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PALILIA 33



Michael Kunst | Daniel Steiniger (eds.)

SETTLEMENT STRUCTURES AND METALLURGY

The Relations between Italy and the Iberian
Peninsula in the Early Chalcolithic

Papers of an International Conference Held in Rome,
Museo Nazionale Romano – Palazzo Massimo,
6–7 October 2011

For some considerable time right up to the present, almost all specialists have been dealing at various different regional levels with the topics of the conference published here. The expansion of the source material in the last decades has led to a comprehensive understanding of early metallurgy and its role in social, economic and settlement-structure terms. Despite this far-reaching progress, concrete questions are emerging more and more clearly that can only be answered at international and interdisciplinary levels. It is precisely this international communication that the conference on which the present volume is based has attempted to set in motion so as to address these complex questions. This publication pulls together and sets out the state of research on the topic at the beginning of the 21st century for the entire Central and Western Mediterranean regions.

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Michael Kunst | Daniel Steiniger (eds.)
SETTLEMENT STRUCTURES
AND METALLURGY

Palilia 33

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PALILIA 33

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Ortwin Dally und Norbert Zimmermann

DEUTSCHES ARCHÄOLOGISCHES INSTITUT

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Vorwort

von *Henner von Hesberg* und *Dirce Marzoli*

Ein offener Dialog, eine einsichtige Darstellung der jeweiligen Arbeitsweisen und die Bereitschaft, den anderen Forschern in die Archive Zugang und in die Ergebnisse eigener Arbeiten Einblick zu gewähren, sind Voraussetzungen eines fruchtbaren Austauschs. Sie führen zu einer vertieften Kenntnis der jeweiligen Erforschung einer archäologischen Epoche, ihrer lokalen Besonderheiten und überregionalen Verbindungen. Ausdruck einer solchen Art von Austausch, der selbst in Zeiten problemloser Kommunikation nicht immer selbstverständlich ist, bilden diese Tagung sowie deren jetzt vorliegende Publikation. Sie erfolgt bedauerlicherweise mit großer Verspätung, aber ihre grundlegende Botschaft ist nicht überholt: nur gemeinsam und länderübergreifend lässt sich das Thema angehen.

Der hier behandelten Kupferzeit Südwesteuropas widmen sich methodisch innovative und interdisziplinär angelegte Projekte, zu denen Ausgrabungen von Siedlungen, Nekropolen, Bergbauarealen ebenso zählen wie Material- und Umweltstudien. Immer komplexer werden dabei auch Einblicke in Gesellschaftsstrukturen, Wirtschaftsweisen, Handelswege und Technologien, zunehmend deutlicher lassen sich zudem die Wege der Übertragung von Fertigkeiten und Produktionsformen nachzeichnen. Einige Ergebnisse liegen schon in internationalen Referenzwerken vor, gleichwohl werden sie im Kontext der Tagung ergänzt und vertieft und um die Forschungsergebnisse aus nicht immer leicht zugänglichen lokalen Publikationen erweitert, welche zudem häufiger lediglich Vorberichte darstellen. Abgesehen davon aber bieten die Beiträge neue Resultate und Interpretationsansätze.

Gerade auf den Gebieten der Siedlungsarchäologie und ihrer Verbindung mit der Montanarchäologie und der Archäometallurgie sind nämlich sowohl auf der Pyrenäen- wie auch auf der Apenninhalbinsel in den letzten Jahrzehnten bahnbrechende Ergebnisse erzielt worden, die nach weiterem Austausch über die Beziehungen zwischen Italien und Südwesteuropa im Chalkolithikum verlangen. Für diese Thematik haben die beiden Abteilungen des Deutschen Archäologischen Instituts – Rom und Madrid –, deren Aktivitäten diesem geographischen Raum vorwiegend gelten, als Veranstalter der Tagung und als Herausgeber der Publikation ein Forum geboten. Mit der Veröffentlichung der Tagung suchen sie der Diskussion im Bereich der Kupferzeitforschung weitere Impulse zu geben.

Die Tagung wurde zwar von den beiden Abteilungen organisiert, aber sie versteht sich als Projekt von Prähistorikerinnen und Prähistorikern aus vielen europäischen Ländern mit dem gemeinsamen Ziel, einen Beitrag zur Kenntnis der westlichen Hemisphäre der europäischen Kupferzeit zu leisten und Anstöße zu weiteren Zusammenarbeiten zu geben. Dabei ging es darum, die sehr unterschiedliche Situation der iberischen mit jener der Apenninhalbinsel zu vergleichen und zu prüfen, ob hier nur der Erkenntnisstand voneinander abweicht oder wir grundsätzlich zwei unterschiedliche Ausprägungen in einem historischen Horizont vor uns haben.

Die Veranstaltung dieser Tagung gewinnt über die fachwissenschaftliche Bedeutung auch eine forschungspolitische. Die Prähistorische Archäologie, die in den Abteilungen des Deutschen Archäologischen Instituts anfangs nur sporadisch und seit den sechziger Jahren in zunehmendem Maße an Bedeutung erlangte, präsentiert sich hier mit einem eigenen Projekt, dessen Anfänge bis in die Zeit der 1954 gegründeten Madrider Abteilung zurückreichen. Zu den Mitarbeitern der ersten Stunde zählte ein Prähistoriker, zu dessen Schwerpunkten die Kupferzeit gehörte: Edward Sangmeister. Ab 1959 war Hermanfrid Schubart als Prähistoriker an der Madrider Abteilung tätig, die er von 1980 bis 1994 leitete. Ihre Forschungen auf diesem Gebiet, vor allem die von ihnen gemeinsam geleitete Ausgrabung in Zambujal bei Torres Vedras in Portugal sind bis heute wichtige Referenzen für die Kupferzeitforschung geblieben. Ihre Namen und der mit ihnen verbundene Grabungsplatz wurden zum Synonym für den Erfolg internationaler Zusammenarbeit, aus der immer weitere Netzwerke hervorgingen. 1994 übernahm Michael Kunst als Referent die prähistorische Forschung der Madrider Abteilung und führte vor allem auch die Grabungen in Zambujal fort.

Das seit 1829 aktive Instituto di Corrispondenza Archeologica war am Anfang ganz den wissenschaftlichen Zielen Johann Joachim Winckelmanns verpflichtet, die in vieler Hinsicht aus einer philologischen Tradition hervorgegangen waren. Deswegen blieben die Zeiträume ohne Schriftzeugnisse zunächst außerhalb der Überlegungen. Erst später, unter dem Einfluss der Entwicklungen in den skandinavischen und angelsächsischen Ländern, kamen einzelne Aspekte der Prähistorie hinzu, konnten aber nie größere Bedeutung erlangen. Immerhin hat Wolfgang Helbig mit seiner 1879 erschienenen

Schrift über „Die Italiker in der Poebene“ sich in diese Bereiche der archäologischen Wissenschaft vorgewagt und damit auch Luigi Pigorini beeinflusst, der seinerseits oft in den Adunanzien des Instituts in jenen Jahren vortrug. Ein gegenseitiger Austausch war vorhanden, aber die Prähistorie in Italien ging bald eigene Wege und das Germanico blieb in der Folgezeit auf die klassische Antike konzentriert, wenn man einmal von der Zeit des Nationalsozialismus absieht, in der aber stärker die Zeit der Völkerwanderung und damit als Wissenschaft die Frühgeschichte an Bedeutung gewann. Spätere Studien von Seiten der Prähistorie, die innerhalb der Abteilung Rom des DAI entstanden, widmeten sich meist der Eisenzeit und ergänzten somit methodisch die Versuche der Klassischen Archäologie, die Frühphasen der späteren Kulturen Italiens zu erschließen. Zu nennen sind hier etwa die 1959 und 1962 erschienenen Werke Hermann Müller-Karpes zu den Anfängen Roms. Später hat Kerstin Hoffmann als Forschungsstipendiatin der Abteilung im Rahmen des von der Gerda-Henkel-Stiftung geförderten Projekts zu den einheimischen Kulturen in Italien sehr intensiv den internen Dialog gefördert. Aber erst mit Daniel Steininger 2006 startete dann ein eigenständiges Projekt, das mit den traditionellen Forschungsfeldern der Abteilung Rom nichts mehr zu tun hatte und ganz im Chalkolithikum angesiedelt war.

Darin kommt ein umfassender Wandel in den Methoden und der Organisation von Forschung innerhalb des Deutschen Archäologischen Instituts zum Ausdruck, der jüngst zu vielen Veränderungen geführt hat, etwa in der sogenannten Bildung von Clustern, also die Abteilungen übergreifenden Forschungsverbünden. Damit die unterschiedlichen Abteilungen des Instituts in den verschiedenen Kulturregionen Europas und der ganzen Welt untereinander weiterhin einen fruchtbaren Austausch pflegen können, zugleich aber auch für ihre Partner an den diversen Universitäten und übrigen Forschungsstätten anschlussfähig bleiben, muss die Konzentration auf einzelne archäologische Disziplinen zu-

gunsten einer breiteren Fächerung erweitert werden. Dadurch ist es möglich, verschiedene historische Horizonte und Epochen etwa im Bereich des Mittelmeeres, aber auch darüber hinaus, in ihren Gemeinsamkeiten und Unterschieden in den Blick zu bekommen. Zugleich profitieren die Disziplinen voneinander durch ihre methodische Vielfalt.

In einer solchen engen Verschränkung kann die Arbeit des Instituts eine wirkungsvolle Ergänzung zu dem Studien- und Forschungsbetrieb der Universitäten bilden, in denen bei aller Interdisziplinarität durch die Studienerfordernisse und Fächerdefinitionen die Grenzen stärker bewahrt werden müssen.

Die Tagung mit ihrer Thematik stellt einen weiteren Schritt in diese Richtung dar und bezeugt zugleich Öffnung und neue Verbindungen, die dadurch möglich sind. Ihr Konzept haben Daniel Steininger und Michael Kunst gemeinsam entworfen. Beide beschäftigen sich vorrangig mit der Kupferzeit und beide stammen von der Universität Freiburg, wo der eine 2007 und der andere 1982 promoviert hat, womit sie wiederum in der mittelbaren Tradition Sangmeisters stehen.

Ihnen gilt unser besonderer Dank. Danken möchten wir auch Patrizia Petitti und Christian Strahm für die Mitarbeit zur Vorbereitung der Tagung im wissenschaftlichen Komitee sowie allen jenen Kolleginnen und Kollegen, die durch Vortrag, Diskussion und schriftlichen Bericht zum Erfolg des Unternehmens beigetragen haben. Auch an alle anderen, die sich an der Betreuung der Tagung und an der Redaktion beteiligt haben, richtet sich unser Dank. Für die finanzielle Förderung gilt der Fritz Thyssen Stiftung unser besonderer Dank. Hervorheben möchten wir schließlich die Gastfreundschaft von Rita Paris und Anna Maria Moretti, die für die Tagung am 6. und 7. Oktober 2011 ihren schönen Vortragsaal im Palazzo Massimo in Rom zur Verfügung stellten.

Henner von Hesberg, Rom, und Dirce Marzoli, Madrid, Januar 2013

Settlement Patterns and Metallurgy in Central and Southern Italy in the Copper Age

by *Alberto Cazzella*

The theme I wish to examine is not readily approachable. Evidence about both metallurgy and about settlement patterns (and settlements in general) in Copper Age Italy is known to be scarce. In recent years, excavations of Copper Age settlements in Central and Southern Italy have increased (at least in some regions), but data on funerary contexts still dominates the picture.

First, I will investigate the situation concerning the places where the metals were worked and the social organisation of this activity. The technical processes linked to smelting and melting obviously must be distinguished here. We have no direct data for the first, but it

is likely to have taken place not too far from the copper mines themselves; melting for the cast could have been done everywhere, utilising either new ingots or old artefacts. The question whether the craftsmen engaged in melting activities in Copper Age settlements were permanent inhabitants or only temporarily present is still open¹.

Another concern regards the role played by metal artefacts in the social and actual life of Copper Age peninsular groups, besides, of course, their function as prestige goods, which is most evident in highly symbolic funerary contexts.

Technology and the Role of Metal Artefacts

I shall briefly outline the position of metallurgical matters in Late Neolithic contexts so that either continuity or change can be traced. It should be kept in mind that the terminology used is different in various regions of Central and Southern Italy: similar cultural aspects could be locally named in different ways. In any case, Late Neolithic and Early Copper Age contexts are not always so clearly distinguishable.

For the last phases of the Neolithic (second half of the 5th millennium to early 4th millennium B.C., with some local variations: rigid chronological periods claiming to be valid for Italy in its entirety just create confusion²), traces of metallurgy are attested in some settlements in Central Italy, although archaeometric analyses confirming metalworking activities actually occurring inside them are still lacking³. Evidence of metallurgy is quite lacking in the Late Neolithic of Southern Italy, even though some metal artefacts have been found⁴.

Well documented cases of Late Neolithic metallurgy are few, but the hypothesis that melting took place inside some settlements seems to be well founded⁵. The artefacts are very simple, such as “awls”, beads and probably flat axes. Because of this low technical level, I hypothesise the existence of part-time craftsmen always living in the one settlement and from time to time using their knowledge and skills. The demand for metal artefacts during the Late Neolithic certainly seems to be low – or at the least but a few have survived. According to Dolfini and Giardino, a short “intensification phase” took place between 3800 and 3600 B.C.⁶, which is attested by the production of triangular elongated axes made in bivalve moulds, but their chronology is, in fact, uncertain.

Whatever the case, evidence related to metallurgy recovered in settlements does not increase during the Copper Age. A few cases do exist. Traces of metal-working were recognised in a Bell-Beaker context in the area

1 See, for example, Bietti Sestieri – Giardino 2003, 412.

2 Dolfini 2013a, tab. 1.

3 A recent review of data in Dolfini 2013a, 140; Dolfini 2013b, 27-29; Dolfini 2014, tab. 3.

4 Contrada Matinelle di Malvezzi, Late Neolithic tomb (late Serra d'Alto culture), probably dating back to late 5th millennium:

Lo Porto 1989; “Copper Age” Monte Pucci tombs (Macchia-a-Mare culture), probably dating back to the early 4th millennium: Cuda 1990.

5 Dolfini 2014, 495.

6 Dolfini 2014, 498; Dolfini – Giardino 2015, 150. 153.

of Sesto Fiorentino⁷, near Florence, and in the settlement recently excavated at Pantano Borghese⁸, south-east of Rome: both of them date back to a late phase of the Copper Age. Moreover, there is the ditch deposit (certainly linked to a settlement) of Conelle di Arcevia, where a possible metal casting (a curvilinear scrap) was found⁹. The case of the Cava-Giacometti settlement, not far from Conelle, is more doubtful: a ceramic pierced fragment could be part of a tuyere, but its hole is very small, so it may well be a cylindrical loom weight¹⁰.

A real tuyere comes from the Sant'Angelo cave¹¹ in the Abruzzo region, the comprehension of which is not straightforward. There are other cases of caves with traces of metallurgy related to the Bronze Age in Abruzzo, such as Grotta a Male di Assergi¹². It could be that the Sant'Angelo example has a symbolic, votive, value or that the cave was used by itinerant metallurgists looking for a temporary shelter. Aspects of both might even apply. Caution has to be used in arguing that the difficult access to the Sant'Angelo cave renders a symbolic interpretation more likely: in modern times a chapel was built inside the cave, which obviously has a symbolic value, but also shows that access to the cave was not so difficult, as the church was built after all.

The technical expertise increased during the Copper Age (conventional starting date: 3600 B.C.), as is widely discussed by Dolfini and Giardino¹³: gradually, daggers/halberds developed a midrib on both faces, indicating technological innovation underway. In fact, weapons with midribs probably started later in the period (late 4th millennium), perhaps earlier in Southern Italy (see Buccino, Tombs 1–2¹⁴) than in Central and Northern Italy. One cannot rule out that their introduction was influenced by contacts with the Aegean world.

As regards the symbolic role played by metallurgy in the Copper Age, the data is very difficult to interpret. Obviously, the tombs – the principal sources of information – are contexts strongly conditioned by ideological aspects. The major part of the metal finds are weapons, even though axes and daggers could also have had a practical, non-military function during the life of their

owners. In some cases the artefacts placed as grave goods may not have been functional at all, just having a symbolic value (see, for example, the tiny Monte Bradoni-Laterza dagger type¹⁵). Awls (or pins?), small blades without a point¹⁶ (razors or scrapers?) and a few ornaments, some made of antimony and some of silver, turn up too¹⁷. The use of silver, early in the Italian Copper Age, adds to the picture of a developed metallurgy being practised then. An exceptional case is the dagger from the tomb of S. Biagio della Valle¹⁸, which was made of a silver-copper alloy. Once again the introduction of this precious metal may have been influenced by contacts with the Aegean world, where silver was cupelled and in wide circulation from the Late Neolithic.

The role of metal artefacts in daily life will have been on the increase too from the Late Neolithic onwards. This is indirectly attested by the production of bone and antler tools using metal blades. The earliest indirect traces of metal blades are documented on pointed bone artefacts from Tombs 17 and 46 in the “Early Copper Age” cemetery at Camerano¹⁹, in the Marche region. Similar artefacts have also been found in the Late Neolithic Layer 6 of the Attiggio settlement²⁰ (in the same region), but these have not been analysed. More traces of metal blades on bone and antler tools were recognised at Recanati – area Guzzini, Tomb 8, and in the settlements of Conelle di Arcevia and Maddalena di Muccia²¹, all in the Marche region, covering the entire chronological span of the Copper Age. Metal artefacts, lacking in tombs and very rare in settlements of this region (which has no metal sources), could thus even have been in wider daily circulation than the archaeological finds suggest. A metal blade was used to butcher the horse found in a ritual pit at Fianello di Maccarese²², in the Latium region. All told, I maintain that the employment of metal blades in the Copper Age is quite significant: blades, especially in their pointed version (daggers, halberds and later spearheads and swords), had an important place in the history of metallurgy as linked to martial developments (see, for example, Renfrew’s Aegean 3rd-millennium B.C. “arms race”²³), which in Italy increased notably during the Cop-

7 Sarti 1998, 151.

8 Angle – Mancini 2010.

9 Palmieri – Cazzella 1999.

10 Cazzella – Moscoloni 1992, fig. 4, 48; Cazzella – Moscoloni 1994a.

11 Di Fraia – Grifoni Cremonesi 1996, fig. 44, 3.

12 Pannuti 1969, 220 fig. 41; Damiani et al. 2003, 320.

13 Dolfini 2014; Dolfini – Giardino 2015.

14 Aurino 2013, 158.

15 Talamo 2015.

16 Biancofiore 1967; Palmieri – Cazzella 1999, 205.

17 Conti – Persiani 2008, 9.

18 Umbria region, late 4th – early 3rd millennia B.C.: De Angelis 1995/1996.

19 ¹⁴C-dates, from other tombs of the Camerano cemetery, span the period 3990–3330 B.C.: Baroni – Recchia 2005; Cristiani 2005a.

20 Cazzella – Silvestrini 2005.

21 Recanati – area Guzzini: Cristiani 2005a; Conelle: Cristiani – Fecchi 2003, Cristiani – Alhaique 2005; Maddalena di Muccia: Cristiani 2005b.

22 Curci – Tagliacozzo 1995.

23 Renfrew 1972.

per Age. Daggers with a flat blade and holes for rivets appear in an early phase of the Copper Age, both in the Central Tyrrhenian and Southern Italy²⁴.

The use of metal tools, in particular points/awls, to produce pressure-flaked flint tools, such as arrow-heads and daggers, might well have started during the Late Neolithic²⁵. Metal tools of this kind are also the most widespread metal artefacts in Copper Age settlements. Nonetheless, metal blades must have existed earlier

within this period, as is indirectly attested by both the manufacturing of bone/antler tools and butchering practices.

Finally, hoards of metal artefacts are lacking in the Copper Age, one more typical difference that distinguishes it from the Early Bronze Age. This pattern could simply mean that it was only after the Copper Age that metal acquired a valued economic role, besides embodying prestige and being practically useful.

Settlement Patterns

As regards settlement patterns, as mentioned above, cases with sufficiently documented data are few. The prevailing pattern emerging from the data, including the indirect information coming from funerary contexts, shows that clusters of small sites (small adjacent communities) existed, presumably interconnected at many levels.

An interesting case to this end is attested in the area of Recanati, in the Marche region, not far from the Adriatic coast. Three cemeteries (Guzzini, Fontenocce and Via Duomo) were brought to light, located a mere 1.5 km apart from each other. Their ¹⁴C-dates partly overlap, so suggesting they were at least partly coeval. Moreover, the Guzzini cemetery is very close to a settlement which, in turn, also includes one tomb. In all likelihood, the other two cemeteries pertained each to a specific settlement, rather than being related to one and the same village. Short distances between coeval cemeteries would indicate communities controlling small territories and with a relatively low population living in each.

The settlement of Conelle di Arcevia, however, is different. Located in the inland area of the Marche region, it has, as mentioned above, yielded traces of metallurgy. It differs from other Copper Age settlements because of the presence of a ditch protecting an area of some 4 ha²⁶. Both the huge ditch and the wide area of the possible

settlement within could indicate an anomalous situation, implying a larger group of inhabitants.

Intensive field research carried out in the territory south-east of Rome produced the picture of a clustered situation with small settlements and adjacent cemeteries, similar to that of Recanati. The same situation seems to repeat itself in various phases, indicating a long-lasting fashion. There, the cemeteries and settlements are very close indeed, and in some cases (especially during the Late Copper Age) some tombs were also located inside the settlements. The residential communities again must have been small. For the Rinaldone culture²⁷, the cemeteries of Osteria del Curato and Ponte delle Sette Miglia can be mentioned²⁸. They are again some 1.5 km apart on the ground: the ¹⁴C-dates indicate that at least some tombs from the two cemeteries were likely coeval²⁹. The settlement and cemetery of Osteria del Curato³⁰ appear to have persisted through both the Laterza and Ortucchio cultures; the settlement of Piscina di Torre Spaccata³¹ belongs to the Laterza culture: it is 1 km from Osteria del Curato; the settlement of Quadrato di Torre Spaccata³² belongs to the Ortucchio/Bell Beaker culture: it is barely 500 m off from Osteria del Curato. Probably, Piscina di Torre Spaccata and Quadrato di Torre Spaccata did not co-exist, though both had Osteria del Curato as a neighbour.

24 Ponte S. Pietro, rock-cut Tomb 21, male individual, in the northern part of the Lazio region (3750–3535 cal. B.C.): Dolfini et al. 2011, 175; Casetta Mistici, rock-cut Tomb 8, south-east of Rome (3640–3510 cal. B.C.; in the same tomb a flat axe of unusual shape seems to have been made from Cycladic copper, according to Pb-isotope analyses): Anzidei et al. 2018; Taurasi, Structure 3, Urn 1, in inland Campania (3510–3370 cal. B.C.): Talamo 2008, 161, Talamo et al. 2011, 41; Grotta Nisco funerary cave, “Room” 1, Individual B, in Central Apulia (3540–3350 cal. B.C.): Ventura et al. 2011, 336, Cazzella et al. 2017, 375 note 2.

25 Pearce 2000.

26 Cazzella 1999; Cazzella – Recchia 2014.

27 During at least from the middle of the 4th millennium B.C. to the late 3rd millennium; the Laterza culture spans the late 4th millennium B.C. and the middle of the 3rd millennium, while the Ortucchio/Bell-Beaker culture dates to the mid-3rd millennium B.C.

28 Anzidei et al. 2007a.

29 Anzidei et al. 2012, 198. 207.

30 Anzidei et al. 2007b.

31 Bietti Sestieri – Gianni 1984.

32 Anzidei – Carboni 1995; Anzidei – Carboni 2007.

The same territorial pattern is arguably attested in the area of the Fiora and Albegna Rivers (Rinaldone culture), even though only cemeteries are known and ¹⁴C-dates are lacking. In a recent MA thesis, it has been pointed out that four pairs of cemeteries were located less than 1 km apart, and a further six cemeteries were separated by 1 and 2 km³³. Obviously it cannot be ruled out that cemeteries located so close to each other belonged to different periods, but the wide chronological range of the Selvicciola cemetery³⁴, according to ¹⁴C-dates, would suggest that Rinaldone cemeteries tend to be long-lasting. And so there may be significant overlaps of occupation in the examples quoted above.

The data on settlements in Tuscany mainly derives from field research carried out in the Sesto Fiorentino area. A number of settlements date to the phases between the Late Neolithic and the Early Bronze Age. In this small area, at least seven settlements from the Late Bell-Beaker phase, which is at the end of the Copper Age, were recognised³⁵.

A number of adjacent sites are known also in the Fucino-Lake area (Abruzzo region), mostly recognised in surveys: 18 sites (excluding caves) are mentioned by Cosentino *et alii*³⁶ in the area round the ancient lake, but it is not yet sure that all of them were real villages; the dating of some sites of the Fucino-Lake area to the Early Bronze Age by Ialongo is not so convincing³⁷. In the case of the site at Ortucchio – Strada 28, where also some explorative trenches were made, the extent to which archaeological materials appear on the surface is very large (between 30 and 70 ha, according to different opinions)³⁸, but then, in this case, the settlement probably lasted for several centuries. It is also possible that a small settlement shifted slightly and many times down the years.

The data for Copper Age Campania are more heterogeneous. The Gaudio culture probably started around the mid-4th millennium B.C.³⁹; virtually only funerary con-

texts are known there. The earliest site of the Laterza culture in Campania dates back to the late 4th millennium B.C.⁴⁰. Thus, Gaudio and Laterza cultures were partly coeval and both went down to the late centuries of the 3rd millennium B.C. Laterza culture settlements and cemeteries are located close together, both in the early sites (Castel Baronia; S. Maria a' Peccerella) and in the later ones (of the Gricignano area)⁴¹. The tombs are either placed inside settlements or located in areas previously occupied by settlements that had shifted slightly⁴². Extensive excavations at Gricignano have actually demonstrated the phenomenon of a small settlement shifting gradually over a seemingly large area, and this constitutes supporting evidence for the hypothesis that the same phenomenon applies to Ortucchio – Strada 28, mentioned above.

Some evidence regarding the co-existence of two adjacent settlements (although ¹⁴C-dates are lacking to verify this hypothesis) could come from specific Campanian contexts (using cemeteries as indirect traces of their corresponding villages) belonging to different cultures. Worth mentioning is the case of the Gaudio-culture cemetery at Gaudio and the Laterza-culture cemetery at Paestum⁴³: they are located more than 1 km apart. The situation at Pontecagnano is similar: the Gaudio-culture cemetery in the Picentino area is located less than 2 km from another set of tombs and cenotaphs prevalently belonging to the Laterza culture⁴⁴. Besides illustrating the co-existence of human groups identifying themselves by different cultural traits, these cases are pertinent to the theme under discussion because of their reciprocal proximity. If the argument for two coeval close settlements is valid, we have again small territories and, as a consequence, a low number of people living in each.

In the remaining regions of Southern Italy, the data for both settlements and cemeteries (from a spatial point of view) is too scarce to approach the question of the demographic dimensions of the communities using them.

33 For example, the pairings of Poggio Formica – Poggiali Val-lungia, Palombaro – Naviglione, Porcareccia – Fontanile di Raim, Fontanile di Raim – Ortaccia: Manca 2009/2010.

34 Conti *et al.* 1997.

35 Sarti 1998, 142.

36 Cosentino *et al.* 2007.

37 Ialongo 2007, 149–187; *contra* Carboni – Anzidei 2013.

38 Remotti 2001; Ialongo 2007, 36.

39 Aurino 2013, 158.

40 Anzidei *et al.* 2007b, tab. II; Langella *et al.* 2008; Tunzi Sisto – Monaco 2010, 129.

41 Castel Baronia: Gangemi 1988; S. Maria 'a Peccerella: Langella *et al.* 2008; Gricignano: Fugazzola Delpino *et al.* 2003, Fugazzola Delpino *et al.* 2007.

42 At Gricignano, in fact, the vast majority of Laterza tombs appear to cut earlier huts: Fugazzola Delpino *et al.* 2003.

43 Gaudio: Bailo Modesti – Salerno 1998, 14–17; Paestum: Arcuri – Albore Livadie 1988; Albore Livadie *et al.* 2011.

44 D'Agostino 1964; Bailo Modesti – Salerno 1998.

Concluding Remarks

To sum up, I propose that the quantitative⁴⁵ and qualitative⁴⁶ increase of metal production over the Copper Age implies a development of the level of specialisation achieved by metallurgists in the 3rd millennium B.C., excluding Bell-Beaker contexts, which generally show a low metallurgical level⁴⁷. Throughout the period the prevailing settlement pattern appears to have been characterised by small human groups, often inhabiting nearby settlements, creating clusters. Moreover, at times, settlements shifted about within a small range (see, for example, Gricignano and probably Ortucchio – Strada 28). In my opinion, each of these small communities, inhabiting small settlements, was either not able or not interested in continuously hosting full-time specialists, such as ‘smelters’⁴⁸. This scenario could demand the existence of itinerant metallurgists, presumably each of them working inside a limited area, probably remaining marginal, even though perhaps dreaded as wizards. Thus, I disagree with Dolfini’s hypothesis that in the Copper Age “...smelters and smiths ... must have acquired unprecedented standing *within* (my italics) their communities”⁴⁹.

The abovementioned cases of metal-working inside settlements (Conelle di Arcevia on the one hand; Pantano Borghese and Sesto Fiorentino on the other hand) are chronologically distant (late 4th to early 3rd millennia B.C. for the former site, late 3rd millennium for the latter cou-

ple); moreover, they could have represented two different situations. The settlement of Conelle was characterized by the presence of a ditch and a rather wide enclosed area (4 ha); these features could suggest, anomalously, a higher number of inhabitants. Thus, a metallurgist continuously working within a sufficiently large community would be a possibility. The other two sites, on the preliminary available data, seem to have been small villages: in these cases archaeological traces are more consistent with the hypothesis of an itinerant specialist visiting those settlements. However, these are Late Copper Age contexts and thus some socio-economic transformations were probably already in motion⁵⁰. Either small communities were also becoming able to permanently host a metallurgist or (as I think) the itinerant metallurgists were more accepted within the social context of a village, even if still on a temporary basis and gradually shedding their marginality.

In my opinion, the phenomenon of full-time and resident specialists developed later (with local chronological variations). The development of centres specialising in exchange activities during the first half of the 2nd millennium B.C., especially in Southern Italy, probably promoted the phenomenon: Lipari, on the Aeolian Islands, Vivara, near Procida, and Capo Piccolo, in Ionian Calabria, could be good examples of its existence⁵¹.

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⁴⁵ This hypothesis is not founded on diachronic variations in the quantity of metal objects within grave goods in Central and Southern Italy during the Copper Age: on the contrary, a discontinuation of placing metal artefacts in later tombs could be a consequence of a wider diffusion of the metal in practical everyday uses.

⁴⁶ Midrib daggers and halberds; real alloys such as copper-silver and perhaps copper-tin; sheet ornaments with *repoussé* decoration: Ingravallo 2002, 72; Dolfini 2013a, 36.

⁴⁷ Beaker daggers, for example, have neither holes for rivets nor a midrib. The pertinence of a bronze ring to a Beaker complex at Poggio Olivastro is to be confirmed (Dolfini 2014, 478).

⁴⁸ In my opinion ‘smelters’ were prevalently inhabitants of villages close to mines, not full-time specialists.

⁴⁹ Dolfini 2013a, 145.

⁵⁰ See, for example, a similar Early Bronze Age scenario at Nola Croce del Papa, lower settlement: Albore Livadie – Vecchio 2005.

⁵¹ Lipari: Albanese Procelli 1996; Vivara: Cazzella – Moscoloni 1994b; Capo Piccolo: Marino – Pacciarelli 1996.

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Riassunto

In che modo si correlano i dati disponibili sui modelli di insediamento dell'età del Rame nell'Italia centro-meridionale con le testimonianze relative alla metallurgia? È questa la domanda centrale che l'autore si pone in questo contributo. Le informazioni, dirette o indirette (costituite dalle necropoli), sugli abitati eneolitici della penisola italiana, anche se ancora insufficienti, danno l'impressione di una prevalente tendenza a stabilirsi in insediamenti di piccole dimensioni, che talora formano nuclei ravvicinati, probabilmente correlati tra loro da forti legami di coesione sociale e politica. Almeno in alcuni casi gli insediamenti sembrano avere una certa durata, con rioccupazioni successive della stessa area (come esempio si può citare Osteria del Curato – via di Cinquefrondi, a sud-est di Roma) o con spostamenti progressivi dell'area di volta in volta occupata (come probabilmente avviene a Gricignano, presso Caserta). Esistono, inoltre, alcuni casi apparentemente anomali, come quello dell'insediamento di Conelle di Arcevia, nelle Marche, caratterizzato da un'estensione di circa 4 ha, maggiore della media, e delimitato da un fossato difensivo.

Per quel che riguarda la metallurgia eneolitica, si può notare che già da un momento iniziale, con ulteriori innovazioni nel corso del periodo (come le lame di pugnali e alabarde con costolatura centrale), i prodotti finiti indicano un elevato livello tecnologico, ma le tracce di

lavorazione all'interno degli abitati sono molto scarse. La soluzione più verosimile, in relazione al prevalente modello di insediamento basato su abitati di piccole dimensioni, può essere quella di ipotizzare, come già proposto da altri autori, l'esistenza di forme di metallurgia itinerante, che comunque non appaiono in contrasto con quel livello tecnologico elevato, che probabilmente aumentò ulteriormente nel terzo millennio (escludendo forse i contesti 'campaniformi', che mostrano tecniche non particolarmente complesse). Nell'opinione dell'autore, tuttavia, i metallurghi eneolitici, in quanto non inseriti stabilmente in una comunità, non acquisirono una posizione sociale emergente, ma furono semmai temuti come stregoni.

Si affronta inoltre il tema del ruolo svolto dalla metallurgia nella vita delle comunità eneolitiche dell'Italia centro-meridionale. Oltre al valore come oggetti di prestigio e all'uso come armi di alcune categorie di prodotti finiti, i dati relativi alle tracce d'uso indicano anche un impiego di alcuni manufatti metallici come strumenti per scopi pratici. Sembra invece mancare il valore del metallo come mezzo per incamerare direttamente ricchezza, che appare evidente dal Bronzo Antico, con l'accumulazione di manufatti, probabilmente per motivi diversi, in ripostigli.

