination[4].

Within such a general framework, the overall study of the ceramic set of the Bocchoris Tomb of Tarquinia – which belongs to a high ranking woman – suggests the tomb is symbolic of a complex and well established cosmological knowledge absorbed from various ancient influences since the Villanovan period.

The tomb dates to the first quarter of the 7th century BC and the set is formed by a stand and a jar with lid[5]. The focus is on the anthropomorphic figure stretched in the bridge stance over the circular space corresponding to the lid of the jar. Such space is fenestrated by thick stripes of white paint delimited by orange lines on the reddish ceramic body. This layout can be compared with that of the very elaborate high handle of a well-known series of bronze cups belonging to the end of the Villanovan period. Their shape can be assigned to the Stillfried-Hostomice series, which shows central European influences[6]. The cups are disseminated throughout northern Etruria and in the areas of Piceno and Umbria, and the handle style is also present on pottery specimens[7]. The anthropomorphic figure is obviously upright in the case of the handle of the cups and horizontal in that of the lid.

The cup handles are linked to the cosmic order through the anthropomorphic figure that divides the background in two. The archaeological contexts preserved are few, and they generally occur in female burials, so that the cups have been assigned to ceremonial practices performed by priestesses[8] whose role–according to a perspective that takes into account the multifaceted status of Etruscan women–is usually not considered as opposed to that of mothers and matriarchs[9,10].

When looking from above, the lid–which is located over the jar that, in turn, is placed over its stand–the anthropomorphic figure appears to be stretching above the maximum expansion of the belly of the jar. The jar is also depicted in white-on-red with a series of seven alternating towers crowned with square battlements, triangular limits crowned by radial pattern axis circles, and soldiers with hoplite armour. Crucial aspects of the whole composition can be identified in the limits and partition of space of the city below the stretching anthropomorphic figure, and the hints to music and sound related to its acrobatic bridge stance.

To present knowledge, this is the most ancient representation known in Etruria of a city surrounded by towers and sacred limits, focused on the idea of the number seven, which was probably borrowed from the Near East, where it was also connected to music. The combination of this concept with that of music and sound likely demonstrates it was accepted and elaborated in

4. Bagnasco Gianni 2008; Bagnasco Gianni 2012; Bagnasco Gianni 2014a.
5. Bagnasco Gianni 2014b.
6. Von Merhart 1969, 268–277; Iaia 2005, 141–143; Babbi 2009, 19, 37. The southernmost presence of the type has been registered in Tarquinia and Pontecagnano, see Gobbi's contribution below.
7. Delpino 2006, 42–46.
8. von Eles 2007; Rathje 2013, 115–116.
9. Pitzalis 2011, 265–266.
10. Bagnasco Gianni 2012.

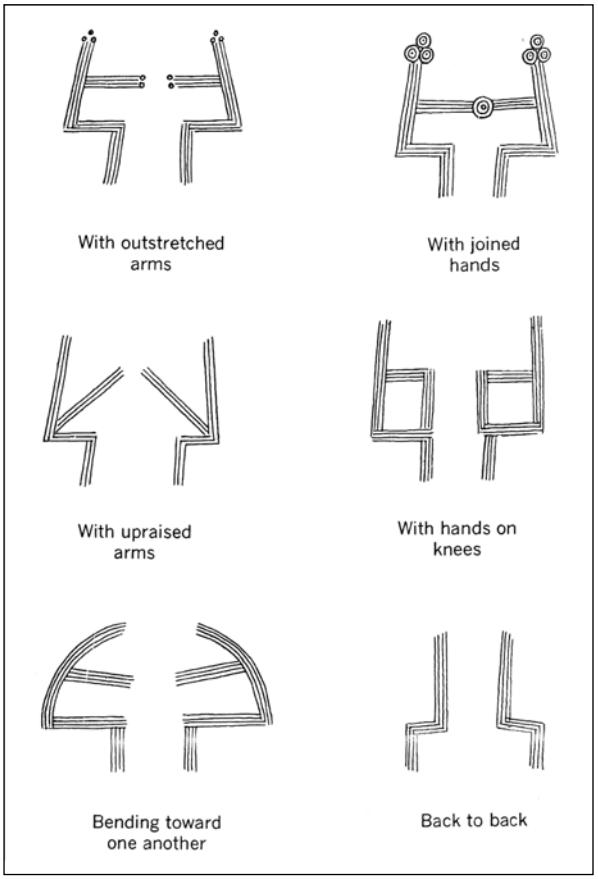

Fig. 1. The seated figure motif on biconical urns from Tarquinia (after Hencken 1968).

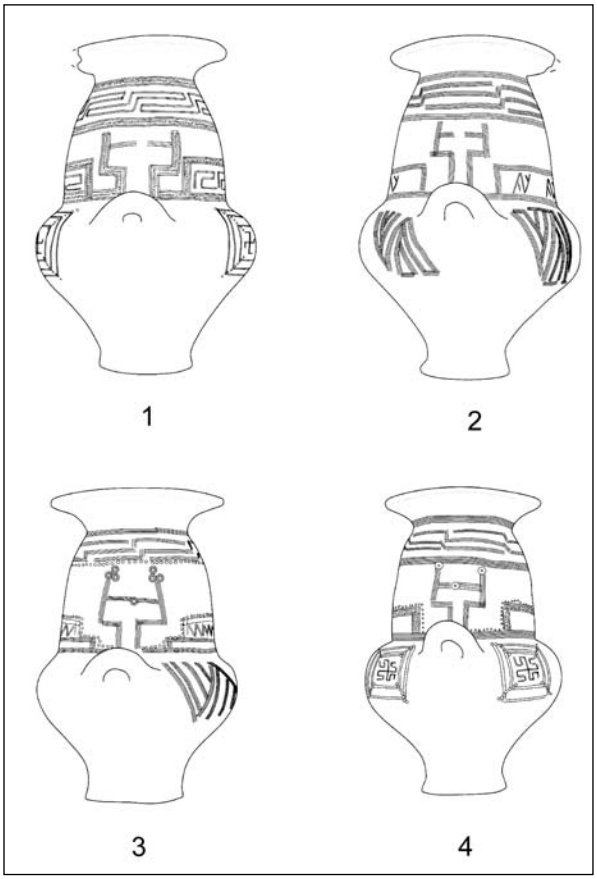

Fig. 2. Examples of biconical urns with seated figure motif (after De Angelis 2001; Delpino 2009a).

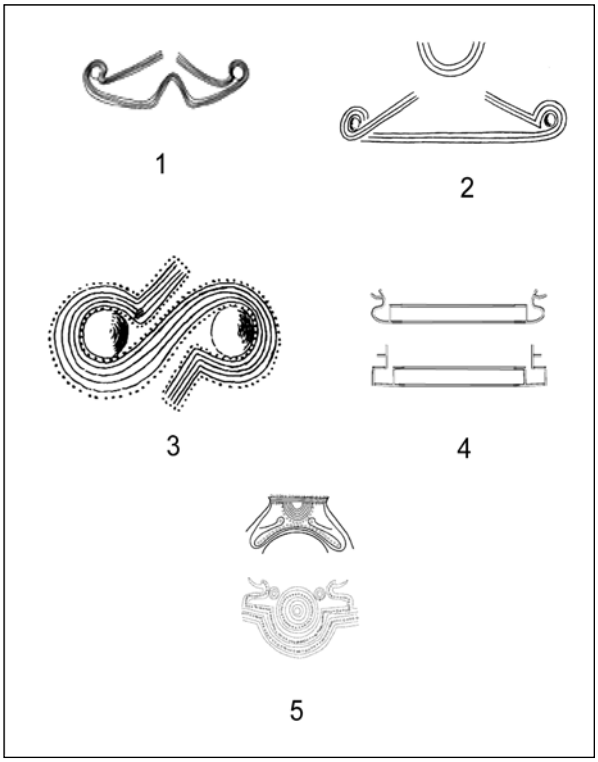

Fig. 3. Possible evolution of the seated figure motif from the sun-boat motif. 1-3 the sun-boat on protovillanovan urns from Pianello del Genga; 4 the seated figure motif on villanovan urns, as frontally seen; 5 Vogel Sonnen Motiv on Etruscan bronzes (after De Angelis 2004, fig. 1B, 347).

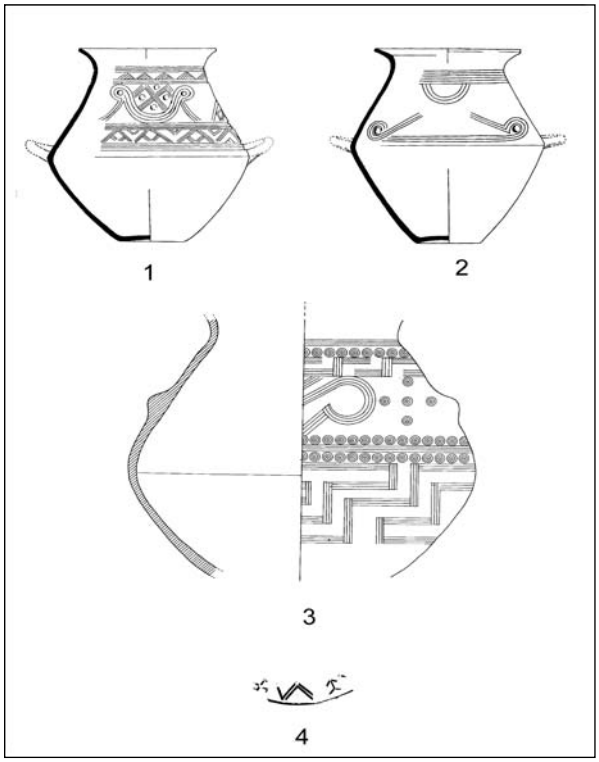

Fig. 4. Protovillanovan urns. 1-2 Pianello del Genga; 3 Volterra; 4 Sorgenti della Nova (after Müller Karpe 1959; Cateni-Maggiani 1997; Dolfini 2002).

Fig. 5. Stand from the Tarquinian necropolis of Impiccato, grave 14 (after Hencken 1968).

Tarquinia and associated to cultic practices[11].

The chronology is consistent with that of the set of bronzes of the „monumental complex" of Tarquinia formed by a wind instrument, the so-called lituus-trumpet, an ax, and a shield, which were all defunctionalized and located in a large pit beside a similar one, in front of an altar temple (*edificio beta*) raised to the east of the natural cavity. These objects have been studied separately, from the point of view of their formal and stylistic features, together with their very archaeological context[12]. Similar sets of bronzes are presently unknown in the Mediterranean world; when looking for comparisons outside the Mediterranean area, however, they can only be found in southern Scandinavia in a number of different and interesting contexts[13].

Summing up, the first case study concerns the presence of well-known central and north European iconographies–such as the „bird protome", the „sun bird", the „sun boat" and water birds–on pottery works from the „monumental complex" of Tarquinia, dating from the Late Bronze Age to the Orientalising period, together with their counterparts from the necropolis (Claudia Piazzi). Based on such evidence of contacts, a second case study compares, for the first time, the combination of the above mentioned three bronze objects with evidence from South Scandinavian contexts (Nora M. Petersen). A third case study involves the relationship between Etruria and Campania, probably supported by Tarquinia as a contact point, by comparing and contrasting the features of contemporary funerary contexts from both areas (Alessandra Gobbi). The last paper focuses on the evaluation of some recent finds of fibulae from the „monumental complex", dated from the 7th century BC onwards. Since their northern origin is most probable, they may help to reconstruct the directions of the interregional relationships between the central and southern parts of Europe (Martin Trefný).

2. The sun-boat or „human seated figures" on Villanovan biconical urns? (Claudia Piazzi)

Some pottery shards from the inhabited area of the „monumental complex" of Tarquinia, dating to the Villanovan period, have a very significant decorative motif. Such motifs are known as the „seated figure," and it is usually depicted on vessels–and especially on urns–from the necropolis. A number of scholars consider it a modification of the sun-boat motif, so that its original meaning is rooted in the semantic sphere of the voyage of the sun.

The symbolic value of the sun-boat[14] connected to the cult of the journey of the sun and to the

11. Bagnasco Gianni 2014; Berlinzani 2007; Ridi forthcoming.

12. Bonghi Jovino 1999.

13. See Petersen's contribution below.

14. The sun-boat motif could be considered the „epitome of the sacred imagery in Continental Europe" (Iaia 2004, 307) and it often appears combined with that of the aquatic birds in a variety of representations; the sun-boat with ornithomorphic protomae is present on a great variety of objects, from pottery to bronzes; at the head of these we can find von Merhart's Vogel-Sonnen/Vogel-Barke Motiv on Hajdúböszörmény bronze vessels (Ha B1), but the same iconographical theme transposed into a wide geographical area had different outcomes. The association of the solar iconography with that of the boat and aquatic birds goes back to the 13th century BC, but the represen-

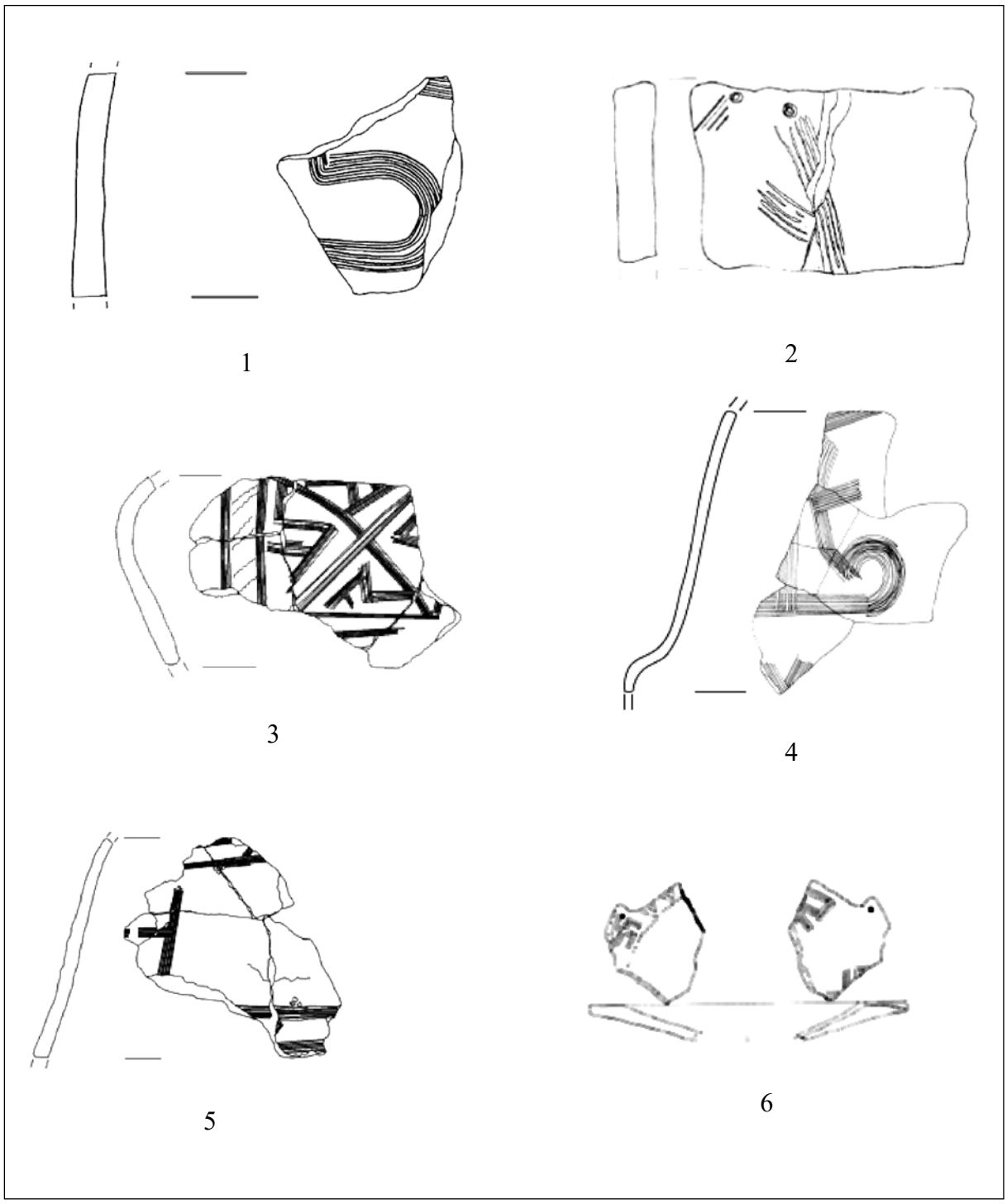

Fig. 6. Materials from the „monumental complex" of Tarquinia.

concepts of day and night, light and dark, earth and sky–is shared at large in Central Europe, Scandinavia, and the north and centre of the Italian peninsula, with a few examples from the Aegean[15]. A similar connection to northern European themes is well known in local metalwork production, giving evidence of ability in acquiring and elaborating them according to the local cultural requirements[16].

The shards from the „monumental complex" enable us to investigate the possible Etruscan ability in combining the idea of the sun-boat and of the seated figures and to discuss some aspects of a very ancient relationship between the religious imagery of Central and Northern Europe and the Italian peninsula, as well as some primitive Etruscan rituals.

2.1 A not pacified question

In 1968, the monumental work of H. Hencken on the Villanovan necropoli[17] of Tarquinia systematically displayed the grave groups of hundreds of tombs of the Etruscan city for the first time. According to Hencken, a particular motif was used only on biconical urns to resemble two human figures. It is formed by two symmetrical terminations arranged in a stripe, located at the base of the neck of the vase, and at the level of its handle[18]. These figures are depicted in a very geometric way: seen from the side, they sit in front of the other. The oblique or straight lines departing from the „bodies", stretched toward each other, looked like arms. This is one of the reasons why Hencken argued they might be the very first representation of funeral feast[19] (fig. 1-2).

After H. Hencken's contribution no further considerations on this motif were offered until 1994, when R. Peroni[20] pointed out that the two symmetrical figures, together with the decorated stripe at the base of the neck, had to be read as an Etruscan outcome of the sun-boat motif, whose representation is at first sight difficult to understand because of the roundness of the vase: the two figures were the bird-protomae of the sun-boat, realized in a very schematic way. In other words, R. Peroni was convinced that the human figure was not involved in such representations, and that the supposed arms should have been considered as the remnants of the bird's beak[21] (fig. 3). In her 2001 work on Villanovan decorative style on pottery, D. De Angelis

tation of the sun for cultic reasons, or of aquatic birds, are themes present since the Neolithic (Marzatico 2011, 327–328). Several scholars focus on solar iconography; sun-boat and aquatic birds are numerous–those dealing with contacts between Central/Northern Europe and Italy include Von Merhart 1952; Kossack 1954; Kossack 1969; Jockenhovel 1974; Krauskopf 1991; Marzatico 2001; Damiani 2004; Dolfini 2004; Iaia 2004; Iaia 2005; Kristiansen-Larson 2005; Brocato 2008; Damiani 2011; Camporeale 2012; Medoro Kanitz 2012.

15. The Vogel-Sonne Motiv, according to the proper declination of the Danubian-Carpathian basin, appears in the above mentioned territories; actually the cult of the sun and the motif of the sun-boat, or of a boat carrying deity, also spread in the Near-East and Egypt, since the 3rd millennium BC, showing shared religious concepts that developed independently of each other, see Marzatico 2011; Bettelli 2004.

16. For this specific topic see in general Iaia 2005.

17. Hencken 1968.

18. This motif was probably created in Southern Etruria, and most likely in Tarquinia. It is also well documented in Veii and Vulci, and at present there is no evidence at Cerveteri (De Angelis 2001, 297–300). Some isolated examples come from other sites that are influenced by South Etruria during the Villanovan period: Bologna, Fermo, Chiusi (Donati 2005, 371). The motif lasts during Villanovan IA-B and IIA and disappears around the half of the 8th century BC.

19. Hencken 1968, 29–30.

20. Peroni 1994.

21. Peroni 1994, 148, 301.

followed the same idea, adding that human figures on Villanovan pottery are usually represented from the front[22].

However, other scholars continued to follow/embrace Hencken's interpretation[23]. L. Donati embraced Peroni's in suggesting that the sun-boat motif is likely to have produced the motif included in the stripe of biconical urns, but he also followed Hencken's interpretation of human seated figures[24]. They would represent a gesture of greeting or farewell between the deceased and his relatives, or ancestors or deities[25]. Although more critical about Peroni and De Angeli's statements, F. Delpino shares the idea of a „semantic polyvalence" between the sun-boat motif and anthropomorphic figures. His point is that human figures are consistent with the Villanovan anthropomorphic conception of the urns[26].

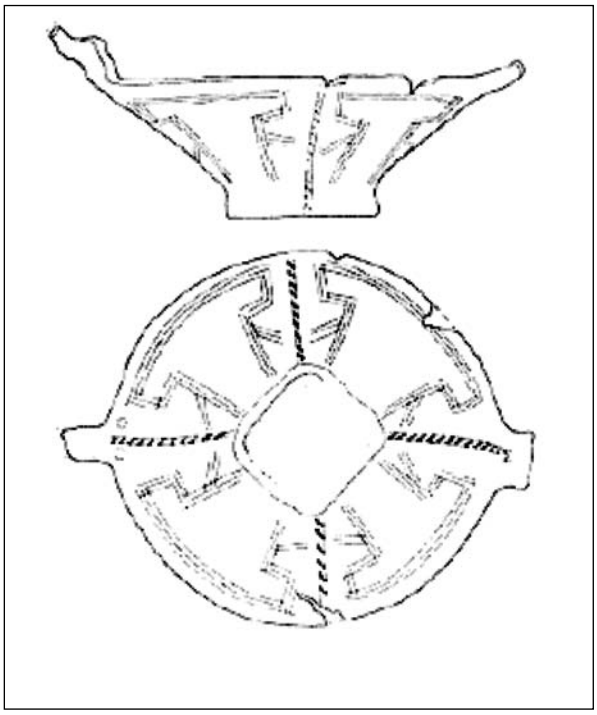

Fig. 7. Stand from Tarquinian necropolis of Villa Bruschi Falgari (after Iaia 2002).

In addition, Donati and Delpino argue that the sun-boat interpretation does not explain some details of the decoration. For example, when the terminations of the protomae are clearly joined it is easier to consider them as human figures holding their hands than as joint „beaks"; the layout of dots, or groups of dots, impressed on the final traits of the figures, are more similar to human heads and hands than bird protomae (fig. 3-4). Further details support the interpretation in the semantic sphere of human beings and the related symbols of the death-passage, such as the biconical shape of the urns recalling the body of the deceased[27], and the ritual convention of breaking off the handle[28].

Recently G. Camporeale questioned the idea of the scheme of the seated figures as an outcome of the sun-boat motif without arguing further[29]. The aim of the present contribution is to point out possible points of contact between these two positions and try to harmonize them.

The solution of a „semantic polyvalence" proposed by Donati and Delpino could be a good starting point. The possible origin of the Villanovan seated figures from the sun-boat motif seems quite unquestionable; such an evolutionary line can be seen on some examples of pottery from the Italian peninsula and specifically on some biconical urns of the

22. De Angelis 2001, 279–281, 366; De Angelis 2004, 340.
23. For example J. Jannot while overlooking the above mentioned issues concerning the sun-boat motif focuses on its meaning as the first representation of very ancient rituals attached to heroization (Jannot 2002).
24. Donati 2005, 373.
25. Donati 2005, 375–377.
26. Delpino 2009, 174.
27. Delpino 1977, 2005; Toms 1996.
28. F. Delpino supports his position recalling the Montescudaio Urn, whose handle is shaped as a human figurine (Delpino 2009, 154); L. Donati attaches the meaning of „passage" to some examples of urns from Tarquinia, on which a door is depicted instead of seated figures (Donati 2005, 377–378).
29. Camporeale 2012, 342.

previous Protovillanovan period (Italian Late Bronze Age), as already stated by Peroni, De Angelis and Donati[30]. In fact a schematic but complete representation of a sun-boat appears on one side of a number of vases from Pianello del Genga[31] (fig. 3:1-2; 4:1-2) and a simplified version of the motif, of which only the two opposite ornithomorfic protomae survive, were found at Sorgenti della Nova[32], Pianello del Genga[33] (fig. 3:3), and Volterra[34] (fig. 4:3). Some examples show that during the following Villanovan period the development of the sun-boat motif into that of the seated figures, regardless of their interpretation, can be followed in southern Etruria thanks to the representation of the boat that is arranged in a continuous stripe around the body of the vases[35] (fig. 2; 3:4). Two interesting examples come from Tarquinia, where two stands also give evidence of the relationship between shape and decoration. The first comes from the necropolis of Villa Bruschi Falgari and is a characteristic stand recalling the shape of the boat decorated with a distinctive motif, occurring on the four partitions of the vase. It is currently quoted in the literature to clearly demonstrate the connection between the idea of the sun-boat and seated figures[36] (fig. 7). It is very clear that the visual impact is twofold: looking towards the centre of the motif a sun-boat can be easily distinguished, whereas focusing on the two terminations located at the sides of the limits of the sectors the impression is different because two confronting seated figures appear.

As will be discussed in the following pages, a similar example from the „monumental complex" of Tarquinia further supports the connection between the sun-boat motif and seated figures.

If the link between the sun-boat and seated figures seems quite strong, it is now useful to investigate if it is possible to link the theme of seated figures to the original interpretation as anthropomorphic figures, firstly by trying to emphasize proof of the link between the sun-boat motif and anthropomorphic figures in the archaeological record. In fact, it is precisely from the final period of the Late Bronze Age that human figures interact with the representation of the sun-boat in decorative motifs on pottery: at the same site, Pianello del Genga[37], there is an urn on which the sun seems to have been substituted by an anthropomorphic figure (fig. 4:1); on a Tarquinian proto-Villanovan urn some anthropomorphic figures stand near the representation of the sun[38]; on another urn from Sorgenti della Nova, an anthropomorphic figure is associated with the swastika and with an „angular motif" that often appears in connection with the handle[39] (fig. 4:4). On hut-urns human figures appear

30. As for Peroni and De Angelis see notes 10 and 11; Donati 2005, 373–374.
31. Müller Karpe 1959, Taf. 53:7, Taf. 55: 14,16; Dolfini 2004, 281.
32. Negroni Catacchio 1995, fig. 136:31; Dolfini 2002, n. 195.
33. Müller Karpe 1959, Taf. 53:1, Taf. 54:9, Taf. 55:1.
34. Two urns found near Ripaie necropolis, actually dating to the very first Villanovan period, testify the survival of the typical protovillanovan motif with mirroring bird-protomae (Cateni-Maggiani 1997, Maggiani 2009; Delpino 2009b).
35. This happens in case of one-handled vases, whereas in the case of two-handled vases two boats and two couples of figures are depicted, as it happens with one exemplar from the „monumental complex", see below No. 7.
36. De Angelis 2004, 340; this boat-stand, together with other similar ones, are related to Etruscan rituals and ceremonies (Iaia 2002).
37. Müller Karpe 1959, Taf. 55:14; Donati 2005, 374.
38. Pacciarelli 2001, 163, fig. 99b.
39. The importance of the urn from Sorgenti della Nova is twofold, because of its archaeological context, a hut, and its narrative scene: the angular motif is currently depicted on pottery of the Late Bronze Age, both from necropoli and inhabitated areas (Cardosa – Pitone 2012); for the distribution and the chronology of the motif in inhabitated areas see (Barbaro 2010, 80–106).

sometimes in pairs seen from the front, probably only in one case, from Montetosto Alto, the two seated human figures are represented from the side[40].

Moreover it is worth noting that the association between human figures and the sun-boat is well documented on bronzes[41], proving the existence of contacts with central and northern Europe regarding metalworking.

These examples show a possible association of the sun-boat motif with the human figure. Shifting to the Villanovan period, and to the seated figures motif of course the overlap between the two appears more intentional in the examples on which the „protomae" reached their maximum degree of geometric realization, and in the examples on which the figures are clearly holding their hands. All examples are located in Tarquinia and it is possible that here, more than at other sites, the overlap was perceived[42]. It is also possible to add here another very interesting example: on another stand from Tarquinia published by H. Hencken the seated figures are not specular but arranged in a sort of procession, quite unexplainable without an anthropomorphic interpretation of the subject; Hencken also recognizes chairs on which the human figures are sitting[43] (fig. 5).

If this general interpretation is correct, the overlap between the two motifs was meaningful and recognizable by the Etruscans, regardless of its declination towards the sun-boat or the human seated figures motif. Scholars agree on its highly symbolic value due to its relevant presence in necropoli, although only on urns or ritual vessels, suggesting the concept of a journey, funeral feast or farewell, or greeting as stated above[44].

A preliminary survey carried out on the grave groups of the Tarquinian necropoli showed no connection or correspondence between this particular motif and particular social figures[45]; the distribution of gender is also similar[46]. Although the frequency of the motif is similar all along the time-span of the Villanovan period[47], the analysis is still in progress and must be completed

40. Trucco – Mieli – Vargiu 2000, fig. 2:1a; Barbaro 2010, fig. 98. Human figurines seated on the roof of two hut-urns of unknown provenance are also outstanding (Babbi 2008, 246).

41. Some good references belonging to the Protovillanovan period come from Pergine, Menaforno, Tolfa (Dolfini 2004, 282–284), whereas outstanding Villanovan examples include a vessel from Veio and an elm from Vulci (Iaia 2004, 310); several pendants from Piceno clearly show a mixture of human figure, sun-boat and ornitomorphic protomae (Nizzo 2007).

42. D. De Angelis seems to notice a difference between the schematic decoration of Tarquinian urns and that on urns from other cities, as Veii, in which the origin from bird protomae can be perceived since it is more naturalistic (De Angelis 2001, 366).

43. Hencken 1968, 322–323, fig. 321 a, b, f, from the tomb no. 14 of Impiccato necropolis. It could be also interesting to compare the above mentioned stand with the askos of the tomb named *Cassa* with a bird-animal askos (Tarquinia, Monterozzi necropolis), in which two mirroring human figurines hold their hands (Hencken 1968, 261, fig. 244). Both the shape and the figurines depicted on the askos have been traced to Near-Eastern and Mediterranean examples (Babbi 2008, 335–336, Tav. 91, fig. 66).

44. For further elaborations of the Villanovan decorative pattern see De Angelis 2001 and 2004. For a debate upon the consciuosness of the Villanovan motif in later periods see De Angelis 2004, 340 (favorable to a consciousness of the original meaning); Camporeale 2012 (favorable to a decorative solution). For the possible meanings of sun-boat and ornitomorphic figures on various items, also with reference to their archaeological contexts, see Iaia 2004, 311 and Dolfini 2004, 288–289.

45. This analysis is based on Iaia's grave-groups assigned to periods: Tq Ia-Ib1 and Tq Ib2-IIa1 (Iaia 1999, 13–74). C. Iaia considered 320 tombs to which I added one hundred more of uncertain chronology. The seated figures motif appears in almost every cluster present in Tarquinia, considering all categories of tombs: poor and rich grave-groups, gender and social polarity.

46. The seated figures motif is present in male and female burials, with a slightly higher percentage of males in period Tq Ib2-IIa1.

47. Its presence amounts to about 30% of the total Tarquinian tombs over the Villanovan Period (Phase I, 900-770 BC; Phase II, 770-720 BC). Considering every single necropolis it is worth noting that the motif is absent at

with data from other sites.

2.2 The seated figures motif in inhabited areas: new evidence from the „monumental complex"

Seven shards found at the „monumental complex" present the seated figures motif. They all belong to biconical urns (No. 1-5, 7) except for one (No. 6) that is a stand fragment. On six of the shards the motif varies, but it can be considered canonic (No. 1-2, 4-7), whereas the remaining one shows a derivate motif in which the two figures can be still recognized (No. 3).

No. 1, 331/4 (fig. 6:1). probably a fragment of a biconical vase; only a curvilinear trait of the body of the figures is preserved. Dim: H. 6.5 cm, Th. 0.8 cm; colour of the surface: brown-red. It was found in a layer dating to the Orientalizing period. See *Tarchna III*, p. 26, tav. 14.

No. 2, 449/11 (fig. 6:2). probably a fragment of a biconical vase; the upper part of the seated figures motif – „the heads", underlined by impressed dots – is preserved. Its traits were incised carelessly. Dim: H. 6.2 cm; Th. 1.4 cm; colour of the surface: brown. It comes from a pit dating 9-8th century BC.

No. 3, 1015/5 (fig. 6:3). fragment of the shoulder of a biconical vase, showing a metope-decoration with seated figures stemming from the arms of a cross and a decorative pattern probably formed by shell-impressions so far unknown at the „monumental complex". Apart from this peculiar pattern, the fragment shows similarities with the decoration of biconical urns from Tarquinia, Veio and Vulci, in which a cross or a swastika are combined with seated figures[48]. Dim. H. 10 cm; Th. 0.7/0.9 cm; colour of the surface: brown, with evident traces of fire. It was found in a burned layer together with Villanovan material.

No. 4, 739/6 (fig. 6:4). fragments of neck and shoulder of a biconical vase; one seated figure is completely preserved and, as in the case of No. 1, it belongs to a rare type that is found in Tarquinia only on one urn from the Le Rose necropolis[49]. The human figure is formed by a curving line, in „S" shape, which forms the upper part of the body and the „legs" and continues at the base of the neck of the biconical vase into a single band of parallel lines. Behind the figure it is possible to see a vertical band of incised lines which continues and seems to curve near the head of the seated figure. The shoulder is probably decorated with the classical Villanovan „N motif". Dim: H. 19 cm; Th. 0.8 cm; colour of the surface: polished black. It was found in a layer dating to the first Orientalizing period and related to an altar made of rough stones.

No. 5, 933/1 (fig. 6:5). fragments of the neck of a biconical vase; they show part of a seated figure. The head is underlined by three dots, the arm is perpendicular to the body and it is also possible to identify a small portion of the specular arm of the other figure. Part of the stripe in the upper part of the neck and part of the one at its base are also preserved: they are arranged in

the Arcatelle necropolis, which is the richest one. Its presence is considerable at Impiccato and Selciatello Sopra necropolises (about 11-15% and 25-30%) in a number of tombs of both periods. Other interesting results could come from the analysis of the topographic distribution, however the 88 tombs from Villa Bruschi Falgari are still unpublished and the Le Rose necropolis yielded a small number of examples of the seated figures motif.

48. De Angelis 2001, 161, 164,Tav. 13: 12, 16: 19.

49. Buranelli 1993, 63, fig. 63:1; De Angelis 2001, 72–73.

the same way, in two rows of incised parallel lines including groups of three oblique traits that are flanked by three impressed dots shaping a triangle. Dim: H. 15 cm; Th. 0.8 cm; colour of the surface: brown. These fragments were found in a layer covering the area of a human deposition, together with a number of other Villanovan fragments of vases.

No. 6, 790/24 (fig. 6:6). the fragment is probably part of a high-foot stand similar to one from Villa Bruschi Falgari (fig. 7). They both seem to knowingly recall a bird-boat-stand and show a grip with two holes decorated with an incised swastika: the seated figures below are depicted clearly; Dim: H. 8 cm; Th. 0.8 cm; colour of the surface: grey and brown. It was found in a layer dating to the first Orientalizing period together with a number of other Villanovan fragments of vases.

No. 7, 682/100 (fig. 8). fragments of an almost complete biconical vase: only the rim and parts of the bottom are missing. The rich decoration is typical of the urns from the Tarquinian necropoli and it is composed by stripes of incised parallel lines, stripes of three segment-meander, bands of dots in the upper part of the neck and a stripe with incised lines and the „N motif" at its base. On the two handles, the two couples of seated figures are arranged in the same way: the heads and the arms are underlined by dots, the arms are oblique; the decoration is sometimes careless and it is possible to notice some mistakes in the rendering of the junction of the lines. The arm of one of the seated figures appears to be too long in comparison to the opposite one; this feature, considered as an evident hierarchical representation[50], characterizes some exemplars from the necropolis, in which one figure is taller or larger than the other one; however, a mistake in manufacturing might also be plausible/possible. Dim. H. 50 cm, Th. 0.9, D. of the body 30 cm; colour of the surface: brown. It was found in a completely disrupted layer.

All fragments are outstanding within the general scenario of the „monumental complex" since they are the only ones decorated with the seated figure motif out of several thousands of already catalogued shards that are variously decorated. Five of them belong to secondary depositions, but some (No. 4, 5, 6; fig. 6:4-6) have been found in three different contexts together with a number of other shards belonging to the Villanovan period. The highly symbolic value of such a decoration– already acknowledged in necropoli–touches upon the character of the above mentioned contexts that are consistent with ritual practices addressing preservation of ancient memories[51].

A twofold question concerning the relationship to the archaeological context arises. Are the seven fragments remnants of vases produced on the spot and intended for the cultic practices carried out in the „monumental complex" itself or for the necropolis?

From such a small number of fragments it is difficult to perceive the existence of pottery manufacturing activities that could have been meant for the necropolis. However, they are consistent with a specialized production that should have left a number of indicators of its presence at the „monumental complex" [52].

The seven fragments are likely to have belonged to vases selected for their shape and decoration to be used for cultic purposes[53] and perceived as diverging from those meant for normal daily

50. Donati 2005, 378.

51. Bagnasco Gianni 2013, 25–27.

52. C. Iaia points out that the production of the urns for the necropolis should be considered a semi-specialized manufacturing because of its „complex geometric decoration…with strong characters of conventionality" (Iaia 1999, 22).

53. As already suggested in the case of biconical vases carrying this motif in inhabited areas: Torre Valdaliga and

activity. The fragment of the stand (No. 6), whose shape is attached to Etruscan rituals, supports such an interpretation also because its decoration clearly points out the link between the swastika, as representation of the sun, and the seated figures motif that in this case is clearly related to the sun-boat. Moreover it indicates that the seated figure motif was selected for a specific use in the aforementioned peculiar cultic spots of the „monumental complex“ [54].

3. From north to south. Lures, axes and shields in ritual deposits from Denmark and Sweden and the constellation of bronzes from the „monumental complex“ of Tarquinia (Nora M. Petersen)

The constellation of axe-shield-lituus found at the „monumental complex“ of Tarquinia and dated to the first quarter of the 7th century BC is still unknown in other Mediterranean contexts so far. It seems thus important to examine the combination of these objects within a broader geographical area, and to compare this unique constellation with similar arrays found only in Scandinavia – mainly in Danish and Swedish depositions in bogs, dated to the Scandinavian Bronze Age (1600-500 BC), and depicted on rock engravings. The Scandinavian material is formed by a number of similar wind instruments consisting of a long slightly tapering tube, called lures, axes and shields, and suggests a possible inspiration from Northern Europe for the rituals connected to the Tarquinian deposit[55]. Similarities between the two situations concern the whole archaeological complex of the constellation - chronology, ritual, decomissioning of the wind instrument – rather than a detailed comparison between the organology (shape and technical aspects) of the Etruscan lituus and the Scandinavian lure. However, it is worth noting the main features of both wind instruments.

3.1 Etruscan lituus and Scandinavian lure

The Etruscan lituus trumpet[56] is a rare discovery. The lituus from the „monumental complex“ of Tarquinia is the only example from a proper archaeological which will be presented. It measures 135 cm in length and was ritually bent in two parts[57]. In addition to this, only five litui are known from Etruria:

1) A lituus probably from Vulci, now in the *Museum Gregorianum Etruscum* in the Vatican

the Civita plateau of Tarquinia (Belardelli 1999, Mandolesi 1999); C. Iaia, for biconical vases, suggests their use in cultual practices as could be demonstarted by the miniaturized biconical vessels from the deposit of Banditella near Vulci (De Angelis 2001, 366, note 1; Iaia 1999, 113–114).

54. When the first example of seated-figures was found at the „monumental complex“ (n. 1, fig. 6:1), M. Bonghi Jovino suggested investigating its meaning within its peculiar archaeological context, and as a representation of divine or heroized entities (Bonghi Jovino 2001, 85).

55. Nora M. Petersen wishes to thank Giovanna Bagnasco Gianni, the director of the excavations of the University of Milan in Tarquinia and, together with Maria Bonghi Jovino, coordinator of the Project Tarquinia, for encouragement to carry out the present study after her visit in Copenhagen in December 2012, when she compared the Tarquinian bronzes with evidence preserved in the exhibition of the National Museum of Denmark. Nearly forty years ago, A. Baynes already attributed the introduction to Rome of similar instruments to the Etruscan mediation from the North (Baynes 1976, 41, tav. II; Berlinzani 2007, 55, note 128.

56. In this paper the term lituus will refer to the lituus trumpet and not to the lituus staff.

57. Bonghi Jovino 1997, 172–173.

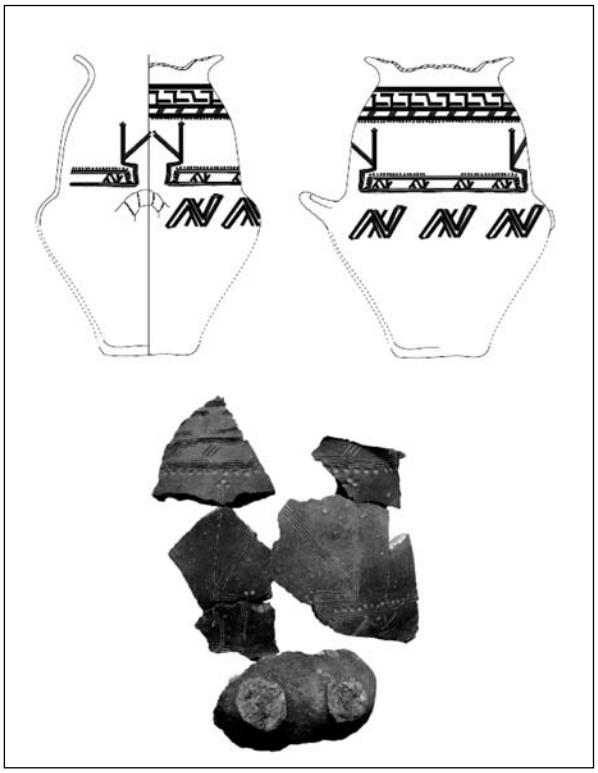

Fig. 8. Biconical vase from the „monumental complex" of Tarquinia. Detail of one of the two pairs of seated figures on it. It is possible to notice that one figure has a longer „arm" than the other.

Fig. 9. Two lures from Brudevœlte Bog (after Broholm et al. 1949, Pl. 4).

Fig. 10. Lure from Lommelev Bog (after Broholm et al. 1949, Pl. 11).

Fig. 11. Detail of the lock from a lure from Brudevœlte Bog (after Broholm et al. 1949, 45, fig. 13).

Museum in Rome; date unknown[58]; length: 140 cm[59].

2) Fragment of a lituus recovered in Etruria, now in the Karlsruhe Badisches Landesmuseum, from the collection of the Grand Duke of Baden in 1853; date: 4th (?) century BC; length (preserved): 32 cm[60].

3) A lituus sold at an auction in Sotheby's in London in 1982; date: 5th century BC (?); length: 101 cm (?) [61].

4) A lituus recovered at Cortona, close to the Tumulo II del Sodo, near the large altar where funerary rituals were practised; today in the Museo dell'Accademia Etrusca e della Città di Cortona; date: end of the 7th century – beginning of the 6th century BC; length: 110 cm (?). It is worth noting that the lituus trumpet from Cortona was bent in the same manner as the Tarquinian instrument, and its origin may be connected with riual practices. However, unlike the lituus from Tarquinia, it appears to retain a fragment of a wooden mouthpiece and an incised braid decoration on the front and on the side[62].

5) Lituus of unknown provenance, undated; dimensions unknown, kept in the Stiftung Preußischer Kulturbesitz Staatliche Museen zu Berlin. No studies about it have yet been published[63].

Individual bronze lures are mainly found in Southern Scandinavia, and they are usually recovered in the areas around the rich settlements on the islands of Zealand and Funen in Denmark[64]: 39 lures have been discovered in Denmark, 13 in Sweden, and 4 in Norway. Archaeological evidence also indicates that lures were spread around Northern and Eastern Europe: 5 in Germany and 1 in Latvia[65].

The Scandinavian lures are made of bronze, measure between 1.5 meters and 2.4 meters in length and weigh around 3 kg[66]. Some of the lures have rattles of metal and chains in order to be carried (fig. 9 - 10)[67]. In most cases the lures are found in pairs (fig. 9)[68]. These large instruments could be disassembled into two pieces, which indicates that they were designed for easy transportation (fig. 11)[69].

The lures usually come in pairs, symmetrically combined to spiral in opposite directions, resembling the horns of an ox. They may have been ritual instruments, as perhaps depicted on petroglyphs, scenes that will be discussed later[70].

58. Bonghi Jovino 2007, 3; Mus. Gregor. 1842, tav. 21,8.
59. Jurgeit 1999, 227; Helbig 1963, 515–516, no. 682.
60. Jurgeit 1999, 227–228, 111, fig. 367.
61. Sotheby's 1982, nr. 244, 77–78.
62. Paolucci – Sarti 2012, 21, nr. 7.
63. Nora M. Petersen wishes to thank Peter Holmes for this information. He examined this lituus in 2012 and mentioned it in the forthcoming article The Etruscan Lituus: Power, Prestige, Piety, Procreation or Performance.
64. Jensen 2002, 457.
65.See the distribution map in Jensen 2002, 459.
66. For information about the production and the sound of the lure, see Jensen 460–462 and Holmes 1986.
67. Jensen 2002, 456–457.
68. There is only one known exception from Rørlykke in Denmark, where the lures turn in the same direction (Jensen 2002, 457–560); Broholm et al. 1949, 23, no. 19–20, pl. 15; Broholm 1965, 38–40, fig. 11.
69. Kaul 2013, 249.
70. Kaul 2013, 249.

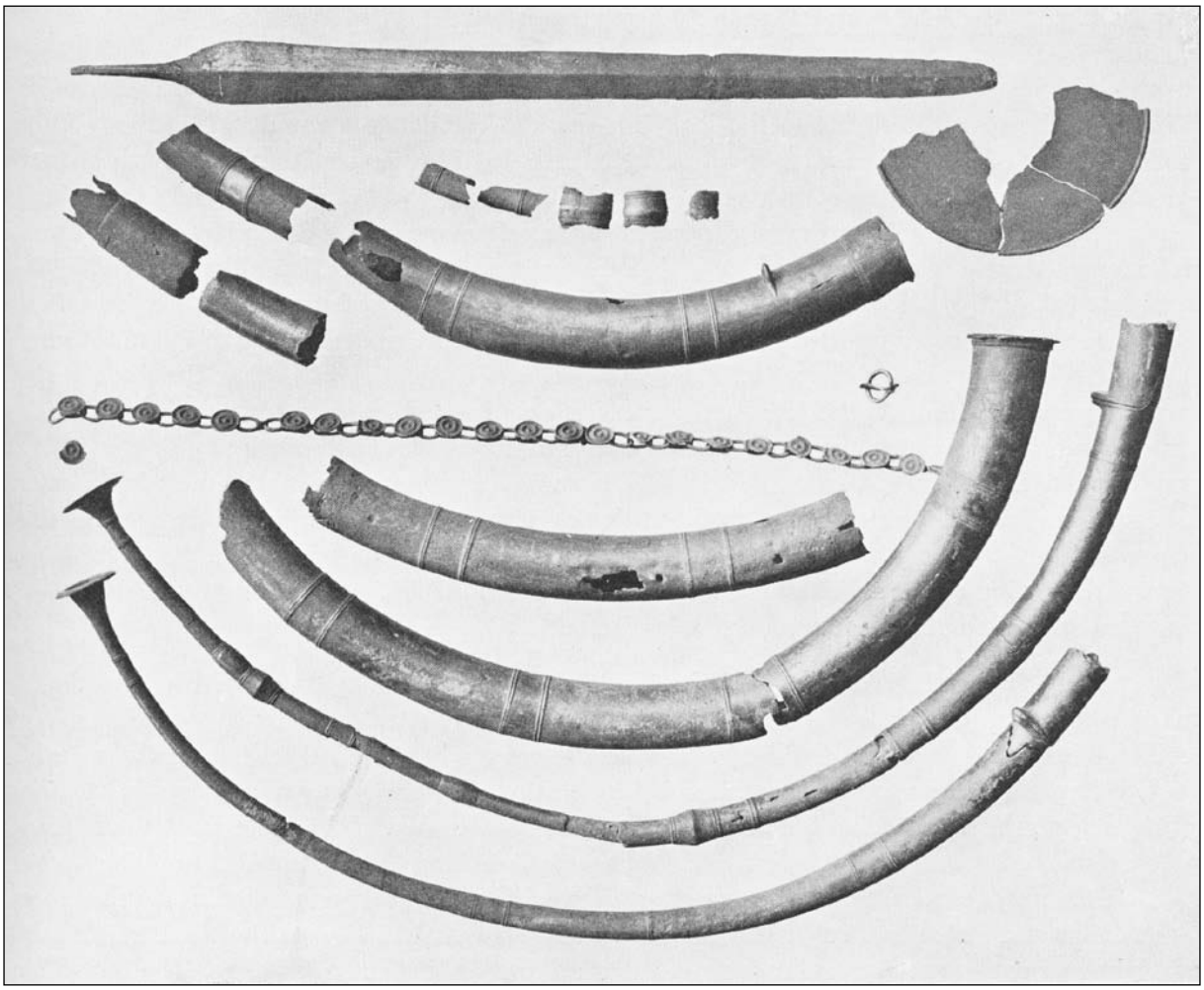

Fig. 12. The Lommelev-lures before reconstruction (after Broholm et al. 1949, fig. 4).

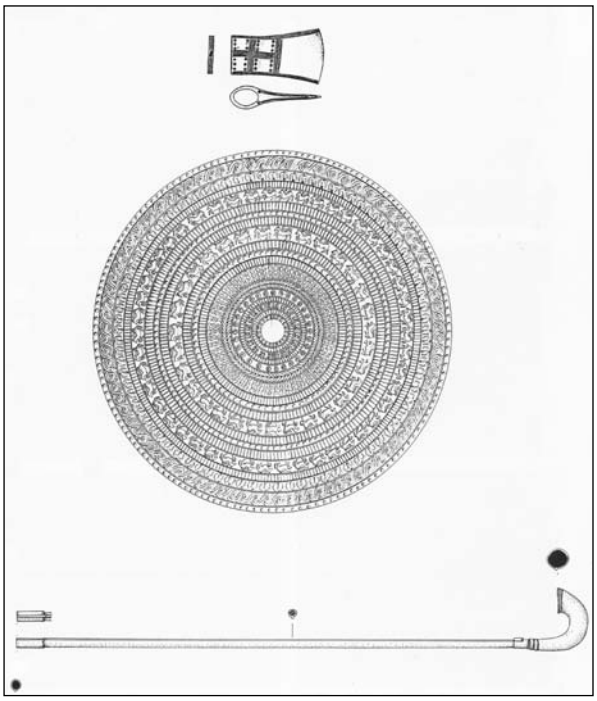

Fig. 13. The shield, the axe and the lituus trumpet from the votive deposit at Pian di Civita at Tarquinia (after Bonghi Jovino – Chiaramonte Treré eds. 1997, tav. 125).

Fig. 14. Petroglyph from Kalleby, Tanum (after Milstreu - Prøhl 2009).

Fig. 15. Drawing of a petroglyph from Svenneby, Bohuslän (after Kaul 2007).

Fig. 16. Lures from Radbjerg Bog (www. samlinger.natmus.dk).

Some lures were damaged or disassembled into pieces before their deposition in bogs[71]. The most remarkable find of lures comes from Brudevælte Bog in Northern Zealand (fig. 9). In this bog, three pairs of lures were recovered over 200 years ago[72]. Their mouthpieces were disassembled, tied together with what seems to have been a triple-braided rope of organic material and placed three meters from the horns, at the same depth[73]. A similar example is known from Maltbæk Bog in Southern Jutland, where the remains of a fibrous braid were found together with the mouthpiece[74].

As already mentioned, the mouthpiece was often not deposited with the instrument, and due to the conditions of preservation it is often difficult to determine whether these were ritual acts or a matter of deterioration caused by the ravages of time (fig. 12).

The widespread distribution of lures indicates that such wind instruments were used in cultic festivals that gathered people from a broad geographical area during the Scandinavian Bronze Age[75]. They reflect a society of people who travelled and had contacts with foreign lands and peoples.

3.2 The archaeological context of the bronzes from the „monumental complex“

In front of the so-called building β, interpreted as an „altar temple”, archaeologists found a large votive deposit formed by two pits. The deeper pit contained three bronzes: the above mentioned lituus trumpet, a shield, and an axe (fig. 13)[76]. The lituus trumpet was carefully folded twice before deposition, and its mouthpiece was missing[77]. The shield was made of a thin bronze sheet and decorated with embossed horses and geometric patterns forming concentric circles. The shield had been folded before the deposition, which confirms that both objects had

71. The Fogdarp lures are unlike other known lures, and they are not found in wetlands, see Larsson 1975; Larsson 1986. The defunctionalization of a wind instrument is also seen in connection with the Celtic *karnyx* at Sanzeno in Trentino, see Roncador – Melini 2010.
72. Jensen 2002, 457; Jensen 1998; Broholm et al. 1949, 12, no. 1–6, pl. 1–6.
73. Broholm 1965, 22; Broholm et al. 1949, 15–16; Lund 1986, 24.
74. Broholm 1965, 45–46; Broholm et al. 1949, 26.
75. Kaul 2013, 249.
76. The axe measures 16 cm in length and the shield 96 cm in diameter (Bonghi Jovino 1997, 172–173).
77. Bonghi Jovino 1997, 173; Bonghi Jovino 2007.

been ritually defunctionalized[78]. The axe bears decoration in the form of incised lines and small circles, and it had been placed in the deposit without its shaft, probably according to a similar ritual for the lituus and the shield. Both pits contained animal bones and ritually broken impasto and only one bucchero chalice – the majority were deposited in pairs[79].

The material from the votive deposit is dated to the first quarter of the seventh century, corresponding to a specific phase within the so-called Early Orientalizing Period (720-675 BC). Soon after the discovery, Maria Bonghi Jovino started her studies on the bronze group, focusing on each object and shedding light on their formal and stylistic connections with other Mediterranean areas. Considering their symbolic value in the framework of the ceremonial activities carried out in the „monumental complex", Maria Bonghi Jovino points out that a *rex*, a king, or a priestly king might have dedicated this bronze group to the main Etruscan goddess, Uni[80].

3.3 The Scandinavian evidence

Several Scandinavian petroglyphs illustrate the use of objects in cultic ceremonies, including lures, axes and shields. Some of the most important Scandinavian petroglyphs are located in the Tanum area in western Sweden, north of Göteborg.

3.3.1 Petroglyphs

The compositions in the Tanum petroglyphs are some of the most complex in Scandinavia, and they include symbols, figures, ships, animals and humans holding ritual objects. These scenes seem to represent themes of fertility and worship of the sun, and they are said to be the lasting traces of religious festivals[81]. Such petroglyphs were probably executed on special occasions, when people gathered for ritual feasts, and it is interesting to observe that the same scenes are often repeated[82]. Perhaps people from Zealand or Falster participated in the celebrations in Tanum since this was a central Scandinavian area[83]. The constellation of all three objects - lures, axes and shields - are rarely depicted together in these prehistoric compositions; it is more common to find just two of these objects together in the petroglyphs[84].

However, two petroglyphs from Tanum depict a shield, an axe and a lure in one composition, and they both date to ca. 900-700 BC. The first petroglyph, from Asberg Mountain[85], depicts four men, each holding an axe above their head and what looks like a shield close to their stomach, while schematic lures protrude from ships. The other example is similar and comes from Bohuslän[86]: each of the three men represented hold an axe above their head and a shield close to

78. Bonghi Jovino–Chiaramonte Treré 1997, tav. 126. 1–6.
79. Bonghi Jovino 2010, 168–169; for more information on the ceramics in the votive deposit, see also Rathje 2006.
80. Rathje 2006, 112; for the recent discovery of an inscription testifying to the chthonic aspect of Uni at the „monumental complex" see Bagnasco Gianni 2013, 595.
81. Jensen 2002, 311.
82. Jensen 2002, 312.
83. Kaul 2007, 60.
84. For more information about lures on rock-carvings see Lund 1986, 28–30 and Holmes 1986, 71–74.
85. http://www.shfa.se (SHFA Arkiv-ID 183).
86. http://www.shfa.se (SHFA Arkiv-ID 234).

their stomach, while the lures are again represented as small hooks on boats. The large axes that are held in petroglyphs are characterized by scholars as cult or procession axes, which imply their use in religious rituals[87]. These very similar representations from different locations in the Tanum region may indicate a specific ritual, repeated in certain ceremonies with the use of all three of our bronze types - lures, axes and shields.

An image in the area of Kalleby, in Tanum, depicts three lure-players with horned helmets, perhaps standing on a ship (ca. 900-700 BC) (fig. 14). Above them are two larger men standing on another ship, and the largest of these figures holds an axe in his outstretched hand. A similar representation from the same site depicts four lure-players with horned helmets and swords, who might be standing on a ship[88]. In most cases the lures depicted in the petroglyphs are strongly stylized, represented as a row of small hooks. This is also the case in a petroglyph from Tanum, in which two ships dated to ca. 1000-700 BC have four visible lures each, illustrated as small hooks. To the right on the lower ship, two figures are carrying sun symbols[89]. In another petroglyph found in Tanum, a ship is depicted with its crew: one member is blowing on a lure, another is holding an axe, while four other figures hold unidentified objects[90].

In other petroglyphs, the figures are carved as if they were in motion. On a representation from Svenneby, the posture of two figures with swords, an axe and a shield suggest that they are dancing (fig. 15)[91]. Furthermore, in Hede, Kville, a figure seems to be portrayed in movement–either jumping or dancing–on a ship. On the right, one man holds a sword and a shield while another wears a horned helmet[92]. Flemming Kaul suggests that scenes like these represent ritual dances, with acrobats and men who carry shields. The way the shields are held does not suggest their traditional use in battle. Instead, they were used in the context of a ritual[93]. The horse head shape of the ship bow dates this petroglyph from Kville to 900-700 BC[94]. Other petroglyphs with illustrations that include acrobats are found in Sortetorp, Bohuslän, Dalsland and Østfold[95].

Already in 1927, the scenes in these petroglyphs from Tanum, which offer complicated representations of ships and several figures, were thought to represent humans performing religious rituals. Scholars have also discussed whether they might have been gods or personifications of gods performing rituals[96]. Flemming Kaul rightly suggests that the depictions on the petroglyphs can reflect reality – and not just fantasy or myth – because the items actually have been found in ritual contexts such as bogs[97]. It has been suggested that in Scandinavia a priest or other high-ranking person performed these rituals, using cult objects that may have been thought to have divine powers[98].

87. Kaul 2007, 52.
88. http://www.shfa.se (SHFA Arkiv-ID 49 & 185).
89. Milstreu – Prøhl 2009, 160; for more information on the schematic lures see also Lund 1986, 30; Holmes 1986, 71–74; Nordbladh 1986.
90. http://www.shfa.se (SHFA Arkiv-ID 234).
91. Kaul 2007, 63–64, fig. 14.
92. Kaul 2007, 62, fig. 13.
93. Kaul 2007, 63–64, fig. 13.
94. Kaul 2007, 63–64.
95. Kaul 2007, 58.
96. Kaul 2007, 51–52; Holmes argues that there might be some other reasons for burying the lures, such as the patination of the bronze (Holmes 1986, 122–123) or hiding the lures between uses, so that they were not visible for individuals who had not been initiated into the rite. Holmes 1978, 200 (non vidi).
97. Kaul 2007, 52.
98. Kaul 2007, 52.

3.3.2 Archaeological contexts and objects

In Scandinavia, the number of bronze depositions in bogs reached its apex around 800-700 BC[99]. The chronology of the lures, however, is especially debated since in most cases they are isolated finds, and as such they are difficult to accurately date. In fact, several of the lures may be later in date than previously thought[100]. If this is the case, a larger number of lures may date to the same chronological time span as the Etruscan litui from Tarquinia and Cortona. In Denmark and Sweden these objects were ritually deposited in bogs during the Bronze Age, but in contrast to the Tarquinian depositions each of the three object types was in the majority of the cases deposited separately.

Several shields are found in Scandinavian bogs. In one of them, at Fröslunda (Västergötland in Sweden), 16 bronze shields were deposited between 900-700 BC[101]. They are made of thin bronze sheet, which indicates, along with the total lack of fighting marks on them, that they were probably not used in battle. Instead, they are interpreted as ritual artefacts, symbolizing the sun, and objects that are closely connected to the gods and the seasons. According to Flemming Kaul, the shields were used in ritual dances, which may have been depicted on Bronze Age petroglyphs, as noted above[102].

Axes are often decorated with spiral motifs and, like the lures, they are deposited in pairs[103]. Such axes were used in religious rituals involving prayers, processions and offerings[104]. Both the shields and the axes testify to some connections with foreign cultures. It seems that the Scandinavian shields were produced in central Europe or north-central Germany and reached southern Scandinavia around 800 BC[105], while an axe thought to have been produced in Denmark has been found in Belgium[106].

However, two of the three Scandinavian bronzes examined here have been found together in a bog. This find was made at Lommelev Bog, on the island of Falster, in southern Denmark, two ritually broken lures were found approximately six meters away from a bronze shield. In the same bog two swords, a stone knife with a wooden shaft (which unfortunately decomposed shortly after its discovery), and a large amount of animal bones were also recovered (fig. 12)[107]. The farmer who found the material in 1846 explained that „*the whole area is full of bones, and every time dirt is hauled from the moor little bone splinters and whole bones are found, both small and large ones*“[108]. This description indicates that the cultic rituals included not only the offering and deposition of the bronzes, but also offerings of meat.

The evidence of a cultic event has also been identified in Radbjerg on Falster, a site considered to be a Bronze Age sacrificial area[109]. Two lures were found in Radbjerg Bog in 1894 (fig. 16), but later excavations in the southern end of the bog exposed fragments of bronze chains, metal rattles, potsherds, charcoal, and a large amount of mixed bones – including a human lower mandible and thigh-bone. The animal bones derived from ox, horse, sheep, pig, dog,

99. Jensen 2002, 324.
100. Flemming Kaul, personal communication, August 2013; see also Holmes 1986, 123–124.
101. Kaul 2007, 64; Jensen 2002, 430; Hagberg 1996.
102. Kaul 2013, 246–247; Kaul 2007, 64–65.
103. Jensen 2002, 292–293.
104. Kaul 2007, 52; Jensen 2002, 289.
105. Jensen 2002, 428–431;
106. Jensen 2002, 292; Jensen 1997, 117.
107. Jensen 2002, 457; Broholm et al. 1949, 19.
108. Broholm 1949, 20.
109. Jensen 2002, 457.

white-tailed eagle, swan and mallard[110].

Despite the large quantity of lures found in Scandinavian bogs, we can only recognize cultic activity in Lommelev Bog and Radbjerg Bog. However, we must keep in mind that the majority of the lures were found in the 18th and 19th centuries–a time when archaeological finds rarely resulted in further surveys or excavations. This fact might also explain why the mouthpieces are missing in several cases.

3.4 Contact or shared cultural practise?

It is important to remember that the Tarquinian votive deposit, which contains the bronzes discussed above, has no parallels in the Mediterranean world, which suggests that this is not a Mediterranean practice. Nevertheless, the bronzes from the votive deposit at Tarquinia, the two contexts from Scandinavian bogs, and the two scenes in petroglyphs share some common elements.

It appears also that the Etruscan lituus trumpets from Tarquinia and Cortona are roughly contemporary to the apex of the Scandinavian bog-deposits with lures, as well as the representations of the three bronze objects in the petroglyphs[111]. The wind instruments, shields and axes are rarely represented together in the same context, both in Scandinavia and in Etruria. However, there are analogous aspects which might imply common tendencies, such as a broad chronological contemporaneity, the use of wind instruments, the ritual context and the defunctionalization of the objects.

How are we to understand such archaeological finds and representations? Are they an expression of contact, or is this simply a coincidence? What are we to think of the pairs of objects? In Scandinavia, the lures and the axes are found in pairs and they are assumed to be associated with twin-hood[112]. In Tarquinia, most of the ceramic material from the votive deposit of the „monumental complex" comes in pairs, and it has furthermore been suggested that the donors might have been two people, a male and a female[113].

Regarding the three types of objects discussed here, some comments may help in revealing evidence for connection between the Tarquinian deposit and the Scandinavian evidence:

Both lures and lituus trumpets are wind instruments and both have been found ritually broken in various cases. In the bogs, the lures were damaged or dismantled–perhaps intentionally before deposition, so that the instrument was taken out of circulation, deposited in a sacred place and never reused[114]. In Tarquinia, the lituus trumpet was bent and then buried. The mouthpieces suggest further connections: some are missing, and in two Danish bogs the mouthpieces are found tied together not far away from the rest of the lures. Bonghi Jovino suggests that the mouthpiece in Tarquinia might be missing because of the ancient custom of depositing parts of an object separately[115].

110. Broholm 1965, 35; Broholm et al. 1949, 22.

111. Jensen 2002, 322–324.

112. Jensen 2002, 292.

113. Bonghi Jovino 2005; Rathje 2006, 2013. There are other common features, for instance the burial rituals practised by the elite in Etruria and Northern Europe, for example. These burials contain bronze vessels often connected to drinking rituals, and the objects reflect a common aristocratic lifestyle. Furthermore, similar prestige weapons have also been found, and the construction of monumental tumuli is another common feature in both areas (Jensen 2002, 418–419; Camporeale 2004, 102–129). Furthermore, the practice of wrapping the cremated human bones in a linen cloth – a ritual known from Homer's Iliad – in connection with the burial of Patroclus. Such practise is for instance known in a Danish elite tomb from Lusehøj. In Etruria the practise is seen in several so-called princely tombs, for example at Casale Marittimo tomba A (Esposito 1999, 48–49). See Gleba 2014 for more information on the wrapping of cremated bones in Early Iron Age Europe.

114. Jensen 2002, 321.

115. Bonghi Jovino 1997, 173; Bonghi Jovino 1987, 75.

Axes were ritual objects in Scandinavia. They were not made for practical usage, but they were used in specific cultic ceremonies, and shields were located in specific depositions, as in the case of the bog of Fröslunda. Both the shields from Scandinavia and Etruria are made of bronze sheet and believed to be used in ritual and ceremonial practices. For instance, Flemming Kaul argues that the Scandinavian shields were objects used in a ritual dance and Annette Rathje shares this view for the shield from the votive deposit in Tarquinia. They both make reference to the so-called Olmobello vessel from Bisenzio (ca. 730-700 BC), where a ritual dance with shields is depicted on the lid[116].

In the same period, northern amber found its way to Etruscan locations such as Verucchio[117], where in a sacred area (Pian del Monte) a votive deposition of three shields buried in a pit was found[118].

Other potentially significant examples include a bronze amphora from Rørbæk Bog in Denmark (fig. 17), which is very similar to one found in the Warrior Tomb from Veii and to an amphora from Westfalen in Germany[119]. Further, recent research indicates that some of the bronze material found in Sweden comes/might come from Sardinia[120].

Furthermore, in both Tarquinia and in northern Europe - Denmark included - the motif of the sun or the sun-boat is a crucial symbolic element disseminated in a number of items connected to rituals[121] - even represented on lures[122].

Such phenomena indicate the existence of contacts, which means that objects might have been exchanged or rituals absorbed, but it may also suggest that certain Scandinavian beliefs and practises concerning the usage of particular ritual bronze objects spread out along a broader geographical area, even reaching Etruria.

The original source of the practice is still unclear, but some elements indicate, at the least, a shared cultural practice with southern Scandinavia. These common trends might help get a clearer understanding of what the „monumental complex“ at Pian di Civita at Tarquinia was like. An intriguing possibility may be that for once the inspiration came from up north rather than from the east.

4. Tarquinia as the mediator of the northern influences to the south (Alessandra Gobbi)

4.1 The „Stillfried-Hostomice“ tradition: from Tarquinia towards Pontecagnano

As already pointed out in the introduction to the present section, the bronze cups named „Stillfried-Hostomice“ represent one of the strongest archaeological indicators for the close contact existing between central Europe and Etruria during the Early Iron Age. This class is well rooted in the central European artisanal tradition of the local Bronze Age and spreads to the Italian peninsula due to the artisans' transfers towards the south[123].

116. Kaul 2007, 63–65; Rathje 2006, 114–115; Kaul 2013, 246–247. Kaul also associates the shield-dance with the ancient Roman priesthood of the Salii, which means jump in Latin: twice a year 12 shields were used in a ritual dance in the streets (Kaul 2007, 64–66).
117. Jensen 2002, 434–438.
118. Geiger 1994, no. 10, 25, 55.
119. Jensen 2002, 417–418, 428; Thrane 1975, 151. Similar amphorae are known from the Hungarian Danube areas and from the Weichsel area in Poland, see Jockenhövel 1974.
120. Ling et al. 2014.
121. Bonghi Jovino 2007-2008; Bonghi Jovino 1995. See Claudia Piazzi's paragraph in the present contribution.
122. The two lures from Maltbæk Bog are decorated with the motif of a sunboat (Broholm 1949, Pl. 19. lure 29). See a similar type of sunboat on a sword handle in Kaul 2014, 895. For more information on ships with coalesced stems see Kaul 1998, 158, fig. 105. In addition a lure currently in Saint Petersburg portrays a ship, (Kaul 2013, 250, fig. 10.)
123. Iaia 2005; Camporeale 2012 and Camporeale 2013.

Fig. 17. Bronze amphora from Rørbæk Bog (after Müller 1888-1895, XXIII, 362b).

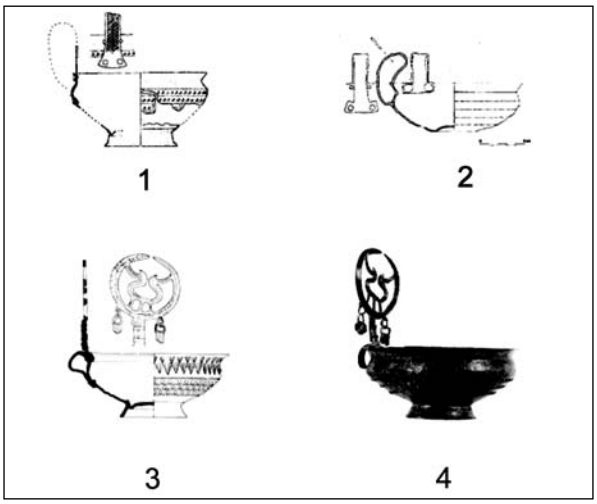

Fig. 18. Stillfried-Hostomice cups from Campania (not in scale). 1 Cuma, grave Osta 5, expunged; 2 Cuma, Coll. Baroni, Museo di Baranello; 3 Pontecagnano, T. 528 (after D'Agostino – Gastaldi 1988; Iaia 2005; Criscuolo 2011).

In Italy, the most ancient „Stillfried-Hostomice" cups were found in Bologna, in the Po Valley, and Tarquinia, which soon became the main production centre of the class. When looking at the geographical dissemination of such vessels[124], it is worth noting that few were found further south than Tarquinia: two examples come from the pre-Hellenic settlement of Cuma, one fragment is from the Villanovan site of Capua and two other examples were brought to light in the cemetery of Pontecagnano.

From such a topographical pattern some questions arise: what is the cultural and commercial vector that spreads these products away from southern Etruria towards the main settlements of the Campanian coast? Did Tarquinia, where the majority of „Stillfried-Hostomice" cups were manufactured, also play a leading role in the distribution of objects, iconographies and particular features toward the south of Italy?

To answer these questions, it is now necessary to focus on the archaeological contexts which yielded the few „Stillfried-Hostomice" cups of Campania. As regards the evidence from Cuma, both examples would need further context. The first one (fig. 18:2) is part of the Collezione Barone in the Museo Civico di Baranello (Campobasso)[125]. Based on some morphological details, such as the *omphalos* and the out-turned rim, the cup could be considered as one of the most ancient examples of the class, dating to the early phase I Ferro2A (beginnings of the 8th century BC). The second cup (fig. 18:1), originally referred to grave Osta 5, should probably be expunged from that context[126]. In the typological classification of „Stillfried-Hostomice" cups made by Cristiano Iaia, the example from Osta cemetery has been attributed to a particular variety elaborated in Tarquinian workshops during the phase I Ferro 2A[127].

A recent study has emphasized the role of Tarquinia in framing contacts and exchanges between Cuma and the southern Etruria district since the first half of the 8th century BC[128]. The two Cuman „Stillfried-Hostomice" cups, in fact, show the crucial function played by Tarquinia among the other centres of southern Etruria as a contact point towards the Gulf of Naples and as

124. Iaia 2012, 42, fig. 4.
125. Criscuolo 2011, 570, fig. 1a.
126. Nizzo 2011, 633, fig. 5.
127. Iaia 2005, 197–199, fig. 79, n. 29.
128. Criscuolo 2011, 575.

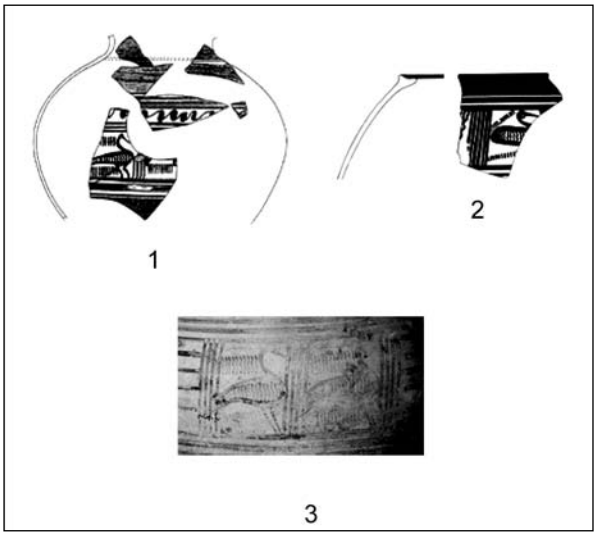

Fig. 19. 1 Tarquinia, „monumental complex", jar of the so-called sea man; 2 Pontecagnano, grave 7780; 3 Tarquinia, Poggio Selciatello, grave 160, detail of the decoration (after Bailo Modesti – Gastaldi 1999; Bagnasco Gianni 2006; Mandolesi – Sannibale 2012).

a point of contact delivering materials and iconographies towards the southern areas of the Peninsula. A few fragments of „Stillfried-Hostomice" vases found in the necropolis of Capua are likely to belong to the same traffic route outlined for the Cuman examples[129]: the high foot of the cup from Fornaci (tomb 204), dating to the local phase IIC (740-720/10 BC), has been referred to the late „Tarquinia" variety[130].

As regards Pontecagnano, two further examples have to be considered, both dated to the local phase IIA (770-740 BC). Iaia has classified the cup from tomb 7121 as an example of the „southern Etruria variety with high foot" [131], the same variety of both the Osta example from Cuma and the foot fragment from Capua. The second bronze cup (fig. 18:3), found in tomb 528, is worth mention. The shape of the vase evidently suggests the influence of (?) the „Stillfried-Hostomice" tradition[132] and some typological features–such as the out-turned rim and the small eyelet created by the handle–suggest comparison with the oldest examples of the class[133]. However the peculiar aspect that characterizes this vase is represented by the openwork disc above the handle, made of a couple of stylized and opposite birds surrounded by a moon-crescent. This feature, which, as G. Bagnasco Gianni pointed out, is well known in both metal and ceramic versions[134], has strong cosmological implications directly deriving from central European iconographies[135]. Though there are no exact parallels for the cup of tomb 528[136], this ceremonial vase has certainly to be referred to the toreutic tradition of middle European origin that developed in the south Etruscan district, with Tarquinia as a leading centre[137].

129. Concerning the way of diffusion of the Latial and southern Etruscan objects in the north of Campania, two different routes existed, one terrestrial through the internal fluvial valleys, one other maritime but until now under debate (Melandri 2011, 429–431).

130. Melandri 2011, type 87B, 317–318, pl. 2:XLIII.

131. Iaia 2005, 199, n. 30 (unpublished). Tomb 7121 together with the tomb groups of the eastern necropolis of Pontecagnano (Proprietà Guadagno, Pontecagnano) are the subject of ongoing theses of undergraduate students of the Università degli Studi di Napoli L'Orientale, under the coordination of Dr.ssa Aurino and Prof.ssa I. Bragantini. For these reasons I had unfortunately no permission to have an authoptic view of the cup nor to obtain a drawing or a photo for the present pubblication.

132. D'Agostino-Gastaldi 2012, 422, note 117.

133. Iaia 2005, 192, fig. 74.

134. A high number of these discs are decorated with an anthropomorphic figure standing/placed between birds: for the italic origin of this insertion (Iaia 2005, 141–142, n.1); for connections with eastern or, more in general, Mediterranean iconographies (Delpino 2006; Babbi 2009). A different position is expressed by Bagnasco Gianni 2014, n. 46.

135. Camporeale 2012, 241–242; Iaia 2004, 309–310.

136. Similar for chronology and composition is the disc on the „Stillfried-Hostomice" cup from Veio Quattro Fontanili, T. FF 7-8, with two upwards arcs surrounding the birds (Iaia 2005, fig. 82, n. 50), for the context see Iaia 2010, fig. 10. The cup from Bisenzio, T. 2 Olmo Bello, is also chronologically close to the Pontecagnano example (third quarter of 8th century BC), even though the disc is here characterized by a human figurine placed between the birds at the center of the arc (Babbi 2009, fig. 3b, 3d, 18–19).

137. The beginning of such a local tradition of metalworks in northern and central Italy is probably due to the

A very similar allusion to the symbolic order of the cosmos is also reflected by a cup of impasto ware, recently studied, from a female deposition (Pontecagnano, tomb 7833), attributed to the local phase IB (from the second half of the 9th to the first quarter of the 8th century BC)[138]. The handle, in the shape of an anthropomorphic female figure, stands upon the circular space of the cup, divided into four sections by four bridging elements connecting a central cylinder to the rim of the vase. For formal reasons, this cup has been connected to Tarquinia,[139] which again suggests the important role played by this city in the transmission of ceremonial objects, with their allusions to cosmological aspects, towards the south of Italy. Tarquinia's role surfaces thanks to the nearly contemporaneous cups of the „Stillfried-Hostomice" tradition. The bronze cups and the impasto vase with an elaborated handle from Pontecagnano are not the only markers of relationships between the two sites. During the same chronological phase of the cup of tomb 528, we can observe the circulation of a specific *„super partes"* feature combining both Eubean and Corinthian styles, which are currently found only in Tarquinia and Pontecagnano. The jar of the so-called seafarer (fig. 19:1), who was found in one of the depositions of the „monumental complex" of Tarquinia, the hydria from T. 160 in the necropolis of Poggio Selciatello (fig. 19:3) and the pyxis from T. 7780 in Pontecagnano (fig. 19:2), show a particular decorative feature: the Eubean typical bird motif is associated with the Corinthian zig-zag pattern that fills the body of the birds[140]. Such a combination of motifs–certainly produced in the western Mediterranean world but still with no restricted geographical determination–reveals the significant relationships existing between the two sites.

However, archaeological finds give evidence of such contacts even before the first half of the 8th century BC [141].

In Pontecagnano we may consider the shapes of some razors with little horns on the grip–named „razors tipo Tarquinia" [142]–or a particular type of bronze spindle with laminated discs typical of the south Etruscan funerary equipment[143]. During the second half of the 9th century BC, bronze swords and sheaths attributed to a production of southern Etruria were common both in Tarquinia and in Pontecagnano and they probably came out from the same workshop[144]. As F. Delpino has already emphasized, these metal objects bear witness to direct contacts between Tarquinia and Pontecagnano since the late phase I of the Early Iron Age[145].

4.2 Interactions between Tarquinia and the south of the Italic peninsula

Turning to the evidence from Tarquinia, it is possible to stress some specific markers, orna-

movements and transfer of Nordic craftsmen from northern Europe, see Iaia 2005, 190, 238; Camporeale 2013, 35–36.

138. Rafanelli ed. 2013, 66–67.

139. The cup is an *unicum* in the local repertory of impasto ware, but could find formal parallels (it shows similarities with) in a vase with a different shape and a similar cylindrical element of Tarquinia (Babbi 2008, 215, n. 842).

140. Bagnasco Gianni 2001, 372–373; D'Agostino 2006, 338–339; Bagnasco Gianni 2008, part. 585.

141. Gastaldi 1994, 55–56 and nn. 29–30.

142. D'Agostino – Gastaldi 1988, type 45B1b2, 72, tav. 22. A razor of the same type, testifying to the influences from southern Etruria and Tarquinia in particular on the Cuman repertory of metals, is also known from Cuma, Criscuolo 2011, 573, n. 2.

143. D'Agostino – Gastaldi 1988, type 46A3, 74, tav. 22.

144. D'Agostino – Gastaldi 1988, type 57A1a1 sword „tipo Pontecagnano", 76 e tav. 23, for the type, see Bianco Peroni 1970, 84–87. For the sheaths, D'Agostino – Gastaldi 1988, type 57B, tav. 23 and Bianco Peroni 1970, 127.

145. Delpino 1984, 266, n. 39; Delpino 1986, 169, n. 18; D'Agostino – Gastaldi 1988, 82–83.

ments and above all weapons that play a relevant role in the pattern of long-distance contacts with the south of Italy opening to new perspectives.

Bronze knives and razors similar to southern Italian types appear in a few depositions of the Poggio Selciatello cemetery[146]. Iron objects also have a particular relevance in such a frame, demonstrating the early adoption of the first items made of this metal in Tarquinia [147], following a metallurgic tradition that was well routed in the Calabrian district.

As regards the Italic iron swords, they are attested in Tarquinian cemeteries during the 9th century BC. The origin of this model has been related to Calabria (in particular to Torre Galli) and it was possibly disseminated towards south Etruria due to the intermediary role played by Pontecagnano, where similar Italic arms were found [148]. Scholars demonstrated that warriors from Calabria had been integrated in the local community since the local phase IB[149].

Together with the Italic iron swords, other archaeological indicators show the existence of routes that relate Tarquinia and the south of Italy through the Villanovan settlements of Campania.

From this perspective, along with an isolated vase probably imported by the settlements of the Valle del Sarno[150], we might consider the Oenotrian pottery with „tent" decoration brought to light both in the „monumental complex" and in the necropolis of Tarquinia[151]. Some small bronze discs and some examples of four-spiral fibulae also derive from Oenotria and the south of Italy in general[152].

Similar materials from Oenotria and Calabria have been found in the necropolis of Pontecagnano too[153], sometimes in association with objects imported from southern Etruria.

All these metal types highlight the existence of a circuit, open both to objects and people, that connected south Etruria with the southern area of the Italic peninsula from the 9th century BC. The direction of traffic was in both directions. From south to north it probably followed the vectors connected to iron metallurgy and the manufacturing and distribution of iron objects, such as arms and ornaments. From Etruria towards the south, instead, ceremonial vases arrived and, together with them, other precious objects often exhibited in high-ranking graves[154].

146. Delpino 1986, 170, n. 19.

147. The earliest iron objects in Tarquinia are some fibulae probably imported from the South of Peninsula, Delpino 1984, 270, n. 58; Delpino 1986, 168.

148. Delpino 1986, 170; D'Agostino – Gastaldi 1988, 82–83.

149. The two warriors buried in T. 889, in the necropolis of Pagliarone, and T. 180, in the necropolis of Picentino, both dating to the beginning of the local phase IB, have been considered mercenaries coming from Torre Galli, soon accepted in the community of Pontecagnano where they obtained the right for a formal burial (Gastaldi 1998, 163, 171; Cerchiai 2013, 140).

150. Delpino 1984, 267, n. 40, with references.

151. Respectively, for the evidence of Pianoro di Civita see Bagnasco Gianni 2001, 351–352; for the Tarquinian cemeteries see Bartoloni 1971 and Delpino 1984, 257–261 with references.

152. The four-spiral fibulae occur in Tarquinia and in other cities of both South and North Etruria (Delpino 1984, 261–262, nn. 20–23), for examples from Vetulonia (Cygielman 1994, 273–274). For the small bronze discs with large and circular hole see Delpino 1984, 262–263, fig. 2.

153. As concerns pottery, for „tent decorated" vases (D'Agostino – Gastaldi 1988, types 26A-B3, 42–43, tav. 15); for pottery coming from Calabria, type 26C1, 43; as regards metalwork see D'Agostino – Gastaldi 1988, type 32C11, 59, for four-spiral fibula; type 57A1b, 76–77, for iron sword; type 57B2, 77 for sheath „tipo Torre Galli"; type 63, 79–80, for shin-guards.

154. Within the sets of ceramics, a specific ceremonial role was probably played by the censers, which were often associated in Tarquinia with the bronze cups (Iaia 2005, 211). Bronze censers, known by a very high number of examples in Bologna, occur in the south of Campania with a few examples considered as importation from the south of Etruria. For the evidence of Pontecagnano see D'Agostino – Gastaldi 1988, type 29A, 48–49, tav. 15 and Horsnaes 2001; for the censer of T. 74 from Monte Vetrano cf. Iannelli 2011, cat. 201, 173.

In this framework, Tarquinia and Pontecagnano seem to have both been involved in a wider network of contacts where they played a similar role.

Along with direct influences between the two centres, as considered above, archaeological finds allow an assessment of their common function as cultural and commercial mediators in a network directed towards both the north and the south, in particular to Oenotria and Calabria[155]. From such a perspective, the relationships between Sardinia, Etruria and the south of Italy should also be considered. As scholars have recently remarked[156], the considerable number of nuragic objects found in Tarquinia could be attributed to the particular connection existing between the city and Vetulonia. These traffic routes converging on Tarquinia support the impression that the city was probably responsible for the arrival and distribution of nuragic materials along the coasts of Campania[157].

Returning to the archaeological evidence bearing witness of such Tyrrhenian connections, it is noteworthy that, in the necropolis of Pontecagnano, south Etruscan materials often appear in the same funerary contexts, and associated with objects coming from Oenotria or from the south of Italy. An example is given by tomb 494[158], where the only crested helmet of impasto ware found in the site is associated with a sword and a sheath both referring to a south Etruscan type and with an askòs „tipo Torre Mordillo", probably imported from the Calabrian district[159].

The context of tomb 528[160], to which the bronze cup with ornitomorphic disc belongs, is even more interesting. As regards the vessels, a few local impasto vases are combined with the metal cup of south Etruscan inspiration and an Oenotrian amphora decorated in the „tenda elegante" style[161].

The ornaments found in the tomb show the combination of local, northern and typical Oenotrian examples[162]. Among the latest, a four-spiral fibula, which is the only one found in Pontecagnano so far, might be assigned to a workshop active in Torre Mordillo[163]; a lowered arch bow fibula that has a more general distribution in northern Italy and in Etruria[164], and an undecorated fibula with a slightly thickened arch, which is a highly popular form in the necropolis of Sala Consilina[165]. The tomb, once again, seems to collect objects of various origins

155. For the variety of contacts and exchanges involving Tarquinia during the 8th century BC, with a direct impact on the local pottery tradition and culture see Babbi – Peltz 2013, part. 72–86. An important accent to the connections with Levantines and the East Mediterranean is given by Botto 2012, 57–59, with previous bibliography.

156. Lo Schiavo – Milletti – Toms Parry, in press, 56, with previous references.

157. Bartoloni 1994, 211; Milletti 2012, 246, n. 285; for a Phoenician involvement in the exchanges that brought nuragic materials in the settlements of Agro Picentino see Gastaldi 1994, 56; Gastaldi 2006, 117. As regards the nuragic evidence yielded by Cuma see Criscuolo 2011, 573; as regards the nuragic bronzes from the necropolis of Pontecagnano, see Lo Schiavo 1994; Gastaldi 1994. For the bronze nuragic ship from Monte Vetrano, T. 74 see Iannelli 2011, cat. 194, 173, with bibliography.

158. Rafanelli ed. 2013, 64–65.

159. Respectively, D'Agostino – Gastaldi 1988, type 20B, 36; types 57A1a (sword „tipo Pontecagnano") and 57B1 (sheath tipo Pontecagnano), 76-77; type 26C1, 43.

160. For a synthetic description of the context see D'Agostino 1974, 102–104.

161. D'Agostino – Gastaldi 1988, type 26A2, 42 (amphora of „tenda elegante" style); type 30A, 49 e fig. B3 (bronze cup with ornithomorphic disc). In the context there were also a spindle whorl (type 24D, 38) and a spindle (type 46A1, 73).

162. Among ornaments, there were small gold objects, like two spiral pendants, a small button and a *saltaleone*.

163. D'Agostino – Gastaldi 1988, type 32C11, 59, tav. 20; Lo Schiavo 2010, type 441, n. 7852, 852–859, part. 858–859, tav. 654.

164. Lo Schiavo 2010, type 86b, n. 1337, 231–232, tav. 101.

165. D'Agostino – Gastaldi 1988, type 32C3, 57, n. 196, tav. 20; Lo Schiavo 2010, type 86, n. 1323, 227–231, part. 230, taf. 101.

that were probably involved in a common trade of goods, people and iconographies between the north and south of Etruria, the Campanian coasts and the areas of the south of Italy.

5. Some types of fibulae as evidence of interregional contacts with the north (Martin Trefný)

This aim of the present paragraph deals with four fibulae from the „monumental complex" as indicators of interregional contacts between Tarquinia and the northern or north-eastern regions during the 7th-5th, and 3rd-2nd century BC[166]. They are two Certosa fibulae, one fibula with a compressed bow and an incised decoration and one fibula of the middle La Tène scheme.

5.1 Certosa fibulae

The first Certosa fibula[167] comes from one of the levels of the path crossing the „monumental complex" (US 8) north to south, and which is dated to the beginning of the 5th century BC.

The fibula is characterised by the irregular curving of the bow, a vertical plate on the foot with incised circles („occhi di dado") and two terminal knobs on the foot-end of the fibula (fig. 20:1). The bow in the vicinity of the spring is decorated by the band of the transversal incisions. The section of the foot is T - shaped.

The formal variety of the Certosa fibulae in the north[168] as well as in the south[169] is enormous. The piece analyzed here has been compared to the variants D1 IV, D1 VII and D2 II after Guzzo[170] and paralleled with the finds from Orvieto, Perugia, Tolfa, Mazzano Romano or Tarquinia (fig. 20: 2-7)[171]. However, it must be stressed that none of these pieces represents an exact parallel to the fibula from the Tarquinian „monumental complex". They have different details, such as the number and placing of the engraved circles, absence or presence of the two terminal knobs on the foot, and the way in which the lines are incised at the bow close to the spring. Unfortunately, none of the aforementioned exemplars comes from reliably dated contexts. Although the piece from Tolfa is dated to the first half of the 6th century BC, its foot is poorly preserved and thus the determination of the fibula type is uncertain. The piece from Mazzano Romano has been dated roughly to a period „between the 7th-6th century BC"[172]. This chronology thus cannot be used for the final considerations regarding the diffusion of these fibulae.

In order to discuss significant analogies to the Certosa fibula found in the „monumental complex", we must point out an important area of occurrence of such variants in Piceno. Between the analogic exemplars we may emphasize the pieces from Tolentino (fig. 20: 8-9) or other sites (fig. 20: 10)[173]. All these finds belong to the Piceno IVB phase, which is parallel to the period of 525-475 BC.

Another significant area with occurrence of the Certosa fibula of the mentioned type is Emilia Romagna. The poignant analogies from a formal point of view, but also here with small variance

166. Two of them have been already published (Tabone 2001, tav. 143), the remaining two are first presented in this contribution.
167. Tabone 2001, tav. 143:70/2.
168. Teržan 1976.
169. Guzzo 1972, 109–122, tav. 7–13; Lo Schiavo 2010, tav. 358.
170. Guzzo 1972, tav. 10-11; Tabone 2001, 497.
171. Guzzo 1972, 43–45.
172. Guzzo 1972, 45.
173. Lollini 1985, fig. 12B, D.

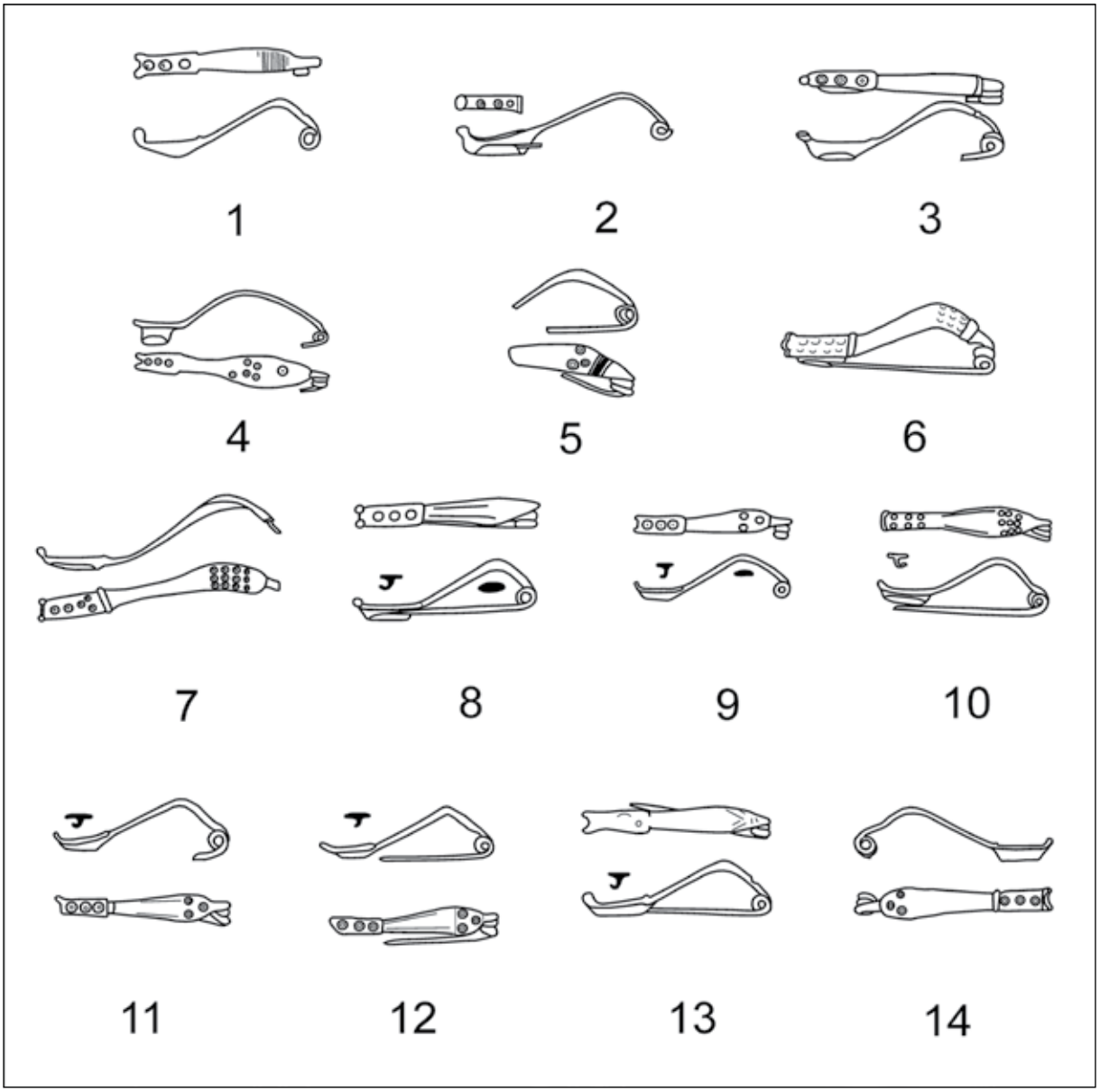

Fig. 20. The Certosa fibulae with two knobs on the foot and related types (various scales). 1Tarquinia, ,,monumental complex"; 2-3 Orvieto; 4 Perugia; 5 Tolfa; 6 Mazzano Romano; 7 Tarquinia; 8-9 Tolentino; 10 Piceno, unspecified, 11-12 San Martino in Gattara; 13 Imola, Monterrico; 14 Sile (after Guzzo 1972; von Eles-Masi 1982; Bermond Montanari 1982; Lollini 1985; Buora 2010).

in decoration, may be found in the necropoli of San Martino di Gattara (fig. 20: 11-12) or Imola, Monterrico (fig. 20: 13)[174].

The Certosa fibula might also be found in other regions. Good counterparts come from Friuli-Venezia Giulia: one fibula with little differences in the decoration of the bow comes from Sile[175] (fig. 20:14), a fragment of another similar one from Tapogliano[176]. Other suitable comparisons may be established with the exemplars from Este-tomba Benvenuti Nr. 98[177], Falerii[178] or Bazzano in Abruzzo[179].

174. von Eles-Masi 1982, tav. 7:9.7; Bermond Montanari 1982, tav. 93: 87.23–24.
175. Buora 2010, fig. 3a–b.
176. Buora – Seidel 2008, n. 37.
177. Fogolari – Frey1965, fig. 15:24.
178. Lollini 1976, 144, tav. 14: 7.
179. Weidig 2007, 56, fig. 1:16.

As mentioned above, the described Certosa types are well represented in the areas of Piceno and Emilia Romagna. It may be also pointed out that from these areas come the best comparisons for our examples from Tarquinia, both in quality of the finds and frequency. The fibulae from these regions may also be helpful to discuss chronological issues. The fibula from the Tarquinian „monumental complex" belongs to the beginning of the 5th century BC[180] and matches the chronology of the exemplars from Picenum (ca. 525-475 B. C-Piceno IVB). However some pieces from S. Martino di Gattara in Emilia Romagna (grave 4) indicate a longer use until the 4th century BC.

Since the Picenum finds are considered the markers of the mutual contacts between Piceno and Emilia Romagna[181], it cannot be excluded that these fibulae could also represent the evidence of movements or contacts from the area of Piceno to the region of Perugia, Orvieto, and Tarquinia (fig. 21). They could even be understood as possible indicators of contacts between Emilia Romagna or even the region of Friuli in the north and Latium in the south, via Piceno, Umbria and Etruria. However, only future finds from chronologically well-defined contexts could confirm this idea.

The second Certosa fibula from the „monumental complex" consists of the piece from the stratigraphic unit of the north-western sector (US 1374), which is unreliable for time-stratigraphic correlation (fig. 22:1). This fibula is fully preserved with the exception of the decorative knob at the terminal part of the foot. It has a unilateral spring, consisting of the two coils and the J-shaped foot section.

From a typological perspective, the fibula also shows strong affinities with specimens from the area of the Piceno culture or the region of Emilia Romagna. The fibula finds parallels at necropolis of Numana (fig. 22:2-5), where some fibulae from grave Nr. 225 might be accepted as good comparative pieces[182], or San Ginesio (fig. 22:6)[183].

The closest analogies seem to occur in the sites from Emilia Romagna at the necropolis of Imola-Monterrico (graves Nr. 58, 59, 60)[184] and Santa Maria Maddalena di Cazzano near Bologna (fig. 22:7-10)[185].

Regarding the chronology of the mentioned finds, the San Ginesio and Numana pieces belong to the phase Piceno IVB, which corresponds to the final decades of the 6th and beginning of the 5th century BC. All finds from Emilia Romagna mentioned above belong to the beginning, or, generally, to the first half of the 5th century BC. Unfortunately, the chronology of all these pieces is too vague to determine where these fibulae first occurred, but this is also the timespan of our fibula from the Tarquinian „monumental complex".

The map of the distribution of this second Certosa fibula type (fig. 23) also indicates a noticeable link between the regions of Etruria and Piceno in the north-east and Emilia Romagna in the north. Therefore we may understand this fibula as a possible indicator of the interregional contacts or movements between the regions mentioned here.

In conclusion we can point out the similar distribution for both Certosa fibulae. In this respect it is necessary to emphasize the important observation of Maurizio Buora,[186] who stresses the fact that the distribution of these Certosa fibulae in Friuli corresponds with the course of the

180. Tabone 2001, 497.
181. Lollini 1985, 332–333.
182. Landolfi 1992, fig. 2:1–4.
183. Lollini 1985, fig. 13D:2.
184. von Eles-Masi 1982, tav. 56: 58.17; 57:59.6; 58:60.18.
185. Morico 1982,Tav. 85:82.25.
186. Buora 2010, 193.

Fig. 21. Distribution of the Certosa fibulae with two knobs on the foot and related types. Sites mentioned in the text (see previous caption).

Fig. 23. Distribution of the related types to the Certosa fibula from the US 1374. Sites mentioned in the text (see previous caption).

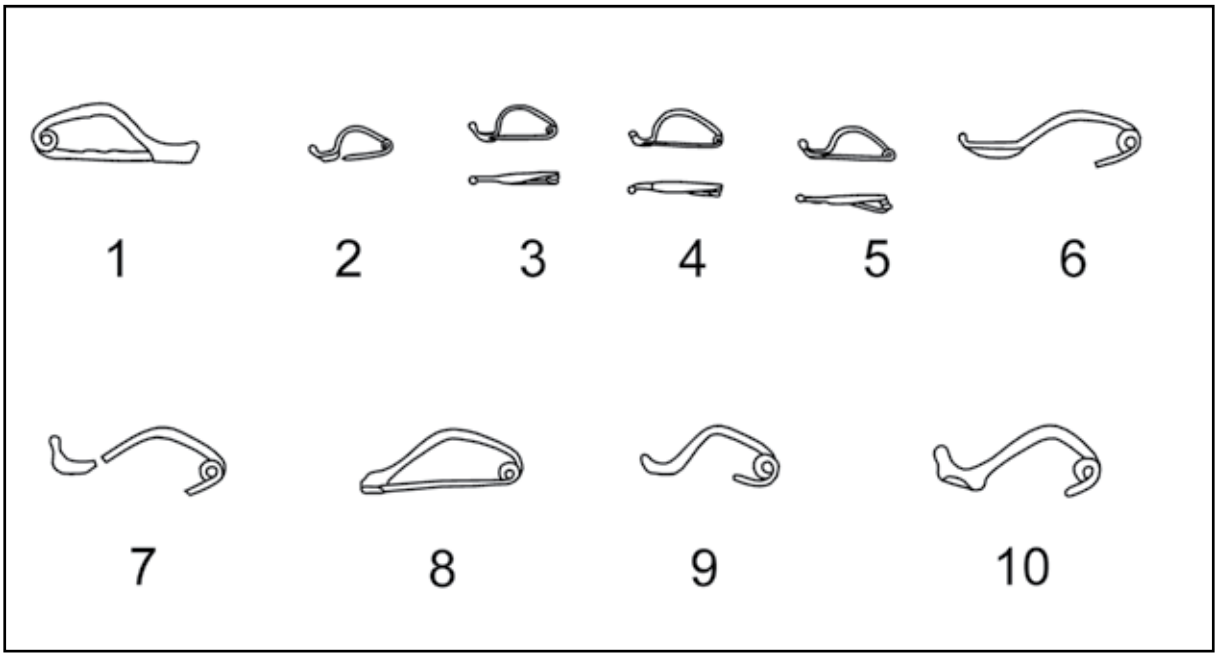

Fig. 22. The Certosa fibula from the US 1374 and related types (various scales). 1Tarquinia, „monumental complex"; 2-5 Numana; 6 S. Ginesio; 7-9 Imola; 10 Santa Maria Maddalena di Cazzano (after Landolfi 1992; von Eles-Masi 1982; Morico 1982; Lollini 1985).

later Roman land connection, called Via Postumia. The same may be said about the remaining fibulae, whose distribution in Emilia Romagna, Piceno, Umbria, Etruria or Lazio approximately corresponds with the later Roman Via Flaminia or Aemilia. Thus it is possible, that the identical connection at the places of these routes have existed already at the period of the 6th or 5th century BC.

5.2 Fibula with compressed bow

The third fibula from the „monumental complex" could also be related to the north-south relationships, although in the reverse direction. The fibula with a compressed bow and incised decoration is characterized by three sections on the bow, with the central one incised transversally and the other two longitudinally (fig. 24:1)[187].

This kind of decoration occurs for example on sanguisuga or navicella fibulae. However here we want to emphasize that our piece does not correspond from the technological point of view to any of these two categories, due to its compressed cast bow. This fibula has already been compared to one exemplar from the Esquiline in Rome[188] (fig. 24:2), but more similar exemplars come from Capua (fig. 24:3-4)[189] or are without provenance (fig. 24:5).

The distribution of this type of fibula is not restricted only to a single area in central or southern Italy, since similar pieces may be found even in the north and in the areas behind the Alps. The examples of such occurrence are represented by the fibulae from Bitnje in Slovenia (fig. 24:6)[190], the princely hillfort of Heuneburg in southwestern Germany (fig. 24:7)[191], an unknown site in Slovakia (fig. 24:8)[192], and Baldaria in northern Italy (fig. 24:9)[193]. This last fibula is rather a navicella type, and it presumably had lateral knobs, although they are now broken.

Regarding the chronology of the pieces discussed / mentioned above, it is clear that the occurrence of this variant is earlier in central and southern Italy than in the north. The chronology of the specimens from Capua and Rome is within the 8th century BC and matches that of the Tarquinian fibula. The exemplars from the North date to a much later period: the Bitnje fibula belongs to phase Santa Lucia Iia (6th century BC); the Heuneburg fibula dates back to the Ha D1 (late 7th to approximately first half of the 6th century BC) and the same chronology suits that of the Slovakian fibula.

Comparing such data, there is a time gap of about 150 or 200 years. In spite of the possibility of an independent origin of such fibula type in the north without links to southern models, such evidence should be interpreted as an indication of the counter contacts in the direction south-north (fig. 25). However, it must be emphasized that this idea still misses a reliable chronological validation, especially due to the considerable time span between northern and southern finds.

As mentioned above, the finds of the three fibulae from the „monumental complex" indicate, at least in case of the two Certosa types, the inter-regional contacts of the Tarquinian area with the regions of the north-east or north within the Alps. What could really have been the charac-

187. Tabone 2001, tav. 143:179.16.
188. Müller-Karpe 1962, tav. 26: 7; Tabone 2001, 496.
189. Lo Schiavo 2010, tav. 175: 2339–2340.
190. Gabrovec 1974, tab. VI.
191. Mansfeld 1973, Taf. 1:4.
192. Novotná 2001, Taf. 16:137.
193. von Eles-Masi 1986, tav. 106:1245.

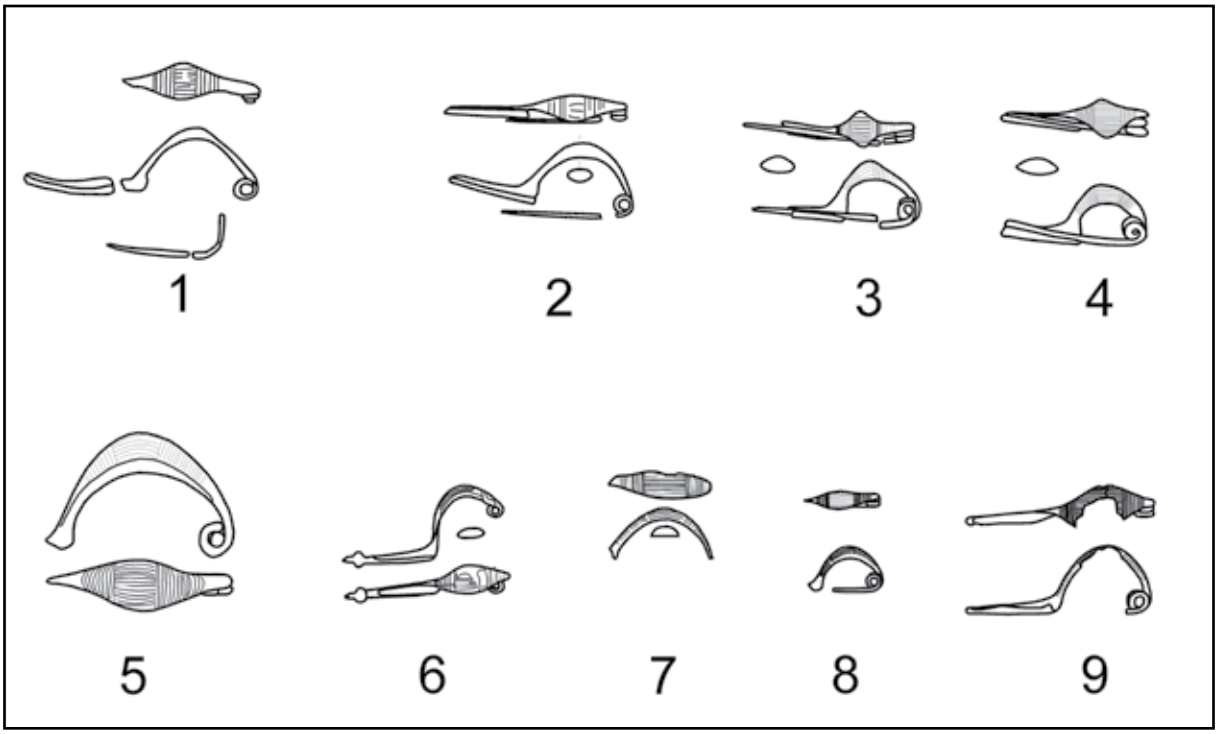

Fig. 24. The fibula with compressed bow and related types (various scales). 1Tarquinia, ,,monumental complex"; 2 Rome; 3-4 Capua; 5 unknown site from Southern Italy; 6 Bitnje; 7 Heuneburg; 8 unknown site from Slovakia; 9 Baldaria (after Müller-Karpe 1962; Gabrovec 1974; Mansfeld 1973; von Eles-Masi 1986; Tabone 2001; Novotná 2001; Lo Schiavo 2010).

Fig. 25. Distribution of the fibula with compressed bow and related types. Sites mentioned in the text (see previous caption).

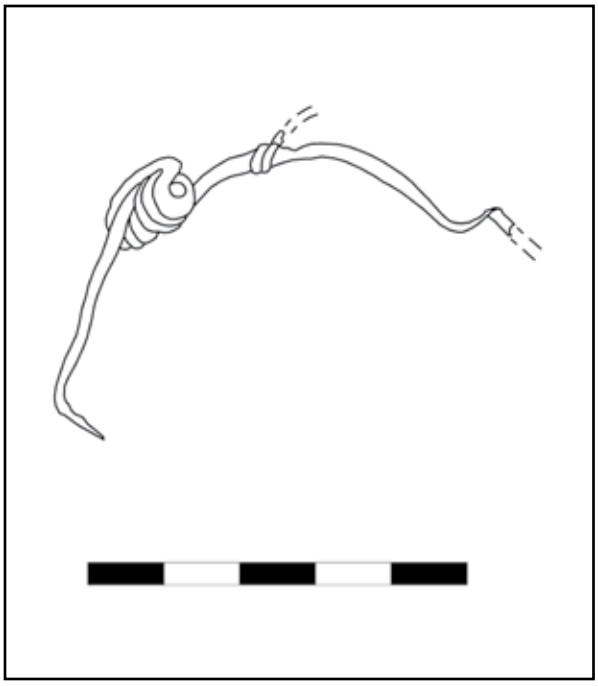

Fig. 26. The fibula of the middle La Tène scheme from the Tarquinian ,,monumental complex".

ter of these contacts? Of course, in many cases it may be explained as an evidence of a casual movement of artefacts. However, since fibulae may be understood to a considerable extent as pieces of personal jewellery, we cannot exclude their significance as an indication of the movement of individuals, etc.

5.3 Fibula of Middle La Tène scheme

Only a few months ago a new fibula fragment was found during the excavation at the sector H-M of the Tarquinian „monumental complex" (fig. 26). It was detected during the uncovering of the surface layer at the western part of the excavated area. The fibula was damaged and the foot and the needle were missing. However, a substantial part of the fibula, including the spring and the terminal part of the foot, folded back and attached to the bow, have been preserved and enabled its typological classification. Although during the excavation of the „monumental complex" no typical remnants of the Celtic presence or artefacts of the „La Tène character" have been detected, the presented find may be clearly identified as the fibula of the „Middle La Tène scheme" or fibula of the so called joint construction, typical for the European La Tène culture.

Regarding the chronology of that piece, only the typological comparison may indicate its date, because the superficial layer contained artefacts from the various periods and was useless for chronological purposes. The fibula finds more appropriate parallels in other Italian regions. One similar example has been found at Stenico[194]. This Middle La Tène piece is almost completely consistent with our exemplar except for the fact that the foot attaches to the bow by a clamp, whereas in our case the foot is attached by winding. But comparing the shape of both fibulae, including the form of the spring, they appear to be nearly identical. The fibula from Stenico, is classified as type XXII j[195], and is formally close to the late La Tène type Misano, spread in northern Italy.

Other notable examples are known from Marzabotto[196]; Valeggio sul Mincio[197] or Pontevecchio di Magenta[198]. Even in these cases, the foot is clamped to the bow. Regarding their chronology, the fibula from Valeggio sul Mincio is classified as the exemplar of the Middle La Tène scheme, being a part of the inventory of the LT D tomb.[199] The exemplar of Pontevecchio di Magenta is dated to the 1st century BC[200] and the fibula from Marzabotto to the second half of the 3rd century BC.[201]

The closest analogies are represented by the fibulae of the Middle La Tène scheme found in one votive deposit close to the temple of Vesta at the Forum Romanum in Rome[202]. The fourteen fibulae suggest many identical elements to our Tarquinian find, some of them even with identical attachment of the foot to the bow by winding, not with a clamp. Consistent with the chronology of these fibulae, the Tarquinian exemplar may be dated to the period of the 3rd-2nd century BC. It is tempting to make a connection of the fibula from the „monumental complex" with the presumed movement of the Celts in the Tarquinian territory, but at the moment a close

194. Marzatico 1988, fig. 45; Adam 1996, tav. 13:310.
195. Adam 1996, 168.
196. Kruta 1990 , tav. VI:27.
197. Salzani 1995, tav. VIIIA:13b.
198. Tizzoni 1983, tav. CXXVI:fig. 2f.
199. Salzani 1995, 22.
200. Tizzoni 1983, 34.
201. Kruta 1990, tav. VI.
202. Piana Agostinetti 2006, fig. 2.

connection with historical events, such as the battle of Talamone (225 BC) must be cautiously considered[203]. In any case, the overall conclusion, including the interpretation of this find in its historical context with respect to the Celtic presence in central Italy, will be a subject of further studies.

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203. For the interpretation of the fibulae of the Middle La Tène scheme in the Roman Aedes Vestae in the context of Celtic presence in central Italy cf. Piana Agostinetti 2006, 108–109. For the fibulae of the Middle La Tène scheme in Sicily and Calabria and their interpretation cf. Baitinger 2012.

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Contacts between the Late Hallstatt groups of the Pannonian Basin, the south-east Alpine Hallstatt region and ancient Veneti from the perspective of horse burials

Petra Kmeťová

Abstract

The interregional contacts between inhabitants of the late Hallstatt groups of the Pannonian Basin, south-east Alpine Hallstatt region and ancient Veneti can be identified by horse burials, namely, several similarities which are observed in horse burials placed in separate pits within human cemeteries. These similarities link above all the territories of the Vekerzug Culture, groups of the south Pannonian Basin and north-east Italy, and partly also two Slovenian groups of the south-east Alpine Hallstatt region (Sveta Lucija and Dolenjska groups). This type of horse burial was the most numerous in north-east Italy and in the territory of the Vekerzug Culture. Moreover, in the same regions, other similar features were recognized in burials of horses and humans of low social status. According to the similar character of the natural environment of both of these areas, along with the archaeozoological analyses and classical written records, they were regions with advanced horse breeding skills. Links between their territories, suggested by horse burials, could be explained in connection to horse exchanges. Naturally, the exact process of this exchange contact remains unclear, but it could be based on mutual exchange of high-quality horses as gifts, etc. Nevertheless, the exchange of stock could have been accompanied by the exchange of information, respectively also by the exchange of information on burial practices. The hypothesis is suggested that it is through these contacts that the idea of horse burials in separate pits spread. The evidence of direct contacts between both „horse breeding centres", cannot, however, be proven – although they both interacted with cultural groups connecting them, namely with Sveta Lucija and/or Dolenjska groups and groups of the south Pannonian Basin. Therefore, it is likely that the inhabitants of these groups were „mediators" of the horse exchange, along with the spread of information on burial customs regarding horses. However, these hypotheses need to be verified by further research.

Key words

Contacts – Pannonian basin – south-east Alpine region – Veneti – horse burials

1. Introduction

The Pannonian Basin was divided into several cultural regions in the late Hallstatt and early La Tène periods (Reinecke HaD – LTA, ca. 625–400 BC).

The western part - the so called East Alpine Region of the Hallstatt Culture – was in regression after the rapid collapse of its political and economic systems in the second half of the seventh century and in the first half of the sixth century BC (during the stage HaD1). This collapse was associated with a rapid reduction of archaeological sites and finds in subsequent

period and also with the occurrence of artefacts connected with the Vekerzug Culture[1]. At the end of the Hallstatt period, new elements occurred in this region, following renewed contacts to the south (northern Italy) and to the west (elements of the early La Tène Culture).

Only some Hallstatt Culture groups, located in the present-day Slovenia (esp. Dolenjska Group and Sveta Lucija Group), survived the disruption referred to above without substantial change[2]. The inhabitation developed continuously, enriched by the new elements coming from the south (north Italy), from the west (the early La Tène Culture) and from the east (the Vekerzug Culture)[3].

Eastern territories of the Pannonian Basin were dominated by the Vekerzug Culture. This emerged during the second half of the seventh century BC and might have been one of the reasons for the above-mentioned breakdown in the development of the East Alpine Hallstatt Culture[4]. This culture has been frequently, but incorrectly, identified by several recent authors as Scythian. However, there is no direct evidence of ethnicity of members of this group being associated with the historic Scythians, and recent studies oppose this identification[5]; research has revealed the polygenetic and syncretic character of this culture manifested through elements and influences rooted in several different regions. These were local groups of the Pannonian Basin (such as the Mezőcsát Group in the transition from the Late Bronze Age to the Early Iron Age, respectively its descendants) and the Hallstatt Culture of the east-alpine region, and also the north Pontic and Caucasian regions and Balkan Peninsula[6]. This culture had mostly a pastoral character, as some semi-nomadic elements of an economy based on the breeding of livestock indicate[7].

Finally, southern territories of the Pannonian Basin were inhabited by groups reflecting both elements of local Hallstatt origin and the influences of the neighbouring Vekerzug Culture.

These diverse cultures and groups were not isolated but interacted in different degrees with each other and other adjacent regions. These interactions brought, amongst others, interesting similarities in the phenomenon of horse burials in several of these regions.

2. The aim of the paper

This study will demonstrate the inter-regional contacts of the Pannonian Basin population with each other and also with other regions during this era, from the perspective of horse burials. This analysis is based on the detailed evaluation of graves with horse remains in the entire Pannonian Basin, including the area of the East-Alpine Region in the Hallstatt period[8]. Within the analysis, interesting relationships between distant regions have appeared. Not only do horse burials in distant regions show similar features but also in the burial contexts and in certain grave goods[9].

1. For example Teržan 1998; Romsauer 1996, 431.
2. Not regarding the impoverishment of the material culture.
3. Teržan 1998; Teržan 2008, 273–294; Dular – Tecco Hvala, 251–252; Teržan – Trampuž 1973.
4. Chochorowski 1985; Teržan 1998; Kemenczei 2009, 111–12; Kozubová 2013, 407–410, 430.
5. Chochorowski 1998; Kozubová 2013.
6. Chochorowski 1998, 473; Kozubová 2013, 403–405, 429.
7. Kemenczei 2009, 21–28.
8. Kmeťová 2014a.
9. In the following, graves of individuals of higher social status with horse burials will not be analysed. These graves were quite frequent even in the previous stages of the Hallstatt Period and most likely associated with the expression of higher social status of a deceased, and probably also with journey to the Other World (Kmeťová

3. Horse burials in separate grave pits

The custom of horse burials occurred rarely in the Pannonian Basin even in the early stage of the Hallstatt period[10]. Horse burials were associated exclusively with human burials and were not as frequent as in later phases of the period. They were placed in the grave interior or in proximity to a human grave (above or adjacent). There are two basic types of horse burial: inhumation and cremation on a funeral pyre. Both types are represented by complete animals (as inhumed or cremated), or only small animal body parts. These burials took place only in graves of privileged social groups and members of the „higher middle class"[11].

The number of horse burials increased considerably in the late stage of the Hallstatt period, in connection with the emergence of new cultural elements[12]. In this phase, a new type of horse burial occurred in this region: burial in separate pit within a human cemetery (fig. 1). It seems that these burials were not associated with individual human graves. They were usually situated at a distance (several metres) from human graves and did not indicate any relationship to them. Also the number of the graves with skeletal remains of whole-horse bodies increased in this period. The occurrence of the burials with remains of whole-horse bodies in the area of Pannonian Basin and East-Alpine Hallstatt Region is documented within the Dolenjska Group of the East-Alpine Hallstatt Culture, the Vekerzug Culture and south Pannonian late-Hallstatt groups. In the latter two, horse burials in separate pits without any apparent association with human graves (fig. 2 and 3) occurred.

3.1 Vekerzug culture

Horse burials of the Vekerzug culture are well-known from their earliest discoveries in the middle of the 20th century[13]. In this culture, the custom of burying horses was quite frequent, although varied greatly from place to place, probably due to heterogeneity of the culture (61 burials of various types detected[14]).

Note especially that burials of horses deposited in separate pits are quite numerous. Nevertheless, they were found only in a few cemeteries throughout the Vekerzug Culture. They were most numerous in the Szentes-Vekerzug cemetery in south-east Hungary; eleven pits each contained the remains of a single horse (fig. 2), and three pits apparently a pair (fig. 3)[15]. The horse graves were mainly concentrated in the south-east part of the cemetery (especially burials of pairs), but some graves were also situated in other parts of the cemetery and at varying distances from human graves (fig. 4).

The only other excavated cemetery with a large number of graves with entire horse bodies deposited in separate pits is Chotín I in south-west Slovakia. In two contemporary cemeteries

2013a, 251; Kmeťová 2013b). Anyway these graves were really uncommon in the late Hallstatt Period in Pannonian Basin.

10. Kmeťová 2013, 251–252; Kmeťová – Stegmann-Rajtár 2014.

11. Kmeťová 2014a; Kmeťová 2013a, 251–252; Kmeťová 2013b.

12. Kmeťová 2013a, 252–254.

13. Csallány – Párducz 1944–1945, 106–107; Gallus – Horváth1939, pl. 69:1; Párducz 1952; Párducz 1954; Párducz 1955.

14. Kmeťová 2014a.

15. A single horse skeleton: graves 5, 6, 11, 16, 17, 18, 19, 32, 36, 39 and 146; a horse pair: graves 12, 13 and 22 (Csallány – Párducz 1944-1945, 106–107; Párducz 1952, 144–148; Párducz 1954, 26–27, 32–33; Párducz 1955, 8–10).

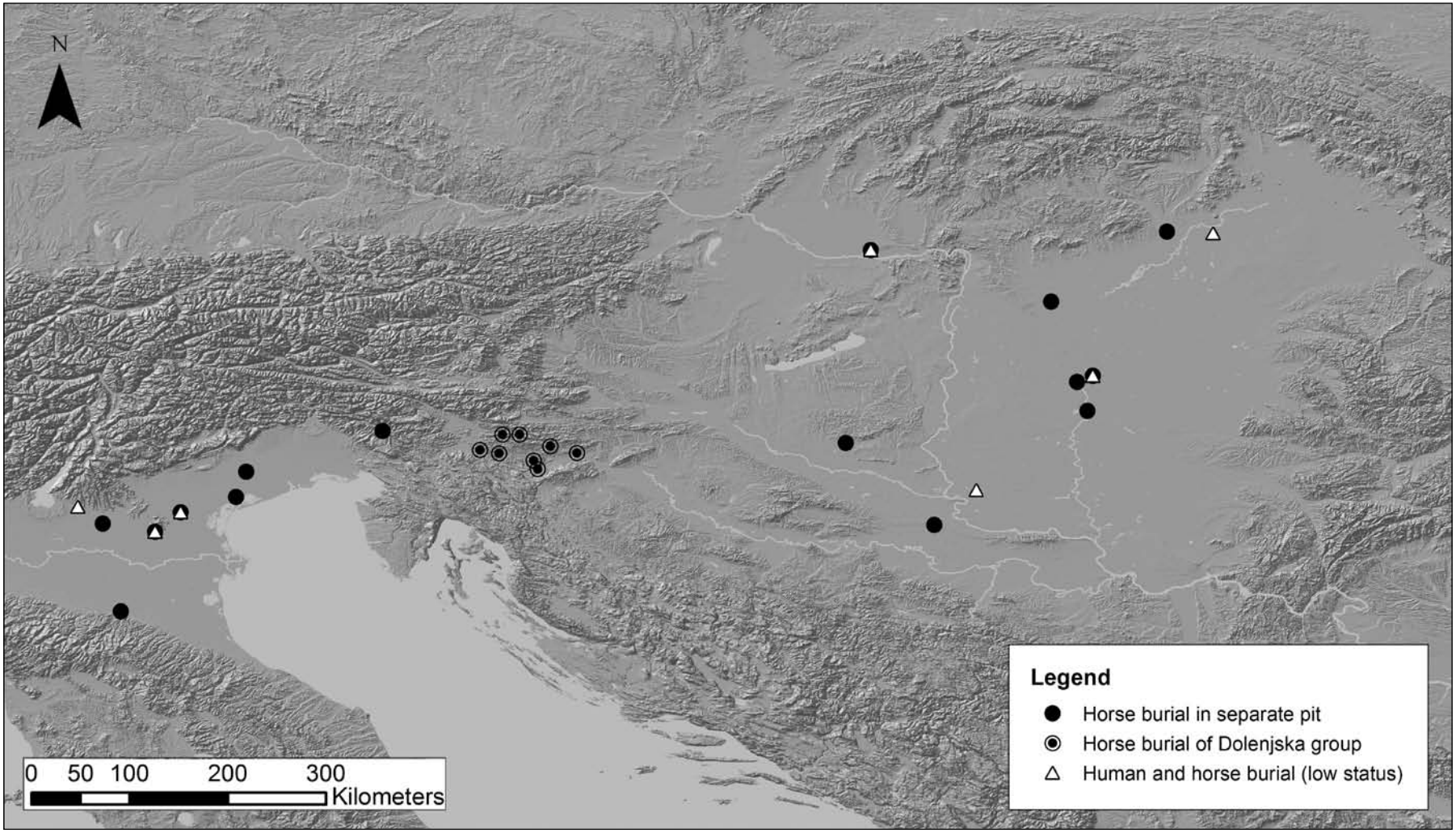

Fig. 1. Distribution of certain horse burial types in the Late Hallstatt and Early La Tène Periods. Horse burial in separate pit: Croatia: Vinkovci-NaMa; Hungary: Algyő, Csanytelek-Ujhalastó, Muhi-Kocsmadomb, Szentes-Vekerzug, Szentlőrinc, and Tápioszele; Italy: Altino-Le Brustolade, and Portoni, Bologna-Palazzo Bocchi, Este-Via Prà, Oppeano-Le Franchine, Oderzo- Opera Pia Moro, and Padua-Piovego; Slovakia: Chotín; Slovenia: Most na Soči. Burial of horse and human of low social status: Hungary: Szentes-Vekerzug, and Tiszavasvári-Csárdapart; Italy: Este-Lachini Pelà, Padua-Via Tiepolo and Via San Massimo, and Piovego, and Verona-Colombara; Slovakia: Chotín; Serbia: Doroslovo. Horse burial of Dolenjska group (selected sites with likely whole horse burials): Boštanj, Brezje, Libna, Magdalenska gora, Novo mesto, Stična, Vače, and Zagorje.

Fig. 2. Horse burial deposited in separate pit: Szentes-Vekerzug, grave 16 (after Párducz 1952, pl. 70).

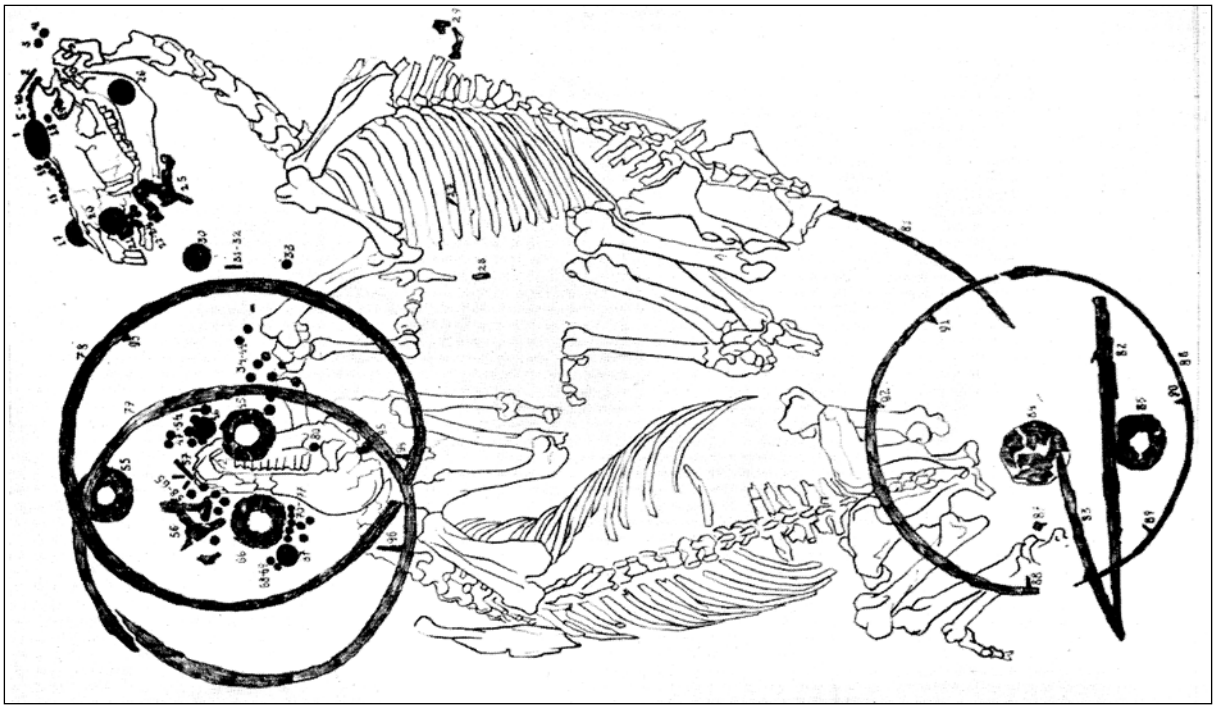

Fig. 3. Horse pair burial deposited in separate pit with remains of wagon: Szentes-Vekerzug, grave 13 (after Párducz 1952, pl. 50-2).

situated in proximity (c. 120 metres from each other – Chotín IA and Chotín IB; it could also be that these are two parts of the same cemetery)[16], ten separate pits containing single horse skeletons were found. In Chotín IA cemetery, eight burials of this type were excavated; in the smaller Chotín IB cemetery, two separate horse burials with partial horse skeletons were unearthed[17]. These horse graves were located in various sections of cemetery IA, without any significant concentrations (fig. 5)[18]. The two horse burials in Chotín IB cemetery were situated close to one another[19].

Remaining cemeteries of the Vekerzug Culture provided just one or two horse burials each in separate pits: in Csanytelek-Újhalastó two horse burial sites were excavated (one horse without a head)[20]; one horse grave in Muhi-Kocsmadomb[21]; a grave with partial horse skeleton in Algyő [22]; and in addition at Tápiószele a grave with what is likely to be an entire horse was found[23]. This situation may be due to the size of excavated areas of the cemeteries; most of the excavation results remain unpublished and there is no evidence on the size of excavated areas.

Grave goods were not unified either. Nearly all horses buried in separate pits in Szentes-Vekerzug cemetery were harnessed (one of the horses even with luxurious phalerae with gold or electrum foil)[24], and two horse pairs buried in separate pits were even buried with different parts of what seems likely to be the same wagon[25] (fig. 3). In contrast, horses buried in separate pits in Chotín I cemeteries, as well as those from the remaining cemeteries, were interred without any artefacts, while the elements of horse harnesses were placed only in few human graves located at a greater distance (fig. 5)[26].

This type of horse burial presented a new element within a frame of cultural groups of the Pannonian Basin. According to earlier views, horse burials of the Vekerzug Culture were associated with influences from the east, namely from the North-Pontic and Caucasian region[27]. The situation, however, seems to be less simple than that. Horses buried within human cemeteries in the North-Pontic and north Caucasian regions were always associated with particular human graves[28]. The only exception is the Pšiš I cemetery of Protomeotian Group in north-west Caucasus, which is a rather problematic case[29]. The situation in these eastern regions is in strong contradiction with the contexts of the above mentioned horse burials of the Vekerzug Culture which do not indicate any association to particular human burials. They either formed separate

16. Kozubová 2013.
17. Chotín IA: horse graves 1, 2, 5, 6, 7, 8, 9 and 10; Chotín IB: 18/1961 and 22/1961 (Dušek 1966, 13, 86, 93–94, pl. 65:5; Kozubová 2013, 122–123, 145–146, Plan 1, 2).
18. Kozubová 2013, Plan 1.
19. Kozubová 2013, Plan 2.
20. Graves 71 and 111 (Galántha 1981, 50, fig. 10; Galántha 1986, 70).
21. Hellebrandt 1996-1997, 128, 141, 158, fig. 31:8.
22. Bende 2003, 64.
23. Grave 168 (Párducz 1966, 51, 84, tab. 34:3).
24. Grave 16 (Párducz 1952, 147, pl. 54–57).
25. Graves 12 and 13 (Párducz 1952, fig. 4-5, pl. 45:9, 47:1–4, 50; Kemenczei 2009, pl. 65:9–13, 66–68; Chochorowski 1985, 122–123.
26. Graves: Chotín IA, cremation grave 22/1952, inhumation graves 40/1952, 119/1953, 120/1953, 210/1954 and 220/1954, Chotín IB, grave 44/1961 (Kozubová 2013, 112–116, Plan 1, 2).
27. E.g. Párducz 1955, 11–12; Kemenczei 2009, 26, 34; Kozubová 2013, 397.
28. Kmeťová 2014a, 226–232, with detailed bibliography.
29. Archaeological context of horse graves is uncertain. According to the context, it seems like horse burials in separate pits were of whole horse skeletons (2 graves) and remains of horse hide (remaining graves), harnessed or unharnessed. These graves were most likely not associated with human graves (Ėrlix 2007, 44–45, 70, fig. 53:1, 56:1, 7, 57:1, 58:1–4, 59:1, 61, 62 with additional bibliography; cf. also Carola Metzner-Nebelsick 2002, 249).

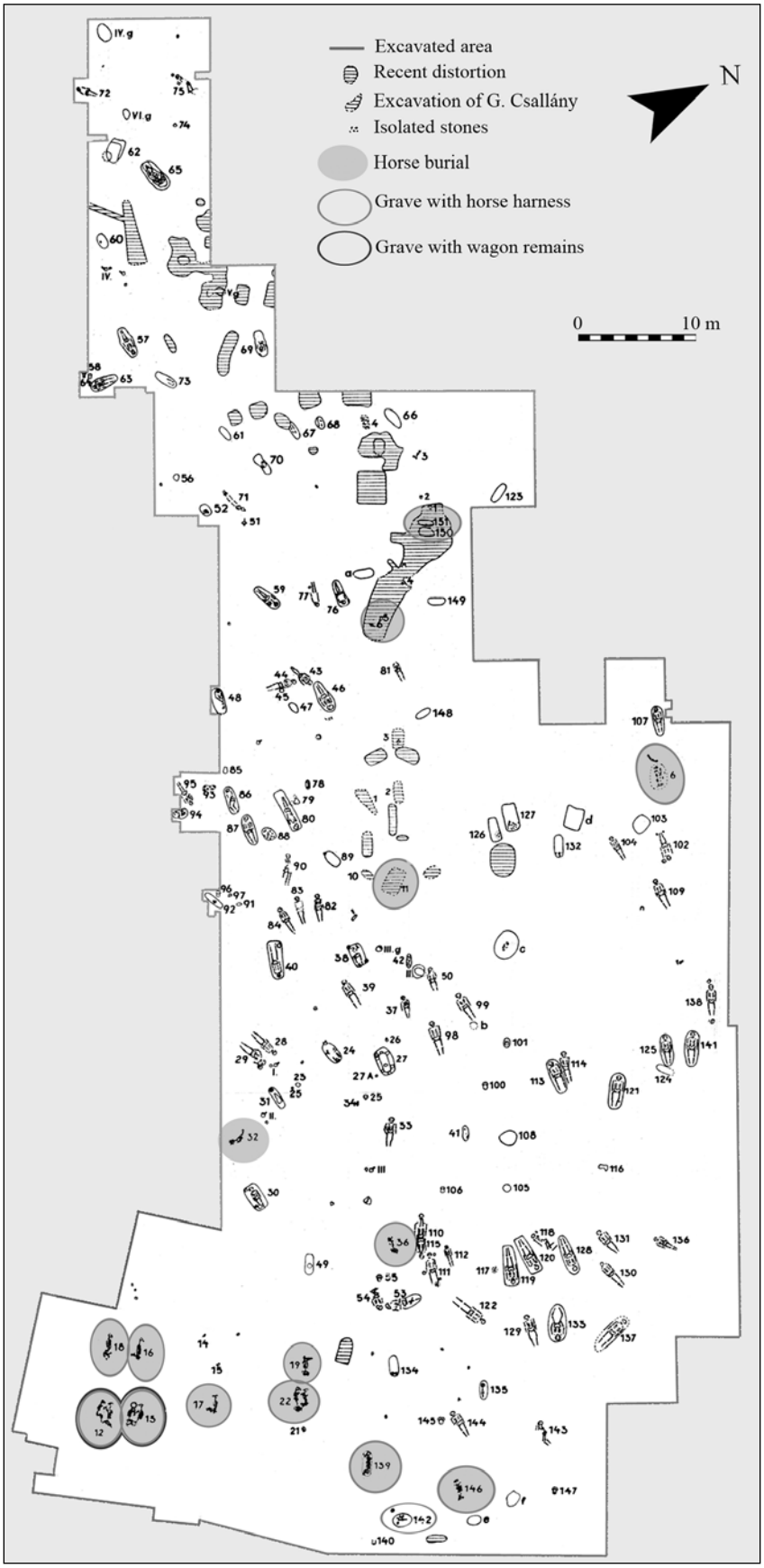

Fig. 4. Plan of excavated area of Szentes-Vekerzug cemetery, with horse burials (after Párducz 1955, amended).

groups in the cemeteries, or, as it seems, were frequently surrounded by an empty area, without any human graves having been detected[30]. These horse burials were usually located far from rich graves of males or equestrian warriors, but rather in a relative proximity (from 2 to 8 metres) to female and child graves with various grave assemblages and also to a few male graves with poor grave goods or none (i.e. differing social rank?).

A direct relationship between the Vekerzug Culture and the North-Pontic and Caucasian regions, regarding the custom of burying horses in separate pits in human cemeteries, seems to carry less conviction. This argument is also based on chronology. Many of the horse graves of the Vekerzug Culture are difficult to date. Even those with chronologically more sensitive grave goods (such as horse bits, or harness fittings) cannot be dated more precisely other than to the wide interval starting from the second half of the seventh century and the first half of the fifth century BC, and to the beginning of the fourth century BC. This difficulty is caused by the fact that the most of Vekerzug material culture is represented by specific artefacts of local origin. In the case of some graves, however, it is possible to reduce this time period to the interval from the end of the sixth century to the beginning of the fourth century BC. The occurrence of these graves even in the later decades of the fourth century BC is suggested by new radiocarbon dates from two horse burials in Chotín cemeteries (within first half of the 4th century BC at the earliest)[31]. Moreover, no horse burial in a separate pit can be dated exclusively to the 6th century BC or earlier. Therefore, it seems the occurrence of horse burials in separate pits can be dated to the interval from the end of the sixth century to the fourth century BC[32]. To the contrary, the most intense contacts of the Vekerzug Culture with the North-Pontic and Caucasian regions are documented in the beginning of its existence at the end of the 7th and in the 6th century BC. In the 5th and 4th centuries BC, inhabitants of the culture were interacting mostly with other regions (Balkans, late Hallstatt Culture, and early La Tène Culture)[33]. Therefore, the origin of horse graves must be sought elsewhere. What was the reason of the occurrence of this burial type in the expression of the Vekerzug Culture? Or, was the Vekerzug Culture the source of spreading this custom into the adjacent regions?

The detailed study of this type of burial has revealed close connections to the regions further to the south-west, namely to the contemporary southern Pannonian late Hallstatt groups and certain South-East Alpine Hallstatt groups.

3.2 Southern Pannonian Late Hallstatt Groups[34]

A situation similar to the Vekerzug Culture, in terms of the occurrence of horse burials deposited in separate pits, was recognised in contemporary groups inhabiting the southern parts of the Pannonian Basin in the late Hallstatt and early La Tène periods. Separate horse graves were found in few cemeteries from different parts of this region. Three horse graves were excavated in the Slavonian Vinkovci, site NaMa, in Croatia[35], and six graves in west-Hungarian Szentlőrinc, including a grave of three horses[36]. These burials represented either whole horse

30. Párducz 1955, fig. 1; Kozubová 2013, Plan 1–2; Párducz 1966, fig. 12.
31. Kmeťová 2014a, 179–182.
32. Kmeťová 2014a, 179–183, 252–253.
33. Kozubová 2013, 403.
34. The Early Iron Age inhabitation on the territory of the south of Pannonian Basin existed continuously also in the subsequent early La Tène Period, as the inhabitation in further areas in Pannonian Basin.
35. Horse graves 1, 2 and 3 (Majnarić-Pandžić 1999–2000, 28–29, pl. 1–4; Majnarić-Pandžić 2003).
36. Graves 48, 51, 52 (with remains of 3 horses), 58, 60 and 61 (Jerem 1968, 169–171, fig. 10–13, pl. 28:2, 4,

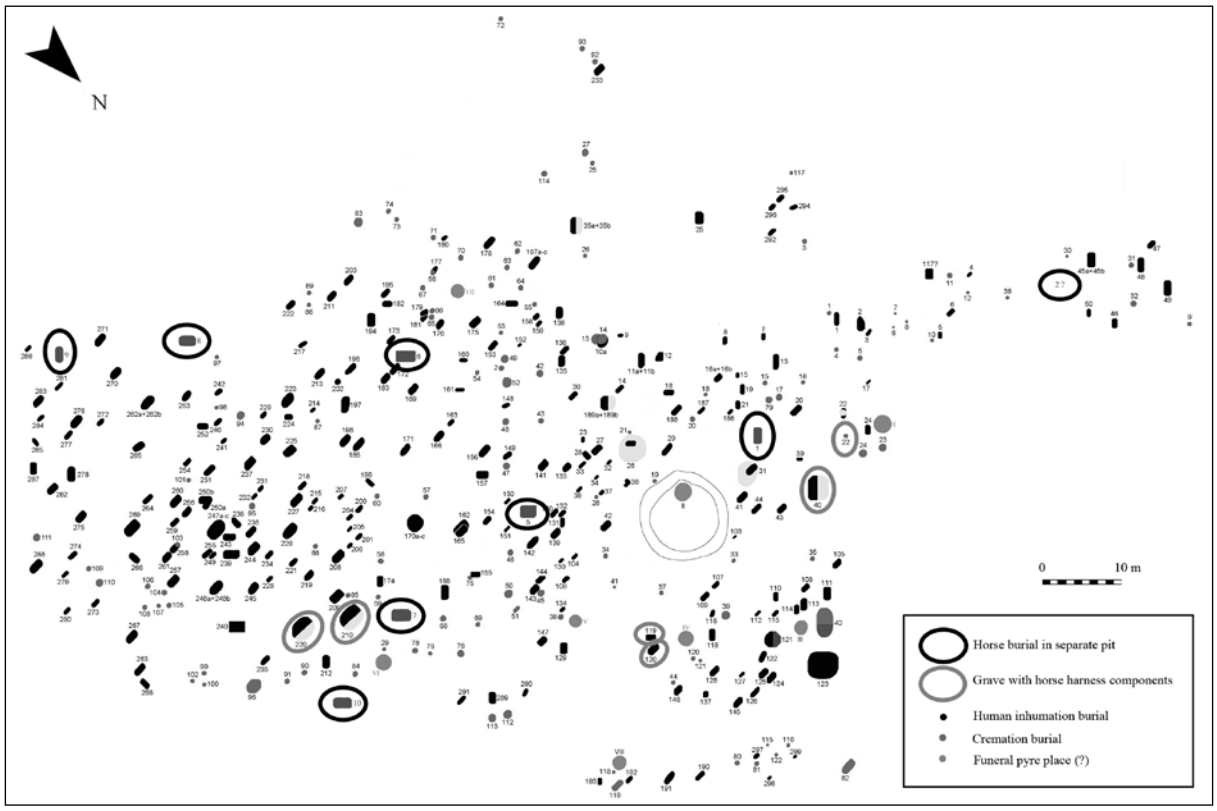

Fig. 5. Plan of excavated area of Chotín IA cemetery, with horse burials (after Kozubová 2013, amended).

Fig. 6. Horse burial – deposition of front part of the body (?) - deposited in separate pit: Szentes-Vekerzug, grave 6 (after Gallus – Horváth 1939, pl. 69-1).

skeletons or atypical burials of partial horse skeletons, i.e. compact front parts of horse bodies (Vinkovci, 2 graves) or problematic compact skeletons without spines and chests (Szentlőrinc, 6 graves)[37]. These graves were not associated with any particular human grave. Similar to the horse burials of the Vekerzug Culture, these graves were often surrounded by an empty area, and located some distance from rich graves of males[38]. These horses were either interred harnessed or without any grave goods. Even in this region, horse burials in separate pits occurred only in the late Hallstatt period[39].

3.3 Sveta Lucija group

Interestingly, similar separate horse burials can be traced further to the west and south-west. Sporadically, these graves occurred in the Sveta Lucija Group of western Slovenia. All the horse burials of this type (three or four burials) were found in a single cemetery, the eponymous Most na Soči (formerly Sveta Lucija/Santa Lucia)[40]. Horses buried in separate graves were usually harnessed. It must be stressed that all these graves were excavated at the end of the 19th century and, therefore, the archaeological contexts cannot be fully understood. According to existing archaeological evidence and dating of the graves mentioned in relation to horse burials, it seems unlikely that any of these horse burials can be directly associated with particular human graves[41].

3.4. Dolenjska Group

Horse burials were also frequent in the Dolenjska Group, located in present-day eastern Slovenia, in the late Hallstatt period. It was situated on the line between the Pannonian Basin and the territory of the Sveta Lucija Group. It is evident that the occurrence of horse burials was quite frequent in the same period as in the above regions, i.e. in the late Hallstatt and in the early La Tène periods[42]. Moreover, although the custom of horse burials had already occurred in the early phase of the Hallstatt period, the occurrence of the burial of what is evidently complete horse bodies set apart from human graves can be dated only from the beginning of the late Hallstatt period[43].

30:1–2).

37. The horse skeletons without spine and chest from Szentlőrinc, however, seem to be problematic (remains of decomposed whole skeletons?), when compared with preserved human remains from the cemetery, which are often without spine and chest, as well, in the anatomic position – see Jerem 1968.

38. Jerem 1968, fig. 2; Majnarić-Pandžić 2003, fig. 2.

39. Metzner-Nebelsick 2002, 204–206; Kmeťová 2014a, 188–190, 253.

40. Graves M 2141, M 2788, S 592 and grave from the excavation of E. Majonica (Marchesetti 1993, 189, 218, 269, 268, note 1; Teržan – Lo Schiavo – Trampuž-Orel 1984-985, 120–121.

41. Even though horse grave M 2141 was in superposition with two cremation (human?) graves, a long time span between dating of one of these cremation graves and the horse grave (200 years or more?) suggests any direct association between these graves may be co-incidential – in case the graves were not arranged to family nuclei (grave M 2142 contained a pin „*Mehrkopfnadel*" that cannot be dated later than to the seventh century BC, – cf. Teržan – Trampuž 1973, 421 sq. The horse grave M 2141 could be dated, based on several elements of horse harness, most likely to Latène B stage, or Latène A at the earliest (cf. Marchesetti 1993, pl. 30; Trachsel 2004, 432, 477, KNO 16b, 546–547, TKN 13c; Werner 1988, 76; Teržan 1995, 94, note 93).

42. Dular 2007, 745-46.

43. Kmeťová 2014a, 249–50; Gabrovec et al. 2006, 56, 137–138, appendix 1, 3; Teržan 2010, 239–246, 273–294.

However, horse burials of the Dolenjska Group are of different character. They were always placed into large, so called „clan" or family barrows. Even if horse remains are frequently found apart from human graves, most of them show close proximity to human graves, namely to graves of males of socially superior status[44]. Therefore it remains uncertain whether a few burials of horses situated outside of human graves, and which do not show any evident connection to particular human graves[45], were associated with them in some way or can truly be regarded as separate horse graves. However, since horse burials from Stična barrows were in proximity to several human graves, and several of these burials in general were excavated in the end of the 19th century with insufficient archaeological evidence, their interpretation as separate horse graves appears to be problematic.

3.5. Chronological aspects of horse burials in separate pits

All horses placed in separate pits from the above cultural groups were interred approximately within the same time span. As already stated, the occurrence of horse burials in separate pits in the Vekerzug Culture can be most likely dated to the interval from the end of the sixth to the fourth century BC. The horse graves in southern Pannonia are also dated to the fifth or fourth centuries BC[46], which corresponds with dating of horse burials in the Sveta Lucija Group[47]. The occurrence of horse burials in the Dolenjska Group, without clear association to nearby human graves, falls most likely within the frame of the sixth and fifth centuries BC[48].

3.6 Analogous features in horse burials deposited in separate pits

The existence of contacts between the late Hallstatt cultures and groups of the Pannonian Basin and Sveta Lucija Group through the territory of the Dolenjska Group is suggested by several aspects of research.

In addition to the character of the separate horse burials, mutual contacts are indicated by the occurrence of an unusual type of buried horse remains. These are represented by compact front parts of horse bodies including the head, neck, front legs and chest, in anatomical position (fig. 6). In consideration of insufficient states of documentation of some graves, the possibility of unrecognized secondary disruption cannot be excluded although, the occurrence of this type of horse burial in several distant sites and also the lack of discoveries of the opposite finds (i.e only the rear of a horse skeleton) indicates the existence of this unusual type of burial. Single graves with the compact front parts of horse bodies were discovered in Szentes-Vekerzug within the Vekerzug Culture, in Vinkovci in southern Pannonia, and in Most na Soči within the Sveta Lucija Group[49].

44. Dular 2007; Kmeťová 2014a, 99–116.

45. Stična, barrow 5, grave 8; barrow 48, grave 71 (Gabrovec et al. 2006, 56, 137–138), Brezje pri Trebelnem, barrow 6, grave 3? (Kromer 1959, 21, 46; Dular – Križ 1990, 537), Libna-Špiler, barrow 3, find 16/1893 and 25/1893? (Guštin 1976, 19–20, 40; Dular 2006, 180).

46. Jerem 1968, fig. 26:52:1, 28:58:1, 60:1, 61; Metzner-Nebelsick 2002, 335–336, type VIIIa; Kruh 2010, 96–98; Majnarić-Pandžić 1999-2000, 28, pl. 1:1–2, 9, 2–3, 4:1–2, 5–7; Majnarić-Pandžić 2003, 491–495, fig. 8:1–2, 9, 9–10, 11:1–2, 5–7; cf. also Trachsel 2004, 452, FAL 16c. For detailed dating see Kmeťová 2014a, 179–183.

47. Kmeťová 2014a, 98.

48. Kmeťová 2014a, 107–111.

49. Szentes-Vekerzug, grave 6 (Csallány – Párducz 1944-1945, 106; Gallus – Horváth 1939, 111, pl. 69:1); Vin-

Furthermore, the existence of mutual contacts between these regions, reflected in the horse burials, is underlined by analogous finds of horse harness components (fig. 7). These finds link the above-mentioned horse burials in separate pits with horse remains in human graves of the Dolenjska Group. In particular, a similar type of decorated bronze phalerae (round-shaped phalerae decorated with plastic circles) was linked to harnesses given to the horses buried in Vinkovci (horse grave 1) and in Most na Soči (grave S 592) – fig. 7–3 and 6[50]. Furthermore, an identical form of undecorated round-shaped bronze phalerae with two loops on the reverse, the so called *Magdalenska gora* type (fig. 7–4)[51], was found in five horse burial sites in Szentes-Vekerzug (graves 12, 16, 18, 19 and 139) and in two graves of the the Dolenjska Group with burials of socially privileged equestrian warriors with horses in Magdalenska gora (Laščik cemetery, grave 5/29; Preloge cemetery, grave 2/13)[52]. Moreover, decorative cross-fittings with one or two loops on the reverse (fig. 7–5) connect the region of southern Pannonia, Dolenjska Group and also the Sveta Lucija Group: artefacts of this type were found in a horse grave in Szentlőrinc (grave 61), in the grave of a socially-privileged equestrian warrior and a horse in Magdalenska gora (Laščik cemetery, grave 5/29), and also in a grave with remains of a horse skull in Most na Soči (Repelc cemetery, grave 22)[53]. The frequent use and local adoption of the Szentes-Vekerzug-type horse bits with riveted cheek pieces (fig. 7–1, 2) by the southern Pannonian groups and by the Dolenjska Group is also a reflection of mutual interaction[54].

3.7 North-east Italy

The above mentioned contacts can be linked further to north-eastern Italy as is suggested by the occurrence of similar horse burials (fig. 1).

The custom of burying horses in human cemeteries occurred in this region even in the earlier centuries (8th and 7th centuries BC). A few horse burials were associated with specific human graves or were located at a separate location within or near a human cemetery (Bologna-San Vitale, Padua-Emo Capodilista and Padua-Via San Eufemia cemeteries)[55]. However, it is uncertain whether any of these burials can be considered as a horse burial in separate pit as determined in this paper[56].

kovci-NaMa, horse graves 1 and 3 (Majnarić-Pandžić 1999-2000, 28–29); Most na Soči, grave M 2141(Marchesetti 1993, 189, 269).

50. Vinkovci, horse grave 1 (Majnarić-Pandžić 2003, fig. 8–10); Most na Soči, grave S 592 (Teržan – Lo Schiavo – Trampuž-Orel 1984-1985, pl. 51: 17–22, 52: 23–24).

51. Parzinger 1995, 73, 269.

52. Szentes-Vekerzug (Párducz1952, pl. 44: 1–4, 7–10, 45: 1–3, 5–7, 54: 1–3, 55: 1–3, 56: 3, 57: 3, 59: 2–3, 60: 1–2, 62: 1–2, 63: 1–2; Párducz 1954, pl. 2: 9–12; Párducz 1955, pl. 6: 16–18); Magdalenska gora – Laščik cemetery, grave 5/29 (Hencken1978, fig. 144c, 148), Preloge cemetery, grave 2/13 (Tecco Hvala – Dular – Kocuvan 2004, pl. 27: 39–43).

53. Szentlőrinc, grave 61 (Jerem 1968, fig. 28: 61); Magdalenska gora-Laščik cemetery, grave 5/29 (Hencken 1978, fig. 144a, 109d, 144b); Most na Soči-Repelc cemetery, grave 22 (Mlinar 2002, fig. 17).

54. Guštin – Teržan 1977.

55. Bologna-San Vitale cemetery: two horse graves in trenches 35 and 37 (Pincelli – Morigi Govi 1975, 462, 469, 452, fig. 35, 37, pl. 46); Padua-Emo Capodilista: horse burial as a part of barrow from the 8th century BC and two other horse burials from the subsequent century, which were located in a proximity of *ustrinum* (Millo 2013, 364); Padua-Via San Eufemia: area with ritual pits of horse burials, situated in the proximity of human cemetery (Tagliacozzo – Facciolo 2005; Facciolo – Tagliacozzo 2006).

56. One of two horse burials from Bologna-San Vitale cemetery (located in trench 35 and 37, probably from the 8th century BC) was situated directly below two human burials, although the first (grave 760) was an inhumation without any grave goods and cremation grave above (grave 755) consisted of a simple grave assemblages: an urn,

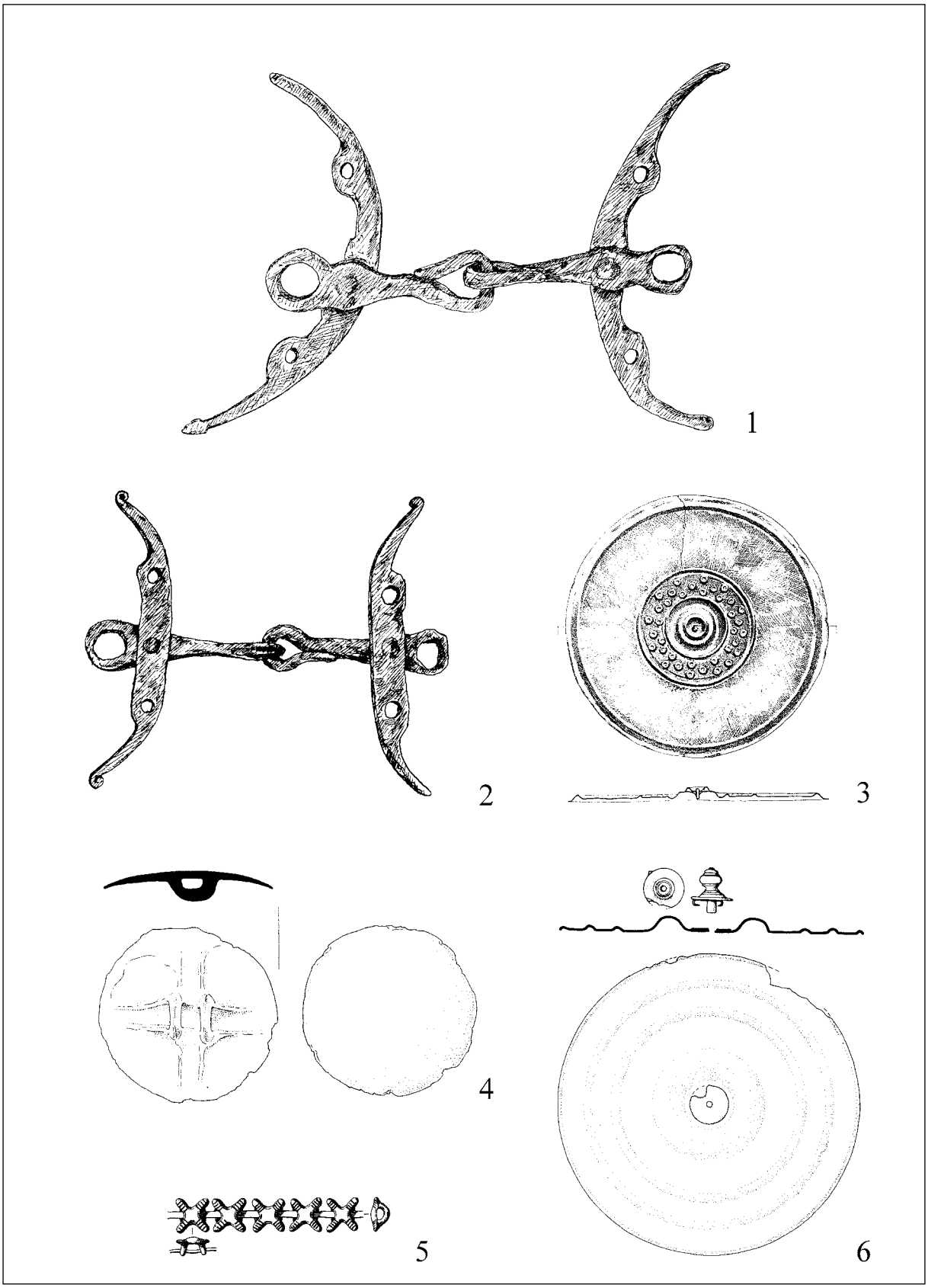

Fig. 7. Types of horse harness components connecting horse burials in different regions. 1. Iron horse bit of Szentes-Vekerzug type: Szentlőrinc, grave 61 (Jerem 1968, Fig. 28-61-1). 2. Iron horse bit of Szentes-Vekerzug type: Szentlőrinc, grave 60 (Jerem 1968, Fig. 28-60-1). 3. Decorated bronze phalera: Vinkovci-NaMa, horse grave 1 (Majnarić – Pandžić 1999-2000, pl. 3-1). 4. Bronze phalera of Magdalenska gora type: Magdalenska gora-Preloge, barrow 2, grave 13 (Tecco Hvala – Dular – Kocuvan, 2004 pl. 27-40 and 41). 5. Bronze decorative cross fittings: M agdalenska gora-Laščik, barrow 5, grave 29 (Hencken 1978, Fig. 144a). 6. Bronze phalera: Most na Soči, grave S 592 (Teržan – Lo Schiavo – Trampuž Orel 1984-1985, pl. 52-A-24). Scale 1:4.

Apart from the above, horse burials in separate pits with no connection to particular human graves occurred in north-east Italy approximately at the same time, or slightly earlier, as in the Vekerzug Culture, south Pannonian groups and Sveta Lucija Group. Starting from the sixth century BC, horse burials were placed in separate pits within human cemeteries in a number of sites. Six horse graves without any grave goods were unearthed in a human cemetery at Padua-Piovego, dated from the beginning of the sixth to beginning of the fourth century BC[57]. Moreover, two horse skeletons were found placed one on another in Bologna-Palazzo Bocchi. They are dated most likely to the sixth century BC[58]. Two other horse burials without any apparent relationship to surrounding human graves were excavated in a Venetian cemetery at Oppeano-Le Franchine[59]. Similarly, two horse burials were quite recently excavated in Oderzo's Opera Pia Moro cemetery, dated from the sixth to fourth centuries BC. One of the horse skeletons was buried in its own barrow and the other one near a barrow with human burials[60].

A special group of horse burials is represented by graves placed in separate „horse cemeteries". One of them was excavated in Altino-Le Brustolade, with burials of 27 horses documented. Several horse skeletons were in superposition and several were buried as pairs or even trios. The analysis of their chronology brought interesting results. Horses were sacrificed and buried there continuously, over a period of several centuries (for about 250 years: from the first half of the fifth century to the third or second century BC). This situation is most likely a reflection of a possibly cyclical activity associated with horse slaughter (sacrifice?) and burial[61]. Furthermore, three horse burials were unearthed in neighbouring site, Portoni[62]. A large horse cemetery was also excavated at Este-Via Prà, containing 34 horse burials and located at the periphery of a human cemetery. The only datable graves are from between the end of the sixth century and the fourth century BC[63]. Finally, a horse grave from Adria-Canal Bianco is of a late date (the 3rd century BC), but represents an interesting case of burial of three horses along with remains of a vehicle[64].

The above situation revealed partial similarities to horse burials in the Pannonian Basin and the South-East Alpine Hallstatt region. Above all, separate groups of horse burials were located in the periphery of human burial grounds, and also among the human graves, refering to the situation in the Vekerzug Culture and south Pannonian groups. The dating of horse burials of the Vekerzug Culture and those of the Venetian territory, as well as problematic character of the earliest north-Italian horse burials regarding their association to human graves, militates against determination of the place of origin of this practice. Nevertheless, it is evident that these regions were connected on a certain level, as is reflected in the entire corpus of horse-burial research[65].

a pin and a pebble (Pincelli – Morigi Govi 1975, 462, 452, fig. 35, pl. 46:below). Another horse burial was not associated directly with any human grave, though there is a certain possibility that it belonged to a larger complex, cf. burial complex in Este-Casa di Ricovero (Balista – Ruta Serafini 1998).

57. Gambacurta – Tirelli 1996, 73 with additional bibliography; Leonardi et al. 2004, 20.

58. Farello 2006.

59. Tagliacozzo – Facciolo 2005,342.

60. Millo 2013, 365.

61. Gambacurta 2003; Gambacurta – Tirelli 1996.

62. Millo 2013, 365.

63. Millo 2013, 365.

64. Gambacurta – Tirelli 1996, 73; Gambacurta 2003, 99; Reggiani – Rizzi Zorzi 2005.

65. It is interesting that in the same time period similar horse burials occurred in several other regions, although not in such high numbers. They were found for example at Zimnicea cemetery in lower Danube region (Alexandrescu 1983), at Sindos and Akanthos cemeteries in northern Greece (Antikas 2005, 143; Antikas 2008a, 33-35), or at cemeteries of the Pommeranian Culture in Poland,such as Warszawa, Grochow, Henryków, Kuchary, etc. (Węgrzynowicz 1976; Abłamowicz 2005). Horse burials in separate pits within human cemetery occurred as an interesting phenomenon in several regions, but their mutual connections in most cases are difficult to prove.

4. Burials of humans of low social status with horses

Another reflection of likely mutual contacts amongst these distant regions is represented by burials of humans and horses with poor, or without any, grave goods (fig. 1). These individuals are considered to be of very low social status. These burials occurred in the Vekerzug Culture and north-east Italy, again in the time period of the sixth to the fifth/fourth centuries BC. They represent another new element within a frame of cultural groups in the Pannonian Basin.

4.1 Vekerzug Culture

A few graves of humans of low social status with horses are known from the territory of the Vekerzug Culture. They represent inhumations of one or two individuals with a horse and with no or poor grave goods. It seems that these people were of very low social rank.

Grave 121/1953 from Chotín IA cemetery in Slovakia contained the skeletons of a human and a horse, without any grave goods. New anthropological analysis of the human individual has revealed remarkable facts. The horse was buried alongside a mature or older woman, who engaged in physical work (she had a front teeth wear – they might have been used as a „third hand"). These facts along with the absence of grave goods indicate the very low social status of the woman. Accordingly, she did not belong to a privileged social class of horse owners. Moreover, marks on her lower extremities indicate that she was probably an equestrian. Regarding the fact that she very likely often rode horses then she might have been engaged in horse breeding - for example as a herdswoman[66].

In the context of the grave from Chotín, it seems that what is possibly a similar grave was unearthed in Szentes-Vekerzug, although this was originally published as two graves: human grave 150 and horse grave 151[67]. On the basis of their direct proximity and also being in a problematic-find context (recent disturbance) it can be held that both burials could have been related in a similar way to the Chotín grave. The horse was equipped with iron bit, similar to horse burials located in pits separate from the cemetery. A chert flake was the only other artefact collected in this grave (it was found along with the horse burial). The skeleton of the adult man was bereft of any detectable grave goods[68].

The third grave of a human and a horse from the territory of the Vekerzug Culture was discovered in Tiszavasvári-Csárdapart cemetery. The context of grave 44 was very unusual. A horse was buried with separated neck and front legs, which were placed just near the body. The cadaver of a dog was also buried along with the horse. On the skeletons of these animals, the remains of two human individuals were also found; however, not complete bodies but in the form of separate body parts. The grave was equipped only with two potsherds[69]. The grave context clearly favours a ritual interpretation[70].

66. Kmeťová 2014b.
67. Párducz 1955, 10, fig. 1.
68. Párducz 1955, 10.
69. Kemenczei 2009, 156, fig. 7:44. From the territory of the Vekerzug Culture, there are several finds of separated body parts of human skeletons from graves (buried as partly decomposed bodies?), e.g. Tápiószele, grave 162 (Párducz 1966,50–51, fig. 1).
70. A situation of partly similar character to these burials was unearthed in Doroslovo-Depfeld cemetery in Serbian Vojvodina. The horse was buried along with human cremation burial (grave 11). The burial appears to be of unusual character: the position of the urn with cremation remains behind the hind legs of a horse, very simple and fragmentary grave goods (fragment of iron knife and bronze bracelet, several potsherds, three silicate flakes and lithic core, partial skeletal remains of several animals) – see Trajković 2008, 35–36. Was the simple human burial accompanying the horse burial, rather than accompanied by it? The surroundings of the grave indicates a similar situation as in above horse burials placed in separate pits (Trajković 2008, excavation plan, 25 sq). Incidentally, the first excavation information on the horse skeleton from this cemetery (Trajković 1974, 64, tab. 66:4; Trajković

4.2 North-east Italy

Once more, interesting analogies to these burials can be found in north-eastern Italy, in the territory of ancient Veneti. Several graves of human and horse individuals without any grave goods were unearthed there. The contexts are different, but their nature is very similar.

In Padua, in a barrow discovered in Via Tiepolo and Via San Massimo streets, grave 57 was found: a man´s skeleton lying in a constricted position between the legs of a horse. Along with horse grave 117, these represent the first stage of use of the barrow dated to the sixth century BC and are considered as foundation deposits[71]. In another Paduan cemetery site, Piovego, an interesting burial of a young male atop a young horse was excavated (grave ufc12). The only other find detected in this grave was half of a pebble[72]. The discovery of this grave brought to light an older find from Este-Lachini Pelà where similarly, a human skeleton was found lying over a horse skeleton, equipped only with a few chert flakes and a burned pebble[73]. The same type of grave goods, i.e. only a chipped stone point, was attributed to another interesting human-horse grave, namely from the Verona-Colombara cemetery. Grave 61 revealed a skeleton of a young female lying in a prone position partly on a hind leg of a horse[74]. This last-mentioned grave, and also the grave from Padua-Piovego, are particularly interesting, since signs on the skeletons of both a young man and a young woman revealed intense physical activity[75]. These facts, together with a „poor" grave inventory (only chipped stone artefacts and pebbles) indicate that they were of inferior social status. Moreover, the young woman from Verona was an equestrian, similar to the older one from Chotín[76]. These conditions might reflect similar occupation of these females, likely related to working with horses.

The nature of all these burials suggests that they could be interpreted as sacrifices of individuals of inferior social status together with a horse. Some of them might have even engaged in work with horses, perhaps as herdswomen or grooms. Nevertheless, the reason for the sacrifice remains uncertain. It is unclear whether these likely sacrifices were associated with a particular grave or graves of members of a privileged social class, located in their vicinity, or were results of sacrificial rites of unknown origin[77]. Their partial similarity in different regions is, however, evident.

1981, 82, 84; Metzner-Nebelsick 2002, 196, 205–206) incorrectly evoked that the horse was buried in a separate pit.

71. Balista et al. 1992, 19–21, fig. 7; Michelini – Ruta Serafini 2005, 133.

72. Leonardi et al. 1989, 30 sq.; Leonardi et al. 2004.

73. Leonardi et al. 2004, 36–40 with other titles.

74. Salzani et al. 2001.

75. The young man from Padua-Piovego had several marks on his skeleton induced by malnutrition or by long-time walking or running on uneven terrain (Leonardi et al. 2004, 29). The front teeth of a young woman from Verona-Colombara had severely worn incisors indicating intense use – the use of the teeth as a „third hand" (Salzani et al. 2001).

76. Leonardi et al. 2004, 42–46.

77. The above grave from Padua-Piovego was placed in immediate vicinity of rich cremation grave ufc2. Authors consider it to be of a „master" for whom the sacrifice was performed (Leonardi et al. 2004, 49). Also the grave from Chotín was located in relative closeness to the rich female cremation grave 40/1953, also with a horse buried within (Dušek 1966, Plan 2; Kozubová 2013, Plan 1). We can even speculate that a subordinate person who had cared for horses, and a horse (in an associated burial) may have been sacrificed to high-status individuals from the family/class of horse owners. It can also be speculated that these graves did not relate to the particular grave of a „mister/mistresses", but may rather have been associated with an entire accumulation of graves. This means that the grave may be a remnant of a sacrificial ritual carried out by a community who buried their dead in this cemetery (for more see Kmeťová 2014b).

5. Conclusions

Based on the analysis of horse burials in the late Hallstatt and early La Tène periods, results are as follows:

Horse burials deposited in separate pits are a phenomenon that occured in several regions starting from the Pannonian Basin (Vekerzug Culture, south Pannonian groups) through the South-East Alpine Hallstatt region (Sveta Lucija Group) to the north-east of Italy (ancient Veneti) – fig. 1. Despite the often problematic dating of these burials, they occurred in the same time period of the (likely late) sixth, the fifth and the fourth centuries BC. They are detected in only some cemeteries within individual cultural groups. The similarity of horse burials deposited in separate pits is also underlined by the character of buried horse remains, including the unusual finds of compact front parts of horse bodies (including head, neck, front legs and chest). Some of these regions are also connected with rare graves of pairs and even trios of horses. Exceptionally, these multiple burials were also accompanied by a wagon or its component parts. Moreover, the burial of horses harnessed was not the rule in any of these regions: horses were harnessed as well as unharnessed. Horse graves were usually located within a certain distance of graves of humans, especially graves with rich grave goods, or they formed a separate horse cemetery in close vicinity to a human cemetery.

The other type of horse burial connecting the distant regions are burials along with humans of inferior social status. They were found without any grave goods or only simple artefacts such as potsherds, lithic flakes or pebbles. It is suggested that these burials were sacrifices. Partialy similar burials occurred in the Vekerzug Culture as well as in north-east Italy (fig. 1).

Distant regions from the Vekerzug Culture, via the south Pannonian Basin and Dolenjska Group to Sveta Lucija Group, were also connected by analogous components of horse harnesses found in the above horse burials.

5.1 Discussion: Inter-regional Contacts Related to Horse Burials

Regarding the horse burials, distant regions including the Pannonian Basin, South-East Alpine Hallstatt region and north-east Italy were connected by several features. What was behind the existence of such relations? Were they result of mutual contact focused only on horses, or could they be explained as one of the results of more complex inter-regional interaction? And, what were these contacts like?

The occurrence of similarities and relations associated with horse burials is strikingly concentrated in the Pannonian Basin, north-east Italy and in the regions connecting them. Evidently, they mark the route (or routes) from one region to the other (fig. 1).

The route from north-east Italy to the north, via the south-east Alpine region is identical with the important lines of communication existing long before and even long after the Early Iron Age[78]. Sometimes it is referred to as the famous Amber Route. However, it was not only amber (from the Baltic region) that was distributed and exchanged along the route, but probably also raw materials, hides, slaves, etc., and in the opposite direction, prestige goods, and, likely, wine and oil[79].

The easiest natural route from Italy to central Europe (Middle Danubian region) is through

78. Marková – Stegmann-Rajtár 2009, 117–20, fig. 4, 6.
79. Dular – Tecco Hvala 2007, 232–234; Gabrovec 1966, 42.

the territory of Slovenia[80]. There, easy communication splits into alternative routes. One of the branches continued further to the north via the north-east Alpine region as far as the Baltic region („Amber Route"). The other important communication led through the territory of the Dolenjska Group to the east, towards the Balkans. One of its branches continued further to the south Pannonian Basin. This route is clearly visible also on the basis of the occurrence of amber artefacts in the late Hallstatt period[81]. In fact, this direction seems to be identical to the line of „horse burials" in the late Hallstatt period (fig. 1). Therefore, the question arises whether these communications served also for spread of the idea of horse burials. Moreover, could these contacts be associated with the transport of livestock?

The above similarities of the horse burials in the regions connected by these routes suggest the existence of contacts associated with the transport of horses. The analogous finds of components of horse harnesses indicate the transport[82] of horse harnesses, which could be linked to the movement of harnessed horses[83]. Actually, several authors have considered a possible existence of the „horse trade" between the populations of the Vekerzug Culture, south Pannonian groups and Veneti, leading through the territory of Slovenian Hallstatt groups (Dolenjska, Sveta Lucija)[84]. This assumption is based on the records of several authors from antiquity on Venetian horse-breeding and on high-class Venetian horses in the contexts of Greece or Sicily[85]. According to these records, ancient Veneti were famous horse breeders and their horses were highly appreciated as such. For example, in 428 BC, Spartan Leon won the chariot racing at the 89th Olympic Games with a team of four Venetian horses[86]. Some recent authors, however, considered the famous Venetian horses to be of direct Vekerzug-Culture or Pannonian-Basin origin[87]. However, the hypothesis about a direct and one-way import of Vekerzug horses to Veneti seems to be problematic. According to archaeozoological analyses, Venetian horses bore some features of Vekerzug horses (respectively of „eastern" Pannonian Basin horses) and at the same time some features of Etruscan horses[88]. Moreover, it is doubtful whether horses in ancient Venetia would only be an exchange article without local breeding, and whether the Veneti would be famous for imported (i.e. not their own) horses. The character of the natural environment of the north-east Italian lowland was similar to that of Pannonian Basin. Both of these regions were very suitable for horse breeding. Horse breeding by ancient Veneti is, after all, documented by Strabo[89]. Moreover, horse breeding had a long tradition in both of these regions, at least from the Bronze Age. This assumption is supported by the production of local forms of horse harness, which reflected local traditions of intensive breeding[90]. This all suggests the existence of the mutual exchange of horses, rather than one-way trade. Further evidence of

80. Dular – Tecco Hvala 2007, 217; cf. Egg 1996, fig. 152; Tecco Hvala 2012, 365–366, fig. 132.
81. Marková – Stegmann-Rajtár 2009, 116–20, with additional bibliography.
82. Since the term „trade" seems to be problematic for Early Iron Age contexts (a more probable reciprocity is supposed for the period, including transport of goods as prestigious gifts among the social elites, plunder trophies, etc. – see e.g. Renfrew – Bahn 1996, 335 sq.; Krekovič 2005; Dular – Tecco Hvala 2007, 232, rather more neutral terms „transport" or „exchange" is used in this paper.
83. Metzner-Nebelsick 2002, 362.
84. Jerem 1968, 192–193; Bökönyi 1983, 335–336; Jerem 1998, 330–332, mostly for the Late Iron Age; Dular – Tecco Hvala 2007, 234.
85. Strabo V, 1, 4, V, 1, 9; Euripides; for citations of Alcman (Frg. 1.50 and Frg. 91) see e.g. Harmatta 1968, 156–157.
86. Antikas 2008b with additional bibliography.
87. Harmatta 1968, 156–157; Jerem 1968, 192; Bökönyi 1983, 335–336; Kemenczei 2009, 26.
88. Riedel 1984, 230–36; Salzani et al. 2001, 84–85; Tagliacozzo and Facciolo 2005, 339.
89. Strabo V, 1, 4.
90. See Metzner-Nebelsick 2002, 359–362.

long-distance transport of horses between north-east Italy and the Pannonian Basin is provided by the find of a horse skeleton placed in a „ritual pit" in the settlement of Sopron-Krautacker in north-west Hungary. Osteometric data show its close similarity to several horse skeletons from the horse graves in north-east Italy[91].

Naturally, the exact character of these exchange contacts remains unclear. It is uncertain whether the horses were transported and exchanged on the basis of reciprocity or a different form of exchange, and whether these exchange contacts had mediators (traders – itinerant vendors), or were of direct nature[92]. In relation to the era, it is likely that it comprised of mutual exchange of breeding horses, for example as prestigious gifts among social elites or communities, rather than a real trade and transport of large numbers of animals[93]. The value of high-quality horses might even have been increased by the long distance across which the horses were transported[94].

The contacts based on transport or trading of horses could have been accompanied also by the transfer of ideas, since the exchange of material culture (and of livestock, as well) in ancient communities usually included the exchange of information[95]. This could have included the information on burial rites. Therefore, it can be suggested that the custom of the above type of horse burials might have been suggested by a foreign contact along with the exchange of horses. At the present time, however, it is difficult to determine the region of origin of this burial custom. Above all, the problematic dating of horse graves does not enable us to state whether it was in north-eastern Italy (Palaeo-venetians) or the Vekerzug Culture (Pannonian Basin). They both had a certain tradition of burying horses in human cemeteries from the earlier period, although in different forms.

The similarity of horse burials in both regions is evident. However, they were not connected with similar finds of components of horse harnesses. The territories of north-east Italy and the Vekerzug Culture are even lacking other mutually analogous artefacts. Nevertheless, apart from the character of horse burials, contacts are indicated on the basis of connections among each of these regions to the South-East Alpine Hallstatt region and south Pannonia. In addition to horse burials and elements of horse harness, vibrant contact with north-east Italy is suggested by several analogous types of artefacts, such as Certosa-type fibulae in various sub-forms and other fibula types, certain types of helmets, products of situla art, etc.[96]. In the opposite direction, the contacts between south Pannonia and the South-East Alpine Hallstatt region and the population of the Vekerzug Culture are suggested by the distribution of Vekerzug-type horse-bits, the adoption of certain types of military artefacts such as arrowheads or mattock-like battle axes by the Dolenjska Group, and by the sporadic occurrence of south-east Alpine types of fibulae and other east-Alpine types of artefacts in the Vekerzug Culture, etc.[97].

Therefore, the above suggests the following: although direct contacts between the Veneti and inhabitants of the Vekerzug Culture are difficult to prove, they both kept intensive contact with adjacent territories of the South-East Alpine Hallstatt region and south Pannonian Basin. In relation to the horse burials, the hypothesis can be raised that the South-East Alpine Hallstatt region as well as the south Pannonian groups had a mediating role in the likely horse exchange and, in the process, the introduction of the custom of horse burials between the Vekerzug Cul-

91. Jerem 1998, 329–331.
92. Cf. e.g. Mauss 1966; Renfrew – Bahn 1996, 335 sq.; Doğan 2010, 33–39, 41; Krekovič 2005.
93. Metzner-Nebelsick 2002, 362.
94. Cf. Doğan 2010, 38.
95. Renfrew – Bahn 1996, 336.
96. Teržan 1976, 343–372; Trachsel 2004, 277–282; Dular – Tecco Hvala 2007, 232–234.
97. Guštin – Teržan 1977; Teržan 1998, 526 sq.; Werner 1988; Kozubová 2013, 403–405, respectively 429; Bende 2003, fig. 3; Kozubová 2011, 73 sq.

ture and north-east Italy.

Among the areas situated „between the horse breeders" the Dolenjska Group had a special role. This strong and wealthy cultural group occupied the territory almost centrally between the Pannonian Basin and north-east Italy. Moreover, it was a territory with several routes, which is underlined by evidence of lively contact of Dolenjska Group to both of these regions, including the import of horse harnesses[98] as well the adaptation of components of horse harnesses. Apparently, these facts have also had an impact on the role of horses in the burial rites of the Dolenjska Group. Horse burials were rather numerous, but restricted only to certain barrows as burial places for individual families or clans. Unlike the majority of horse burials of the late Hallstatt cultural groups in Pannonian Basin, contemporary horse burials of the Dolenjska Group seem to be associated with particular human graves. It is suggested that they reflected an important social position of the deceased or prominent position of his or her family[99]. The high number of horse burials might reflect the significance of a horse as a status symbol of privileged social groups. It might also reflect its significance in the local communities through the important role of horses in the economy. This suggestion is based on the assumption that the socially privileged families of this group obtained their wealth and power from the exchange of goods, or from the control of the traffic as well as from mining of raw materials and production of goods[100]. In the context of the above, it can therefore be suggested that these individual families, or at least their individual members, were somehow involved in the horse trade. However, the question of their role in mediation of the idea of the custom of horse burials is unclear.

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98. There were several finds of imported horse harnesses from (central?) Italy, e.g. Stična, barrow 48, central grave (Gabrovec 2010, 48, fig. 22; Teržan 2010, 294–295), Stična, a find from 1853 (Teržan 2010, 295–296, fig. 43).
99. Dular 2007; Kmeťová 2013a, 252.
100. E.g. Dular – Tecco Hvala 2007, 234–235; Tecco Hvala 2012, 366.

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Intercultural contacts at the end of Early Iron Age in the northern periphery of the Thracian world

Dragoş Măndescu

Abstract

During the late period of the Early Iron Age, on the northern fringes of the Thracian world, at the foothills of the southern Carpathians (now south-central Romania) there appears and develops a unitary archaeological culture known as Ferigile, according to the most important necropolis discovered in the eponymous locality[1]. We know this culture mainly through cemeteries consisting of cremation graves under small barrows. It continuously evolves over two centuries, from the 7th to the 5th century BC. It seems to be an isolated culture, confined to a well delimited territory, but closer inspection reveals a number of influences and intercultural contacts received from various areas, sometimes situated a considerable distance away. Weapons and harness equipment, deposited in large numbers in graves, have a definite Eastern influence, namely Scythian. Various adornments have their best analogies in the western Balkan Illyrian region or even in the eastern Alpine area. Ceramics have affinities with Thracian pottery from south of the Danube. Some vessels, though hand built, copied Greek wheel-thrown shapes. An internal analysis of this archaeological culture revealed that these influences were perceived successively as their home areas were in a phase of intense affirmation or cultural expansion.

Key words

Ferigile archaeological group – influences – weaponry – adornments – pottery

The concept of the „Ferigile Cultural Group" became important in the archaeological literature from Romania and south-eastern Europe in the second half of the 20th century, when a large and interesting cremation necropolis from the locality was researched and published. Until then, the end of the Early Iron Age in the area between the Carpathians and the Danube was poorly represented archaeologically. After some funerary vestiges were accidentally discovered in the Ferigile locality between 1956 and 1962, Alexandru Vulpe performed systematic archaeological research that brought to light a necropolis containing about 150 cremation tombs covered by small tumuli with a stony mantle constructed from river rocks.

The fact that the Ferigile necropolis was quickly and thoroughly published in 1967 was a decisive factor in making this a defining notion for a later stage of the Early Iron Age in southern Romania.

That was the moment it was realized that this period (which was little attested and known until then between the Carpathians and the Danube) was more expressive than had previously been considered. The tombs from Ferigile, that were created over two centuries (between the middle of the 7th century and the middle of the 5th century BC[2]) not only contained very rich and

1. Vulpe 1967.
2. Vulpe 1977, 81–11.

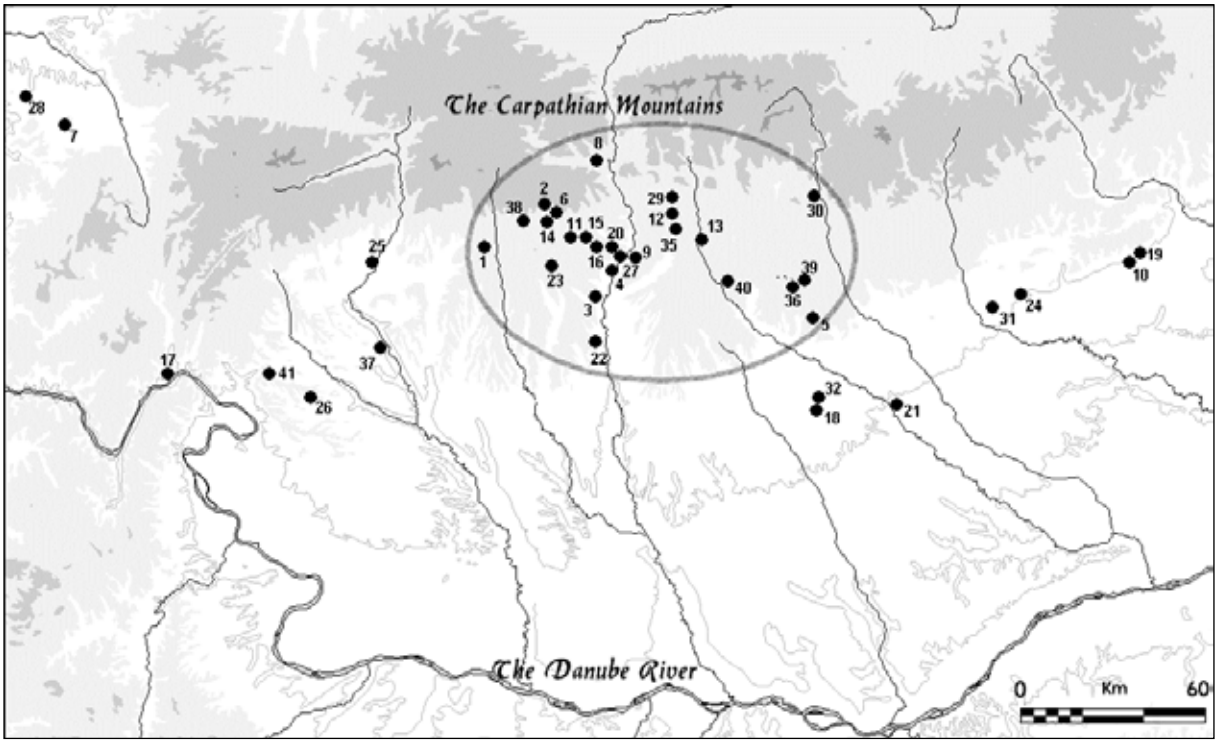

Fig. 1. The distribution of the Ferigile Archaeological Group (7th-5th centuries BC). 1 Alimpeşti; 2 Arnota; 3 Băbeni; 4 Bârseşti Vâlcea; 5 Beleşi-Negreşti; 6 Bistriţa; 7 Brebu; 8 Brezoi; 9 Budeşti; 10 Budureasca; 11 Buneşti Vâlcea; 12 Cepari; 13 Curtea de Argeş; 14 Ferigile;15 Gătejeşti; 16 Govora Sat; 17 Ieşelniţa; 18 Mozacu; 19 Năeni; 20 Ocnele Mari; 21 Odobeşti; 22 Orleşti; 23 Oteşani; 24 Ploieşti Triaj; 25 Preajba; 26 Punghina; 27 Râureni; 28 Remetea Pogănici; 29 Rudeni; 30 Stoeneşti; 31 Târgşoru Vechi; 32 Teiu; 33 Teiuş; 34 Teleşti-Drăgoeşti; 35 Tigveni; 36 Ţiţeşti; 37 Urdarii de Sus; 38 Vaideeni; 39 Valea Stânii; 40 Vâlcelele; 41 Valea Boierească.

varied grave goods, but they were relevant to the everyday life of the respective populations.

Soon afterwards, new discoveries were added to the eponymous necropoli. They drew a well-delineated and expanding area of this archaeological culture. The necropoli researched on the Topolog River valley at Tigveni, Cepari and Rudeni[3] were very important in highlighting the unitary features of the Ferigile Cultural Group as well as in the refining of the chronology. Little by little it became evident that this cultural group spread over the high area of the sub-Carpathian hills from Oltenia and Muntenia (fig. 1). The number of discoveries has increased; now there are about 40 – especially necropoli and isolated tombs, all of them being used for cremation. The settlements are barely known, but this reality is not an objective one as it is determined by the stage of the research.

Thus, we talk about a population set in the high area situated in the south of the Carpathians, in a hilly landscape, for most part afforested and crossed from north to south by the valleys of rivers that flow into a number of direct tributaries of the Danube. The unitary group of the Ferigile type discoveries occupies a maximum 4,500 square kilometers. Along the 60 kilometers between the northern (Brezoi) and southern (Orleşti) extremities of the central nucleus the altitude gently declines. By comparison, along the west-east direction the elevation of the relief has a more uneven aspect. There is 97 kilometres between the extreme points of the central nucleus discoveries: Vaideeni (west) and Stoeneşti (east). This uneven aspect is determined by many valleys that cross the territory from north to south (Luncavăţ, Bistriţa, Otăsău, Govora, Olăneşti, Olt, Topolog, Argeş, Vâlsan, Doamnei, Bratia, Târgului, Argeşel and Dâmboviţa Rivers).

3. Vulpe – Popescu 1972, 75–111; Popescu – Vulpe 1982, 77–114; Popescu – Vulpe 1992, 109–111.

Beside this compact nucleus of discoveries, there are also peripheral areas, towards the west, east, and south. Here the discoveries were more scattered; they are separated by void areas (there are no discoveries there) from the central nucleus[4]. Despite this territorial enlargement that increased the distribution area of the Ferigile group, the aspects regarding the material culture reflected by the peripheries, as well as those of funerary rites and rituals, were not significantly different from those of the central nucleus.

The vestiges of Ferigile Cultural Group had never been found at an altitude below 200 meters, while the cultural homogeneity is remarkable – for example, between the necropolis from Stoeneşti, one of the most northern of all, found at an altitude of about 600 meters, and the one from Teiu (200 metres of altitude), representing the extreme southern point, 60 kilometers distant from Stoeneşti, the differences in the funerary rite and rituals (including the composition of the grave goods assemblages) are minimal and they are circumscribed by the same common laws.

The existence of the Ferigile Cultural Group in the sub-Carpathian hills in the middle of the 7th century BC was a sudden phenomenon; there is no obvious linkage between it and the cultural manifestations previously recorded in the research region. In the entire area between the Carpathians and the Danube, the mid period of the Early Iron Age was that of the Basarabi culture, a real cultural phenomenon which is mainly characterized by the features of pottery which evolved from the end of the 9th century to the middle of the 7th century BC[5].

It is obvious (and consequently must be taken into account) that in the hilly area where, from the middle of the 7th century BC, the Ferigile Cultural Group evolved there is no discovery belonging to the Basarabi culture; no settlement, no tomb, not even a single artefact. Along the entire evolution of the Basarabi culture, the future area of evolution of the Ferigile Group still remained a blank patch. The map of the spreading of the Basarabi culture[6] clearly shows that these communities preferred the living conditions they found in the low areas from the Danube plain or along the valleys of the main water flows. The high areas, sub-montane and hilly, whose relief was uneven, always remained out of preference for the communities belonging to the Basarabi culture.

A dramatic and radical change of the archaeological landscape of the Lower Danube took place in the middle of the 7th century BC. The Basarabi Culture suddenly went into dissolution and the archaeological monuments (settlements and necropoli) ceased to exist in the Danube plain. It is obvious that a sudden depopulation took place around 650 BC; which was in stark contrast to the density of inhabitants of the Basarabi culture period. Maybe what Herodotus (V.9-10) said – that immediately after crossing the Danube and reaching its northern bank you find a deserted place inhabited only by bees – should be interpreted almost literally and not as a figure of speech; it probably represents the memory of an epoch in which the area was transformed into a wilderness as a consequence of an accelerated depopulation.

In the traditional historiography, the sudden disappearance of stable human communities from the Danube plain in the middle of the 7th century BC was considered to be the consequence of the ever more powerful threat of the Scythians, whose frequent invasions were mounted from the east[7]. It was considered that, as a consequence of the Scythian invasions, the continuity of the autochthonous living in the Danube plain was no longer possible.

This is exactly the moment when, as the Danube plain was transformed into a deserted place,

4. Măndescu 2005, 33–43.
5. Vulpe 1986, 49–89.
6. Vulpe 1986, 68–71, fig. 19.
7. Vulpe 1970, 176–178; Sîrbu 1987, 427–428.

the high sub-montane areas evidence the development of the Ferigile cultural group. A shallow interpretation of this archaeological reality is to consider these communities the direct descendents of the population from the plain, who were trying to escape from the Scythian invaders towards the high and uneven sub-montane areas in search of an inviolable and safe shelter. However, direct affiliations of the Ferigile communities and the Basarabi still need to be argued[8]. The funerary rite of cremation and, partially, the style and the technical peculiarities of the pottery offer some clues in this direction, but there are still lots of missing elements belonging mainly to the material culture; this lack inhibits the conclusion that there are certain direct lineages of the Ferigile Group from the Basarabi Culture. We will discuss further those aspects of the material culture of the Ferigile Group that were responsive to an ensemble of external influences which began from various geographic and cultural poles.

The Ferigile archaeological group is a hallmark of the end of the Early Iron Age in the sub-Carpathian area. It is known especially due to its necropoli that catch the attention of archaeologists due to their rich and extremely expressive assemblages of funerary grave goods (pottery, clothes accessories, adornments, weapons and harness parts).

The settlements corresponding to these necropoli are much less known. They were discovered by chance or after intense research performed by some local „champion" archaeologists. As a consequence, the information we have regarding these archaeological sites remains insufficient and disproportionate.

Only 16 sites with materials of Ferigile type discovered in non-funerary contexts have so far been analyzed. Regarding six of those sites (i.e. about a third) we have only brief information. Other settlements, such as those from Gătejeşti and Govora Village[9], situated in the area of the central nucleus of discoveries of the group, could offer important information that could lead to further understanding of the main features of this type of monument inside the Ferigile Group.

Common features of these settlements are that they are situated on high areas, hardly accessible, next to a water source. When they can be connected to the necropoli, the distance between the two components varied between 200 m and 3-6 kilometers. Fortification systems are absent. The vestiges of the way of living are materialized in a single anthropological layer and the attested type of dwelling is the mud hut. The archaeological inventory is scarce, but „surprises" are not excluded. For example, some of the artifacts discovered inside the Ferigile Group in non-funerary contexts show the reception of some external influences which sometimes emanated from considerably distant areas, which have no correspondence in the necropoli of the group. This is the case of a mobile ritual hearth discovered at Ocnele Mari (fig. 2:1) and of a three-aperture vessel belonging to a vessel deposit discovered at Bistriţa Monastery[10], which reminds one of the *kernos* type offering vessels[11] used in the Near East since the 10th century BC[12] (fig. 2:2-3). In the settlement at Budureasca fragments of pottery coming from Lesbos amphora were discovered[13]; they are particularly representative of cultural influences from the south, characteristic to the last stage of evolution of Ferigile Group.

The necropoli and the discoveries having a funerary character offer a richer and more varied image than that from the settlements.

The first category of funerary grave goods that clearly reflects the external influence is repre-

8. Vulpe 1977, 109–110.
9. Petre-Govora 1970, 476–479, fig. 6-7; Petre-Govora 1971, 557–558, fig. 3:4-8.
10. Petre – Vulpe 1983, 134, 138, fig. 6:45, 7, 9:45, A.
11. Bignasca 2000; Alpert Nakhai 2011, 351.
12. Alpert Nakhai 2001, 172.
13. Lichiardopol et al. 2006, 387.

Fig. 2. 1 The ceramic mobile hearth for offerings discovered at Ocnele Mari; 2-3 Kernoi from Sasa and Tell el-Hammah,10th century BC (after Petre – Vulpe 1983; The Israel Museum, Jerusalem; different scales).

sented by the weaponry. Almost a quarter of the tombs from the eponymous necropoli included weapons as grave goods (the ratio tends to be confirmed in the ensemble of the tombs of the group). The horse bits and harness parts suggest that about a third of the tombs containing weapons belonged to mounted warriors. The 1/3 ratio representing fighters who belonged to the cavalry must not be considered an exaggeration. The horse was always a good partner during battles for the northern-Thracian tribes. For many of the Thracian horses their masters built individual tombs. At Tigveni, in tumulus 15, there is proof of the cremation of a horse together with his master, a symbol of the strong connection between man and animal, even beyond death. The burned bones of the horse were carefully gathered from the funeral pyre and they were stored in the tomb in an urn next to the calcined bones of his master and of a woman[14].

Probably the most spectacular and complete weaponry set placed in the tombs of Ferigile Group is that discovered in the tumulus 5 from Cepari[15]. The iron bit and the bronze adornments for the harness indicate the fact that the tomb belonged to a mounted warrior. The panoply from the respective tomb is a complete one: akinakes type sword (fig. 3:3), fighting knife (fig. 3:4), spearhead (fig. 3:8), double-edged axe (fig. 3:10) and arrowhead, all of them made out of iron. No trace of shield or defensive equipment (armour, helmet etc.) has been found. Indeed, shields are not present in any of the tombs belonging to the Ferigile Group. As it is hard to believe that any military defensive equipment was absent from the panoply of the Ferigile warriors, the lack could be explained as a certain ritual element, a certain funerary common law that imposed this negative selection.

The akinakes type sword from Cepari is notable due to the fine working of the handle. The end of the handle has antennae, shaped like two birds of prey with their heads joined together.

14. Popescu – Vulpe 1982, 113–114.
15. Popescu – Vulpe 1982, 88–89, fig. 11.

The bird-of-prey motif is not chosen by chance for the weapons; it probably has a well-determined symbolism that suggests the precision and force of the stroke using the weapon. An analogy for the akinakes sword from the tomb from Cepari was discovered in a Scythian tomb from Zurofka in association with imported Greek pottery dated to the middle of the 1st millennium BC[16]. This is also the most adequate dating for the tumulus 5 from Cepari.

Akinakai-type swords are widely spread within the Ferigile Group (fig. 3:1-3). They are present in all the important necropoli (Ferigile, Tigveni, Cepari, Curtea de Argeş), as well as in the neighbouring cultural groups (Ciumbrud Group in the north, beyond the Carpathians, and Bârseşti Group in the east)[17]. This is the epoch when this effective weapon, elaborated after an eastern model of Persian origins, having the guard in the shape of a heart or a butterfly, spread over large areas in Europe due to the Scythians; even beyond the northern Polar Circle as is attested by two items discovered in Finland, at Savukoski[18].

Some of the items discovered in the Ferigile milieu, including the already mentioned akinakes from tumulus 5 from Cepari, have a thick net of horizontal striations incised on the handle, probably to facilitate the adherence of gold sheeting with adornments, subsequently melted in the fire of the funeral pyre. The practice of covering the handle of the akinakes with gold lamina is common both to the Persians and the Scythians (for instance: Chertomlyk, Kul Oba, Melgunov, Karagodeuashkh and Five Brothers kurgans)[19], therefore the origin of the pattern is obvious.

Another possible point of connection between the Ferigile Group and the Scythian cultural milieu is suggested by another aspect regarding these weapons, but this time connected to a particularity of the funerary ritual. In tumuli 1, 41 and 44 from Ferigile and in the tumulus 18 from Curtea de Argeş, the akinakes swords were vertically and obliquely thrust in the ancient soil (at any rate thrust and not placed horizontally on the earth). The image is similar in some respects to that described by Herodotus (IV.62): the sword thrust into the top of a brushwood pile to which the Scythes prayed.

The iron spearheads, especially the longer ones – such as two specific items from Tigveni[20] (fig. 3:7) – have western origins instead, namely Illyrian. It has already been said that this influence decreases as one goes towards the east; it is a feature that can be observed especially in the length of spears but also in the gradual decrease of the places where they are found[21].

But it would be an error to consider the whole panoply of the Ferigile Group to be exclusively the result of the external influences. There is a series of specific elements for the Thracian area that indicate these weapons also have autochthonous roots. The slightly curved fighting knives having the edge on the curved side of the blade[22] (fig. 3:5-6) are local creations that belong to the group of the so-called Thracian and Macedonian *mahaira*[23]. The local creativity of the fighters from Ferigile Group is reflected in a completely original product, namely the iron arrowheads, which were flat and had perforations for fastening on the rod of the arrow (fig. 3:11-12). The ingenious shape of the arrowheads was discovered in the most part of the necropoli of the group (at Ferigile, Cepari, Tigveni, Curtea de Argeş, Teiu)[24] and it seems to be the only preferred and

16. Onajko 1966, 61, cat. no. 165, pl. 9:2.
17. Vulpe 1990, 38–50.
18. Erä-Esko 1969, 86.
19. Minns 1913, 70, 165, 172, fig. 51–52, 68; Shilov 1961, 157, fig. 11.
20. Popescu – Vulpe 1982, 91, fig. 15:D.
21. Vulpe 1967, 64–65.
22. Vulpe 1967, 61, pl. 17:13; Popescu – Vulpe 1982, 109, fig. 17:a.
23. Borangic 2009, 7, pl. 7:1–2, 9:3.
24. Vulpe 1967, 65, fig. 21; Popescu – Vulpe 1982, 88, fig. 11:l; Măndescu 2004, 153, fig. 8:2-3, 12:1-2; Măndescu

used type. It is a model not attested in other areas, in none of the neighbouring cultural groups where the Scythian three-edged arrowhead type holds the primacy, except the Miroč group, in what is nowadays north-eastern Serbia[25].

Another original element found in some tombs of the fighters belonging to the Ferigile Group is with regard to the funerary ritual. We talk about the ritual bending or folding of some weapons set in tombs as a grave good; the fact was observed in the necropolis from Ferigile: an akinakes type sword, two spearheads and three fighting knives. The ritual killing of the weapons and their placement in the tomb next to their dead owner, in a chronological horizon corresponding to the 6th century BC, precedes by far the coming into existence and the spreading of this phenomenon in the Late Iron Age, attested to the Celts from the Central Europe[26].

The parts of harness from the funerary inventory indicate that a third of the tombs containing weapons belonged to mounted warriors. Thus, according to the trend resulting from analyzing the fighters' tombs, we should also notice some external influences inside the mounted-warrior tombs. Indeed, the majority of bridle bits belong to the Szentes-Vekerzug type (fig. 3:13), a common item for the harness used for horses from the Hungarian plain[27]. To this certain western influence, the eastern influences are added from the Scythian cultural milieu. Not only the zoomorphic ends[28] (horse heads shape) of the bits discovered in the necropolis from Curtea de Argeş[29] (fig. 3:14), but also a disc-shaped bronze frontlet (fig. 3:15) having a hook used for attaching a tassel probably made from textiles, discovered in tumulus 2 of the necropolis from Rudeni[30] and sharing analogies in the „cimmerian" pre-Scythian tombs; this could be used as argument in the support of the idea that such influences existed[31].

Regarding the clothing accessories and adornments which sometimes were found in large amounts in the cremation tombs of the Ferigile Group, it must be said that the sources of inspiration or even their production must be sought toward the west, in the Illyrian area from the western Balkans, which certainly influenced from a cultural viewpoint the Danubian area in the respective period[32], or even farther, in the eastern Alpine area. Bronze was the main material used for producing jewelry; iron was also used, but only in very small amounts, while precious metals were never used. Though not very numerous (there are 20 items known in total) they were found at Ferigile, Tigveni, Budureasca, and Stoeneşti; two had been repaired – this fact demonstrates that they had been used over a long period of time and that their purchase was relatively difficult[33]. The fibulae belong to some types characteristic to the Glasinac Plateau, as the names used to designate them in the literature indicate; the *Glasinac* type with triangular catch-plate (fig. 3:21) or with Beotic shield shape catch-plate (fig. 3:20) and the *Donja Dolina* type[34]. The spiral chains made out of thin bronze thread, type *saltaleoni* (fig. 3:17), indicate the same origin, as well as the pierced plates richly decorated with incised geometrical motifs (fig. 3:16) whose real functionality is still questionable – perhaps parts of belt or sheath trimmings[35].

2005, 37.
25. Jetvić 2013, 79–80.
26. Măndescu 2012, 347–384, fig. 3:1-4.
27. Párducz 1965, 150–152, fig 5; Werner 1988, 12–30, fig. 4.
28. Dietz 1998, 177–178, pl. 46:632.
29. Vulpe 1967, 68, pl. 16:3; Werner 1988, 21, cat. no. 66, pl. 11:66; Măndescu 2004, 149, fig. 6:1, 11:1.
30. Popescu – Vulpe 1992, 109, fig. 3:11.
31. Chochorowski 1993, 103–109, pl. 9.
32. Potrebica 2008, 201–202, fig. 3.
33. Măndescu 2007, 47–48, pl. 1:1-2.
34. Vulpe 1962, 309, Vulpe 1967, 68–71, pl. 22.
35. Vulpe 1967, 71–72, pl. 23.

Fig. 3. Ferigile Archaeological Group. Metallic grave goods. 1-12 weapons; 13-15 harness parts; 16-23 adornments. 1, 6, 11, 13, 16-17, 20-22 Ferigile; 2, 5, 7 Tigveni; 3-4, 8, 10, 19 Cepari; 12, 14, 18, 23 Curtea de Argeş; 9, 15 Rudeni. 1-14 iron; 15-23 bronze.

Fig. 4. Ferigile Archaeological Group. Pottery. 1 Ferigile; 2 Cepari; 3 Ţiţeşti.

The bronze finial of a multi-headed pin discovered in the necropolis from Ferigile[36] (fig. 3:22), certainly an import from the Adriatic area, either from the north of the Italian peninsula[37] or from the western Balkans[38] (although the Peloponnesus should not be ignored considering the abundance of goods from there)[39] constitutes one of the most eastern manifestations of this type of adornment[40]. That the local craftsmen tried to imitate these ornamental pins is proven by a piece discovered in the necropolis from Curtea de Argeş[41] (fig. 3:23), but their products were far removed from the original.

For some bronze adornments or accessories for clothes, such as a link from Curtea de Argeş[42] (fig. 3:18), and an openwork bracket from Cepari[43] (fig. 3:19), the closest analogies indicate a northern provenance, from a neighbouring cultural group called the Ciumbrud [44], situated in Transylvania, beyond the Carpathians.

Pottery is the most frequently discovered archaeological material in the tombs of the Ferigile Group. Its main features are reminders of the previous Basarabi background. Although the shape repertoire does not overlap completely with the previous one (the decoration being far from overlapping) [45], the filiations of some elements once specific to the Basarabi culture are obvious, especially in the case of the vessels decorated with cannelures and those covered with a brown well-polished engobe (fig. 4:1) where it is mainly the technical aspects that remind one of the Basarabi background.

The pottery of the Ferigile Group is hand modelled; the potter's wheel was almost never used (there are some fragments of wheel-made vessels[46] with no possibility of gathering them as a whole). Despite that, there is fine pottery made from good quality clay that was carefully selected and well kneaded, having a rich repertoire of decorative motives; it is especially evident in vessels having embossed decoration. Although the wheel-made pottery is known

36. Vulpe 1967, 74, pl. 33:3.
37. Škoberne 2003, 200–201.
38. Potrebica 2008, 196, 201, pl. 4:1–3.
39. Kilian-Dirlmeier 1984, 200–203, pl. 65–83.
40. Škoberne 2003, 210, pl. 4.
41. Măndescu 2004, 151, fig. 6:3, 11:2.
42. Vulpe 1967, pl. 16:5; Măndescu 2004, 146, fig. 4:1.
43. Popescu – Vulpe 1982, 87, 106, fig. 4:Bb.
44. Vasiliev 1980, 96, pl. 16:18; Marinescu 1984, 48, fig. 3:3a-c.
45. Vulpe 1962, 308.
46. Petre-Govora 1971, 559; Popescu – Vulpe 1992, 109; Măndescu 2004, 148–149.

in the Ferigile cultural milieu only in a tiny proportion of the pottery assemblage, these communities produced hand modelled vessels very similar to the wheel-thrown ones produced in the south Balkan cultural milieu. The two-handled dishes (fig. 4:2) produced in the late stage of the Ferigile culture, used as a funerary urn (numerous items were found in the necropolis from Ferigile, Curtea de Argeş, Cepari etc.)[47], are imitations of the *lékané* wheel-thrown vessels, while an elegant shape pitcher discovered in a tomb from Ţiţeşti[48] (fig. 4:3) is nothing other than a „barbarized" imitation of a wheel-thrown *oenochoe* from Ancient Greece. Thus, it is obvious that the potters were in contact with the south Balkan wheel-thrown prototypes; they saw them and they valued their elegant shapes. They transposed them in a personal manner, i.e. hand modelled, because of the lack of auxiliary technological elements (potter's wheel). It is not impossible that the wheel-thrown prototypes may have been brought from the Greek milieu to the sub-Carpathian by the south Danube Thracians whose influence upon the pottery of the late stage of the Ferigile culture has already been noted[49].

Finally, trying to reach some conclusion regarding the way the human communities from the last stage of the Early Iron Age in the area framed by the Carpathian and the Danube perceived the external cultural influences, we notice that the „historized" theories are not valid and consequently should be only reluctantly considered. Were the communities of the Ferigile Cultural Group a fleeing people in search for a shelter in the pre-Carpathian hills and for protection against the attacks of the Scythians but a steppe population which did not feel comfortable in uneven areas but preferred wide spaces?

Taking into consideration what is known at present about this issue and having the big picture offered by the proof of cultural interaction previously discussed, results in rather the opposite conclusion. The Ferigile communities undoubtedly constituted a population open to intercultural exchanges, sometimes with populations living very far from them, and open to all the trends and fashions of the time. There are no features that suggest it was a chastened and migrant population: the rejection of contact with the outside world, or the rejection of material culture of the hypothetic „besiegers", or the conservatism, or the perpetuation of the personal cultural paradigm.

The depopulation of the Danube plain in the middle of the 7th century BC, a real fact and archaeologically attested, must have been the result of some circumstances and convergences of factors other than the Scythian attacks. The climatic and the environmental changes that affected the livelihood of the communities from the end of Basarabi culture, reflected in the changes of the economic pattern of the epoch, i.e. the transition from an agricultural type of economy to one based on breeding, as already happened during the Bronze Age, all these elements could be factors that led to the migration of the population from the plain toward the high areas, like the sub-montane hills[50]. All these things are to be said in case we accept the fact that the communities of the Ferigile Group are the direct descendents of those of the Basarabi culture, although this is another issue not yet completely clear. For an unbiased answer the modern domains of investigation such as anthropology and genetics are still expected to be involved.

47. Vulpe 1967, 40–41, pl. 2:8-12; Vulpe – Popescu 1972, 81–82, fig. 13:9; Popescu – Vulpe 1982, 77, fig. 12:B, 95, fig. 17:3, 14; Măndescu 2004, 144, fig. 3:3, 10:3.
48. Popescu – Vulpe 1982, 102, fig. 24:5.
49. Vulpe 1977, 110–111.
50. Vulpe 2003, 122–126; Vulpe 2012, 46–54.

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Enlightening identity: reconsidering burial practices in the Lychnidos region from the Iron Age until the end of the Hellenistic period

Pero Ardjanliev

Abstract

Early antiquity in the Lychnidos area is still a hot research topic, even after more than a century. This is due to the combination of controversial information gleaned from ancient written sources and the rich archaeological findings; the latter beginning with the princely graves of Trebenište, whose discovery firmly placed the region on the world archaeological map. Scholarly interest to date, apart from the level of development and evolution of the local culture, mainly concerns the still-ongoing debate about the identity and ethnic origins of the regional inhabitants. The wide variety of studies covering these aspects encompasses the available ancient written sources, further combining that data with stylistic and comparative analysis of the unearthed artefacts. The first political entity connected to the area around Lake Lychnidos is the mythical Enchelei, who later fell into obscurity and were followed by the historical Dassaretae, whose name and existence, apart from literary sources, is recorded in both epigraphic and numismatic evidence. Academic theories are mainly divided in two camps; one holding that both tribal names are simply different terms used to describe same group of people; the other differentiating between them and claiming a separate identity, present throughout discontinuous time periods. To escape this predefined framework, and in order to solve the problem, we will try to reconstruct the past by utilizing the clues left by those who remain forever silent – the dead.

Key words

Lichnidos – Enchelei – Dassaretae – written sources – burial customs – Hellenistic period

1. Introduction

Ancient Lychnidos, with its favourable location on the banks of Lake Ohrid, well-stocked with fish and located on one of the most important ancient regional routes–the so-called Candavian road that later became known as Via Egnatia–was always regarded as an ideal site for a continuous human habitation and settlement (fig. 1). That is the main reason for the long continuity of human activity in the area, which, with the help of the available archaeological data we can trace, and partially reconstruct, from the Iron Age until the present.

The fact that this is an extremely rich archaeological area has led to extensive scientific attention for more than a century, beginning with the most important find in the close vicinity of the city of Ohrid (widely accepted as ancient Lychnidos): the so-called princely graves of Trebenište, whose discovery firmly placed the region on the world archaeological map. Beginning with the pioneering work of B. Filov and K. Shkorpil on these remarkably rich tombs[1], the

1. Filov – Škorpil 1927.

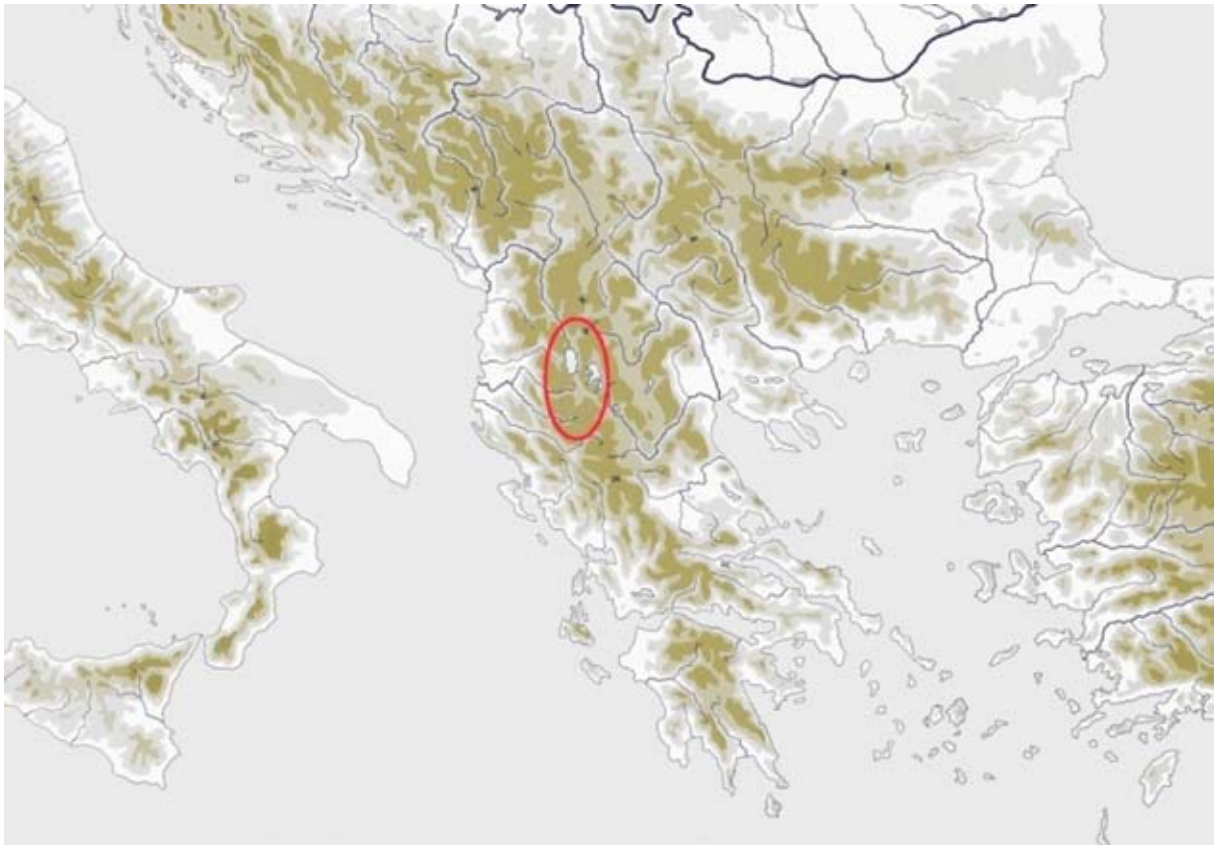

Fig. 1. Balkan Peninsula. The location of the Lychnidos region.

region suddenly became a very important cultural and archaeological site, as well as a central research focus for numerous scientific studies trying to resolve different aspects of the local human activity such as the ethnic origin of the inhabitants, funerary rites and customs, the artistic value of the uncovered artifacts and their origin, etc.

This has been a very enigmatic region since antiquity, mainly because of its location at the junction of three powerful ethnic groups (the Epirote, the Macedonian and the Illyrian), making it heavily dependent on the relations between these powerful kingdoms and their vital interests. Because of these uneasy and complicated regional politics, even ancient historians and cartographers render different accounts regarding the local borders, ethnicity and location of the local urban centers. Modern studies cover these accounts in detail, further combining that data with stylistic and comparative analysis of unearthed artefacts. The most sensitive, and still ongoing, discussion is that revolving around the identity and ethnic origins of the regional inhabitants. The first political entity connected to the area around Lake Lychnidos is the group called Enchelei, who are only referenced in legendary accounts and later fall in to obscurity. They are later followed by the Dassaretae, whose name and existence, apart from literary sources, is recorded in both epigraphic and the numismatic evidence. Academic theories revolving around the two entities are mainly divided into two groups; one holding that both tribal names are simply different terms used to describe the same group of people; the other differentiating between them and claiming a separate identity, present throughout discontinuous time periods. In order to escape from this predefined frame with a clear intent to solve the problem, we will try to reconstruct the past by analyzing the local burial rites and the funerary customs of the regional inhabitants from the Iron Age until the end of the Hellenistic Period. But first, let us see how this problem appeared.

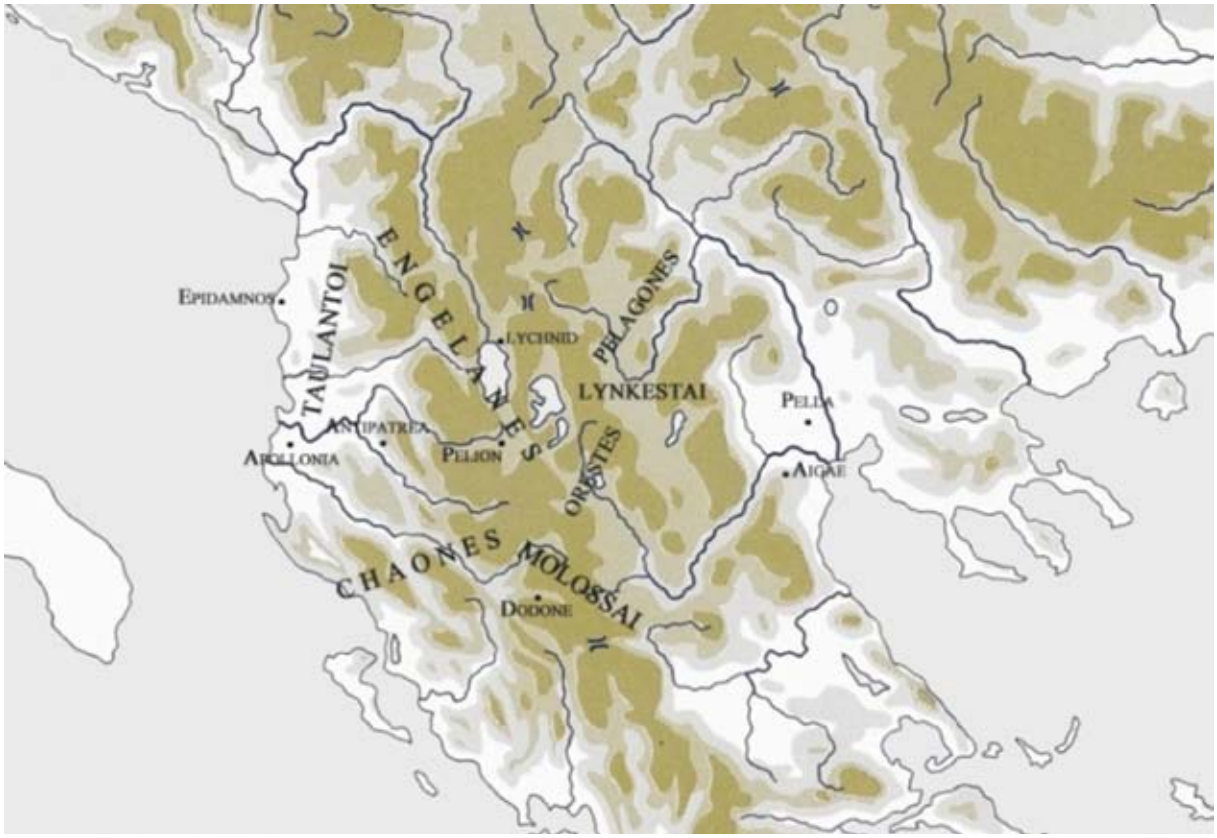

Fig. 2. Territory of the Enchelei in the 6th century BC according to the ancient written sources.

2. Origins of the problem – ancient written sources

The earliest noted inhabitants of the Lychnidos area are the Enchelei, mentioned by Hecataeus as neighbours of the Chaonians. Later authors connect the Enchelei with the legend of Cadmus and Harmonia, and represents the main source of information for this tribal community in general. The myth begins with the expulsion of the Phoenician prince Cadmus from Thebes, after which he supposedly went among the Enchelei, where, along with his wife Harmonia, he established his own dynasty. The account of the arrival of the Cadmeians among the Enchele, also includes the foundation of the city of Lychnidos. The diversity of opinion among the ancient authors regarding the ethnic origins of the Enchelei, derives directly from the interpretations of this legend. Some claim Cadmus escaped to the Illyrians who named themselves Enchelei[2] - while others hold that the Enchelei and the Illyrians are clearly different groups. Herodotus, while describing a prophecy claiming that death will follow all the Persians who will invade Greece and sack the temple in Delphi, recalls that there is an identical prophecy involving the Illyrians and the army of the Enchelei[3]. Apollodorus makes even clearer distinction between the two ethnic groups when describing the arrival of the Cadmeians, which according to him took place during a war between the Enchelei and the Illyrian[4]. This confusion among the ancient authors should be explained both by the specific location of the Enchelei, placed between three powerful ethnic groups (the Epirote, the Macedonian and the Illyrian), and the subsequent change of rulers over the area during later periods.

The location of the Enchelei is connected with wider territory, from the hinterland of Apol-

2. Pausanias IX, 5, 3.
3. Herodotus IX, 43.
4. Apollodorus III, 5, 4.

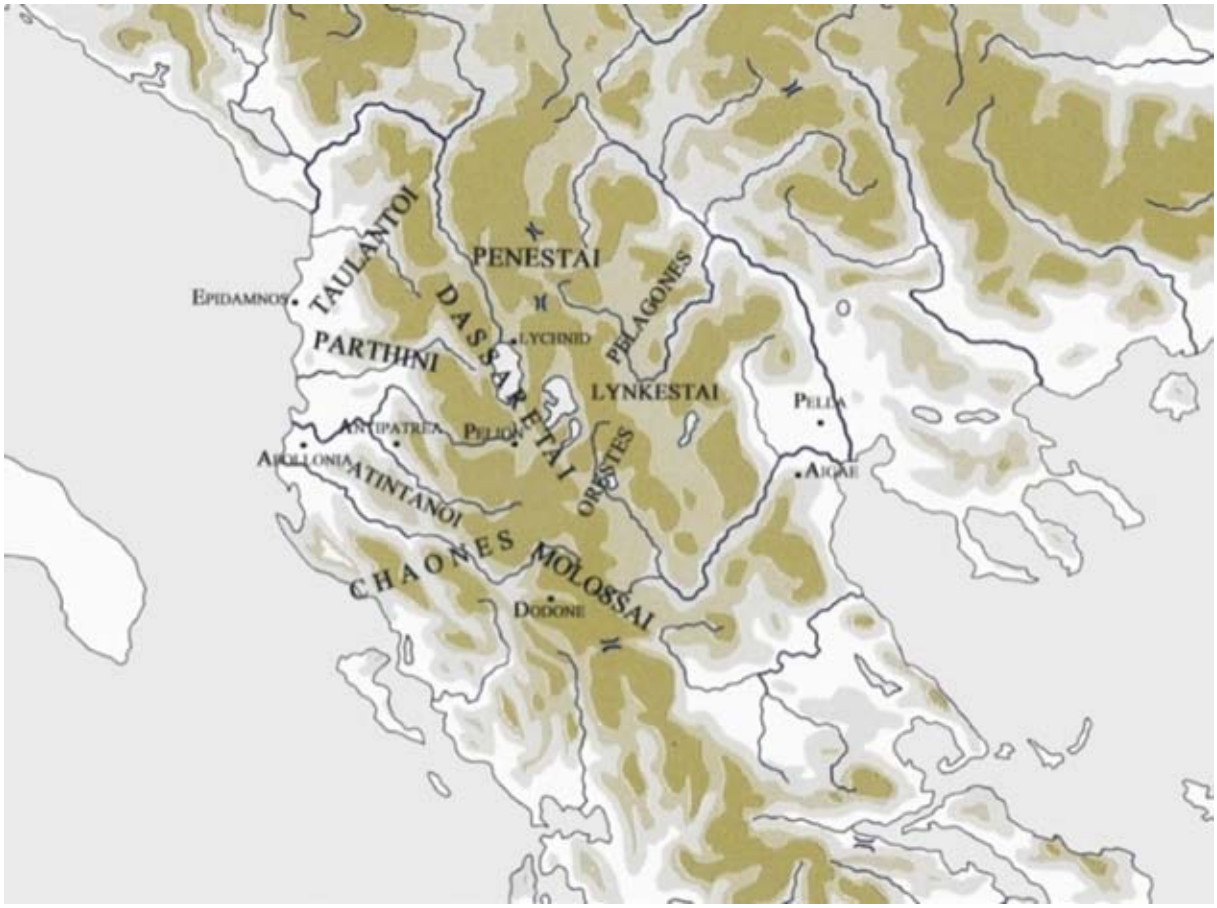

Fig. 3. Territory of the Dassaretae in the 3rd century BC according to the ancient written sources.

lonia and Epidamnos in the west, the mouth of river Drilon to the north, down to the territory of the Chaonians (according to Hecataeus) to the south. The name of the Enchelei derives from the Greek word enchelys which stands for eel and that in its own way connects the tribe with the eel-rich area around Lake Ohrid. Polybius even mentions a town called Enhelanai in the vicinity of Lake Ohrid[5], which if taken as a relic of the tribal name once associated with the region, can serve as proof that the location of the Enchelei is closely associated with the same area (fig. 2).

Later, the Enchelei completely disappear from the historical scene and are no longer mentioned. Apart from the ancient written sources, their name and existence are not recorded anywhere else.

In later historical sources, the same territory previously associated with the Enchelei is suddenly attributed to the Dassaretae. Dassaretis is a vast area which ranges from the rivers Osum and Devol to the west, along to the neighboring regions of Upper Macedonia, Lyncestis and Orestis to the east. The region also borders with the Epirote tribes to the south and the Parthinoi and Penestae to the north (fig. 3). Upon close inspection of the recorded territorial span of both the Enchelei and the Dassaretae, it is hard not to come to the conclusion that the area first attributed to the Enchelei is afterwards closely tied to the Dassaretae. This means that it probably just came down to an overlap between the two tribal communities in the writings of some ancient authors and that this trend was later accepted and perpetuated in modern works[6]. For instance, according to the information given by Strabo, the Enchelei were also called Sassaretae[7]. According to F. Papazoglu, this claim can only be accepted if the Sassaretae are identical

5. Polybius V, 108.
6. Papazoglu 1985, 72.
7. Strabo VII, 7, 8.1853.

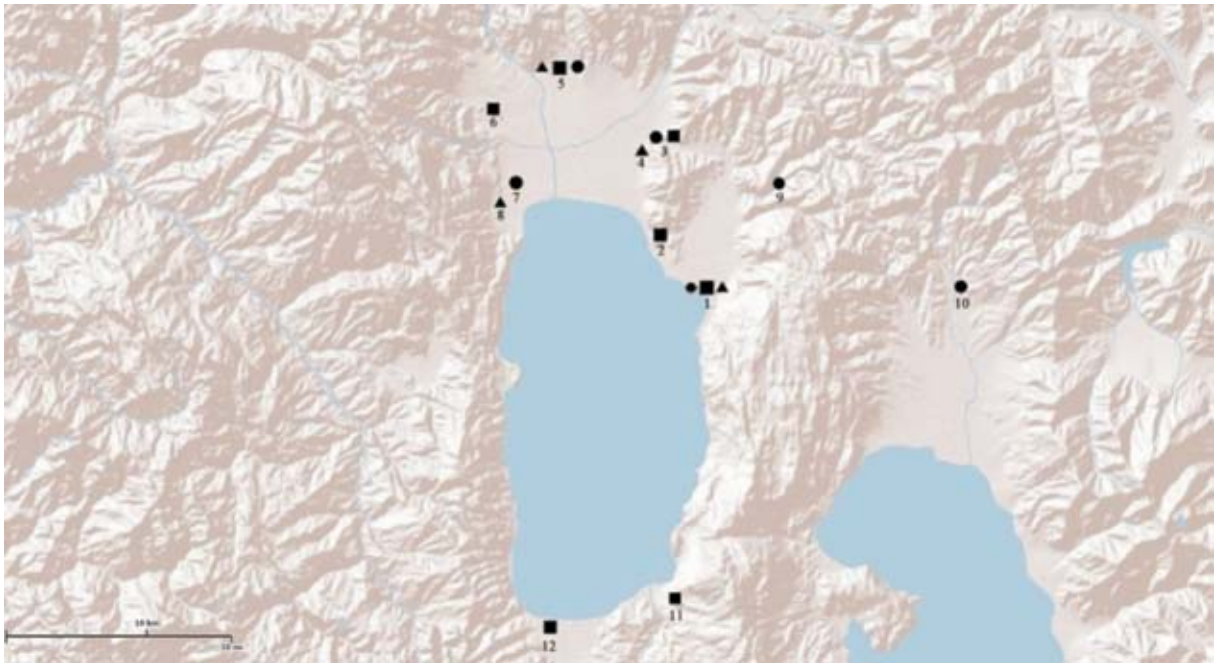

Fig. 4. Map of the Ohrid region with marked forts (■), Iron age necropoleis (▲) and Hellenistic necropoleis (●). 1 Ohrid; 2 St. Erazmo; 3 Trebeniško Kale; 4 Tri Celjusti i Vrtuljka; 5 St. Ilija-Delagožda; 6 Vajtos-Oktisi; 7 Arapski Grobišta-Šum; 8 Radolišta; 9 Crvejnca-Opejnca; 10 Gimbabica-Izbišta; 11 Ljubaništa; 12 Pogradec.

with the Dassaretae[8].

In clear contrast to the fact that the Enchelei are mentioned only in the ancient written sources, is the presence of the Dassaretae both in inscriptions, carved on several epigraphical monuments from the early imperial era in the Ohrid region[9], and, to an even greater extent, on coins struck in their name[10].

In some academic circles, there is still an ongoing debate as to whether the Enchelei and the Dassaretae are one and the same identical tribal community or are two distinctive groups which inhabited the same area in different chronological periods[11]. From the middle of the 5th century until the middle of the 4th century BC, some scholars trace a hiatus on several regional necropoli (Delagožda, Trebeniško Kale, Deboj), which leads them to the conclusion that there might have been a migration of the local inhabitants to pastures new[12]. I, in turn, hold that we should look for answers to this problem in the archaeological context, by analyzing the burial customs, rituals and architecture that have always been considered as the basic elements in the determination of any group identity and ethnic belonging. So what are the results of our in-depth archaeological analysis of the necropolises in the Lichnidos region?

3. The language of the dead: burial customs in the Lichnidos area

The „Deboj“ necropolis, along with the recently discovered Hellenistic tombs from several

8. Lahtov1956, 166–71; Vulic 1931-1934.
9. Lahtov1956, 166–71; Vulic 1931-1934.
10. There are at least two samples of this type of coin, recently uncovered at the site of Plaošnik, from which one comes from the sector that I excavated myself. I discovered another sample while analysing the archaeological material from the Deboj necropolis.
11. Papazoglu 1985, 72.
12. Bitrakova-Grozdanova 1995, 53–60.

locations in the old town of Ohrid (that in all probability belong to an identical burial site), represents one of the most actively excavated sites of its type in the Republic of Macedonia. In addition, there are more identified and, to a certain degree, excavated Hellenistic necropoli from the wider region of Ohrid and Prespa, for instance Trebeniško Kale[13], Crvejnca at the village of Opejnca, Arapski Grobišta in the village of Šum near Struga, Gimbabica at Izbišta in the vicinity of the town of Resen[14] and Sveti Ilija at Delagožda, near Struga[15]. Some of those sites have been systematically excavated with partially or fully published results, while the remainder, in most part located by chance during some construction or similar activities, have been excavated under developer led intiative and lack full publication of results and materials. Taking every scrap of information into account, we are presented with a rare opportunity to shed some light on the stance of the Lychnideans towards their dead and we will try to reconstruct the regional burial rite that took place in the Hellenistic period (fig. 4).

One of the most characteristic regional features is the uniformity of the burial architecture, rituals and customs throughout the entire duration of the Hellenistic period, something which presents a true rarity in itself.

As far as the burial architecture is concerned, there is, without exception, only a single type of grave construction present in each regional necropolis during the Hellenistic period. Construction consists mainly of a rectangular pit, whose boundaries are marked with two to three layers, both in height and width, of dry stone walling. The grave pit's dimensions are dependent on both the stature and the age of the deceased. There are no traces of either roofing or flooring inside or in the immediate vicinity of the tombs (fig. 5).

The burial ritual itself is also identical throughout all regional necropoli, which is an uncommon feature within the rest of the Republic[16]. Inhumation is practiced in each burial according to a strict set of rules; the deceased are laid flat on their backs, with arms and legs straight. The osteological material from some sites has also been partly analyzed, providing a rare opportunity to determine the organization of the necropolis and the burial practices that took place in regard to the age and the sex of the dead.

Another characteristic regional burial custom is that of the orientation in which the body is placed, which is closely tied to the sex of the deceased. The male bodies were always placed with heads placed towards the east and legs towards the west, with the reverse position recorded for female burials. This clear distinction in the burial ritual depending on the sex of the deceased is not only noted in other contemporary regional necropoli (Deboj, Trebeniško Kale and Crvejnca at the village of Opejnca) but also in most of the Iron Age burials from the area which precede the Hellenistic period, such as the case of the sites of Trebenište and Tri Celjusti i Vrtuljka.

Since all necropoli where the same burial practice is recorded belong to the same region, we can safely draw a conclusion that this custom is specific to a single homogeneous group of people, which inhabited the same area, from at least the Iron Age until the end of the Hellenistic period. The same point can be argued from the information presented to us by Strabo that the Enchelei are also called Sassaretae[17], which F. Papazoglu took as a confirmation that the Sassaretae, hence the Enchelei, can only be identified as Dassaretae[18].

13. Lahtov 1959, 11–77.
14. The material from these three necropolises is not yet published.
15. Bitrakova-Grozdanova 1982, 63–68.
16. Mikulčić 1966; Sokolovska 1986.
17. Strabo VII, 7, 8.
18. Papazoglu 1985, 72.

Fig. 5. Part of the Hellenistic necropolis at Deboj (after Guštin – Kuzman – Malenko 2011).

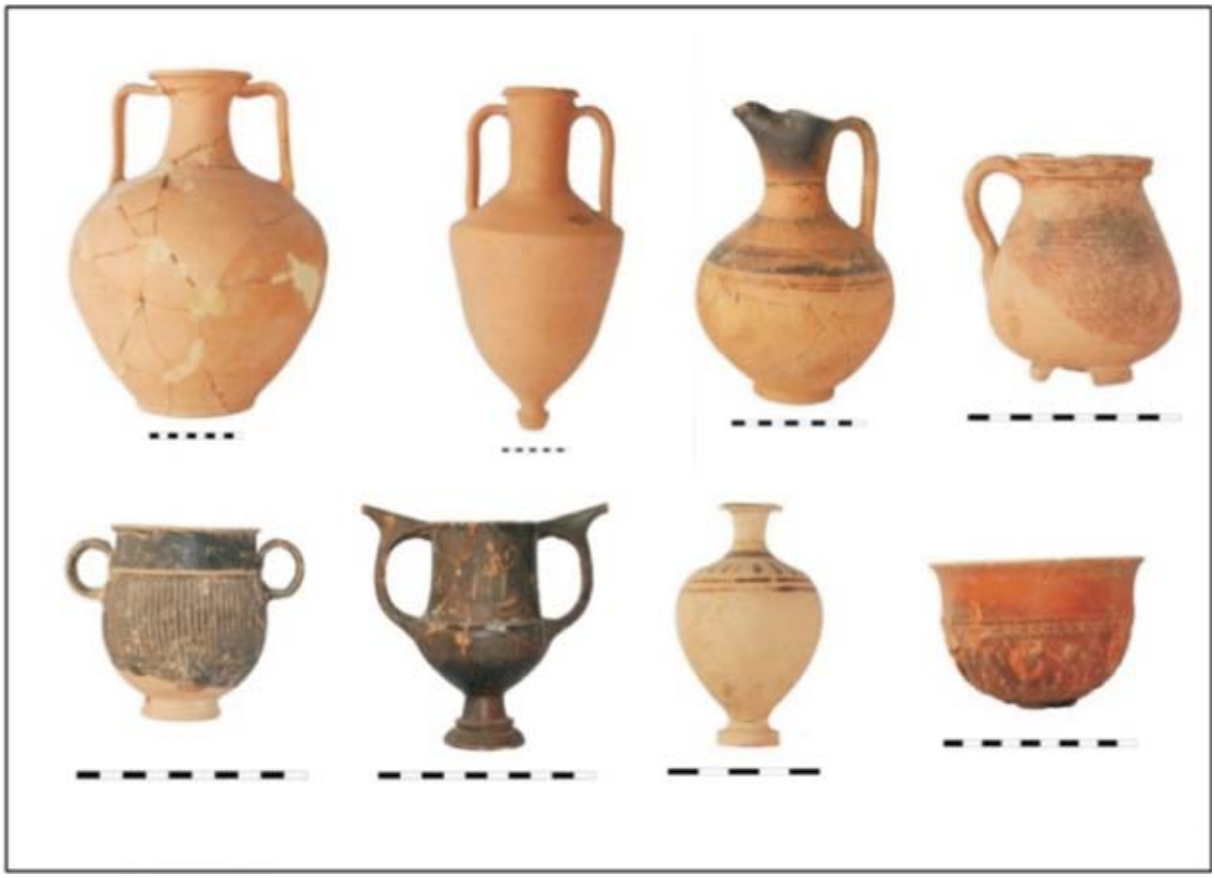

Fig. 6. Various pottery finds from Lichnidos region.

The continuity of the same burial rite is also in contrast with the previously mentioned hiatus (mid. 5th - mid. 4th century BC), which supposedly led to a migration of the local population[19]. The major historical events that might have significantly influenced the region can also be taken into consideration in accordance with the aforementioned conclusion. This was the period when the south Illyrian tribes were united under one banner, which in turn significantly disturbed the regional balance of power to such an extent, that even the Macedonian king Amintas III had to abandon his seat and escape to Thessaly. Even after succeeding in gaining back his throne, Amintas still had to pay a tribute to the Illyrians in order to spare himself and his kingdom from further military attacks from the north-west[20]. If the mighty kingdom of Macedon was in such a dire position, we can only imagine the difficulties that the inhabitants of the intermediate border regions like Dassaretia might have faced. In all likelihood they lost so much of their wealth that, simply, they could rarely afford rich burials like those of the preceding period. The situation again changes in the aftermath of the battle between Philip II and Bardilis in 359 BC which marked the firm establishment of Macedonian rule over the area, after which wealthy local burials slowly start to re-appear.

The placement of the grave goods, found in their original position, partially enables us to complete the image regarding the deceased at the moment of the burial, to let us determine the use of certain objects, as well as to imply the status of the dead in the society. In parallel to the case of the body position within the burial, the grave goods were placed according to a strict set of rules. When observing the male burials, it becomes evident that weapons are always placed in a predetermined spot in relation to the body – the spears are almost always in the area next to the right leg and in the case there is a dagger or a sword present, it is found around the left side of the pelvis, probably marking the spot where it was worn during life.

In the case of the female burials, noticeable is the presence of jewelry. Earrings with zoomorphic protomes are the most common form, followed by necklaces and rings. Child burials are poorest in terms of grave goods, with the most characteristic type of objects being terracotta figurines, small ceramic pots and astragals.

The ceramic pots are statistically the most common type of grave good, present in burials of both sexes and across all age classes (fig. 6). The placement of the pottery was also carried out according to previously determined rules, always in the area around the lower legs. A distinct regional characteristic is the rite of closing up the bigger and more robust storage vessels, like amphorae and oinochoai, with smaller pots, as is the case with several types of drinking cups – kantharoi, skyphoi and moulded relief bowls, as well as with small utility bottles like unguentaria. This ritual practice is evident at the necropoli of Deboj, Trebeniško Kale and Crvejnca. Since most types of pots found within the Hellenistic graves are associated with storage and consumption of wine, their placement in the form of complete sets along the burials are inevitably associated with the ritual of libation, which was evidently practiced in the region.

Besides the pottery, there are also bronze vessels in certain graves, although present to a much lesser degree mainly because of the obvious exclusivity of these types of goods, whose cost throughout antiquity is known to be quite high and not suitable for everyone (fig. 7). Therefore, the presence of bronze pots in certain burials gives us valuable information about the economic and social status of their owner. The most established practice is the placing of the bronze vessels in a set of three: one lebes (fig. 7:1), one bowl (fig. 7:2) and either an oinochoe (fig. 7:4) or an olpe (fig. 7:3). Although rare, sometimes these bronze vessels come in a pair. The specific

19. Bitrakova-Grozdanova 1995, 53–60.
20. Diodorus of Sicily 92, 3–4.

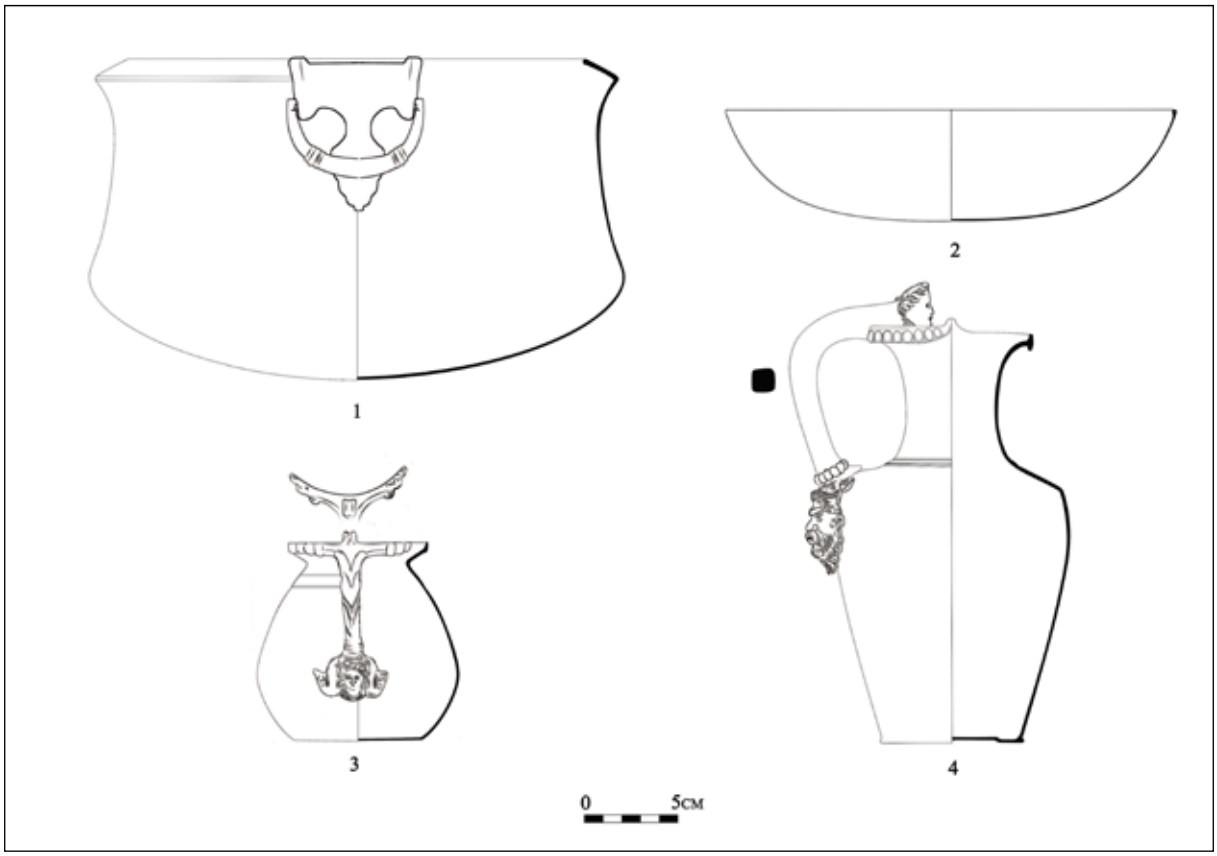

Fig. 7. Drawing of bronze vessels from Lichnidos region (drawing D. Petreski).

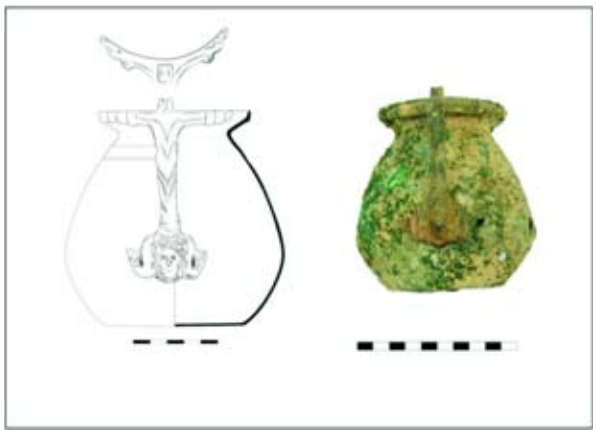

Fig. 8. Bronze olpe, from grave no. 100 at the site of Deboj (drawing D. Petreski).

Fig. 9. Military equipment of the „Celtic" warrior from grave no. 58 (after Guštin–Kuzman–Malenko 2011).

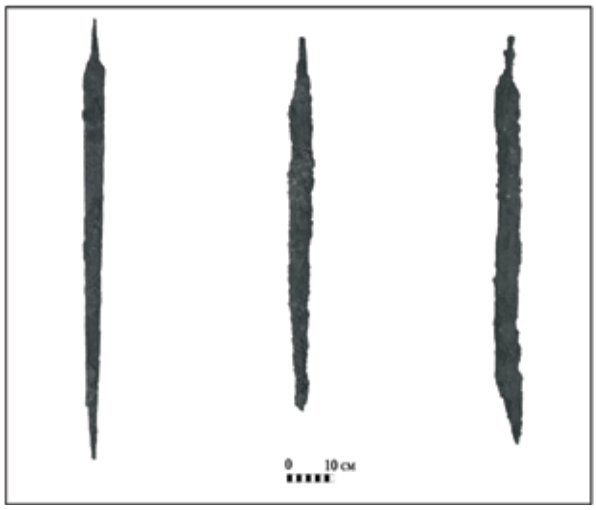

Fig. 10. Long swords of so-called „Celtic" type from the necropolis at Deboj.

grouping of bronze vessels was probably done with a similar purpose to the ceramic sets, and might also have been motivated by a certain ritual involving food and drink offerings. The most common bronze good is the lebes, with specific handles shaped in the form of the letter T, and the deep bowls, found on many sites both in the same region and the neighbouring areas. However, the most characteristic regional form of bronze vessel is the small one-handled pitcher otherwise known as olpe.

Coins are also found in a very specific location within the graves, and with no regard to the sex of the deceased, they are always placed in the right hand. This custom can be explained with the preparation of the dead to pay Charon for the voyage to the underworld.

4. Relations between the region around Lichnidos and central Europe

Taking everything into account, there might be a general impression that the Lichnidos region was a very conservative environment, but, despite the traditionalism, there is still a noticeable influence from both the neighbouring areas and central Europe. The relations between the Lichnidos region and central Europe can be more closely observed by examining two very specific occurrences.

The first of these is connected with the already-mentioned bronze olpai which are one of the most characteristic regional forms of vessel found within the local Hellenistic necropoli. They are made from bronze sheet and are characterized by a wide pear-shaped body, rim drawn towards the outside and a flat base. The massive handle was moulded separately along with their characteristic decoration: swan protoms where it connects to the rim and a realistically shaped head of a young Dionysus on the lower part of the handle where it is brought together with the body of the vessel. These bronze olpai are also known as type Kelheim, a term invented by J. Werner[21]. Apart of the Kelheim type there is one more type of bronze olpai widely spread throughout central and western Europe - type Piatra Neamt[22]. The high concentration of these types of pots in central Europe has led to the accepted theory that they were produced in either the north Italian or the Campanian workshops.

But despite the central European finds, many Kelheim and Piatra Neamt types olpai were also found in the region of Ohrid. From the published examples alone, we are aware of two samples from Trebeniško Kale[23], one from Crvejnca [24] and another two from the necropolis at the site of „Deboj" (fig. 8)[25]. When we add several still unpublished examples from the excavation at Gorna Porta and Samuil's Fortress, which are both part of Lichnidos' main burial site, we count

21. Werner 1954.
22. Boube 1991.
23. Lahtov 1959, 39, T. XVI: 2, 49, XXIII:1.
24. Bitrakova-Grozdanova1999, 256–86.
25. Ardjanliev 2013, 117–21.

about ten such items in the vicinity of Ohrid alone. The popularity of these vessel types is also confirmed with several finds of ceramic olpai from the necropolis at Crvejnca (ΒΟΛΟΣ 2000), with identical form and decoration.

If we bear in mind all the rest of the grave goods from the burial sites where these bronze olpai were found, it can easily be concluded that they were used from around the end of the 3rd until the first half of the 2nd century BC which is much earlier than the suggested chronology of the middle European samples, dated around the 1st century BC[26].

All the above data leads to the idea that the popularity of this form of bronze vessel originated somewhere in the Lichnidos region, from where it spreads to central Europe, while the most probable place of manufacture might have been the Macedonian toreutic workshops, whose artistic endeavours peaked during this exact period.

The other specific regional occurrence is represented by many findings of Celtic armaments and weaponry, which gives an additional opportunity to understand the relationships between the local inhabitants and central Europe. Until recently, most of the finds bearing central-European La Tène features discovered in the southern Balkan archaeological sites were mainly connected with the Celtic intrusions, which briefly passed through the region during the invasion south towards Delphi in 279 BC[27]. However, the unearthed artefacts from the city necropolis of Lichnidos tell a somewhat different story. Burials containing Celtic weapons are found on several spots throughout the site, side by side with graves bearing distinctive local characteristics. If this occurred just once or twice, we might have thought that it is simply a case of local people buried along with their military trophies.

A typical example of these distinctive burials is grave no. 58, discovered on the site of Gorna Porta (fig. 9) , part of the wider city necropolis, along with full battle gear consisting of a long sword of the „Celtic“ type, iron helmet, a spear and shield-boss from an oval-shaped shield[28]. So-called „Celtic“ long swords are also discovered in several burials from the site of Deboj (fig. 10) all dating from the first half of the 3rd century BC, otherwise known as La Tène C1 in the middle European chronology.

The appearance of this type of weaponry and armour should not be surprising if we take into account the available historical information that during the reign of Antigonus Gonatas, the Macedonian army mainly consisted of mercenaries, among which the Celts had a very prominent role[29].

The anthropological analysis of the osteological material from these burials also speaks in favor of the Celtic mercenary theory. Examination of the skeletal remains from these graves has determined they represent males of age ca. 45 and above, which might suggest that certain veterans were granted the right to stay and live in the city at the end of their military service.

Another proof which loudly proclaims the Celtic presence in Lichnidos, comes from the Hellenistic settlement itself, in the form of Celtic pottery shards and jewellery, with analogies from the settlements along the Danube and the surrounding areas[30].

The most interesting part about these burials is that, even though the deceased came from distant regions, they were still buried according to strict local funerary rites and customs on the same burial grounds along with the regional inhabitants themselves. This gives us a unique op-

26. Vidal 1977, 104.
27. Mitrevski 2008, 363–81.
28. Guštin – Kuzman – Malenko 2011, 181–96.
29. Walbank 1984, 221–57
30. This material has not been published yet. The information was gathered while being part of the team which excavated the site.

portunity to observe the close relations of the Ohrid area with the central Europeans, without being closely tied to the extremely violent events such as the Celtic invasion of Delphi.

5. Conclusions and future perspectives

All results presented in this study, derive from previously conducted research that took place while working on my M.A. thesis, Deboj, life in ancient Lichnidos through its necropolis, which revolved around the ancient burial customs practiced in the region around the city of Lychnidos. In order to present a chronological continuity, we also took the chance to revise the burial customs practiced in the Iron Age necropoli.

The main goal of this research was to present a new perspective for reconstruction of the regional past through detailed analysis of the available archaeological contexts. At same time, that meant we had to abandon the stance already taken in the preceding studies, which relied solely on the ancient written sources, the artistic analysis of the artifacts and their origin.

This new interdisciplinary approach is made with all due respect not only to the historical sources, but to the available data both from previous and ongoing archaeological excavations, as well as the conclusions derived from the anthropological analysis, which were previously– but rarely– taken into account in similar studies. All this brings us to the conclusion that the region was continuously inhabited by a homogenous group of people for a long period of time, at least from the Iron Age up to the end of the Hellenistic period, no matter how they are identified in the written sources. What is most significant in these chronological frames is that the local inhabitants were practicing identical burial customs and conducting a strict set of funerary rites for a period of at least half a millennia. Despite the high degree of conservatism in the area, we can clearly identify a certain correlation with both the neighbouring territories and with even more distant regions such as those of central Europe.

All of this has contributed towards shifting the focus to a different view of the past relationships in the region of ancient Lichnidos itself, as well as the inter-regional contacts with the neighbouring areas of the Balkans and even central Europe.

We hope the establishment of these parallels will contribute significantly towards all future research that might take into account the archaeological data analyzed in this study. No matter if the future scholarly interest involves research of the settlements or the necropoli; I truly believe that the here presented views and conclusions will be provide insight for all who try to solve the enigma about the past of both Lychnidos and the Dassaretae.

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