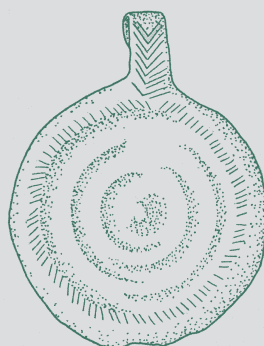


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Italia tra Mediterraneo ed Europa:
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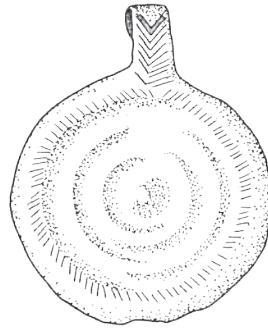
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Il volume raccoglie la rielaborazione, sottoposta a *referee*, dei testi presentati in occasione della LI Riunione Scientifica dell'Istituto Italiano di Preistoria e Protostoria, tenutasi a Forlì dal 12 al 15 ottobre 2016

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Istituto Italiano di Preistoria e Protostoria



Italia tra Mediterraneo ed Europa: mobilità, interazioni e scambi

a cura di Maria Bernabò Brea



Associato
all'Unione Stampa

PRESENTAZIONE

Con il volume intitolato *Italia tra Mediterraneo ed Europa* l'Istituto Italiano di Preistoria e Protostoria inaugura la Serie dei numeri speciali della Rivista di Scienze Preistoriche.

La nuova serie, che mantiene la veste grafica e le norme editoriali della Rivista, è stata pensata per accogliere volumi dedicati all'approfondimento di tematiche specifiche, con *guest editors* e procedura di *peer-review* estesa a tutti i contributi.

L'intento è quello di dare spazio alle molteplici occasioni di riflessione incentrate sulle tematiche della ricerca preistorica e protostorica in Italia, valorizzando l'attività scientifica degli studiosi e destinando loro una sede editoriale rispondente agli attuali sistemi di valutazione accademica. Già a partire da questo numero saranno quindi pubblicati in questa sede anche gli esiti delle Riunioni Scientifiche dell'Istituto, sostituendo la collana "Studi di Preistoria e Protostoria" che si avvia a conclusione.

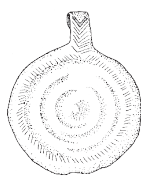
Per quanto riguarda i criteri editoriali, si è scelto di salvaguardare la distinzione delle due serie (ordinaria e speciale): la Rivista proseguirà la numerazione attuale con cadenza regolare e numeri romani, mentre la serie speciale manterrà il numero della rivista relativo all'anno di uscita, aggiungendo a seguire una numerazione (S1, S2, S3,...) in progressione interna continua. L'adozione di un colore differente per le scritte di copertina e l'inserimento di un logo di volta in volta differenziato, utile a identificare lo specifico numero tematico, completano la veste editoriale dei numeri speciali.

Mi preme sottolineare il respiro internazionale con cui si inaugura la serie speciale, con un volume che rappresenta un'importante riflessione sul tema dei molteplici contatti che il nostro Paese ha stretto, fin dalla preistoria, con gli altri paesi d'Europa e del Mediterraneo, ricevendone influssi che ha spesso integrato nel proprio patrimonio, rielaborandoli e ritrasmettendoli a sua volta. Alla curatrice, già Presidente dell'Istituto dott.ssa Maria Bernabò Brea e al Direttore della Rivista, prof. Carlo Lugliè va il mio sentito ringraziamento per aver reso possibile questo progetto.

Monica Miari

Presidente dell'Istituto Italiano di Preistoria e Protostoria

ETÀ DEL BRONZO E DEL FERRO



Andrea Cardarelli ⁽¹⁾, Claudio Cavazzuti ⁽²⁾, Michaela Fritzl ⁽³⁾, Mario Gavranovic ⁽³⁾, Tamás Hajdu ⁽⁴⁾, Viktória Kiss ⁽⁵⁾, Kitti Köhler ⁽⁵⁾, Gabriella Kulcsár ⁽⁵⁾, Eszter Melis ⁽⁵⁾, Katharina Rebay-Salisbury ⁽³⁾, Géza Szabó ⁽⁶⁾, Vajk Szeverényi ⁽⁷⁾

The connections between the plains of the Po and the Danube during the Bronze Age seen through the spread of the ‘urnfield model’

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Keywords: Bronze Age, urnfields, Terramare, Po Plain, Danube area, contacts, funerary customs

Parole chiave: Età del Bronzo, campi d’urne, Terramare, Pianura padana, area danubiana, contatti, pratiche funerarie

ABSTRACT - THE CONNECTIONS BETWEEN THE PLAINS OF THE PO AND THE DANUBE DURING THE BRONZE AGE SEEN THROUGH THE SPREAD OF THE ‘URNFIELD MODEL’ - The adoption of a new funerary ritual denotes an important change in society, although it can be difficult to identify the triggers. In the past, theories such as that of Luigi Pigorini on the origin of the Terramare culture, the concept of mass migration was used as the central explanation. In the 20th century, alternative approaches have emphasized the role of local developments and ideological change in response to ‘global’ macro-trends.

The massive introduction of urn cremation, which replaced the inhumation burial that prevailed in previous periods, marks the beginning of the Urnfield Period. Traditionally, this change has been dated to around 1300/1200 BC, the beginning of Bronze Age D/Hallstatt A1 (Bz D/Ha A1), in Central Europe. In the light of recent archaeological research, however, it appears that the ‘urnfield model’, which originally developed within the territory of the tells in modern-day Hungary, was introduced during the 15th century BC (Bz B2/C) - at least one century before the ‘Urnenfelderzeit’ - in several areas between the Danube and the Po plains. However, the archaeological record shows a wide spectrum of local attitudes towards the spreading novelty, ranging from radical acceptance, to hybridization and rejection. Our aim is to highlight this variability in Hungary, Lower Austria, western and central Balkans and to connect this evidence with the Terramare area.

ORIGINS AND DEVELOPMENT OF THE DEBATE ON THE ITALIAN FIRST ‘URNFIELDS’

The appearance of the large urn cremation cemeteries in the context of the Terramare was one of the cornerstones onto which Luigi Pigorini built his theory of the ‘*Italici incineratori*’. In his idea, perhaps directly inspired by scholars, such as W. Helbig, the ‘Italic peoples’ entered Italy from the north-alpine

region (Swiss lake-dwellings), founding first the lake-dwelling villages (Polada culture) and then, after a second migration from the Hungarian plain, the *terramare*, whose cemeteries were essentially urnfields. The later spread of urnfields southwards reflected the migration of this people into the peninsula, and ancient Rome was the outcome of this process (Helbig 1879; Pigorini 1909; Pearce, Gabba 1995; Guidi 2011, Cupitò, Paltinieri 2014).

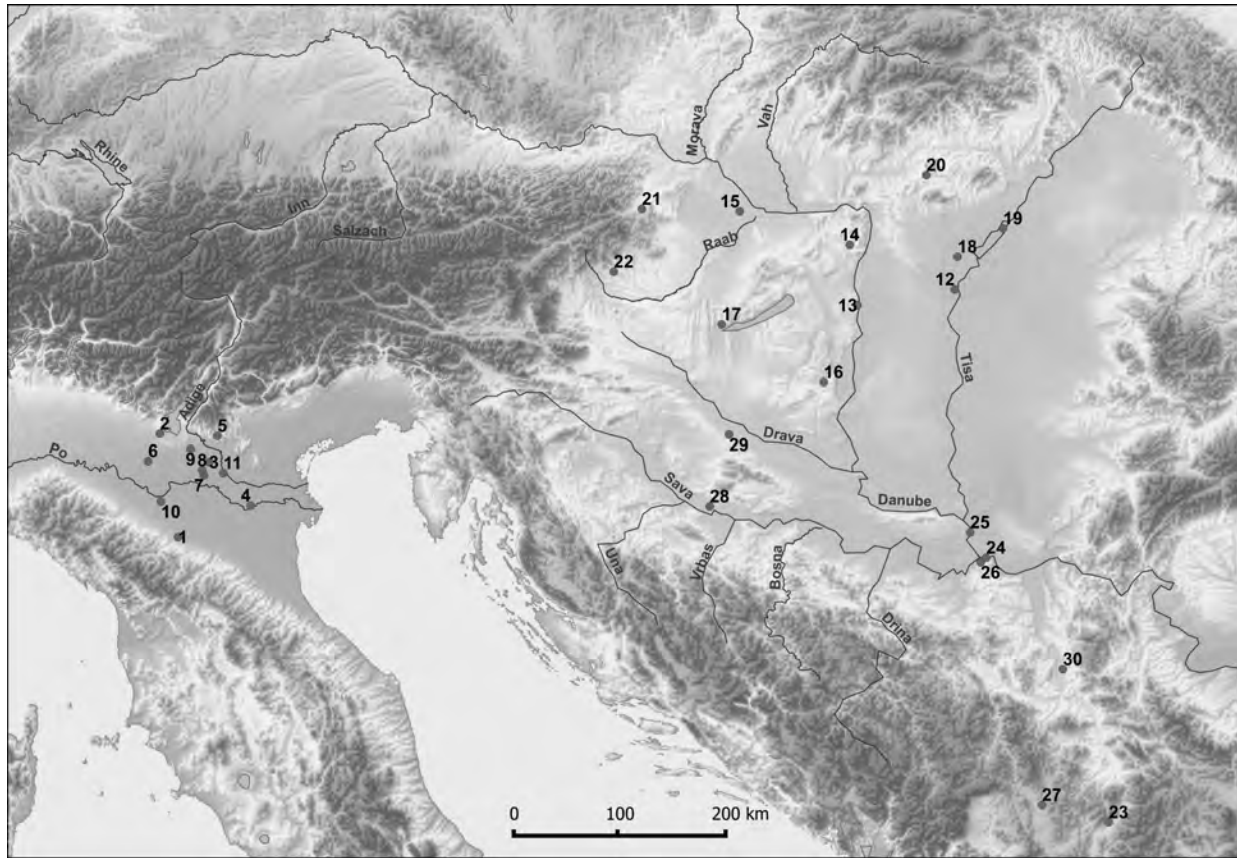


Fig. 1 – Sites mentioned in the text. 1) Casinalbo; 2) Monte Lonato; 3) Bovolone; 4) Canar; 5) Arano; 6) Sorbara di Asola; 7) Gazzo Valserà; 8) Olmo di Nogara; 9) Povegliano Veronese; 10) Santa Rosa di Poviglio; 11) Scalvinetto di Fondo Paviani; 12) Tószeg; 13) Dunaújváros; 14) Biatorbágy; 15) Mosonszentmiklós; 16) Bonyhád; 17) Keszthely; 18) Jánoshida; 19) Tiszafüred; 20) Salgótarján-Zagyvapálfalva; 21) Pitten; 22) Baierdorf; 23) Vranje-Meanište; 24) Karaburma; 25) Stojića gumno; 26) Kaluderske livade; 27) Brnjica; 28) Gređani; 29) Virovitica; 30) Paraćin.

Siti menzionati nel testo. 1) Casinalbo; 2) Monte Lonato; 3) Bovolone; 4) Canar; 5) Arano; 6) Sorbara di Asola; 7) Gazzo Valserà; 8) Olmo di Nogara; 9) Povegliano Veronese; 10) Santa Rosa di Poviglio; 11) Scalvinetto di Fondo Paviani; 12) Tószeg; 13) Dunaújváros; 14) Biatorbágy; 15) Mosonszentmiklós; 16) Bonyhád; 17) Keszthely; 18) Jánoshida; 19) Tiszafüred; 20) Salgótarján-Zagyvapálfalva; 21) Pitten; 22) Baierdorf; 23) Vranje-Meanište; 24) Karaburma; 25) Stojića gumno; 26) Kaluderske livade; 27) Brnjica; 28) Gređani; 29) Virovitica; 30) Paraćin.

The funerary ritual was, however, a later addition to Pigorini's first narrative, enriched by the discoveries of the 'urnfields' at Casinalbo, Monte Lonato, Bovolone between 1876 and 1880 (Pigorini 1882-1883; Peroni 1992; Salzani 2010; Cardarelli 2014, 9-12; Danckers 2017).

Pigorini's theory, initially developed together with G. Chierici and P. Strobel, had indeed a long gestation period, starting in around 1870 and becoming consolidated in 1876 *Congrès international d'anthropologie et d'archéologie préhistoriques* in Budapest, after Pigorini, together with R. Virchow and J. Mestorf, had the chance to explore the tell settlement at Tószeg (Pigorini 1870, 1876 and 1877; Bóna 1992). The similarities with the Terramare settlement structures and materi-

als led him to see the existence of 'significant relationships', which could suggest a 'common origin' of the two Bronze Age civilisations. Pigorini's view was widely supported by the dominant component of the European academy. On the contrary, criticism progressively grew in Italy, initially with a dispute with E. Brizio, and later in connection with the idealist reaction (Patroni, Rellini) to the positivist-naturalist approach that Pigorini had embraced at least for the first part of his career (see Peroni 1992; Danckers 2015). Despite this, the idea of a common background between the Hungarian *tell* and the *terramare* cultures remained largely endorsed, or at least acknowledged in the wider European context. In 1927, in a letter to L.C.G. Clarke, curator of the

Cambridge University Museum of Archaeology and Anthropology, V. G. Childe wrote that his plan to dig at Tószeg “would be of quite first class importance: the place has always been cited as a *terramara*” (Leighton, Sørensen 2004).

During the second half of the 20th century, in the general atmosphere of criticism against migration theories and cultural history, Italian scholars developed a new approach that became mature in the 1990s. This new hypothesis emphasized the role of local and regional components in the formative process of the Terramare system (Bernabò Brea, Cardarelli, Cremaschi 1997; Bernabò Brea, Cremaschi 2009; Cardarelli 2009a and 2009b ; Bernabò Brea, Cardarelli, Cremaschi 2018). In spite of the slightly differing personal views amongst contributing scholars, the common structure of the new theory pivoted around the tripartite sequence of ‘rise, florescence and fall’ phases. The ‘rise’ coincides with the end of the Early Bronze Age/initial phases of the Middle Bronze Age (XVII-XVI c. BC), during which the Po plain (as well as the Apennine; Cavazzuti, Putzolu 2014) was colonized by pioneer groups of different origin: Central Italy (Grotta Nuova-Farneto *facies*), the western part of the Po Plain (Pollera-Mercurago *facies*), the North Italian lake area (Polada *facies*). The multi-directionality of the colonisation process was suggested by the distribution of pottery types used as cultural markers. The idea, however, that relatively small groups from other more distant areas, such as the Danube plains, contributed to the occupation of the Po plain and to the ‘foundation’ of the Terramare could not be completely discarded (Cardarelli 2009a, 35-37). Indeed, the archaeological record shows a significant number of long-term connections and similarities in material culture between the two regions that cannot be ignored. Intense contacts with groups settled in the areas north-east of the Alps (particularly Gáta-Wieselburg, Unterwölbling and Mad’arovec) are documented, at least from the Early Bronze Age, by the distribution of a wide set of materials, such as specific types of bronze objects, ceramic, and the enigmatic clay tablets known as *Brotlaibidole* (Piccoli, Laffranchini 2011; David 2016). Striking similarities can be observed between the ceramic assemblage at Canar and other contexts in North Eastern Italy and Gáta-Wieselburg pottery from the Danube areas between modern-day Austria and Western Hungary (Bellintani 1987; de Marinis *et alii* 2015). Affinities between funerary customs might also

suggest a shared system of beliefs, which appears to have continuity with the Bell Beaker tradition. Single inhumations with the dead placed in a crouched position and orientated according to sex are indeed documented both for Polada sites (Arano, Sorbara di Asola, Gazzo Valserà, south and east of Lake Garda), and among Unterwölbling (Lower Austria) or Maros (Southeastern Hungary) groups (Reiter 2008, 122; Salzani *et alii* 2015). It seems, therefore, that the communities settled in the two plains of the Danube and the Po had already established networks for exchanging raw materials (primarily metal), artefacts and ideas during the Early Bronze Age.

The use of these pre-existing corridors continues or even intensifies in subsequent phases, although the exchange of goods and information shifts towards new forms and contents, more related to warriorhood, settlement and land management. During the Middle Bronze Age, indicators of contacts include Boiu-Sauerbrunn type swords (Salzani 2005; Neumann 2009), shared types of horse equipment (Sofaer *et alii* 2013), broomcorn millet cultivation (Filipović *et alii* 2020) and above all, similar settlement patterns, internal organisation of villages, and social structures (Peroni 1989 and 1997; Cardarelli 2009b).

How then, might we consider the introduction of the ‘urnfield’ as funerary custom in this general framework of the contacts between the Po and the Danube plains? Is there still something of Pigorini’s theory that can be of value to contemporary studies?

Recent discoveries and research on the Terramare cemeteries suggest that the ‘urnfield’ model was probably adopted by these communities at least from 1500/1450 BC (MBA2B-MBA3 in Italian chronology), namely during the florescence phase, and therefore at least one century after the ‘colonisation’ (‘rise’) phase. By contrast, cemeteries that included burials of the initial phases of the MBA (i.e. Olmo di Nogara, Povegliano Veronese) comprise exclusively inhumations and are located to the north of the Po, between the Mincio and Adige rivers. Despite a significant presence of settlements, MBA 1-2A burials have not been found among the Emilian Terramare, south of the Po River. It is likely that the bodies of the deceased were treated in such a way as to leave no trace in the archaeological record; scattered cremation is a plausible hypothesis, though weakly supported by a single, uncertain case (a few cremated bones in a pit at Santa Rosa di Poviglio) (Cardarelli 2014, 859-860).

Since the ‘rise’ period and the adoption of the urnfield model do not coincide, as posited in the original theory of the ‘*italici incineratori*’, this argument cannot be used as evidence of a colonisation from outside. We can reasonably assume that the urn cremation ritual was not imported in the Po plain by migrating masses from modern-day Hungary. It is, however, undeniable that major social, demographic and geopolitical changes occurred around 1500/1450 BC in both the two plains: on the one hand, the striking expansion of the Terramare, on the other hand, the collapse of the Hungarian *tell* system during the ‘Koszider period’.

Traditionally, the crises of the various cultural groups associated to the *tell* system has been connected to the “*invasion des langschwertigen Hügelgräbervolkes*” from Central Europe (Mozsolics 1957; Bóna 1958). More recently, this hypothesis has undergone a series of significant reassessments, which generally attenuate the idea of ‘migration→collapse’, emphasize the role of internal socio-economic transformations (Vladár 1973; Točík 1982; Furmánek, Marková 1992; Novotná, Novotný 1996; David 1998, 2002), and propose a more gradual dynamic towards a less hierarchical and centralized settlement system after the Koszider period (Fischl *et alii* 2013; Duffy *et alii* 2019; see also David 2009 and Szeverényi, Kulcsár 2012 for a general discussion). The fact that *tell* and hilltop sites were abandoned is now explained through scenarios of socio-political reorganisation instead of catastrophic events, such as conflict or ethnic substitution, although the penetration of groups of newcomers (‘tumulus people’) still appears plausible and, obviously, historically important. Accordingly, the few but significant genetic data seem to confirm that from the EBA to the LBA in Hungary no significant population shift occurred (Gamba *et alii* 2014; Allentoft *et alii* 2015).

It is still not clear, however, whether we can effectively distinguish the various Central European populations or sub-populations of the second millennium BC through the analysis of ancient DNA, although the available few but significant genetic and isotopic data seem to confirm the presence of newcomers in EBA and MBA period (in Hungarian chronology between 2500 and 1500 BC; Gerling *et alii* 2013; Gamba *et alii* 2014; Allentoft *et alii* 2015; Olalde *et alii* 2018; Giblin *et alii* 2019). In any case, genetic studies are currently

providing extraordinary information that might shed light on the dynamics of crises of Bronze Age societies both in general and especially in the study of epidemics. In this regard, the recent identification of *Yersinia pestis* (bubonic plague) in Bronze Age individuals (1800 BC) from the Samara region of modern-day Russia, appears a promising field for those contexts that show significant/sudden changes in settlement patterns, as well as in material culture (see Spyrou *et alii* 2018; Mühlemann *et alii* 2018; Rascovan 2019).

Even if it was not ‘demographic’, the collapse of the former hegemonic centres, the *tell* sites, might have provoked far-reaching turbulence on a geopolitical level, and disrupted the previously established networks. The possibility that groups of people were forced to move from the *tells* to alternative more or less ‘friendly’ and distant regions is not implausible. Even if we assume that groups of people left the Danube plain and moved towards Northern Italy, it is probable that their demographic and genetic impact on the rising Terramare population (mostly local) was not so significant.

In other areas of Europe, population movements have been related to the spread of the *stric-tio sensu* Urnfields, in later phases. The genetic transect recently published seems to “*document gene flow into Iberia during the Late Bronze Age or Early Iron Age, possibly associated to the introduction of Urnfield tradition*” (Olalde *et alii* 2019, 2). Unfortunately, we currently have few genetic data from prehistoric Italy (the Iceman, three burials from Copper Age site at Remedello, and three burials from Bell Beaker site at Parma via Guidorossi; Allentoft *et alii* 2015; Olalde *et alii* 2018). Since not a single Bronze Age individual from Northern Italy has yielded aDNA so far, we cannot discuss whether any population dynamics eventually influenced the rise and florescence of the Terramare. In any case, the process of cremation during the MBA inhibits most aDNA analyses for this period, so we need a different strategy for highlighting contacts between the two areas.

In this paper, we apply a different approach, focussing neither on circulation of artefacts nor the migration of people. By reassessing Pigorini’s early insights from a modern trans-regional perspective, we aim instead to explore the spread of a funerary model, the ‘urnfield’, beyond its origin, the Danube-Carpathian Basin, into neighbouring

areas. For this reason, it is important to clarify what we mean by ‘urnfield’. For the purpose of our analysis we define these as cremation cemeteries that are characterized by a) a ritual consisting of the deposition of cremated bones in urns placed into pits; b) a large number of burials (hundreds or even thousands), often organized into groups, largely representative of the living community (except for perinatals and/or young children); and c) frequent reduction or exclusion of bronze grave goods (especially weapons) from the burial.

These are the characteristic traits of the *stricto sensu* ‘Urnenfelder’ from the Bz D/Ha A1 (1300/1200 BC) onwards. However, urn cremation cemeteries of this kind are also documented in the Carpathian Basin from at least the 25th century BC, when this new and complex way of treating and disposing of the dead starts to juxtapose or replace traditional flat inhumations and primary (*in situ*) or scattered cremations. As we will later argue, the urnfield model reaches its highest stage of standardization with the Vатья Culture in Central Hungary (ca. 2000/1900-1600/1500 BC). During the central centuries of the 2nd millennium BC (Bz B2-Bz C in Central European chronology; 1600-1300 BC), and in parallel with the decline of the *tell* sites, use of the ritual begins to be intensively practiced in other regions or isolated sites beyond its original boundaries, surrounded by communities practicing inhumation. Examination of this pre-*Urnenfelderzeit* phase, and on these ‘first urnfields’ of Bz B2-Bz C might therefore help to disentangle the dynamics of interactions on an ideological level.

We will briefly focus on three different areas¹ involved in this trans-regional network – Hungary, Lower Austria and the western and central Balkans – in order to determine the times and modes through which the urnfield model is locally adopted and interpreted. Finally, we will return to the response of the Terramare to this expanding novelty².

¹ In this text, the first paragraph is written by A. Cardarelli and C. Cavazzuti, the paragraph on the Carpathian Basin by V. Kiss, G. Kulcsár, T. Hajdu, K. Köhler, E. Melis, G. Szabó and V. Szeverényi, the paragraph concerning Austria by K. Rebay-Salisbury and M. Fritzl, the paragraph on the Balkans by M. Gavranovic. The conclusions are common to all the authors.

² For a detailed description of the funerary ritual in the area of the Terramare, see Cardarelli 2014, Cavazzuti and Salva-dei 2014, Salzani 2010.

THE DEVELOPMENT OF BURIAL CUSTOMS IN CENTRAL CARPATHIAN BASIN BETWEEN Bz A2 AND Bz C

Following earlier periods with cremation burials from Hungarian Early Bronze Age (Kulcsár 2009; 2011), cremation became the dominant rite in western and central Hungary from the beginning of the second millennium BC (Fischl *et alii* 2013, Zoffmann, Hajdu 2017).

In the central part of Hungary, communities of the Vатья Culture produced the largest ‘urnfields’, such as Dunaújváros-Duna-dűlő, where around 1600 graves have been excavated (Vicze 2011). The cemetery is associated with the *tell* settlement of Dunaújváros-Kosziderpadlás and is spatially organized into boat-shaped groups of graves, likely reflecting extended families or kinship units. The typical burial form is a large vessel covered by one or two bowls containing the cremated remains, which are arranged in anatomical order (skull on top; Vicze 2011, 54). In most cases, a small cup is placed inside the urn or next to it. For what concerns the grave good assemblages, we observe a progressive reduction of metal objects from earliest phases of the cemetery (2200-1700 BC) to Vатья III phase (1700/1600 BC; Vicze 2011, 80, 119, 124; Dani *et alii* 2016, 229-231).

In western Hungary, among cemeteries of Transdanubian Encrusted Pottery Culture, urn cremations are well-represented (ca. 250 burials), but less frequent than scattered cremations (ca. 480 burials). Urns are found in small pits, while scattered cremations, equipped with a dozen or even more vessels and sometimes bronze ornaments (10-20% of overall burials), are placed in oval or rectangular shaped pits, slightly smaller than body size (Sørensen, Rebay-Salisbury 2008b; Kiss 2012, 229-238; Szabó 2012). Cemeteries in this region are not as large as those of the Vатья area: they tend to be organized into burial groups according to both sex and age, with subadults accounting for 30-45% (Zoffmann 2011, 34-36).

Two cemeteries in particular exemplify the variety that characterizes Transdanubian Encrusted Pottery rituals: Mosonszentmiklós (1700-1500 BC) includes 22 scattered cremations, 31 urn burials and 22 cenotaphs (Kiss 2012) and Bonyhád, with 184 graves dating from 2150 to 1500/1450 BC, including around 85% of non-urned cremations, mainly of the initial phases, and 15% of urn

burials, more common in the advanced phases (Szabó 2012; Kiss *et alii* in press). In the earliest phase (Bz A1) of the Bonyhád cemetery inhumation was dominant, although two *in situ* cremations, with the body placed in the same position of the inhumations, clearly show the hybridization and transition from one rite to the other. A similar case is also known from Szőreg, a cemetery of the same period in eastern Hungary, related to the Nagyrév culture (Hajdu *et alii* 2016). As cremation proliferates, bronze grave goods significantly decrease in the later phase of Transdanubian Encrusted Pottery (Bz A2b-c), in parallel with the appearance of hoards (Kiss 2009; Dani *et alii* 2016, 232-233; Hajdu *et alii* 2016; Szeverényi, Kiss 2018).

With the beginning of the Tumulus Culture around 1500 BC, the number of inhumations increases. In western Hungary, graves typical of this phase are well represented by the fifteen tumulus burials from Keszthely-Sömögyei-dűlő. Here, the deceased were placed in a supine position with Boiu-Keszthely type swords, daggers and seal-headed pins. Sauerbrunn and Boiu swords clearly witness a close connection with the Terramare north of the Po River, and importantly, with Olmo di Nogara and Povegliano Veronese sites (Kemenczei 1988; Salzani 2005; Neumann 2009). In eastern Hungary, several larger cemeteries are known from the period (e.g. Jánoshida, Tiszafüred, Salgótarján-Zagyvapálfalva), characterized by urned and scattered cremation graves and inhumation burials (Csányi 2003, 2017; Guba, Vaday 2008; Fülöp, Váczi 2016). The increased variability of burial rites compared to the previous phases has been related to the integration between local groups and supposed newcomers (Hajdu 2008, 2012; Csányi 2017).

Stricto sensu urnfields appear in the subsequent phase (Bz D), showing more standardized characteristics: urn cremations are dominant and usually contain a few hundreds grams of cremated bones (Heußner 2010; Köhler, Polgár 2011).

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In Austria cremation appears sporadically in the Early Bronze Age (Reiter 2008). Most cremations can be dated either to earlier phases (Bell Beaker and Corded Ware rites), or to the transi-

tion to the Middle Bronze Age, as in the case of an urn burial of a 25-40-year-old pregnant woman at Franzhausen II (Neugebauer 1999, 487).

During the Middle Bronze Age (Bz B1-C2, c. 1600-1300 BC), funerary rituals change and cremation is practised alongside inhumation, usually under burial mounds. The relatively small number of burials and the ostentatious grave goods, including short swords, daggers and axes, suggest that only the upper social segment is archaeologically visible (Urban 2000; Probst 2011).

The cemetery at Pitten in Lower Austria is probably the most comprehensive illustration of how the transition to cremation unfolded in a small community south of the river Danube (Hampl, Kerchler, Benkovsky-Pivovarová 1981, 1985). Cremation is the dominant rite at Pitten. Seventy-five individuals were inhumed, while 154 were cremated. Of these latter, however, urn cremations represent a small minority (n=8) compared to *in situ* or scattered cremations (n=146). The first and second phases of the cemetery are characterized by the dominance of inhumation, while during the third and the fourth phases cremation progressively prevails. Within this trend, urn cremations seem to occur only in the last phases. This variety of rituals and the different forms of hybridization offer a privileged perspective for discussing the development of the urnfield model in Lower Austria.

Burial Mound 5, for example, covered the remains of a pyre oriented northwest-southeast, with the cremated bones of a female individual. Next to this, a mature male was inhumed oriented southeast-northwest, referencing the gendered body placement traditionally practised by Early Bronze Age communities south of the Danube. This opposite orientation of male and female individuals is also found in the double inhumation graves in other mounds. Moreover, *in situ* cremations were often found with dress elements and jewellery matching the correct body regions, in a form of emulation of the inhumed bodies. Grave 110, for example, was found with two pins in the shoulder region, a finger ring in the middle body region, and pottery at the head end and the side of the body.

These cases suggest that cremated body was still perceived and treated as whole corpse, according to the former tradition. By contrast, the introduction of urn cremation seems to mark a different attitude towards the human body, now

conceived as something that can be manipulated, dismembered, relocated. Cremated remains found in urns are also low in weight – a token, maybe symbolic, deposition rather than the entire body seems to have sufficed to represent the individual.

From a demographic perspective, the cemetery population has a roughly even distribution of males and females, and under 20-year-olds make up 47% of the population, as expected for societies that precede the introduction of vaccines. Among cremations, however, adult females occur slightly more frequently than males (58% and 42% respectively). It has been hypothesized that this uneven ratio might reflect a predominance of women in the later phases (Sørensen, Rebay 2008a, 159), although it might also result from a bias in sex determination methodologies, which tend to attribute female sex to more gracile males (e.g. Cavazzuti *et alii* 2019a).

The Pitten cemetery shows that rites gradually changed from inhumation to cremation. Cremation did not arrive as a ‘package’ of pre-formulated ideas and models, but was one element of the complex funerary rites experimented with. Cremations continued to share common characteristics of inhumations in terms of grave architecture, placing of bodies and artefacts, as well as post-funerary rituals at this cemetery (Sørensen, Rebay 2008b).

Although the cemetery reflects several steps in the development towards urnfields, it does not reach the standardisation and uniformity seen in Late Bronze Age cemeteries of the *Urnenfelderkultur*. The first *stricto sensu* urnfields attributed to the Middle Danubian Urnfield Culture (Lochner in press) appear in the 13th century BC, during Bz D. Typical Middle Bronze Age traits continue in the region. The cemetery of Baierdorf, for example, includes richly furnished graves with material culture suggesting contacts to the Po Valley (Lochner 1986).

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Similarly to the observed trend in other areas of the Danube plain and the Carpathian Basin, cremation represents the dominant burial rite of the Early Bronze Age Vinkovci-Somogyvár group (Kalafatić 2006), and in some isolated sites in central Balkans such as Meanište near Vranje in South Morava valley (Bulatović 2014). Incineration is practised as a secondary burial rite, more or less occasionally,

among several groups located in the mountainous area of Western Balkans, including Belotić-Bela Crkva (Garašanin 1983a; Kulcsár 2009), Glasinac (Čović 1983) and Cetina in Adriatic Hinterland (Marović 1991). The local variability of rituals (urns, scattered cremations, tumuli), however, indicates that cremation was an outcome of a selective process, subjected to local reinterpretation, rather than a widespread uniform burial practice.

From the Middle Bronze Age, the situation changes significantly, as urn cremation becomes predominant among regional groups along the Danube (Dubovac-Žuto Brdo, Belegiš I) and in continental area of central Balkans (Paraćin group), although along the Dinaric Alps and Dalmatia (the former Cetina area), cremation is totally absent (Teržan 2013).

The earliest urn cremation graves in the Danube area of today’s Croatia and Serbia are associated with the Bijelo Brdo-Szeremle group (Majnarić-Pandžić 1985; Medović 2007) and the early stage of the Vatin group (Garašanin 1983b; Ljuština 2012; Gogâltan 2014). Between 1800 and 1600 BC, the urn burial was apparently still not fully established in these two groups, since inhumation is also frequent. Inhumations are usually well-equipped with bronze jewellery and weapons, while cremations include few grave goods and these only occasionally (Vinski-Gasparini 1973; Hänsel 1968; Harding 1995). One notable exception is the area of northeastern Serbia where cremation in urns placed in stone circular constructions appears to be a dominant burial practice since 1900 BC (Kapuran, Gavranovic, Mehofer 2020).

Cemeteries matching our definition of ‘first urnfields’ can be found in Dubovac-Žuto Brdo-Gârla Mare (DŽG) group, a southern manifestation of the large trans-regional phenomena known as ‘Transdanubian Encrusted Pottery’ (Šimić 2000; Şandor-Chicideanu 2003; Reich 2006; Kiss 2011). Here, urns were placed in pits and regularly covered with bowls, while bronze objects are very uncommon. All demographic groups are proportionally represented among the buried population. The deposition of animal remains and additional vessels (jugs, cups and bowls) is quite frequent. Indicative of DŽG are also anthropomorphic statuettes with ornaments depicting clothes and jewelry, which are clearly correlated with child and infant graves (Palinkaş 2010; Vasić 2010).

The full adoption of the urnfield concept with a higher degree of uniformity, however, is attested

in the Belegiš I group, which both territorially (banks of the Danube) and chronologically (onset in the 15th century BC) partly overlaps with DŽG. Urnfields such as Karaburma (300 graves), Stojića gumno (155 graves) and Kaluđerske livade (88 graves) are characterized by the typical burial form comprising urns covered with bowls, generally containing the bones of one individual and, infrequently, bronze grave goods (e.g. pendants, bracelets) damaged by fire (Todorović 1977; Vranić 2002; Petrović 2006). Other accompanying vessels are quite rare (present in fewer than 5% of burials). In terms of spatial organization, the Belegiš cemeteries included several grave groups, interpreted as a family burial places (Todorović 1977; Della Casa 1996). Most of the cemeteries of Belegiš I continued to be in use during the subsequent period (Bz D-Ha A, or Belegiš II), without significant changes in burial practice.

At the same time, other local groups in Central Serbia, such as Paraćin, Brnjica, Western-Serbian group, use the urn cremation ritual. Despite the overall adoption of the various ritual traits of the urnfield model, these cemeteries are far too small for a reliable assessment of socio-demographic background. Moreover, differences are shown not only by material culture, but also in grave architectures: in the Paraćin area (Peković 2007), urns were placed within stone circuits at Trnjane and Magura in eastern Serbia (Kapuran 2014; Lazić 2016), in stone-slab constructions in the Brnjica area (Bulatović 2011), under tumuli in Western Serbia (Dmitrović 2017). This regional variety of grave constructions continued into the Urnfield period.

With the transition to the Urnfield Period (Bz D, Late Bronze Age), the area west of the Danube is characterized by the beginning of Barice-Gredani in the middle Sava valley in Bosnia and Croatia (Čović 1988; Marijan 2010) and Virovitica in the Drava valley of northern Croatia and Slovenia (Teržan 1999; Ložnjak-Dizdar 2014). Again, the two groups show significant differences. Urns are placed turned upside-down in Barice-Gredani, while among groups of Virovitica they are placed in an upright position. Although both areas are associated with the spreading of the early urnfields in Central European terms, the size of the cemeteries (ranging between 30 and 80 graves) seem to indicate rather small communities.

In conclusion, the adoption of the urnfield model in the Balkans can be dated on the beginning of Middle Bronze Age (18th - 16th), first in the areas along the Danube (Northeastern Serbia, Vatin group). What characterizes this area, however, is the variability in the degree of local adaption of the general trend, especially for grave architecture, while the rituals appear, to a certain degree, rather homogenous. Furthermore, with the exception of Belegiš I group, cemeteries are quite small and occupied for short periods. Unfortunately osteological analyses are not sufficiently extensive to provide detail of internal demographic composition. Despite the supra-regional trends, the same local variability can be observed in the cemeteries of the Urnfield period (Virovitica/Barice-Gredani group).

CONCLUSIONS

This condensed trans-regional overview shows that the early diffusion of the 'urnfield model' beyond modern-day Hungary was not a unilineal or uniform process. Different areas, characterized by long-term connections with the territory of the *tells*, adopted the innovation more or less simultaneously, but with local approaches. In some cases, such as the Danube plains of today's Croatia and Serbia (*Belegiš I*) or Emilia region (*Emilian terramare*), the new funerary custom was embraced quite radically, while in other areas, such as Lower Austria, it was subject to a long process of experimentation and hybridization with traditional rites. In the plain between Mincio and Adige River (*northern terramare*), urn cremation juxtaposed to the traditional rite of inhumation, and in Friuli Venezia Giulia, Istria and Dalmatia (*castellieri*) was not introduced until the final phases of the Bronze Age. Further analyses might clarify the reasons for this variability.

The introduction of a new funerary model, especially one so different from the former tradition, undoubtedly derived from changes of ideology. Social theoreticians argue that ideas travel with less resistance among similar societies and along the existing corridors of networks, which were previously established by trade or migration of individuals and groups (see Rogers 2003; McPherson, Smith-Lovin, Cook 2001). In the case of the two plains and the neighbouring areas, connections

were likely administered by warrior elites, highly motivated by the supply and demand of metal and metal objects.

Beside the circulation of goods, there was mobility of people in a geopolitical scenario that was probably destabilized by the crisis of the *tell* system. For instance, it has been recently demonstrated through strontium and oxygen isotope analyses, that large *terramare*, such as Scalvinetto di Fondo Paviani (15-20 ha), include up to 47% of non-indigenous individuals, from both the hinterland (<50 km), and from much more distant places, among which we cannot exclude the Danube plains (Cavazzuti *et alii* 2019b). The intense mobility of ‘rich’ individuals, especially high-status ‘women’ is revealed at Casinalbo not only by isotope data (Cavazzuti 2019b, 24), but also by the presence of pins, which are well documented in Bohemia (Cardarelli 2014, 599).

All these preliminary data and observations suggest that it is through the perspective of trans-regional mobility and social organization that we must consider cultural change and the variability of local responses to macro-trends.

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