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RADIOCARBON EVIDENCE FROM THE MIDDLE BRONZE AGE SETTLEMENT AT PORTELLA (AEOLIAN ISLANDS, ITALY): CHRONOLOGICAL AND ARCHAEOLOGICAL IMPLICATIONS

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ABSTRACT. This paper deals with radiocarbon determinations from the Middle Bronze Age site of Portella on the island of Salina (Aeolian Archipelago, Italy). The available ^{14}C evidence is taken into account, in a simple Bayesian model, in order to explore the issue of the absolute chronology of both the settlement and the stage of the local cultural sequence to which Portella belongs. A high date is proposed for the start of the Aeolian (and Sicilian) Middle Bronze Age: 1556–1422 cal BC (95.4% confidence), with a a most likely (modal) date of about 1450 cal BC. Further, the analysis suggests that the Portella phase is likely to have been a very short one, with a span of 0–65 yr (68.2%) or 0–131 yr (95.4%). The archaeological implications are explored. The relation of these results to the evidence of ceramic phasing is also considered. Since Aegean datable ceramic imports are documented in Aeolian/Sicilian Middle Bronze Age contexts, the connection between Portella's chronology and the absolute dating of one of the Aegean phases (namely, Late Helladic IIIA1) is also investigated.

INTRODUCTION

Middle Bronze Age (hereafter MBA; Table 1) Sicily, dated on a historical basis to ~1400–1270 BC, features the incorporation of objects from different locations along the Mediterranean shores (Bernabò Brea and Cavalier 1968, 1980, 1991; Voza 1985; De Miro 1999; Castellana 2000). It is well known that pottery from Late Helladic (hereafter LH) Greece, Cyprus, Malta, and the Italian mainland, as well as jewelry, ivory, and gold items (all of possible east Mediterranean provenance), were deposited in MBA domestic and funerary contexts as result of long-distance maritime trade. These items often appear within the framework of social competition and display of social status (D'Agata 1997, 2000; Vagnetti 1999; van Wijngaarden 2002; Vianello 2005; Alberti 2006, 2007a).

Among these items, LH pottery has been used as a means for providing an absolute chronology beginning with the first pioneering archaeological research conducted at the end of the 19th century. Its use as a temporal marker became even more important in the following years as the chronological resolution of the changes in style and/or typology increased, providing an important means for dating finding contexts outside Greece (Taylour 1958, 1980; Vagnetti 1991).

Even though radiocarbon evidence began to be taken into account in Sicily during the 1960s (Alessio et al. 1980), its use as a means to build an independent chronology has been generally downplayed, perhaps due to the lack of research programs aimed at addressing specific chronological issues. The use of ^{14}C has been subordinated to chronologies based on historical means, namely absolute dates provided by imported Aegean pottery.

Importantly, as far as absolute dates are concerned, and allowing that imports can only provide a *terminus post quem* for the recipient contexts, converting the presence of Aegean ceramic styles into absolute dates turns out to be a complex matter. In fact, the chronology of the LH Aegean itself is undergoing a revision due to the ^{14}C evidence related to the Theran (Santorini) eruption contrasting with the chronological sequences devised by historical and archaeological synchronizations. Consequently, different scenarios regarding the absolute dates of the earlier stages of LH have been put forward by scholars, leading to the contrasting views of a high versus low chronology (Warren and Hankey 1989; Manning 1995, 1999, 2009; Warren 1998, 2009; Manning and Bronk Ramsey 2003; Wiener 2003a, 2009; Manning et al. 2006; Bietak 2007; Heinemeier et al. 2009).

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Table 1 Italian, Aeolian, and Sicilian archaeological phases from the Early Bronze Age (advanced) to Late Bronze Age. Inner phasing of Milazzese facies according to Alberti (2008a); inner phasing of Thapsos facies after Alberti (2004, 2007a). Late Helladic ceramic imports are shown (according to Alberti and Bettelli 2005; Jung 2006; Alberti 2008a), along with the approximate starting and ending dates (BC) of each ceramic phase according to the Aegean Low Chronology (derived from Warren and Hankey 1989; Warren 1998, 2009). The ^{14}C evidence from Portella suggests that the start of Milazzese facies is likely to occur around the mid-15th century BC. Note: slightly different dates are suggested by Wiener (2003b) for LH IIIA2: starting around 1390/75 BC; ending around 1330–1290 BC. Further, according to Jung (2006), the Italian Late Bronze Age is synchronous with the whole LH IIIB period, with no overlap between the early stage of that Aegean period and the Middle Bronze Age.

Bronze Age phases defined on archaeological grounds (facies)			Sicilian Bronze Age cultural periods	Aegean imports	Approximate starting and ending dates (BC) of the Aegean phases (Low Chronology)	
Mainland Italy	Aeolian Islands	Mainland Sicily			start	end
ProtoApennine B	Capo Graziano 2	Castelluccio 2-Rodì-Tindari-Vallelunga	Early Bronze Age (advanced)	LH I	1580	1530
				LH II A	1530	1470
				LH II B	1470	1400/1390
Apennine	Milazzese 1	Thapsos 1	Middle Bronze Age	LH III A1	1400/1390	1370/60
	Milazzese 2	Thapsos 2		LH III A2	1370/60	1340/30
		Thapsos 3		LH III B	1340/30	1185/80
SubApennine	Ausonio I	North Pantalica	Late Bronze Age	LH III C	1185/80	1065

With a comprehensive examination of the ^{14}C evidence from MBA Sicily pending (being the subject of a current study by this author), this paper aims to analyze a specific aspect of the ^{14}C evidence from Sicily: the findings from the MBA settlement at Portella on the island of Salina (Aeolian Archipelago, Italy). The reason for taking into account the evidence from this site lies in the fact that, even though it represents just one facet of the issue, it bears a strong importance in the cultural and chronological aspects of its period.

In the following sections: a) first, a description will be provided of the cultural context as well as of the find context; b) the ^{14}C determinations will be analyzed, some comments will be made about the previous interpretation of this evidence, and an alternative scenario will be put forth; c) an evaluation will be proposed of the chronological and archaeological implications of these dates on the local culture's chronology and of the links with Aegean phasing.

THE SETTLEMENT OF PORTELLA: ARCHAEOLOGICAL AND CULTURAL CONTEXT

The site of Portella lies on Salina, one of the islands of the Aeolian Archipelago off the northeastern Sicilian shores (south Tyrrhenian region) (Figure 1). Excavations made in the 1940s by Bernabò Brea and Cavalier (1968) unearthed a MBA settlement, ascribed to the Milazzese culture, positioned on the steep slope of a rocky crest overlooking the shore (elevation 20–300 m asl) and made up of 10 huts (Figure 2).

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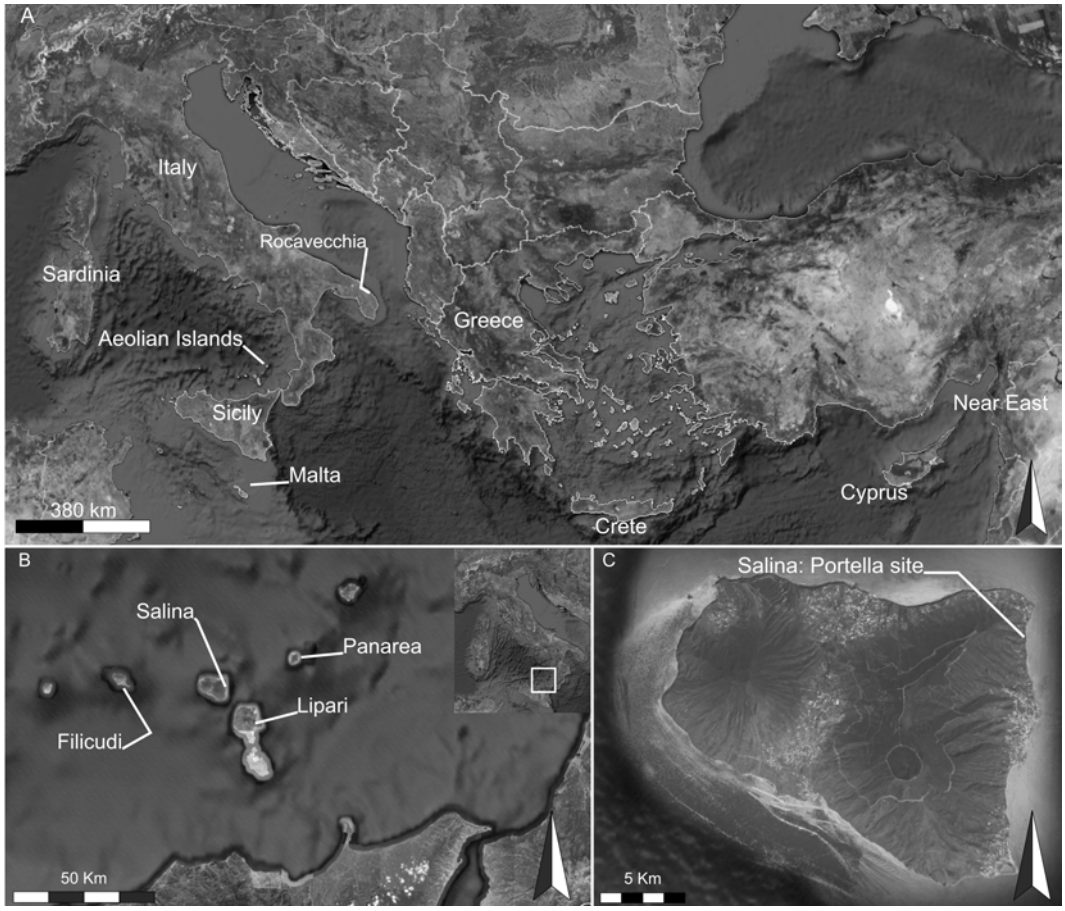

Figure 1 A) Mediterranean basin with indication of the main Bronze Age cultural areas and sites quoted in the text; B) Aeolian Archipelago: location of the main Middle Bronze Age settlements; C) Salina Island with location of Portella settlement. (A–C after Google Earth®, modified)

The huts were subcircular, with floors and part of the walls cut into the slope. The roofs were made with wooden and other perishable materials. The settlement was inhabited only during the MBA and this, along with the geological nature of the sediments that filled the huts after their abandonment, assured the good preservation of the belongings the inhabitants left behind. These comprised ceramic inventories, made up of the typical gray handmade vessels with engraved decoration, stone and clay tools (mortars, grindstones, spindle whorls), a few items of jewelry, and pottery from the coeval Italian Apennine culture. One Mycenaean fragmentary vessel was found in hut F. Additional documentation has been provided by the recent excavations lead by M C Martinelli on this site in 2000, 2006, and 2008. While the publication of the 2006 and 2008 campaigns is pending, the 2000 campaign (Martinelli 2005) discovered a new group of 7 huts (huts L–R), along with some open areas (Figure 2C). Extra evidence for imports from the Italian mainland was added, as well as for imports from the Aegean area: sherds of a pithos with a clay composition suggesting a Cypriot origin were found (see remarks in Alberti 2007b).

The Portella settlement and its material culture share similarities with other Aeolian MBA villages of the Milazzese culture, like the ones on Panarea (site of Punta Milazzese), Filicudi (Montagnola di

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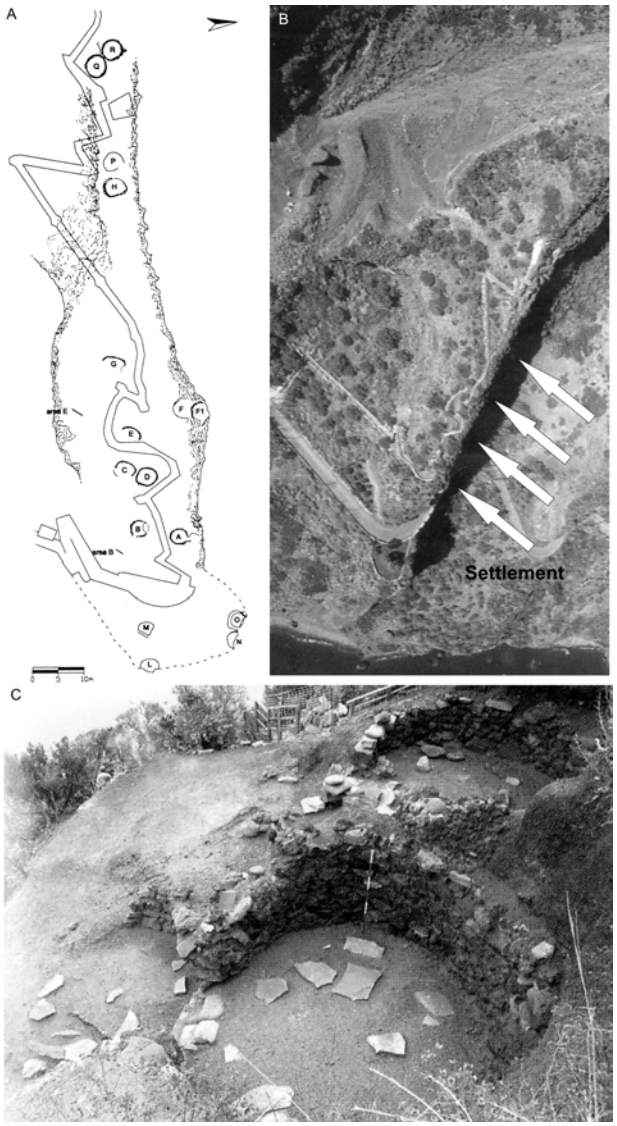

Figure 2 A) Portella settlement's site plan (after Martinelli 2005): huts A–H (hut I not showed) unearthed by Bernabò Brea and Cavalier excavations; huts L–R unearthed by Martinelli excavation (2000 campaign); B) aerial photo showing the settlement on Portella's rocky crest; C) Portella huts Q and R (B–C after Martinelli 2009, modified).

Capo Graziano), and Lipari (Acropoli) (Figure 1B), all the objects of excavations lead by Bernabò Brea and Cavalier (1968, 1980, 1991). Also, these villages yielded imports from Mycenaean Greece. The corpus of the Aegean sherds from the Aeolian Archipelago has been published at different points in time (Taylour 1958, 1980; Cavalier and Vagnetti 1984; Vagnetti 1991). More recently, a number of works have been published regarding (directly and indirectly) the use and appreciation of Aegean pottery by local communities (van Wijngaarden 2002; Vianello 2005) as well as its typological, chronological, depositional, and functional aspects (Bettelli 2002; Alberti and Bettelli 2005; Jung 2005, 2006; Alberti 2008a).

RADIOCARBON SAMPLES FROM PORTELLA

The 2000 campaign provided 7 ^{14}C determinations from 5 huts (L, M, N, O, and Q) (Table 2). The measurements were performed by the Department of Earth Sciences, University of Rome I "La

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Sapienza." After visual inspection using a binocular microscope, the samples underwent a sequential chemical decontamination (HCl-NaOH-HCl) and were then converted to benzene. Dates were measured by liquid scintillation counting (LSC) with multichannel beta spectrometers (Calderoni and Martinelli 2005).

Table 2 Radiocarbon determinations from the Middle Bronze Age settlement at Portella on Salina Island (Milazzese facies) and from Middle Bronze Age strata at Rocavecchia settlement (Apulia, SE Italy; Apennine facies). Data from Martinelli (2005) for Portella and Pagliara et al. (2007) for Rocavecchia. Calibration performed with OxCal v 4.1.6 (Bronk Ramsey 2009), using the IntCal09 calibration curve (Reimer et al. 2009).

Lab ID nr	Context	Provenance	Material	Species	^{14}C age BP	Calibrated age (BCE, 1 σ)	Calibrated age (BCE, 2 σ)
Rome-1247	Port.-Hut O	Roof (hearth?)	Charred twig	*Genista* sp.	3230 ± 45	1600–1437	1612–1423
Rome-1250	Port.-Hut Q	l.s.i.d.[a]	Charred twig	*Genista* sp.	3220 ± 45	1525–1436	1608–1416
Rome-1249	Port.-Hut L	Roof	Charred twig	*Genista* sp.	3210 ± 45	1516–1435	1608–1410
Rome-1244	Port.-Hut M	Hearth	Charred twig	*Genista* sp.	3155 ± 45	1494–1398	1519–1316
Rome-1245	Port.-Hut O	Roof	Charred twig	*Genista* sp.	3150 ± 40	1491–1396	1506–1316
Rome-1248	Port.-Hut L	Hearth?	Charred twig	*Genista* sp.	3120 ± 45	1447–1317	1496–1271
Rome-1246	Port.-Hut O	Roof (hearth?)	Charred twig	*Genista* sp.	3110 ± 45	1434–1316	1493–1266
LTL 1523A	Rocav.-SAS X	US 5801	Seed	*Triticum dicoccum*	3204 ± 40	1504–1433	1606–1407
LTL 1525A	Rocav.-SAS X	US 5785	Seed	*Triticum dicoccum*	3180 ± 50	1500–1414	1606–1318
LTL 1462A	Rocav.-SAS X	US 5779	Charred twig	*Myrtus communis*	3103 ± 35	1427–1318	1446–1271
LTL 1460A	Rocav.-SAS X	US 5785	Charred twig	*Phyllirea* sp.	3074 ± 35	1403–1313	1426–1262

[a]l.s.i.d. = layer sealing internal deposit.

With the exception of hut Q, samples come from layers lying on the floor (Martinelli 2005). Four samples were from layers that have been identified with the collapse of the burnt roof on the original floor. In one case (Rome-1248 from hut L), a provenance from the hut's hearth has been proposed, but the actual presence of such a hearth is not altogether clear, and so a provenance from the burnt roof seems more likely. In another instance (Rome-1246 and -1247 from hut O), the assignment of the samples to the roof or to the hut's hearth is not clear, with the former perhaps more likely. For Rome-1244 from hut M, a provenance from the hearth seems more certain. Sample Rome-1250 from hut Q comes from the uppermost layer sealing the hut's internal deposit. This layer also sealed the adjoining hut R.

The anthracological analysis showed that the samples are related to *Genista* sp., a short-lived species in archaeological terms. Relying on the available data, it seems in fact that both the dimensional aspects (samples are similar to twigs with a diameter of ~4 cm) and xilological features of this species (Calderoni and Martinelli 2005; Fiorentino 2005) rule out the possibility of its long circulation before the incorporation into the living context, since the wood would have begun to decay not long after being cut (Martinelli 2005). Consequently, no old-wood problem (Schiffer 1996; Bronk Ramsey 2009) would have affected Portella's ^{14}C dating: the event archaeologists are interested in (its use as a building material) is reasonably near the date at which the plant ceased to absorb ^{14}C (the cutting of the plant).

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Two further points are worth noting before delving into the core of this paper's argument. The first is the possibility for Portella's species to have absorbed old CO_2 due to the volcanic nature of Salina Island. The issue of the drawback of the "old CO_2" on ^{14}C chronology has been recently stressed in relation to the Aegean chronological debate (Heinemeier et al. 2009; Wiener 2009). As for Portella, the volcanic activity on the island ended well before the Bronze Age, in a period estimated between 24 and 13 kyr BP (Ferlito 2005). This allows the negative effect of old CO_2 on ^{14}C determinations from this island to be ruled out. The second point is that, at least as far as Bronze Age southern Italy is concerned, there does not seem to be any significant discrepancy between the ^{14}C chronology and historically dated deposits that could be a consequence of various natural phenomena (e.g. volcanic carbon vents) affecting the ^{14}C determinations. Although this issue has been recently addressed by Wiener (2009), the Bronze Age evidence from southern Italy shows that historical dating and ^{14}C chronologies are on the whole consistent (see e.g. Cazzella and Moscoloni 1994; Passariello et al. 2009). Consequently, such a phenomenon cannot be turned into a general rule for the region.

RADIOCARBON CHRONOLOGY

In the literature, 2 groups of dates have been devised on the basis of ^{14}C, each representing a different phase of the settlement lifespan (Martinelli 2005). The stratigraphical position of sample Rome-1250 has been highlighted: given its provenance, it seems clear that hut Q (as well as the adjoining hut R) was already dismantled at the date provided by the sample (Martinelli 2005). It is worth stressing that the literature lacks a definition of the time duration of the phase, as well as an estimate of its starting and ending boundaries.

It is this author's opinion that a different picture of the Portella chronology can be sketched out. What we are dealing with here is a group of determinations associated with archaeological material pertinent to a given cultural horizon. No *a priori* information that could provide sequential information is available. For these reasons, the approach taken here is twofold: to preliminarily check whether or not the data are consistent with the alleged hypothesis of group divisions; and to treat Portella's determinations as a phase in a simple Bayesian model (Buck et al. 1996), with the aim being to estimate the phase's start, end, and duration.

The analysis (Figure 3) was performed with the OxCal program v 4.1.6 (Bronk Ramsey 2009), using the IntCal09 calibration curve (Reimer et al. 2009). It must be noted that the hypothesis of the 7 dates being coeval cannot be rejected at 95% confidence, as the OxCal Combine function confirms (χ^2: $T = 6.50 < 12.60$ for $df = 6$) (Ward and Wilson 1978). This weighs against devising any group divisions on a ^{14}C basis. As for the Portella determination defined as a single phase, besides the fact that the modeled probability distributions (solid distributions in Figure 3A) are narrower than those calculated in isolation (hollow likelihood distributions), the analysis indicates that the start of the phase is in the ranges 1502–1438 cal BC (68.2%) or 1556–1422 cal BC (95.4%), with a most likely (modal) date of about 1450 cal BC. The end is in the ranges 1443–1388 cal BC (68.2%) or 1486–1336 cal BC (95.4%), with a most likely date of ~1415 cal BC. Figure 3B shows the sum of the probability distributions of the dates (μ 1445 cal BC, σ 28), which can be considered the best estimate of the distribution of the events. Additionally, the analysis indicates that the duration of the phase can be anything from 0–65 yr (68.2%) or 0–131 yr (95.4%).

In sum: a) the data are not consistent with group divisions; b) the Portella phase is likely to have been a very short one; and c) the most likely starting and ending boundaries are respectively equal to about 1450 and 1415 cal BC.

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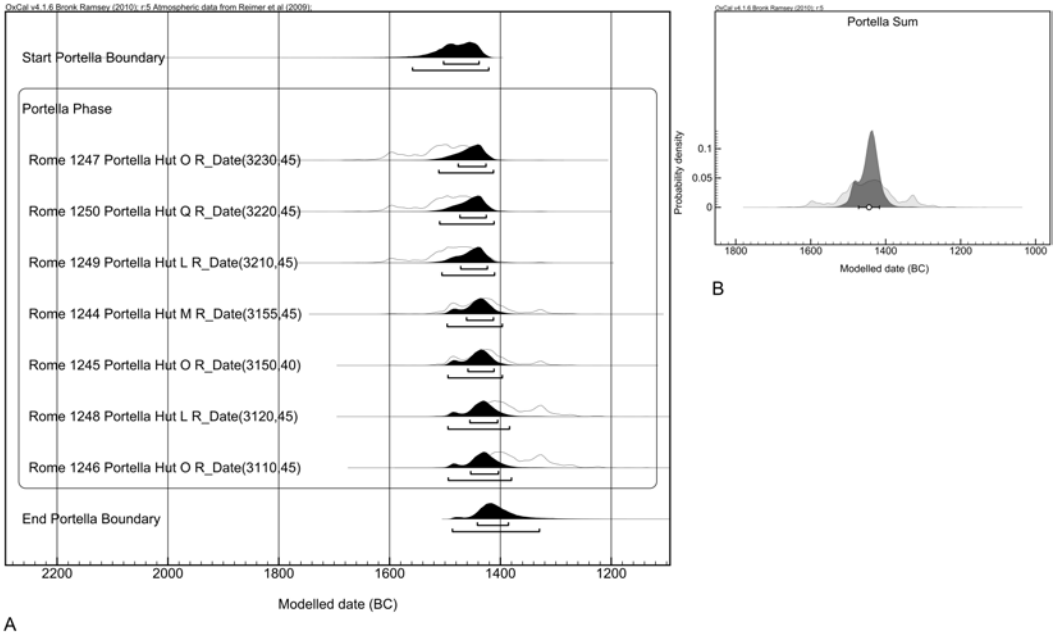

Figure 3 A) OxCal's Phase analysis: modeled calibrated date distributions for Portella phase; starting and ending boundaries of the phase are also shown; B) Diagram of the sum of the probability distributions of the dates in Portella phase, providing the best estimate of the distribution of the events (μ 1445 cal BC, σ 28).

DISCUSSION: CHRONOLOGICAL AND ARCHAEOLOGICAL IMPLICATIONS

Important archaeological implications stem from the preceding analysis, from the standpoint of both the local cultural context and of the links with the Aegean chronology. The current ^{14}C evidence does not support devising any chronological difference between groups of huts. It could still be possible that group divisions had existed, but it is beyond the resolution of ^{14}C dating. What is striking is that the analysis of ^{14}C evidence, suggesting that the Portella phase is very likely to have been a short one, fits the analysis of the huts' ceramic assemblages found in layers pertinent to the huts' last stage of use (Alberti 2008a). Interestingly, this locates the Portella huts under discussion yielding diagnostic vessel types within the same Milazzese 1 phase, namely the earliest stage of the Aeolian MBA culture synchronized with the LH IIIA1 (Table 1). It seems that one cannot further resolve the events within those timespans, since they are beyond the resolution of both ^{14}C and ceramic typology. The only exception could be inherent to huts Q and R. It is worth repeating that sample Rome-1250, which is consistent with the others, comes from the top layer that sealed the internal deposit of hut Q, and of the adjoining R, when it had already been laid down. The sample constitutes a *terminus ante quem* for the period of use of these 2 cabins. Thus, only on stratigraphical grounds, they are likely to be earlier (but, admittedly, by an unknown amount) than the date provided by Rome-1250 (Martinelli 2005; Alberti 2008a). Nonetheless, ceramic typology ascribes huts Q and R to the aforementioned Milazzese 1 phase.

The ^{14}C chronology of Portella is also interesting for its relevance to the absolute dating of Sicilian MBA culture and, indirectly, of the Aegean area. The development of Sicilian and Aeolian MBA has been linked to specific Aegean LH phases (Taylour 1958; Voza 1985; Vagnetti 1991; Jung 2005, 2006; Alberti 2007a, 2008a;) (Table 1). The upper chronological boundary of the period has been synchronized with LH IIIA1, while the lower one has been synchronized (though with different

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views among scholars) with part of LH IIIB. Interestingly, the start of the Portella phase turns out to be earlier than generally hypothesized for the start of the MBA (e.g. Taylour 1980; Leighton 1999; Pacciarelli 2001; Vianello 2005). There are grounds now to raise the beginning of MBA to early in the second half of the 15th century. Further, it is worth noting that the early chronology here devised for the Portella phase is bound to affect a number of archaeological issues related to the evidence from that site: a) the chronological relation to the preceding later stage of the Sicilian Early Bronze Age culture (Rodì-Tindari-Vallelunga facies); b) the chronological connection with Italian mainland Apennine culture, due to the presence of both Apennine and Apennine-type vessels in Portella contexts (see the analysis of the ^{14}C evidence from the site of Rocavecchia, below); and c) the chronology of the earliest metallurgical activity and presence of tin in Sicilian MBA contexts, since a casting mould and tin cramps have been found in a context pertinent to the aforementioned Hut R (Martinelli 2009; on tin see Lo Schiavo 2003; Kassianidou 2003; Alberti 2008b).

As for the Aegean chronology, given the link between the early stage of MBA and the LH IIIA1, which is confirmed by the evidence from both the Sicilian and Aeolian contexts (Jung 2006; Alberti 2008a), the Portella evidence gives support to an early start of LH IIIA1. The aforementioned Aegean fragmentary vessel from hut F, recently redated by Jung (2006) to the LH III A1, unfortunately comes from a context impossible to accommodate within the Milazzese ceramic sequence due to the lack of diagnostic ceramic types (Alberti 2008a). Still, the possibility for that LH IIIA1 vessel to be "in phase" with Portella's chronology stems from the following line of evidence. The later stage of the Aeolian Early Bronze Age (hereafter EBA), characterized by the Capo Graziano 2 culture, is featured by the presence of Aegean ceramic imports ranging from LH I to LH IIB (Table 1) (Taylour 1980; Vagnetti 1991; Jung 2006), which are remarkably absent from MBA horizons or, when present, are very likely to be residuals and/or intrusive from earlier strata (Alberti 2008a). On the basis of both stratigraphy and material culture, there is no evidence of overlap between the Capo Graziano and Milazzese facies, i.e. they were not contemporary. Consequently, the Aeolian EBA and its LH I–IIB imports must be earlier than the start of Portella, while the LH IIIA1 must span from the time period of Portella onward, until its lower boundary was constrained by the start of the subsequent LH IIIA2 (see Wiener 2003b; Table 1).

Supporting evidence comes from the MBA site of Rocavecchia, a fortified settlement lying in the Italian southeast (Apulia) (Pagliara 2005). Recent excavations in sector SAS X have exposed a stratified deposit spanning from the Middle to the Final Bronze Age (Pagliara et al. 2007). Four accelerator mass spectrometry (AMS) measurements on short-lived samples (Table 2) are available from the MBA level dating to the Apennine period (coeval of the Milazzese facies; Table 1). Measurements were made by the CEDAD laboratory (University of Salento, Lecce). Treating these determinations as a phase in a Bayesian framework (for the same reasons exposed before with regard to Portella), it is possible to estimate: a) the starting boundary, falling in the range 1529–1421 (68.2%) or 1704–1395 (95.4%) cal BC with a most likely (modal) date of ~1449 cal BC; b) the ending boundary, falling within 1414–1298 (68.2%) or 1433–1129 (95.4%) cal BC with a most likely (modal) date equal to 1385 cal BC; and c) the time duration: 21–133 yr (68.2%) or 0–133 yr (95.4%).

If we bear in mind that Italian mainland Apennine horizons are post-LH IIB in date (since LH IIB imports are present in earlier horizons but not in Apennine contexts; Alberti and Bettelli 2005; Jung 2006), there are grounds to believe that the evidence from Portella, and the interpretation here suggested, is consistent with that from Rocavecchia. Interestingly, both equally suggest that the MBA (Apennine and Milazzese facies) is likely to start around the mid-15th century BC; consequently, relying upon the present understanding of stratigraphy and ceramic imports, that period is likely to represent the starting boundary of LH IIIA1 as well.

Finally, as far as the Aegean absolute dates are concerned, the hypothesis put forward here fits the current view of Aegean scholars. In spite of the earlier position pointing to LH IIIA1 starting from about 1400/1390 BC (Warren and Hankey 1989; Cline 1994; Warren 1998), it seems that a consensus is now growing about a pre-Amenhotep III for the start of that phase (Amenhotep III's reign: from 1390 to 1352 BC according to the Egyptian Middle Chronology; Wiener 2003b and references therein): see e.g. Manning (1995), Wiener (2003b) and Höflmayer (2009). Interestingly, the evidence here analyzed are consistent with Höflmayer's hypothesis of a LH IIIA1's start falling somewhere during the reign of Amenhotep II (1427–1400 BC), or, better, with the much debated hypothesis of a start before the end of Tuthmosis III's reign (1479–1425 BC) (Cline 1994; Manning 1995; criticism in Warren 1998; 1450 BC is considered acceptable by Macdonald 2001). It is this author's opinion that the Portella evidence can be useful for better defining the chronology of LH IIIA1, whose upper ceiling is poorly defined due to the lack of Aegean vessels found in securely datable contexts in Egypt or the Levant that could help to pinpoint the LH IIB–IIIA1 transition (Cline 1994; Höflmayer 2009). It is clear that the present hypothesis has to be cross-checked by means of new evidence on the absolute chronology of the Aegean phases immediately preceding the LH IIIA1. In this direction, interesting results could come from an Egyptian context (Saqqara tomb 16) in a forthcoming publication, which could contribute more information on the absolute chronology of the LH IIA (F Höflmayer, personal communication).

CONCLUSIONS

This article has attempted to show the potential of ^{14}C chronology in providing an insight into the chronological issues related to the Sicilian and Aeolian MBA contexts. The simple Bayesian analysis of the 7 ^{14}C determinations thus far available from Portella suggests that: a) the data are not consistent with group divisions between huts; b) the Portella phase is very likely to have been a short one, with an estimated span of 0–65 yr (68.2%) or 0–131 yr (95.4%); and c) the phase's start is in the range 1556–1422 cal BC (95.4%), with a most likely date equal of 1450 cal BC; the end is in the ranges 1443–1388 cal BC (68.2%) or 1486–1336 cal BC (95.4%), with a most likely date equal to about 1415 cal BC. Consequently, the start of the Sicilian MBA culture is likely to occur early in the second half of the 15th century BC. Further, the consistency of Portella's ^{14}C evidence has been stressed: d) with the ceramic typological chronology that assigned the assemblages from Portella huts objects of this article to the early stage of Aeolian MBA only (namely, Milazzese 1); and e) with the ^{14}C evidence from Rocavecchia on the Italian mainland. The Portella chronology leaves open the possibility to consider under a new light a number of archaeological issues, stemming from that site's documentation, such as the date of the earliest metallurgical activity and the presence of tin in Sicilian MBA contexts.

As far as the LH IIIA1ceramic style documented at Portella is concerned, it turns out that its relationship with Aeolian early MBA contexts is in agreement with the current view of Aegean scholars, pointing to the start of that style well before 1400/1390 BC. This analysis supports the hypothesis that LH IIIA1 started during the reign of Amenhotep II or, better, of Tuthmosis III. This is bound to contribute to a more clear definition of the absolute date of that Aegean phase.

In conclusion, more work needs to be done in relation to Sicilian contexts, especially analyzing the whole corpus of available data and planning specific research projects. Nonetheless, it is believed that the objectives in this paper can be a first step toward a deeper evaluation of the potential use of ^{14}C evidence in Sicilian prehistory and for assessing the extent to which Aegean and central Mediterranean chronologies can mutually benefit from such an evaluation.

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