

PUNTA DI ZAMBRONE I

1200 BCE – A TIME OF BREAKDOWN, A TIME
OF PROGRESS IN SOUTHERN ITALY AND GREECE

REINHARD JUNG (ED.)

Reinhard Jung (Ed.)
Punta di Zambrone I

AUSTRIAN ACADEMY OF SCIENCES
Austrian Archaeological Institute
Department of Prehistory & West Asian/Northeast African Archaeology

Oriental and European Archaeology

Volume 17

Series Editor: Barbara Horejs

Publications Coordinator: Ulrike Schuh

Reinhard Jung (Ed.)

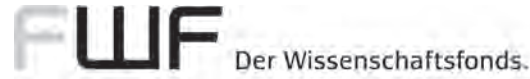
Punta di Zambrone I

**1200 BCE – a Time of Breakdown, a Time
of Progress in Southern Italy and Greece**

Accepted by the Publication Committee of the Division of Humanities
and the Social Sciences of the Austrian Academy of Sciences:

Michael Alam, Bert G. Fragner, Andre Gingrich, Hermann Hunger, Sigrid Jalkotzy-Deger, Renate Pillinger,
Franz Rainer, Oliver Jens Schmitt, Danuta Shanzer, Peter Wiesinger, Waldemar Zacharasiewicz

Printed with the support of the Austrian Science Fund (FWF) PUB 746-Z



Open access: Except where otherwise noted, this work is licensed
under a Creative Commons Attribution 4.0 Unported License. To view a copy of this licence, visit
<http://creativecommons.org/licenses/by/4.0/>

Picture on the opposite page:
Punta di Zambrone seen from the northeast (photo: M. Pacciarelli)

This publication was subject to international and anonymous peer review.
Peer review is an essential part of the Austrian Academy of Sciences Press evaluation process. Before any book can
be accepted for publication, it is assessed by international specialists and ultimately must be approved by the
Austrian Academy of Sciences Publication Committee.

The paper used in this publication is DIN EN ISO 9706 certified
and meets the requirements for permanent archiving of written cultural property.

English language editing: Nicola Wood
Graphics and layout: Markus Baumann, Crossdesign Graz
Coverdesign: Mario Börner, Angela Schwab

Some rights reserved.
ISBN: 978-3-7001-8615-1
Copyright © Austrian Academy of Sciences, Vienna 2021

Print: Wograndl Druck, Mattersburg

<https://epub.oeaw.ac.at/8615-1>

<https://verlag.oeaw.ac.at>

Made in Europe

Contents

Preface by the Series Editor	11
Reinhard Jung Introduction	13
Section 1: Punta di Zambrone	
Anja Buhlke Topography and Geomorphodynamics of Punta di Zambrone	37
Burkart Ullrich – Wieke de Neef – Anja Buhlke – Rudolf Kniess Geophysical Prospection and Verification at the Protohistoric Settlement of Punta di Zambrone (Calabria, Italy)	45
Paola Romano (†) – Elda Russo Ermolli – Maria Rosaria Ruello – Giuseppe Ferraro – Reinhard Jung – Valentino Di Donato – Nicoletta Insolubile – Marco Pacciarelli Coastal Landscapes at Punta di Zambrone (Capo Vaticano, Calabria) and their Suitability for Harbour Facilities during the Bronze Age	55
Reinhard Jung – Marco Pacciarelli The Settlement of Punta di Zambrone in its Local and Mediterranean Context during the Recent Bronze Age	67
Cristina Capriglione Punta di Zambrone (Calabria, Italy) and the Recent Bronze Age in the Southern Tyrrhenian Region	113
Bernhard Weninger – Cristina Capriglione – Reinhard Jung – Marco Pacciarelli The Absolute Chronology of the Recent Bronze Age at Punta di Zambrone	135
Marlies Klee – Barbara Zach – Ursula Thanheiser Archaeobotanical Investigations at Punta di Zambrone (Calabria, Italy)	157
Alessia D’Auria The Olive Tree and the Agroforestry Landscape at Punta di Zambrone during the Bronze Age	215
Gerhard Forstenpointner – Gabriela Slepecki – Alfred Galik – Gerald E. Weissengruber Faunal Remains from the Bronze Age Settlement at Punta di Zambrone (Calabria, Italy)	237

Fabian Kanz – Jan Cemper-Kiesslich – Nora Großschmidt – Reinhard Jung – Karl Großschmidt Human Remains from the Filling of the Bronze Age Fortification Ditch of Punta di Zambrone (Italy)	257
Jan Cemper-Kiesslich – Petra Kralj – Reinhard Jung – Fabian Kanz – Walther Parson Ancient DNA from Punta di Zambrone: Minute Traces of 3000-year-old DNA or ‘Much Ado About Nothing’?	267
Alistair W. G. Pike – Matthew J. Cooper – Gerhard Forstenpointner – Reinhard Jung – J. Andy Milton – Marco Pacciarelli Domesticate Animal Herding and Procurement Strategies, and the Childhood Origin of the Human Mandible (SP1) from the Bronze Age Site of Punta di Zambrone, Calabria, Italy: a Laser Ablation Sr Isotope Study	277
Tatjana M. Gluhak – Christoph Schwall – Reinhard Jung – Marco Pacciarelli Provenance Determination of Bronze Age Grinding Stones from Punta di Zambrone	289
Pamela Fragnoli The Impasto Pottery of Punta di Zambrone (Vibo Valentia, Calabria): Production, Use, Function and Exchanges within the South-Italian Recent Bronze Age Scenario	303
Pamela Fragnoli – Hans Mommsen – Reinhard Jung Production Regions and Technology of Pottery at Punta di Zambrone: NAA and Petrography in a Combined Approach	321
Reinhard Jung – Mathias Mehofer – Marco Pacciarelli – Ernst Pernicka The Metal Finds from Punta di Zambrone and Other Sites, and the Bronze Age Metal Supply in Southern Calabria	345
Christian-Heinrich Wunderlich Analysis of a Recent Bronze Age Amber Bead Fragment from the Site Punta di Zambrone	401

Section 2: The Central and Eastern Mediterranean

Claudia Minniti Animal Exploitation and Forms of Economic Interaction in Southern and Central Italy during the 13 th and 12 th Centuries BC	407
Alberto Cazzella – Giulia Recchia Coping with Changes: Social and Economic Developments at Coppa Nevigata during the 12 th Century BC	425
Riccardo Guglielmino Roca and its Aegean Contacts in the Recent Bronze Age	445
Reinhard Jung – Riccardo Guglielmino – Francesco Iacono – Hans Mommsen Neutron Activation Analysis of Aegean and Aegeanising Ceramics from Roca Vecchia and the Circulation of Pottery in Southern Italy	459

Marco Bettelli	
From the Aegean to the Ionian Sea: Pottery, Technology and People in the Plain of Sybaris in the Late Bronze Age	491
Eleftheria Kardamaki – Adamantia Vasilogamvrou	
Handmade Burnished Pottery in the Palace of Ayios Vasileios, Laconia (Southern Greece)	509
Salvatore Vitale	
‘Turn and Face the Strain’: Continuity and Change on Kos during the Mycenaean Late Palatial and Early Post-palatial Periods	527
Elisabetta Borgna	
The Trapeza Cemetery near Aigion: its Western Connection in a Diachronic Perspective . .	561
Index	587

Coping with Changes: Social and Economic Developments at Coppa Nevigata during the 12th Century BC

Alberto Cazzella¹ – Giulia Recchia²

Abstract: The fortified settlement of Coppa Nevigata was mostly devoted to transmarine and overland exchange throughout the whole Bronze Age. Craft activities, such as the production of purple dye, were developed early at the site, possibly in relation with these external trades. Wider transformations in the Late Bronze Age Mediterranean scenario impacted on the Adriatic networks, yet Coppa Nevigata maintained an active role in the local and transmarine trades. During the Recent Bronze Age, particularly in the 12th century BC, the site experienced major changes concerning both the settlement's plan and the rise of specialised craft production, such as the flourishing of the locally based production of Aegean–Mycenaean-type pottery. These changes were doubtless related to deep socio-economic transformations of the resident community. Evidence from the extensive excavations at the site points to the emergence of an elite in this period, which was possibly responsible for the reshaping of the settlement's organisation.

Keywords: Coppa Nevigata, Late Bronze Age, transmarine exchange, craft production, emerging elites

Introduction

At the dawn of the 12th century BC, the Coppa Nevigata settlement already had a long history as a centre devoted to overland and transmarine exchange (Fig. 1).³ According to our proposal for a phase sequence of the settlement, 1200 BC would approximately correspond to the passage between the Early and Late Subapennine (Recent Bronze Age 1 and 2).⁴ In that period the settlement's plan was significantly reshaped, probably in response to ongoing socio-economic transformations of the resident community, which are also indicated by the increase in specialised craft production at the site.

We will examine old and fresh evidence from the settlement that points to these significant transformations.⁵ Moreover, we will consider the extent to which major changes at a Mediterranean level affected the role played by Coppa Nevigata within the Adriatic exchange network.

Changes in the Settlement Organisation Possibly Related to the Arising of Social Inequalities

Starting from the late 13th century BC (RBA 1), the settlement layout underwent significant modifications in both the areas of the site that have been extensively explored: the northwest area (Puglisi's excavations 1972–1975) and the northeast area (current excavations).

¹ 'Sapienza' University of Rome, Department of Ancient World Studies, Italy; alberto.cazzella@uniroma1.it.

² 'Sapienza' University of Rome, Department of Ancient World Studies, Italy; giulia.recchia@uniroma1.it.

³ Apart from the occupancies preceding the Bronze Age, the long-lasting occupation of the site began around 1800 BC; Cazzella – Recchia 2012a.

⁴ Then it would indicatively correspond to the transition between LH IIIB and LH IIIC. The possible back-dating of this transition in the Aegean recently proposed by Wardle et al. 2014, which entails consequences for the South Italian Bronze Age chronology, appears at present to be inconsistent.

⁵ The manuscript of this paper was submitted in 2015 and discusses data acquired until then. Excavations at the site have continued, providing new pieces of evidence, some of which are briefly mentioned in the footnotes.

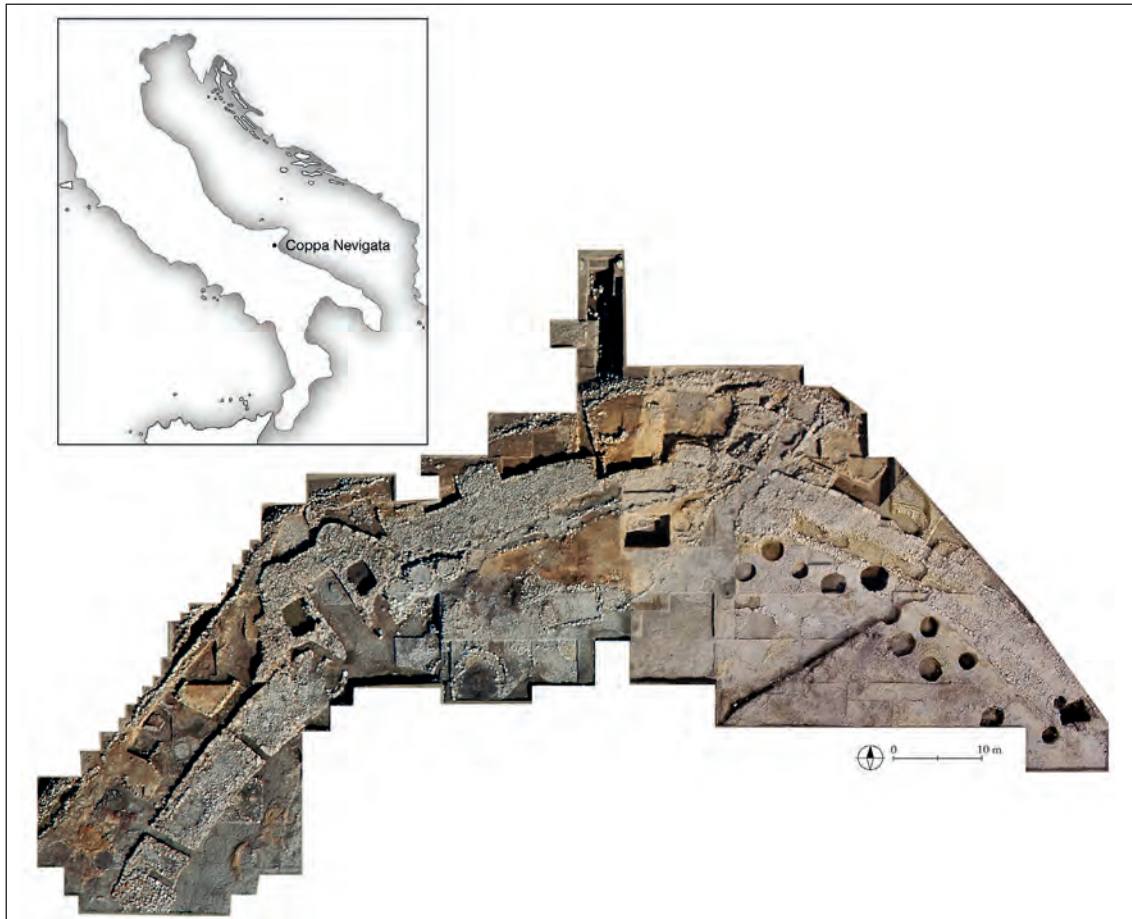


Fig. 1 The site of Coppa Navigata at the end of the 2015 excavation season (aerial photos: A. V. Romano 2006, F. Nomi 2010 and B. Mandelli 2015)

Alas, at present there is no way to stratigraphically correlate the deposits unearthed during these two seasons of excavations, due to the destructive action perpetrated in 1979, when the landlord dug deep trenches in different parts of the site with the precise purpose of erasing the archaeological remains. This action resulted in the clearing of all the structures that had been brought to light up until then and the destruction of the archaeological deposits at different parts of the site.

Northwest Area

During the Late Subapennine (RBA 2) the northwest area of the settlement was characterised by a series of structures and open spaces neatly arranged along the south side of a narrow path running above the remains of the preceding defensive Apennine (MBA 3) dry-stone wall.

The most notable structure was constituted by two adjacent quadrangular rooms, probably pertaining to the same building, which dated to an early phase of the Late Subapennine (early 12th century BC, RBA 2A). Having been sealed up by a collapse resulting from a fire, these have yielded significant evidence, although they were only partially exposed.⁶ The spatial distribution analysis has shown that each room was probably intended for different purposes: the northern for the storage of goods, and the southern for food processing and cooking.⁷ The south room has yielded a large quantity of burned seeds, whose spatial distribution suggests that they were kept

⁶ These rooms were excavated in 1975; Cazzella – Recchia 2012a, 308, fig. 105.

⁷ Moscoloni et al. 2002.

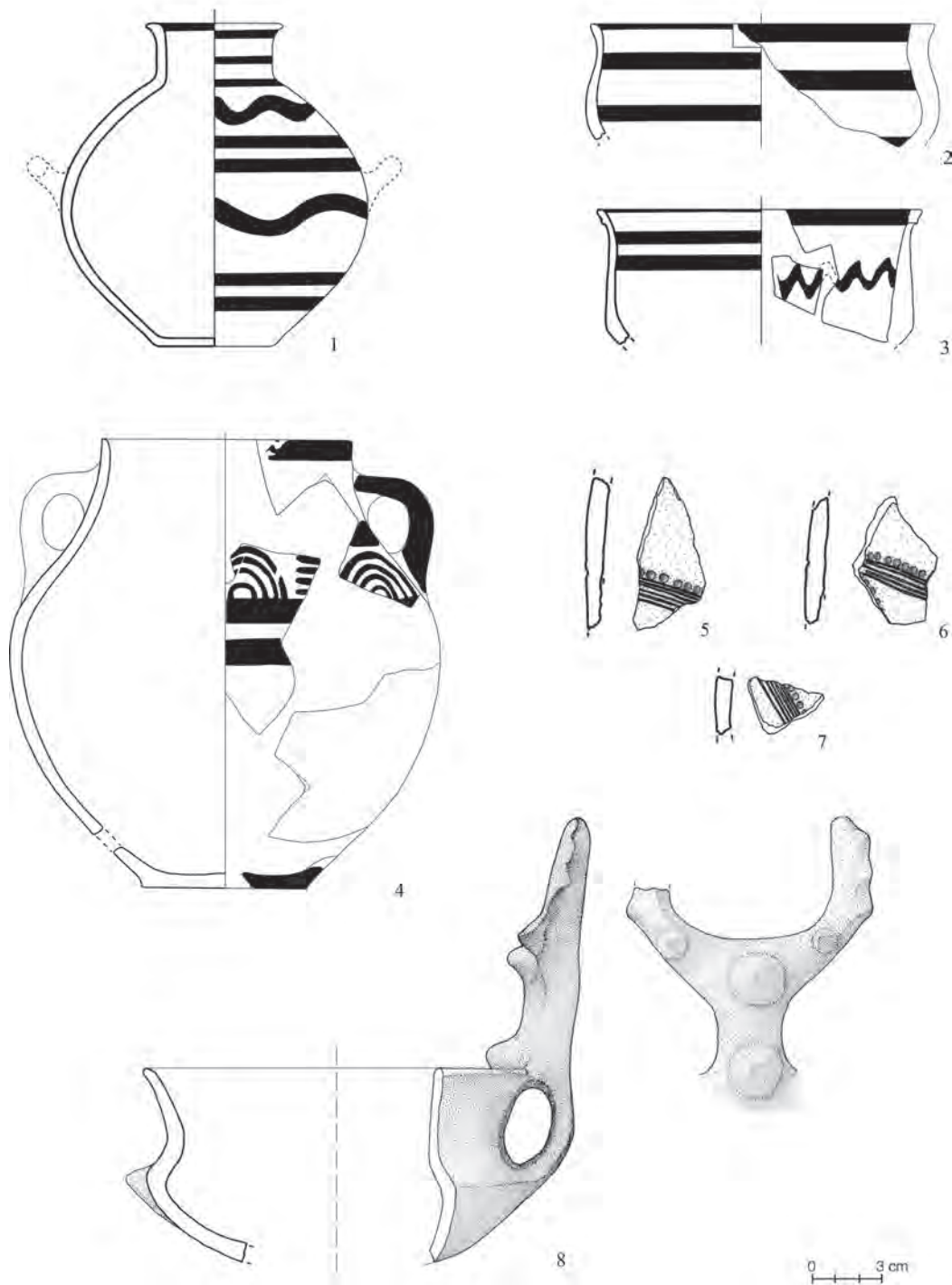


Fig. 2 Coppa Navigata, pottery from the Recent Bronze Age layers. 1–4. Aegean–Mycenaean-type pottery; 5–7. local *impasto* pottery with Proto-Villanovan-type decorations; 8. local Late Subapennine bowl. Scale 1:3 (drawings: 1–4 M. Bettelli and L. Vagnetti; 5–8 G. Recchia)

in sacks and possibly stored in a loft.⁸ Inside the same room three Mycenaean-type sherds have been found and a fourth was just outside it.⁹ Given their fragmentary status in contrast with the occurrence of several local vessels broken on the spot, these sherds are most likely residual.

⁸ Coccolini 1987; Moscoloni et al. 2002.

⁹ Recchia 2012a, 438, fig. 7; Vagnetti et al. 2012, nos. 29–32.

A cobbled open space was revealed in the excavation trench located a few metres to the south of the one yielding the two-room structure. This open space, which appears to be slightly later than the structure itself, was provided with a clay oven located on the eastern edge of the trench and was bounded on the northwest side by the abovementioned narrow path and on the southeast side by an earthen floor, possibly pertaining to a hut.¹⁰

The spatial analysis has indicated that the space was mostly used for the consumption of food, while the faunal remains scattered around the clay oven possibly resulted from carcass processing.¹¹ The area has yielded some Mycenaean-type sherds and close to the oven there was a LH IIIc amphora broken on the spot (Fig. 2.4).¹² According to the results of archaeometric analyses, this was possibly imported from the Peloponnese,¹³ although Lucia Vagnetti has argued that it may well be a local production considering its characteristics, such as the fabric, the poor rendering of the decoration and the matt quality of the painting.¹⁴

All in all, it seems probable that the open space was intended for ‘feasting’, involving more than one nuclear family, which also entailed the use of ‘fine’ pottery such as the Mycenaean-like vessels.

Northeast Area

Extensive excavations in the northeast area of the settlement, which began in 1983, have been providing critical data about the Recent Bronze Age Coppa Nevigata. It is now clear that substantial changes occurred starting from the second half of the 13th century BC (RBA 1B) that not only involved the settlement layout, but also the way in which resources were managed within the community.

Corroborative indication as regards this latter aspect is the evidence of household grain crop storage that recurs in various cases from the final phase of the Early Subapennine (RBA 1B) onwards. In fact, besides the abovementioned Late Subapennine (RBA 2A) two-room structure unearthed by Puglisi, large amounts of charred seeds have also been found in two domestic structures belonging to this phase, one located in the western sector of the northeast area¹⁵ and the other, discovered in 2015, in the southern sector (Fig. 3). This evidence contrasts with that of collective storage in silos, which could supply the needs of more than one extended family, prevailing in the previous periods (between 16th and early 13th centuries BC, MBA 2–RBA 1A)¹⁶ and appears to epitomise one of the symptomatic transformations of the Subapennine community.

As far as the spatial organisation of the settlement is concerned, it underwent substantial re-shaping starting from the 13th century BC (RBA 1). The massive defensive dry-stone wall of the 14th century BC (MBA 3) seems to have lost most of its functionality, yet the entrance gate (the only gate to the settlement we know for these periods) was rebuilt just above the predating entrance. It is probable that a new defensive line of a different kind was built on the top of the predating wall’s remains, as is also suggested by the pair of stone door sockets discovered at the sides of the doorway, meaning that the gate was inserted into a fence of some sort (either wooden and earth or dry-stone).

Deposits of crushed yellow limestone mixed with soil were intentionally accumulated against the inner face of the predating wall, forming two heaps, one to the east and one to the west of the gate. On the basis of the stratigraphic evidence, these appear to have been piled up in at least three stages, starting from the 13th century BC (RBA 1). Between the first and the second stages, a cur-

¹⁰ Moscoloni – Recchia 2012, 30, fig. 8; Moffa – Simeï 2012.

¹¹ Moscoloni et al. 2002.

¹² Vagnetti et al. 2012, nos. 33, 38, 39.

¹³ Jones – Levi 2012; Jones et al. 2014, 139–142.

¹⁴ Vagnetti 2012, 425.

¹⁵ Cazzella – Recchia 2012a, 295.

¹⁶ Cazzella – Recchia 2013, 198.

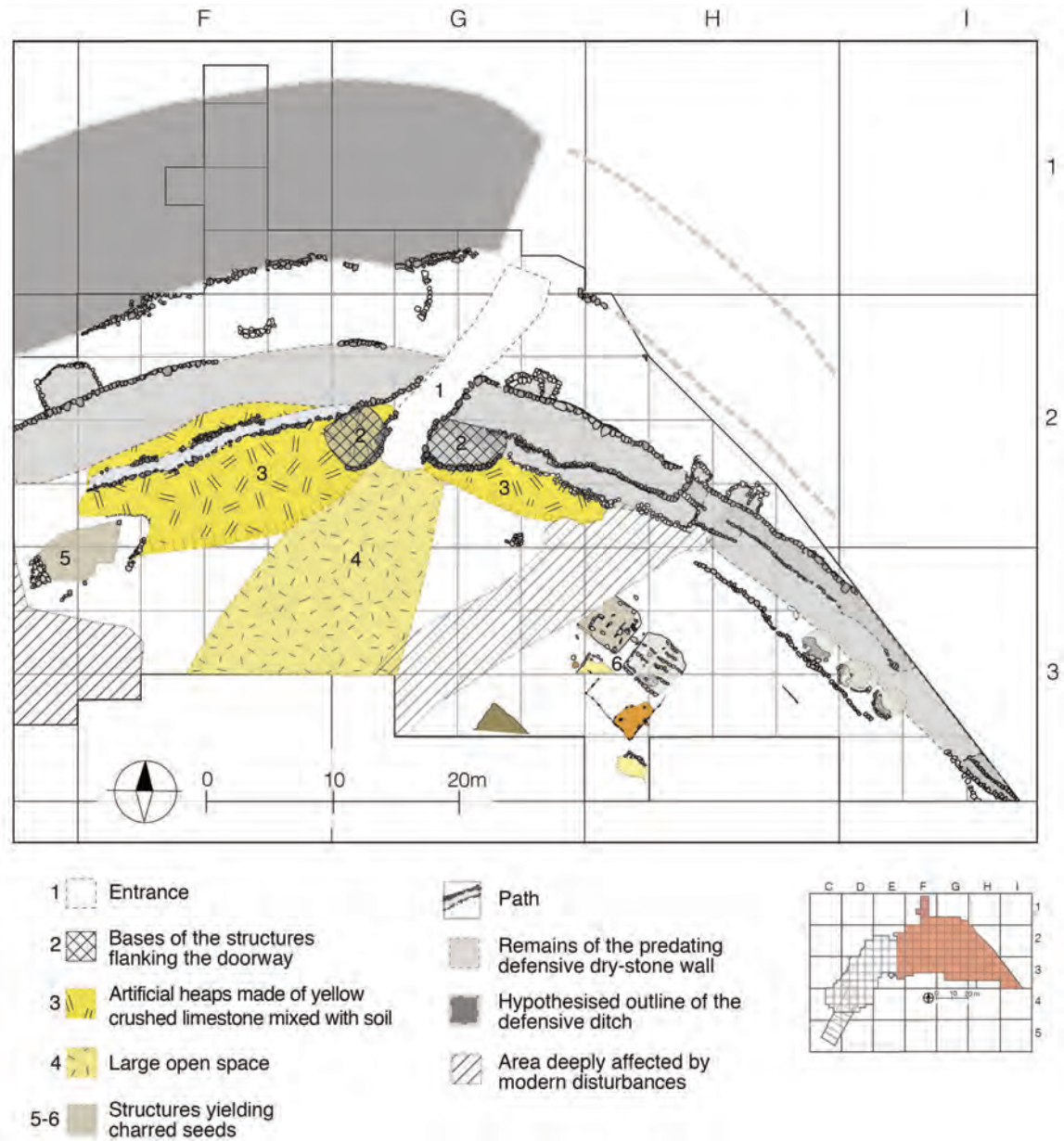


Fig. 3 Coppa Navigata, map of the Subapennine (13th–12th centuries BC, RBA) features brought to light in the north-eastern area of the settlement – lower strata (graphics: G. Recchia)

vilinear wall constituted by a single line of stones, probably the base of a structure, was built near the gate on the top of the eastern heap and was then enlarged after the second stage, reaching a final extension of more than 20m². This structure, located as it was on a high spot close to the gate (or one of the gates) might have had a defensive purpose, yet it protrudes towards the settlement rather than outwards. The topmost layers of the western heap were wiped out by the destructive event in 1979, but some traces indicate that a corresponding building was probably located there and it is therefore likely that this pair of buildings was intended to monitor the entry to the settlement or, in any case, connected to it.

The western pile of limestone mixed with soil is quite extensive, forming an artificial mound whose northern side was bordered by a narrow path. It overlooked a large open space of more than 150m², located in front of the entrance gate and directly approachable from the little road crossing it. It is difficult to tell whether the mound had actually been settled by a specific kin group at this stage or if it was just used for communal purposes, along with the nearby open space. This latter,

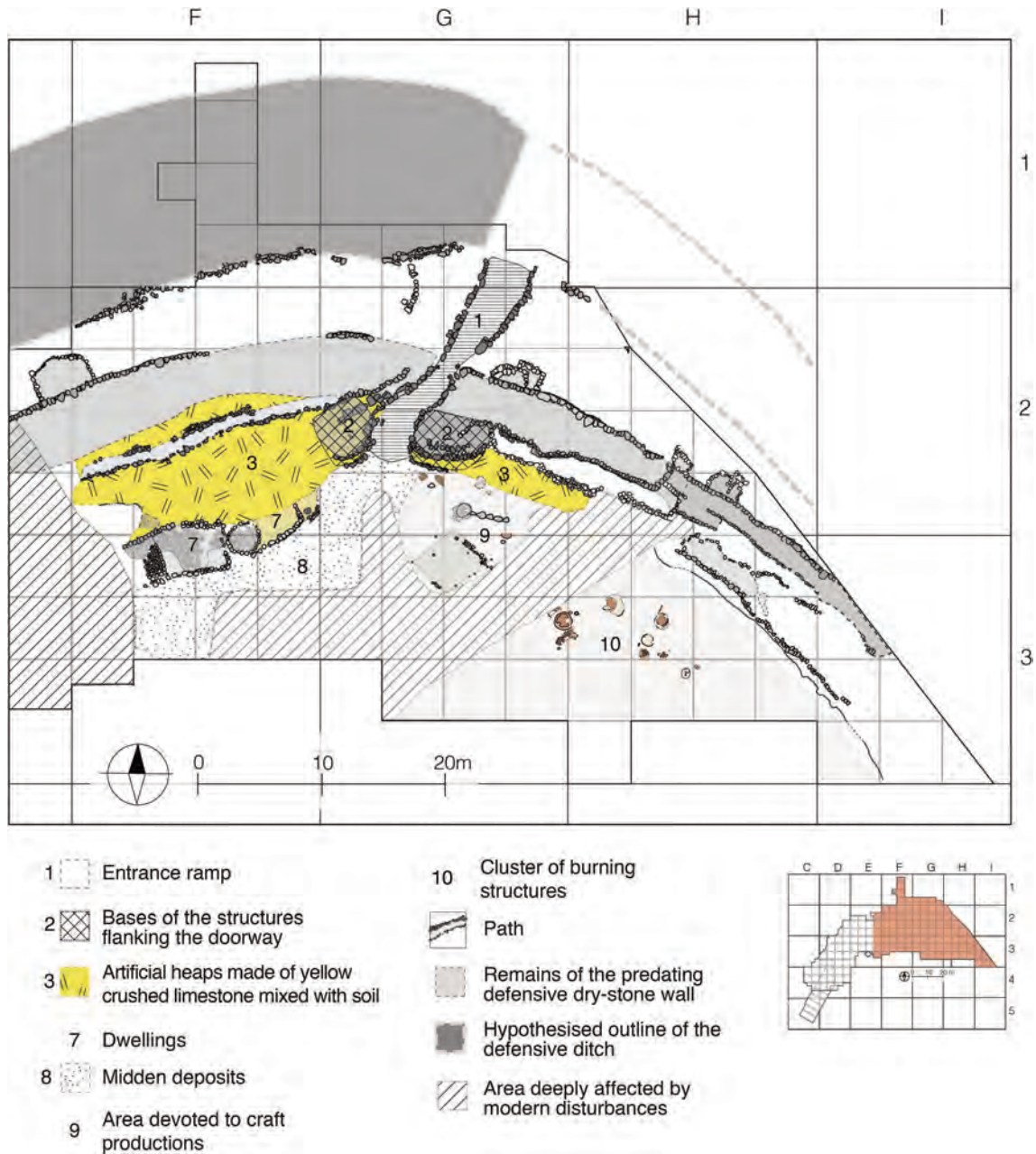


Fig. 4 Coppa Nevigata, map of the Subapennine (12th century BC, RBA 2) features brought to light on the north-eastern area of the settlement – upper strata (graphics: G. Recchia)

resembling a kind of ‘square’, was created in the late 15th century BC (MBA 3) and remained in use until the late 13th century BC (RBA 1B). It was floored several times,¹⁷ yet it was kept ‘empty’ (or at least free of detectable structures) throughout two centuries of use and its level remained lower than that of the surrounding areas. The actual function of this space is difficult to figure out. Quite possibly it served for collective purposes, perhaps related to exchange activities or symbolic practices, if not to both.¹⁸

¹⁷ The techniques adopted for the floorings differed through time. During the Apennine (14th century BC, MBA 3) these were made of cobbled layers, while in the Early Subapennine (13th century BC, RBA 1) they were made of layers of the same crushed yellow limestone mixed with soil that was used for the artificial accumulations near the gate.

¹⁸ Cazzella – Recchia 2015, 63.

On the southern slope of the western artificial ‘mound’ some structures were built during the final stage of the piling up process, approximately at the beginning of the Late Subapennine era (early 12th century BC, RBA 2A). In particular, two joined rectangular rooms and a small hearth located just outside the eastern room are recognisable (Fig. 4.7).¹⁹ We tend to think that these were part of the same building, which, given its distinctive location, was probably the residence of an emerging kin group. In any case, at this stage the mound seems to have definitely become a dwelling place. As mentioned above, the topmost layers of the ‘mound’ are not preserved, so we have no data about the existence of further buildings on this spot, which is nonetheless conceivable.

We would suggest a scenario in which a specific kin group took possession of an area of the settlement that was strategic on both a practical and a symbolical level, with the purpose of emphasising their prominent social position. The hypothesis that the Late Subapennine mound’s dwellers also occupied the abovementioned couple of structures flanking the gate is tempting, but unfortunately there is no supporting evidence for it.

To the south of the eastern pile of crushed yellow limestone there is an area provided with some facilities that were likely intended for craft activities. This, in fact, has yielded both complete artefacts, especially adornments, and in-work antler and bone objects (see next paragraph).

From the early 12th century BC onwards (RBA 2A), concurrently with the dwelling on the slope of the ‘mound’, the large open space (or ‘square’) began to be filled up with extended deposits characterised by burnt patches, probably deriving from dumping. These, in fact, are kind of midden deposits, containing a lot of organic remains (charcoals, seeds and animal bones) possibly resulting from the preparation and consumption of food, as well as ceramic sherds, among which a number of pieces of locally produced Aegean-Mycenaean-type pottery stand out (e.g. Fig. 2.1–3).

The deposition process of the midden layers, whose precise duration is difficult to determine but did not extend beyond the 12th century, eventually resulted in the complete filling of the gap between the ground level of the ‘square’ and that of the contiguous areas, with a stratigraphic depth of c. 0.50m.

The drastic shift in the pattern of use of the ‘square’, or rather its complete obliteration, is perhaps the major change that occurred in the 12th century BC (RBA 2), entailing not only a transformation in the topographic organisation of the settlement, but also a socio-ideological turning point.

Having said that, although garbage disposal inside the settlement might not have been perceived as bothersome as it is today, the occurrence of deposits related to dumping activities near the entrance of the settlement, ‘invading’ a former communal space, deserves more thorough investigation.

In all likelihood, these deposits resulted from both the activities carried out in the close vicinity of the abovementioned two-rooms building²⁰ and reiterated disposals of ‘waste’ coming from repeated activities,²¹ implying the use of fire and probably food consumption.

A cluster of burning structures has been revealed in an area located to the southeast of the former open space filled up by midden deposits (Fig. 4.10). The cluster, covering a space of c. 80m², includes the remains of eight sub-circular clay hearths and a small clay oven, which are spatially divided into two groups according to their size (and possibly specific function): four medium-sized clay hearths (with diameters of c. 1.5m) to the west, and four small-sized ones

¹⁹ Cazzella – Recchia 2012a, 296–298, figs. 87–89. Recently the spatial analysis of this area has been carried out taking into consideration the spatial distribution of both artefacts and ecofacts. This has provided precious information on the patterns of activities performed there (Recchia et al. in press).

²⁰ See above n. 19.

²¹ It is worth noticing that these midden deposits have also yielded five human bones that pertain to different individuals, as they differ in age and gender, showing traces of post-mortem manipulation (namely one burned pelvis fragment of a female, one burned cranium fragment of a young male with fresh traces of cuts, one cranium fragment of an adult male, one metatarsal of a juvenile and one metacarpal of an adult). We tend to think that these were related to symbolic practices entailing the manipulation of skeletal parts, which had a long tradition at Coppa Nevigata (Recchia 2012b).

(with diameters of c. 0.90m) plus the small oven (1.2m in diameter) to the east. The clay hearths of both sizes are made of a layer of potsherds resting on a pure clay bed and enclosed by a whitish clay kerb. In various cases, a new structure was superimposed directly over a pre-existing one.²²

Despite these structures testifying to a set of actions related to food preparation and perhaps consumption, the deposits extending over and near this cluster were far less rich in both organic remains and ceramic sherds (including Italo-Mycenaean sherds) than the abovementioned midden deposits.

Unfortunately, a direct stratigraphic correlation between the two areas has been made impossible owing to the gap caused by the destructive action perpetrated in 1979. Nevertheless, on the grounds of the pottery types occurring in both areas these are likely to be coeval.

From an interpretive point of view, the two situations appear to be somehow complementary. In fact, the cluster of burning structures exemplifies a place devoted to the collective preparation and consumption of food and drink, perhaps related to feasting.²³ On the other hand, the relatively small presence of organic remains and sherds may imply that the resulting waste was disposed of somewhere else.

In any case, the functional shift of the former large open space also implies that the patterns of activities that were once carried out there were moved elsewhere and/or managed differently. Had these activities encompassed collectively managed exchange, this latter would no longer have taken place on this spot and perhaps would have become controlled by specific kin groups.

Following this hypothesis, the concurrence between the building of (private) dwellings on the artificial mound and the functional shift of the large open space might not have happened by chance, as it might have entailed a synchronicity between the emergence of a specific kin group and the end of exchange activities in a collective area. In this scenario, a distinctive kin group, whose power was increasing, settled on the artificial mound and ‘privatised’ a former communal area of the settlement. From then on, exchange within the community and with external partners would have been progressively controlled by this group, which, at the same time would have promoted feasting in order to enhance its own power. (G. R.)

Changing Organisation and Scale of Craft Production

Some kinds of production that required specific knowledge of the process appear to have occurred at Coppa Nevigata over the preceding centuries, yet these developed decisively from the 12th century BC (RBA 2) onwards.

A production that seems to distinguish Coppa Nevigata from the coeval southern Italian sites is that of purple dye, which requires not only the local availability of Murex shells but also some technical knowledge. This production, which possibly involved the whole community rather than a few specialised individuals, emerged at the site as far back as the 18th century BC (late Early Bronze Age), had its peak in the 15th–14th centuries BC (MBA 2–3) and then a sharp decrease from the 13th century BC (RBA 1) onwards (Fig. 5A).²⁴ At present, it is difficult to say whether this trend is affected by a bias in the archaeological record (for instance, during the RBA crushed Murex shells could have been disposed of in some areas of the settlement that have yet to be excavated), or whether it reflects an actual decline in this production, possibly due to a decreasing demand for purple dye from the Mycenaeans.²⁵

²² In 2017 a peculiar structure has been brought to light to the south-east of this cluster of burning structures. It is horseshoe-shaped and defined by a clay bench with a series of raw clay rings. Inside the semicircle, the structure was provided with a clay hearth. Various fragments of portable clay ovens lay on the surface of this installation (Cazzella – Recchia 2018a). In all likelihood, this structure too was devoted to the preparation of collective meals.

²³ Hayden 2001.

²⁴ Minniti 2012; Minniti – Recchia 2018; Minniti, this volume.

²⁵ Cazzella et. al. 2004.

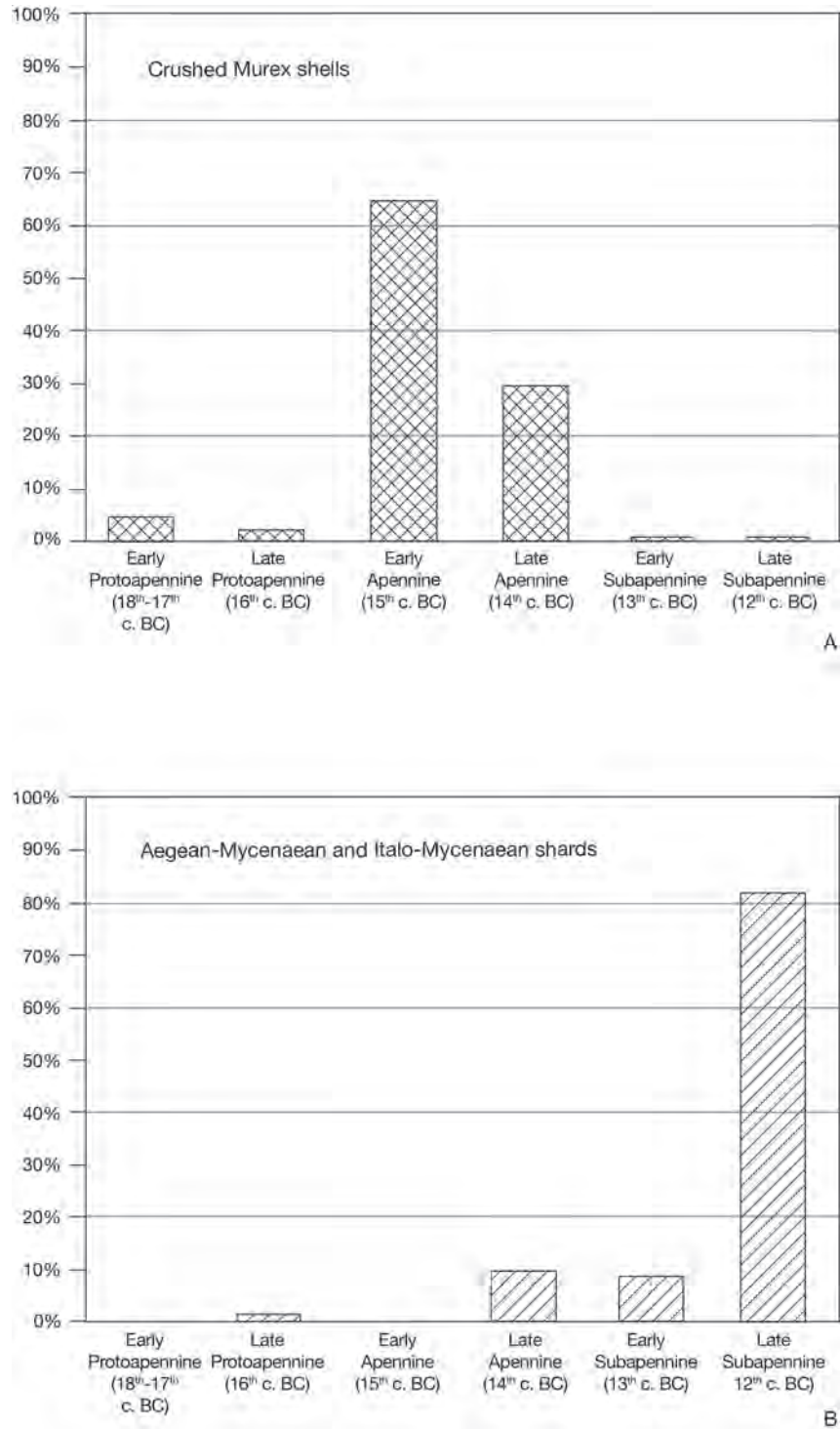


Fig. 5 Coppa Nevigata, frequency distribution of crushed murex shells (A) and Aegean–Mycenaean-type pottery (B) across the various periods (graphics: C. Minniti, G. Recchia)

By contrast, the production of Italo-Mycenaean pottery at the site appears to take off in the late Recent Bronze Age (Fig. 5B).²⁶ As is well known, the local production of Italo-Mycenaean pottery, which started in MBA 3, spread over the whole of southern Italy and beyond during the RBA, and

²⁶ Vagnetti 2012; Vagnetti et al. 2012.

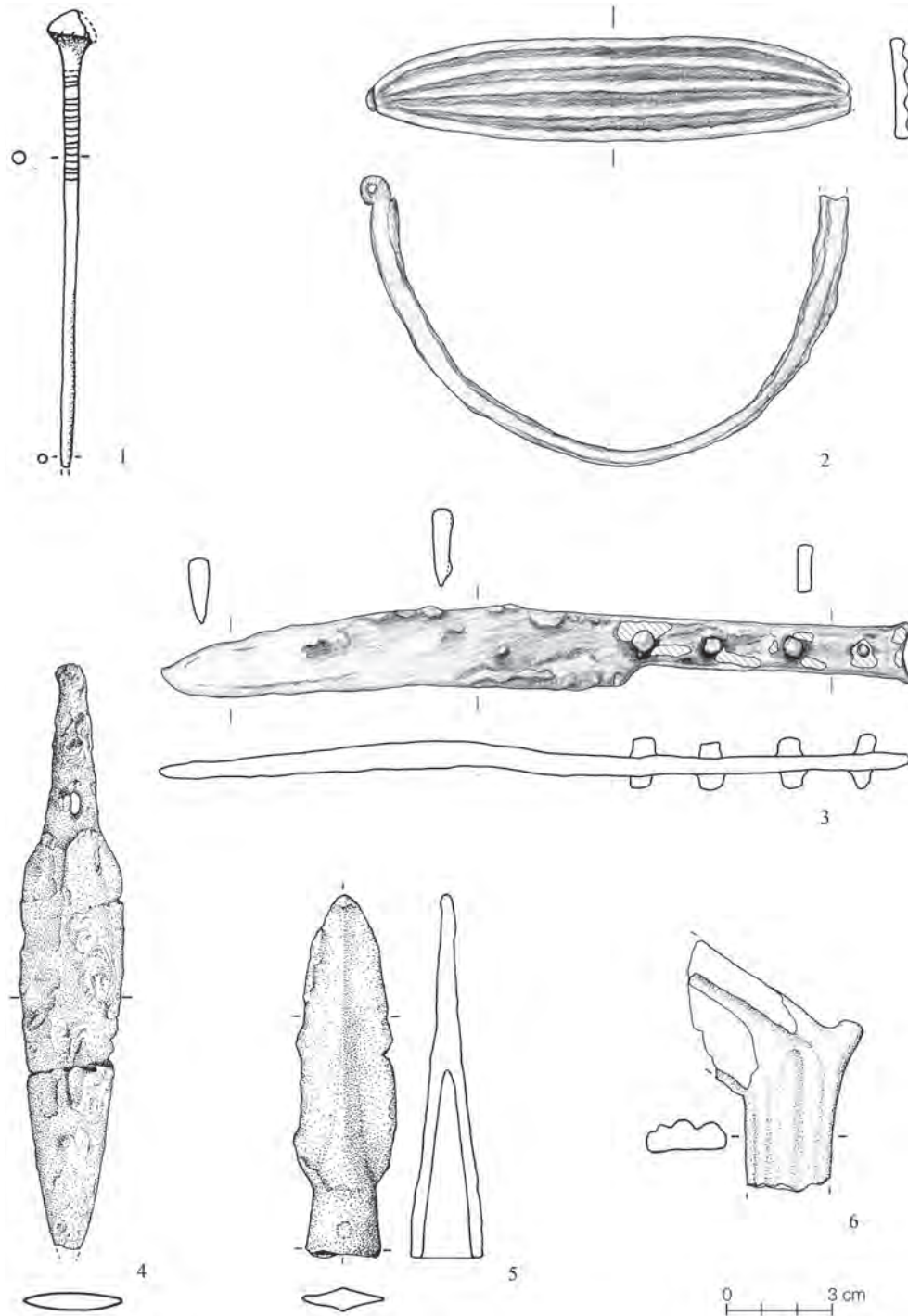


Fig. 6 Coppa Nevigata, Recent Bronze Age bronze artefacts. 1. Biandronno-type pin (Naples museum); 2. necklace decorated with a series of parallel ribs from the ongoing excavations in the northeastern area; 3. knife of type Scoglio del Tonno from the ongoing excavations in the northeastern area; 4. dagger of type Torre Castelluccia from Puglisi's excavations; 5. spearhead of type Pila del Brancòn from the ongoing excavations in the northeastern area, 6. Muscoli-type sickle from Quagliati's excavations. Scale 1:2 (drawings: 1, 6 modified from Belardelli 2004; 2–3 G. Recchia; 4–5 C. Placidi)

therefore Coppa Nevigata does not represent an exception in that respect.²⁷ Yet, the southern Apulian sites where this local production flourished generally had a prior well-established tradition of

²⁷ Jones et al. 2014, 15–16.

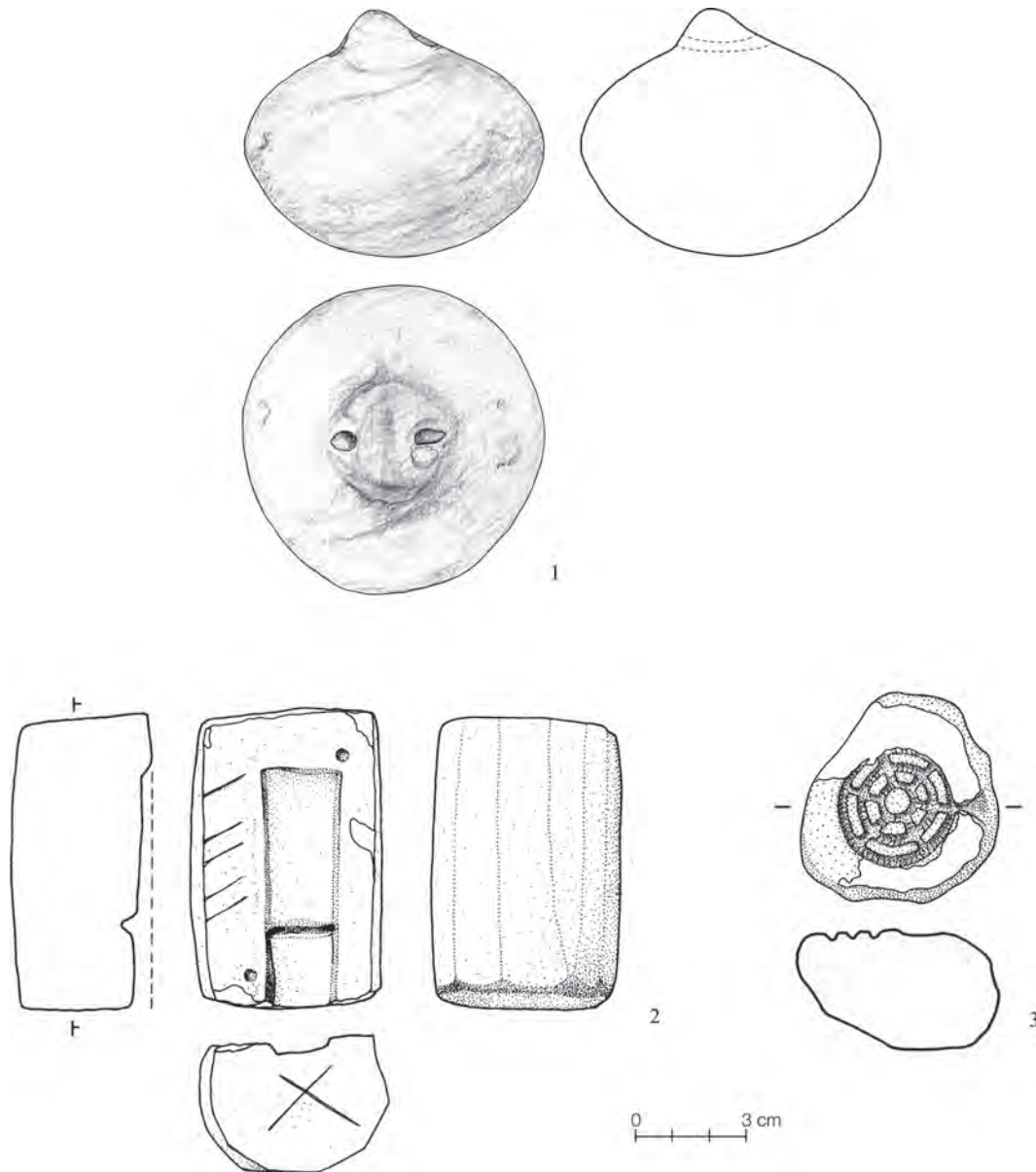


Fig. 7 Coppa Nevigata, Recent Bronze Age stone weight and stone moulds. 1. rounded stone weight perforated for suspension at the top from the ongoing excavations on the northeastern area; 2. stone mould from Mosso's excavations; 3. stone mould from the ongoing research. Scale 1:2 (drawings: 1, 3 G. Recchia; 2 modified from Belardelli 2004)

Aegean-Mycenaean pottery imports,²⁸ whereas, at Coppa Nevigata (and in northern Apulia in general) only a few sherds of this kind occur in Apennine–Early Subapennine layers (MBA 3–RBA 1),²⁹ as if the communities of this area had little interest in this exotic pottery.³⁰ This might imply that at the dawn of the 12th century something changed, as the demand for this alluring item rose sharply. The local manufacturing of wheelmade figulina pottery is strictly related to the vexed question of how local potters acquired the knowledge to produce such refined pottery. Given the absence of any evidence related to stable foreign presences at Coppa Nevigata, we tend to think that, at least in this case, no Aegean potters settled there. Indigenous craftsmen might well have mastered the

²⁸ E.g. Roca Vecchia, S. Sabina and Scoglio del Tonno: Jones et al. 2014, 144, 146–147, 153–158.

²⁹ Recchia 2012a.

³⁰ Radina – Recchia 2006.

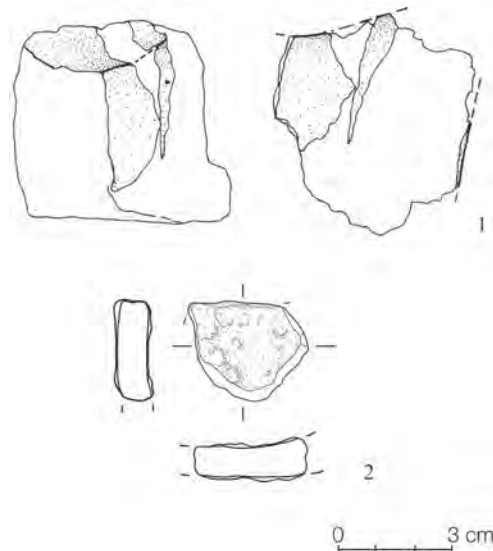


Fig. 8 Coppa Navigata, metal fragments possibly pertaining to ingots. 1. Fragment that may be interpreted as part of an ox-hide ingot, coming from the dig related to the reclaiming of the lagoon; 2. fragment from Puglisi's excavations in the northwest area of the settlement. Scale 1:2 (1 modified from Belardelli 2004; 2 drawing G. Recchia)

production of Italo-Mycenaean vessels and over time become full-time specialised potters. R. Jung has recently suggested a specific model of interaction between indigenous and Aegean potters.³¹

The occurrence of bronze artefacts becomes substantial in the late Recent Bronze Age deposits (Fig. 6).³² Moreover, it is to this period that pieces of evidence pointing to the local production of metal objects can be dated, such as the presence of both limestone moulds (Fig. 7.2–3) and metal fragments possibly pertaining to ingots (Fig. 8; a peculiar fragment possibly pertaining to an ox-hide ingot is discussed in detail in the next paragraph).³³ These traces also refer to the presence at the site of locally based specialised bronze workers.

Bone and antler manufacturing possibly developed into a specialised activity in this period as well (Fig. 9). For instance, as mentioned above, the area localised just to the south of the eastern pile of crushed yellow limestone has yielded a group of semi-finished bones showing traces of metal saw cuts. In the same area, various types of ornaments made of different raw materials (metal, rock crystal quartz and perhaps ivory) and a rounded stone weight have also been found (Figs. 7.1; 9.4; 10),³⁴ which lead to the hypothesis that composite adornments were manufactured and/or assembled there, as probably happened at other coeval or slightly later sites, such as Roca, Moscosi di Cingoli, Scarceta and Maccaresse.³⁵

This overall increase in craft production at the site may well be related to an upsurge in the role Coppa Navigata played as a functionally distinct centre devoted to these activities. The rise of a social hierarchy within the community could have favoured this trend, yet this does not necessarily imply that the site had established political territorial control. In fact, at present there is no evidence in Recent Bronze Age northern Apulia of a settlement pattern based on central places surrounded by satellite settlements. On the contrary, long-lasting major settlements, usually located on the coast or at high spots overlooking trade routes, appear to be topographically separated from clusters of hamlets, commonly located inland.³⁶

³¹ Jung 2005, 59–60.

³² Cazzella 2012.

³³ Recchia 2009; Cazzella 2012.

³⁴ Cazzella – Recchia 2016.

³⁵ Poggiani Keller et al. 2002; Sabbatini – Silvestrini 2005; Bietti Sestieri 2008, 32–33; Pagliara et al. 2008, 267–268; Maggiulli 2009; Ruggeri et al. 2010.

³⁶ Cazzella – Recchia 2017b.

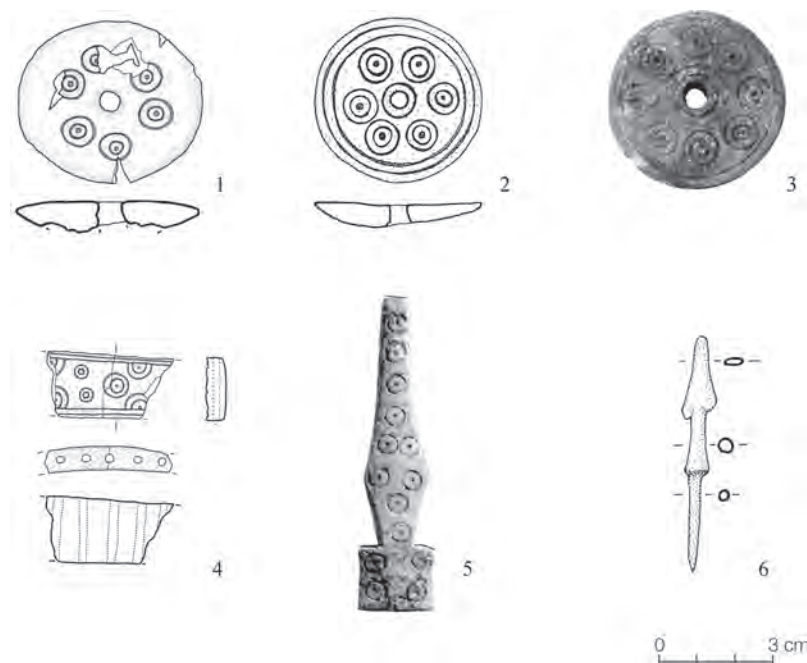


Fig. 9 Coppa Nevigata, Recent Bronze Age antler and bone artefacts. 1–3. incised round-shaped ornaments from the ongoing excavations on the northeastern area; 4. decorated necklace spacer, possibly made of ivory, from the ongoing excavations in the northeastern area; 5. decorated grip from Puglisi's excavations, 6. arrowhead with elongated stem from Puglisi's excavations. Scale 1:2 (1–2, 4, 6 drawings G. Recchia; 3 photo G. Recchia; 5 photo F. Scarpelli)

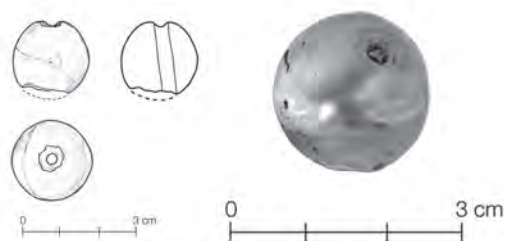


Fig. 10 Coppa Nevigata, Recent Bronze Age rock crystal bead from the ongoing excavations on the northeastern area (drawing and photo: G. Recchia)

Exchange Activities

The role played by Coppa Nevigata in managing external exchange has a long history too, and in this respect the site might not have actually grown in importance after 1200 BC.

The site maintained exchanges with various cultural and geographic regions that are indicated by the circulation of artefacts and raw materials, besides the stylistic similarities with pottery productions across quite an extended territory.

As far as metallurgic production is concerned, the rise of a 'metallurgical koiné' encompassing the Italian peninsula and the eastern Mediterranean is a well-known phenomenon. Nevertheless, on closer investigation some regional differences are detectable for the circulation of specific models and objects, which suggest that preferential contacts were established between certain areas.³⁷

³⁷ Some discussions of the relationships between northeastern Italy and the eastern Mediterranean are presented in Cassola Guida 1999 and Jung 2009, 73–74, 89 fig. 1.

As for pottery production, close comparisons can, in particular, be drawn with pottery assemblages from Recent Bronze Age sites in Molise and southern Apulia/the Ionic gulf, such as Oratino,³⁸ Porto Perone and Termito, whereas the similarities with pottery from sites such as Canosa and Roca appear to be limited, but this might be due to the patchy distribution of sites sharing similar cultural traits that characterise southeastern Italy during the late 13th–12th centuries BC (RBA 1 and 2).³⁹ Some of the metal artefacts occurring at Coppa Nevigata, namely Scoglio del Tonno-type knives and Torre Castelluccia-type daggers (Fig. 6.3–4), also exemplify connections with southern Apulian centres.

Differentiated exchanges with further regions are testified to by an array of goods. Tight relationships with the *terramare* area and Marche are illustrated by antler and bone artefacts, such as incised round-shaped ornaments and grips and arrowheads with elongated stems (Fig. 9),⁴⁰ and the abovementioned sub-spherical stone weight perforated for suspension at the top (Fig. 7.1).⁴¹ Amber and amber beads (i.e. the Tiryns-type bead)⁴² were possibly acquired from Veneto (perhaps via *terramare*). Metal weapons (i.e. the Pila del Brancòn-type spearhead, Fig. 6.5) and ornaments (i.e. Biandronno-type pin, Fig. 6.1)⁴³ are also related to contacts (direct or mediated) with Veneto and Lombardia. Moreover, the Proto-Villanovan-type decoration occurred at Coppa Nevigata as far back as the 12th century BC (RBA 2) (Fig. 2.5–7)⁴⁴ and was possibly conveyed here through the mediation of the Italian northeastern or central-eastern centres with which the site was in contact.

Connections with the eastern Adriatic coast were still flourishing during the Late Bronze Age too, as parallels between various metal artefacts from Coppa Nevigata and northeastern Adriatic and Balkan sites, ranging from ornaments to tools and weapons (Fig. 6.2, 6), would indicate.⁴⁵

In addition to the small number of Aegean–Mycenaean vessels that are likely to have been imported, other goods, including rock crystal and perhaps ivory and copper,⁴⁶ possibly came from the Eastern Mediterranean.

It is now widely accepted that from the 12th century BC onwards (if not earlier), Cypriot–Levantine sailors ventured into the Adriatic corridor and directly reached the northwestern Adriatic centres (i.e. Fondo Paviani, Frattesina and perhaps Campestrin di Grignano Polesine – where Tiryns-type amber beads were manufactured).⁴⁷ This might imply, however, that southwestern Adriatic settlements decreased in importance as intermediary centres in the exchange network between eastern Italy and the eastern Mediterranean,⁴⁸ a role they certainly played within the Mycenaean connection. This notwithstanding, coastal Apulian settlements doubtless maintained an active role in transmarine exchange, and Cypriot–Levantine sailors probably visited them. A possible piece of evidence supporting this hypothesis is a fragment of a peculiar metal object coming from the dig carried out at Coppa Nevigata in relation to the reclaiming of the lagoon⁴⁹ that may be interpreted as part of an oxhide ingot (Fig. 8.1).⁵⁰

³⁸ Copat – Danesi 2017.

³⁹ Cazzella – Recchia 2017a, 460–463, fig. 3.

⁴⁰ Bernabò Brea – Cardarelli 1997, figs. 190.14, 195.5, 204.2; Provenzano 1997, 531, figs. 295.13, 298.9; Pasquini 2005; Cupitò 2006, fig. 22; Recchia et al. 2010, 302.

⁴¹ Cardarelli et al. 1997, 636.

⁴² Bellintani 2010, 145.

⁴³ Belardelli 2004, 98, fig. 34.1; Jung – Mehofer 2012.

⁴⁴ Cazzella – Recchia 2012b, pls. 19.9–17; 36A.

⁴⁵ In particular, a bronze necklace decorated with a series of parallel ribs, a bracelet with spiral-shaped end, a Muscoli-type bronze sickle and a Pazhok-type spearhead all belonging to the Recent Bronze Age occur at Coppa Nevigata. Cazzella – Recchia 2016; Cazzella – Recchia 2018b.

⁴⁶ Cazzella – Recchia 2016.

⁴⁷ Cassola Guida 1999; Bettelli et al. 2015; Bellintani et al. 2015; Bietti Sestieri et al. 2015.

⁴⁸ Cazzella 2009; Borgna 2013, 137–138.

⁴⁹ C. Belardelli suggested that this was a fragment of an anvil (Belardelli 2004, 101, fig. 35.21).

⁵⁰ Cazzella 2012, 190.

What still remains an open problem is the provenance of the metal used at Coppa Nevigata. Lead isotope analysis carried out on a Pila del Brancòn-type spearhead (Fig. 6.5)⁵¹ has indicated that the raw material is not compatible with Trentino sources,⁵² while it is close to Cypriot copper, although not completely compatible with it because of its trace element pattern.

Concluding Remarks

Ongoing socio-economic transformations of the community inhabiting Coppa Nevigata during the RBA left good archaeological traces. The settlement layout was significantly reshaped over this period and in the 12th century BC it appears to have been definitely renovated with the complete conversion of the former large open space that had probably served public purposes and the construction of domestic building(s) on the artificial mound piled up near the gate.

The settlement plan now included some areas possibly intended for feasting (or in any case for food preparation/consumption involving a number of inhabitants), which differ in size and position. In one case (the northwestern sector of the settlement), a relatively small space of this kind interposes the dwellings and could have been related to the family units living in this specific area, while in the northeastern sector a far wider space seems devoted to these activities, possibly fostered by the elite group. It is in this period, in fact, that the establishing of a social hierarchy at the site is conspicuous.

One of the symptomatic transformations of the RBA community is the evidence of crop storage inside domestic structures rather than in communal spaces, which took place from the late 13th century BC onwards. We are inclined to think that the tendency towards an increasing social relevance of nuclear families might have been correlative to the gradual emergence of elite groups.⁵³ In fact, a growing division within kin groups can be associated with the rising of economic inequality between families. Both demographic ‘success’, related to the number of children and the longevity of family members, and economic ‘success’, deriving from harvest and breeding fluctuations, might well result in an imbalance between the various families. Nevertheless, the demographic/economic factor in itself may not suffice to explain a phenomenon such as the ‘privatisation’ of critical areas of the settlement (i.e. the artificial mound close to the settlement’s gate and the adjoining open space). It is likely that the emerging family group (or kin group) that was allowed to inhabit the artificial mound and possibly to manage the activities carried out in the surrounding spaces had achieved social recognition. Moreover, this group might have stood out from the rest because its size was larger than that of average families.

Wider transformations that were taking place in the Mediterranean during the 12th century BC (RBA 2) apparently did not negatively affect Coppa Nevigata, or, at least, they did not hamper the rise of a social hierarchy and the flourishing of specialised craft production. Nevertheless, the mutated scenario of transmarine networks must have caused the site to adapt to new equilibriums. The possible direct arrival of Cypriot–Levantine sailors in the northern Adriatic, for instance, might have resulted in the site losing its role as a hub between the northern and the southern Adriatic centres. Yet, it appears that Coppa Nevigata maintained an active role in exchange activities at both overland and transmarine levels, as testified by the occurrence of artefacts and raw materials of different kinds and origins encompassing various cultural and geographic regions, besides the affinities with pottery productions covering a more extended area. (A.C.)

Acknowledgements: We are indebted to R. Jung for his useful comments on the draft of this paper.

⁵¹ Jung et al. 2011, 242; Jung – Mehofer 2012.

⁵² Therefore, this spearhead was manufactured at the site, rather than imported from northern Italy.

⁵³ Cazzella – Recchia 2013, 203.

Bibliography

Belardelli 2004

C. Belardelli, *Coppa Nevigata. Materiali da scavi e rinvenimenti 1903–1909, Grandi contesti e problemi della Protostoria italiana* 8 (Florence 2004).

Bellintani 2010

P. Bellintani, *Ambra, una materia prima dal Nord (ma non solo)*, in: Radina – Recchia 2010, 141–146.

Bellintani et al. 2015

P. Bellintani – L. Salzani – G. de Zuccato – M. Leis – C. Vaccaro – I. Angelini – C. Soffritti – M. Bertolini – U. Thun Hohenstein, *L'ambra dell'insediamento della tarda Età del bronzo di Campestrin di Grignano Polesine (Rovigo)*, in: Leonardi – Tinè 2015, 419–426.

Bernabò Brea – Cardarelli 1997

M. Bernabò Brea – A. Cardarelli, *Le terramare nel tempo*, in: Bernabò Brea et al. 1997, 295–378.

Bernabò Brea et al. 1997

M. Bernabò Brea – A. Cardarelli – M. Cremaschi (eds.), *Le Terramare. La più antica civiltà padana* (Milan 1997).

Bettelli et al. 2015

M. Bettelli – M. Cupitò – S. T. Levi – R. Jones – G. Leonardi, *Tempi e modi della connessione tra mondo egeo e area padano-veneta. Una riconsiderazione della problematica alla luce delle nuove ceramiche di tipo miceneo di Fondo Paviani (Legnago, Verona)*, in: Leonardi – Tinè 2015, 377–387.

Bietti Sestieri 2008

A. M. Bietti Sestieri, *L'età del Bronzo finale nella penisola italiana*, *Padusa* 44, 2008, 7–54.

Bietti Sestieri et al. 2015

A. M. Bietti Sestieri – P. Bellintani – L. Salzani – I. Angelini – B. Chiaffoni – J. De Grossi Mazzorin – C. Giardino – M. Saracino – F. Soriano, *Frattesina. Un centro internazionale di produzione e di scambio nell'Età del bronzo del Veneto*, in: Leonardi – Tinè 2015, 427–436.

Borgna 2013

E. Borgna, *Di periferia in periferia. Italia, Egeo e Mediterraneo orientale ai tempi della koinè metallurgica. Una proposta di lettura diacronica*, *Rivista di Scienze Preistoriche* 63, 2013, 125–153.

Borgna – Càssola Guida 2009

E. Borgna – P. Càssola Guida (eds.), *Dall'Egeo all'Adriatico. Organizzazioni sociali, modi di scambio e interazione in età postpalaziale (XII–XI sec. a. C.) / From the Aegean to the Adriatic. Social Organizations, Modes of Exchange and Interaction in Postpalatial Times (12th–11th c. BC)*, *Atti del Seminario internazionale (Udine, 1–2 dicembre 2006)*, *Studi e ricerche di protostoria mediterranea* 8 (Rome 2009).

Cardarelli et al. 1997

A. Cardarelli – M. Pacciarelli – P. Pallante, *Pesi da bilancia nell'età del Bronzo?*, in: Bernabò Brea et al. 1997, 629–642.

Cassola Guida 1999

P. Cassola Guida, *Indizi di presenze egeo-orientali nell'Alto Adriatico alla fine dell'età del bronzo*, in: V. La Rosa – D. Palermo – L. Vagnetti (eds.), *επί πόντον πλαζόμενοι*. Simposio Italiano di Studi Egei dedicato a L. Bernabò Brea e G. Pugliese Carratelli, Roma, 18–20 febbraio 1998 (Rome 1999) 487–497.

Cazzella 2009

A. Cazzella, *Exchange Systems and Social Interaction during the Late Bronze Age in the Southern Adriatic*, in: Borgna – Càssola Guida 2009, 159–169.

Cazzella 2012

A. Cazzella, *I manufatti in metallo dagli scavi in estensione 1972–75 a Coppa Nevigata*, in: Cazzella et al. 2012, 185–192.

Cazzella – Recchia 2012a

A. Cazzella – G. Recchia, *Un trentennio di nuove ricerche a Coppa Nevigata. L'organizzazione dell'abitato e i sistemi di difesa durante le varie fasi dell'età del Bronzo*, in: Cazzella et al. 2012, 246–318.

Cazzella – Recchia 2012b

A. Cazzella – G. Recchia, La ceramica d'impasto degli scavi in estensione 1972–1975. Analisi tipologica e confronto con i dati dagli scavi 1955–1971, in: Cazzella et al. 2012, 47–157.

Cazzella – Recchia 2013

A. Cazzella – G. Recchia, The human factor in the transformation of southern Italian Bronze Age societies. Agency Theory and Marxism reconsidered, *Origini* 35, 2013, 191–209.

Cazzella – Recchia 2015

A. Cazzella – G. Recchia, Spazi aperti e strade a Coppa Nevigata durante l'età del Bronzo alla luce delle più recenti scoperte, *Scienze dell'Antichità* 21, 1, 2015, 49–67.

Cazzella – Recchia 2016

A. Cazzella – G. Recchia, Elementi di ornamento dall'abitato dell'età del Bronzo di Coppa Nevigata, in: N. Negroni Catacchio (ed.), *Atti del XII Incontro di Studi 'Preistoria e Protostoria in Etruria'*, Valentano (VT) – Pitigliano (GR) – Manciano (GR), 12–14 settembre 2014. Ornarsi per comunicare con gli uomini e con gli Dei. Gli oggetti di ornamento come status symbol, amuleti, richiesta di protezione. *Ricerche e scavi (Milan 2016)* 359–372.

Cazzella – Recchia 2017a

A. Cazzella – G. Recchia, Confini geografici e temporanei permeabili fra Bronzo Recente e Bronzo Finale nell'Italia centro-meridionale adriatica, in: A. Angelini – M. Cupitò – M. Vidale – V. Donadel (eds.), *Beyond Limits. Studi in Onore di Giovanni Leonardi*, *Antenor Quaderni* 39 (Padua 2017) 457–468.

Cazzella – Recchia 2017b

A. Cazzella – G. Recchia, L'abitato fortificato di Coppa Nevigata e il suo ruolo nel sistema economico e politico della Puglia settentrionale, in: F. Radina (ed.), *Preistoria e Protostoria della Puglia*, *Studi di Preistoria e Protostoria* 4 (Florence 2017) 465–471.

Cazzella – Recchia 2018a

A. Cazzella – G. Recchia, Una struttura connessa con attività di *feasting* a Coppa Nevigata?, *Scienze dell'Antichità* 24, 1, 2018, 219–230.

Cazzella – Recchia 2018b

A. Cazzella – G. Recchia, Coppa Nevigata e i suoi rapporti con la *facies* dei Castellieri, in: E. Borgna – P. Càssola Guida – S. Corazza (eds.), *Preistoria e Protostoria del Caput Adriae*, *Studi di Preistoria e Protostoria* 5 (Florence 2018) 289–300.

Cazzella et al. 2004

A. Cazzella – C. Minniti – M. Moscoloni – G. Recchia, L'insediamento dell'età del Bronzo di Coppa Nevigata e la più antica attestazione della produzione della porpora in Italia, *Preistoria Alpina* 40 Suppl. 1, 2004, 177–182.

Cazzella et al. 2012

A. Cazzella – M. Moscoloni – G. Recchia (eds.), *Coppa Nevigata e l'area umida alla foce del Candelaro* (Foggia 2012).

Coccolini 1987

G. Coccolini, Studi sui resti vegetali di un abitato dell'età del Bronzo, in: S. M. Cassano – A. Cazzella – A. Manfredini – M. Moscoloni (eds.), *Coppa Nevigata e il suo territorio* (Rome 1987) 197–199.

Copat – Danesi 2017

V. Copat – M. Danesi, Il sito della Rocca di Oratino (CB) nel contesto del versante Adriatico meridionale, in: F. Radina (ed.), *Preistoria e Protostoria della Puglia*, *Studi di Preistoria e Protostoria* 4 (Florence 2017) 1005–1009.

Cupitò 2006

M. Cupitò, Tipocronologia del Bronzo medio e recente tra l'Adige e il Mincio sulla base delle evidenze funerarie, *Salutarie dal laboratorio del Piovego* 7 (Padua 2006).

Hayden 2001

B. Hayden, Fabulous feasts. A prolegomenon to the importance of feasting, in: M. Dietler – B. Hayden (eds.), *Feasts. Archaeological and Ethnographic Perspectives on Food, Politics and Power* (Washington, London 2001) 23–64.

Jones – Levi 2012

R. E. Jones – S. T. Levi, Nuove analisi archeometriche della ceramica di tipo egeo-miceneo di Coppa Nevigata, in: Cazzella et al. 2012, 445–452.

Jones et al. 2014

R. E. Jones – S. T. Levi – M. Bettelli – L. Vagnetti, *Italo-Mycenaean Pottery. The Archaeological and Archaeometric Dimensions*, *Incunabula Graeca* 103 (Rome 2014).

Jung 2005

R. Jung, *Aspetti del commercio mykenico e dello scambio di prodotti*, in: B. Horejs – R. Jung – E. Kaiser – B. Teržan (eds.), *Interpretationsraum Bronzezeit. Bernhard Hänsel von seinen Schülern gewidmet*, *Universitätsforschungen zur prähistorischen Archäologie* 121 (Bonn 2005) 45–70.

Jung 2009

R. Jung, *Pirates of the Aegean. Italy – East Aegean – Cyprus at the end of the second millennium BCE*, in: V. Karageorghis – O. Kouka (eds.), *Cyprus and the East Aegean. Intercultural Contacts from 3000 to 500 BC. An International Archaeological Symposium held at Pythagoreion, Samos, October 17th–18th 2008* (Nicosia 2009) 72–93.

Jung – Mehofer 2012

R. Jung – M. Mehofer, *Analisi archeologiche ed archeometriche di una punta di giavellotto del Bronzo Recente da Coppa Nevigata*, in: Cazzella et al. 2012, 453–456.

Jung et al. 2011

R. Jung – M. Mehofer – E. Pernicka, *Metal exchange in Italy from the Middle to the Final Bronze Age (14th–11th century B.C.E.)*, in: P. P. Betancourt – S. C. Ferrence (eds.), *Metallurgy. Understanding How, Learning Why. Studies in Honor of James D. Muhly*, *Prehistory Monographs* 29 (Philadelphia 2011) 231–248.

Leonardi – Tinè 2015

G. Leonardi – V. Tinè (eds.), *Studi di Preistoria e Protostoria 2, Preistoria e Protostoria del Veneto* (Florence 2015).

Maggiulli 2009

G. Maggiulli, *Metallurgia e produzioni metallurgiche a Roca (Lecce). I ripostigli del Bronzo Finale*, *Rivista di Scienze Preistoriche* 59, 2009, 307–334.

Minniti 2012

C. Minniti, *La raccolta di molluschi marini a Coppa Nevigata nell'età del Bronzo*, in: Cazzella et al. 2012, 367–387.

Minniti – Recchia 2018

C. Minniti – G. Recchia, *New evidence on purple dye production from the Bronze Age settlement of Coppa Nevigata (Apulia, Italy)*, in: M. S. Busana – M. Gleba – F. Meo – A. R. Tricomi (eds.), *Textiles and Dyes in the Mediterranean Economy and Societies. Proceedings of the VIth International Symposium on Textiles and Dyes in the Ancient Mediterranean World, Purpureae Vestes VI* (Zaragoza 2018) 87–97.

Moffa – Simeì 2012

C. Moffa – S. Simeì, *Analisi dei frammenti di intonaco di capanna dagli scavi in estensione 1972–75 a Coppa Nevigata*, in: Cazzella et al. 2012, 229–234.

Moscoloni – Recchia 2012

M. Moscoloni – G. Recchia, *Gli scavi Puglisi-Palmieri in estensione 1972–1975 a Coppa Nevigata*, in: Cazzella et al. 2012, 27–46.

Moscoloni et al. 2002

M. Moscoloni – G. Recchia – I. Baroni – C. Minniti, *Coppa Nevigata. Analisi funzionale delle strutture subappenniniche dei settori E4 e D5 (scavi Puglisi – Palmieri in estensione)*, in: C. Peretto (ed.), *Analisi informatizzata e trattamento dati delle strutture di abitato di età preistorica e protostorica in Italia* (Florence 2002) 443–465.

Pagliara et al. 2008

C. Pagliara – R. Guglielmino – L. Coluccia – I. Malorgio – M. Merico – D. Palmisano – M. Ruge – F. Minnonne, *Roca Vecchia (Melendugno, Lecce), SAS IX. Relazione stratigrafica preliminare sui livelli di occupazione protostorici (campagne di scavo 2005–2006)*, *Rivista di Scienze Preistoriche* 58, 2008, 239–280.

Pasquini 2005

M. Pasquini, *L'industria su corno di Moscosi di Cingoli. Forme principali e loro diffusione*, in: Istituto Italiano di Preistoria e Protostoria (ed.), *Atti della XXXVIII Riunione Scientifica "Preistoria e Protostoria delle Marche"*, Portonovo, Abbadia di Fiastra, 1–5 ottobre 2003 (Florence 2005) 985–991.

Poggiani Keller et al. 2002

R. Poggiani Keller – I. Baroni – C. Minniti – G. Recchia, Scarceta (Manciano – GR). Analisi dell'uso dello spazio nella struttura del Bronzo finale relativa al settore D, in: C. Peretto (ed.), *Analisi informatizzata e trattamento dati delle strutture di abitato di età preistorica e protostorica in Italia* (Florence 2002) 355–367.

Provenzano 1997

N. Provenzano, *Produzione in osso e corno delle terramare emiliane*, in: Bernabò Brea et al. 1997, 524–544.

Radina – Recchia 2006

F. Radina – G. Recchia, *Scambi senza ceramica: ambra, avorio e pasta vitrea nei rapporti tra Italia sud-orientale e mondo egeo*, in: Istituto Italiano di Preistoria e Protostoria (ed.), *Atti della XXXIX Riunione Scientifica “Materie prime e scambi nella preistoria italiana”*, Firenze, 25–27 novembre 2004 (Florence 2006) 1555–1566.

Radina – Recchia 2010

F. Radina – G. Recchia (eds.), *Ambra per Agamennone. Indigeni e Micenei tra Adriatico, Ionio ed Egeo* (Bari 2010).

Recchia 2009

G. Recchia, *Attività di scambio e sviluppi sociali a Coppa Nevigata (Manfredonia – Puglia) durante la tarda età del Bronzo*, in: Borgna – Càssola Guida 2009, 219–234.

Recchia 2012a

G. Recchia, *Distribuzione spaziale della ceramica di tipo egeo-miceneo nei diversi livelli di frequentazione dell'abitato dell'età del Bronzo di Coppa Nevigata*, in: Cazzella et al. 2012, 431–444.

Recchia 2012b

G. Recchia, *Sepulture e resti umani nelle varie fasi dell'abitato dell'età del Bronzo di Coppa Nevigata*, in: Cazzella et al. 2012, 389–409.

Recchia et al. 2010

G. Recchia – E. Cristiani – C. Lemorini – V. Copat – M. Bettelli – C. Ruggini, *Coppa Nevigata, Manfredonia (Foggia), in Radina – Recchia 2010*, 270–302.

Recchia et al. in press

G. Recchia – E. Lucci – G. Fiorentino – C. Minniti – V. Mironti – M. Primavera – G. Siracusano – M. Vilmercati, *Interpreting long-lived-in dwelling spaces. Integrated spatial analysis of a Late Bronze Age area at Coppa Nevigata (south-eastern Italy)*, in: L. Jallot – A. Peinetti, *Lieux de vie et espaces domestiques. Organisations fonctionnelles et stratégies sociales / Use of Space and Domestic Areas. Functional Organisation and Social Strategies*, UISPP Proceedings Series (in press).

Ruggeri et al. 2010

D. Ruggeri – M. Gala – A. Facciolo – M. C. Grossi – C. Morelli – M. L. Rinaldi – S. Sivilli – E. Carrisi – D. Citro – F. R. De Castro, *Località Le Vignole – Maccarese (Fiumicino, Roma). Risultati preliminari dello scavo protostorico*, in: *Atti del IX Incontro di Studi Preistoria e Protostoria in Etruria* (Milan 2010) 327–338.

Sabbatini – Silvestrini 2005

T. Sabbatini – M. Silvestrini, *Piano di Fonte Marcosa, Moscosi di Cingoli. Un sito pluristratificato dell'Appennino marchigiano. Le fasi del Bronzo Recente*, in: Istituto Italiano di Preistoria e Protostoria (ed.), *Atti della XXXVIII Riunione Scientifica “Preistoria e Protostoria delle Marche”*, Portonovo, Abbadia di Fiastra, 1–5 ottobre 2003 (Florence 2005) 639–657.

Vagnetti 2012

L. Vagnetti, *Osservazioni sulle ceramiche di tipo egeo-miceneo da Coppa Nevigata*, in: Cazzella et al. 2012, 423–426.

Vagnetti et al. 2012

L. Vagnetti – M. Bettelli – G. Recchia, *Catalogo delle ceramiche di tipo egeo-miceneo dall'abitato dell'età del Bronzo di Coppa Nevigata*, in: Cazzella et al. 2012, 411–422.

Wardle et al. 2014

K. Wardle – Th. Higham – B. Kromer, *Dating the end of the Greek Bronze Age. A robust radiocarbon-based chronology from Assiros Tomba*, PLoS ONE, 9, 9, 2014, e106672. doi:10.1371/journal.pone.0106672

This monograph presents a significant portion of the scientific results of the archaeological excavations at the Bronze Age settlement site of Punta di Zambrone on the Tyrrhenian coast of Calabria (southern Italy). These excavations were conducted from 2011 to 2013 in an Italian-Austrian cooperation. The book is the first in a series dedicated to the final publication of those excavations and focuses on the later part of the settlement history (13th–12th centuries BCE). Major topics include the topography of the site (including a harbour bay), its chronology, investigations into the economic basis of the Bronze Age society and its local, regional and interregional interactions. The new data from Punta di Zambrone are evaluated in comparison with new research results from coeval sites in Italy and Greece, which forms the basis for a historical contextualisation of the settlement and thus contributes to the broader reconstruction of Mediterranean history at the end of the 2nd millennium BCE. These coeval sites are presented by their excavators or investigators.

The authors conducted geophysical and bathymetric surveys as well as underwater archaeological investigations, typological analyses of artefacts, a definition of the relative and absolute chronology, archaeobotanic and archaeozoological studies, aDNA analysis, Sr isotope analyses on human and animal teeth, chemical and Pb isotope analyses on metal artefacts, provenance analyses of pottery vessels, amber and stone artefacts (from Zambrone and other sites).

Made in Europe

ISBN 978-3-7001-8615-1



9 783700 186151