Anthony Bonanno*

Tarxien and Tarxien Cemetery. Break or Continuity between Temple Period and Bronze Age in Malta?

Abstract

This question is discussed in the light of new approaches to prehistoric studies and making use of the latest available data.

A clear-cut separation between the two periods had been proposed by Themistocles Zammit as soon as he investigated the site of the Tarxien Temples in 1915-17. There he identified a sterile layer which, in his view, clearly separated the stratum representing the Temple Culture («Neolithic») from the following one, that representing the re-use of the same megalithic structures as a cremation cemetery by a Bronze Age people carrying a totally different culture. The latter were technologically more advanced - they carried bronze tools and weapons - but artistically less endowed than their predecessors.

The possibility of some sort of continuity, despite the apparent complete break in material culture and in the religious ideology, has been suspected and expressed on several occasions by John Evans since the 1950s.

The evidence of the possibility of such continuity comes from imported objects which seem to overlap the two strata, as well as from direct contacts with overlapping contemporary cultures in Sicily. New data from current excavations on the island of Gozo, which still need to be properly processed, are taken into consideration.

Weighing all the evidence one does not find as yet sufficient reason to change the conclusion reached by Zammit in 1930, namely, that the Temple people were in fact replaced by a new people around 2000 B.C.

A Prehistoric Identity

Since early modern times the Maltese archipelago, its rocky landscape marked strikingly by its outlandish megalithic constructions, attracted the interest of antiquarians and students of antiquity, whether foreign or Maltese (Leighton 1989). The first to write on some of these Maltese megalithic building remains was the Frenchman

^{*} Department of Classics and Archaeology, University of Malta.

aller was a hold of the series of the series

Jean Quintin who was struck by the *lapidum longitudinis crassitudinisque stupendae* (Quintin 1536: f. A4v), but he identified these stone relics with two sanctuaries mentioned by the Classical writers Cicero (1st century B.C.) and Ptolemy (2nd century A.D.). Since then the same remains and other monuments of the same type, scattered prominently in various parts of the two major islands of the archipelago, have been variously attributed by writers on Maltese antiquities to a race of giants (Abela 1647: 145, 148), to the inhabitants of the mythical Atlantis (Grognet 1854) and to the Phoenicians (Vassallo 1853; Caruana 1882: 6-26; Perrot-Chipiez 1885: 110, 301-18). It was only in the last decade of the 19th century (Cooke 1893; even earlier with Furse 1869) but more emphatically and decisively at the turn of the 20th century (Mayr 1901) that the concept of «prehistory» and «prehistoric man» was introduced into Maltese archaeological studies and applied to these ancient monuments.

None of the clearance operations conducted in the first half of the 19th century, Ggantija in 1820 (Mazzara 1827; Smyth 1829), Hagar Qim in 1839 (Vance 1842) and Mnajdra in 1840 (Lenormant 1841), nor the somewhat more specific «excavations» made in the second half of the same century (Caruana 1886 and 1896) seem to have provided evidence of repeated, successive usage of the same site at different ages; in any case, no such evidence was ever identified and reported.

Table showing the chronological sequence of Maltese archaeology from the earliest presence of man on the island down to the end of the Roman period

PERIODS	PHASES	SUGGESTED CALIBRATED RADIOCARBON DATES B.C. (Renfrew 1972)	OTHER APROXIMATE DATES B.C.
ROMAN			218 B.CA.D. 535
PHOENICIOPUNIC	Punic		550-218
	Phoenician	1	700-550
BRONZE (and IRON) AGE	Bahrija		
	Borg in-Nadur		900-700
	Tarxien Cemetery	2500-1500	
TEMPLE PERIOD	Tarxien	3300/3000-2500	
	Saflieni		3300-3000
	Ggantija	3600-3300/3000	
	Mgarr	3800-3600	
	Zebbug	4100-3800	
NEOLITHIC	Red Skorba	4400-4100	
	Grey Skorba	4500-4400	
	Ghar Dalam	5000-4500	

Neolithic and Bronze Age

It was in the years 1915-1919, when the Tarxien megalithic temple complex was excavated by Themistocles Zammit, that two successive occupations of the same site within the prehistoric age were identified for the first time. At Tarxien Zammit discovered a circumscribed area covered with a deposit consisting of dark ashy soil containing cremated bones, potsherds and whole urns lying over another level, almost a metre high, resting directly on the floor of the megalithic temple and consisting only of fine sandy soil. At the edges of this circumscribed area the ashy level cut into and partly lay over a deposit representing the last use of the westernmost of the three temple units before it fell into disuse (Zammit 1930: 45-7; Evans 1971: 149-51).

Although it was the first time that a bronze carrying culture was identified for the Maltese islands Zammit found no reason to doubt that at Tarxien he had come across a sequence of two consecutive cultures sharply and distinctly separated from each other. He went even further and suggested that the «sterile», sandy layer he found underlying the Bronze Age cremation cemetery implied a period of separation of possibly several scores of years, if not of centuries, between the two cultures (Zammit 1930: 45).

However, as neither this sandy layer nor the dark ashy soil covered the whole area occupied by the previous temple structures, I find the debate on the significance of this «sterile» layer quite futile. From Zammit's field notes it transpires that the extent of this layer was limited to the area covered by the Bronze Age ashy layer. Therefore, it could not have been a natural deposit of windswept sand, as suggested by Zammit, since this would have covered the whole site, if not beyond. I can only interpret it, therefore, as a layer deposited purposely by the Bronze Age people who intended to establish their cemetery there, after having cleared the same area from the temple debris (Evans 1971: 149).

After Zammit's discovery at Tarxien further excavations and research continued to emphasise the alien nature of the Bronze Age cemetery culture to that of the previous temple builders. Further explorations in different temple sites revealed several instances of re-utilisation of the same temple structures by the subsequent Bronze Age populations. In most cases, such as at Skorba (Trump 1966: 7; 1990: 162) and at Borg in-Nadur (Murray 1923-29; Trump 1990: 162), the secondary occupation was seen as «squatting» by the either the Tarxien Cemetery of Borg in-Nadur folk inside truck to the large the structures. In contrast to the large the secondary occupation ruined megalithic temple structures. In contrast to the latter, the structures of the Bronze Age populations were small, unsophisticated, round or oval huts built of perishable mud-brick supported by low foundations of relatively small and shapeless blocks of limestone.

Meanwhile the chronology of the prehistory of the Maltese islands was being sorted out with internal subdivisions both for the Bronze Age (Murray 1934) and, later, for the temple period, initially designated as «Neolithic» (Zammit 1930: 45-7, 80), later as «Copper Age» (Trump 1966: 20-1), to be given the more neutral and less confusing label of «Temple Period» in more recent years (Bonanno 1986; Trump 1990). A distinction thus surfaced between the re-use as a cremation cemetery of the Tarxien temples by the earliest Bronze Age inhabitants (for this reason better known as the Tarxien Cemetery folk) and the «squatting» inside the Skorba and Borg in-Nadur

temples by the same or by the inhabitants belonging to the second phase of the Maltese Bronze Age, named after the second of these two sites (the *Borg in-Nadur* phase).

Other evidence of Bronze Age re-occupation of earlier, Temple Period sites comes from cave dwellings. At Ghar Dalam, a large cave situated on the side of a valley close to the southeast harbour of Marsaxlokk (better known for its rich yield of Pleistocene fauna), the Temple Period is represented by pottery ranging from the earliest *Zebbug* to the latest *Tarxien* phase, while all three Bronze Age phases are represented, with *Borg in-Nadur* sherds predominating (Evans 1971: 20). A partly quarried cave explored in May 1927 on a hill in the Torri Falka district in the north of the main island (*M.A.R. 1927-8*, 1-2) produced evidence of a similar cave dwelling used successively in both the Temple Period and in the Bronze Age.

A parallel situation to that encountered at Tarxien has been emerging over the last five years at a unique archaeological site being explored by a joint research mission promoted by the Universities of Malta and Cambridge, and the Museums Department of Malta. Here, at Xaghra on the smaller island of Gozo, the monument that was reoccupied was not a megalithic temple, as at Tarxien, but the enclosed area above an underground inhumation cemetery of the same period, situated some 300m. west and further uphill from the impressive Ggantija temples. The roof of this once underground complex had in most parts collapsed at some stage sealing beneath it deep layers of interred human, as well as animal bones, occasionally accompanied by small anthropomorphic figurines, amidst a scatter of megalithic structures.

The excavations of this underground cemetery are still under way and it is still not certain whether its roof of natural rock had already caved in when the site was occupied by the Tarxien Cemetery people. I believe it had already collapsed, the sporadic Tarxien Cemetery sherds found in some of the lower layers mixed with Tarxien material being accounted for as loose material slipping in from above along with other debris. Whatever the case may be, the Bronze Age inhabitants seem to have been attracted to the spot, as their contemporaries had been to the Tarxien temple ruins, by the awesome and «religious» aura of the circle of large upright megaliths that enclosed the underground funerary monument. This megalithic monument is known to have survived at least till the end of the 18th century when it was described and illustrated with an engraving by a French traveller (Houel 1787: pls. 249, 251) and later still, in 1820, when the artist Charles de Brochtorff painted two watercolours of the site while a huge hole was being dug up in its middle (Brochtorff 1849). This Bronze Age re-occupation of the Xaghra Circle (or Brochtorff circle, as it has become more popularly known) is represented by a layer of ashy soil which covers various parts of the area enclosed by the stone circle, and which resembles in many ways that encountered at Tarxien in 1915-8. The major difference revealed so far is that it contains neither cinerary urns nor an appreciable quantity of cremated human bone, as was the case in Tarxien. The scientific analysis of this layer, in order to establish its components, is still pending and, until it is made available, judgement on the significance of the whole layer is suspended.

In the light of this discovery, and in the wake of new trends in theoretical approaches to archaeological studies, in particular processual archaeology whose purpose extends to the study of subsistence technology, social organisation, population density, and so forth, and from these parameters to construct a picture of social

State of Brooks

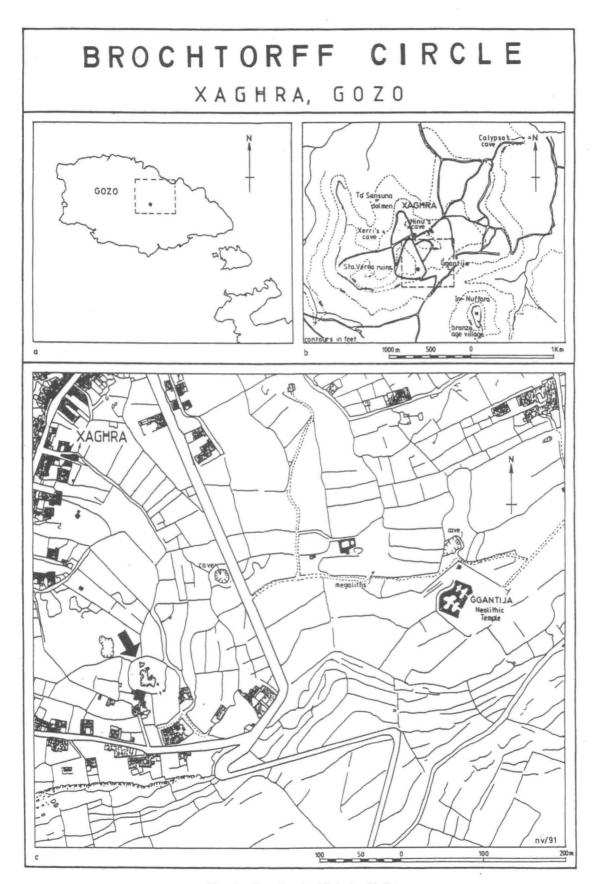


Fig. 1 - Drawing by Nicholas Vella.

change and explain the process of that same change (Renfrew 1973: 253), it has recently been suggested that: «Evidence is now accumulating that although the ritual practice and the material culture changed dramatically, the break may not have required a replacement of population» (Bonanno et al. 1990: 202). The qualification that «not all the present authors are agreed on how far to stress this point» (ibid.) is an important one as the present speaker was the one who was not totally convinced of the statement.

From the résumé of their paper which has already been circulated I gather that my colleagues Caroline Malone and Simon Stoddart are reproposing the same position, allowing for a drastic restructuring of the social network and the introduction of new cremation rites to replace inhumation and temple building. This stand, I believe, tacitly implies that it was the same community which underwent all these changes. I really wish I could agree with my colleagues Malone and Stoddart but, however hard I try, I cannot manage to convince myself that it was so. I shall explain why in a moment.

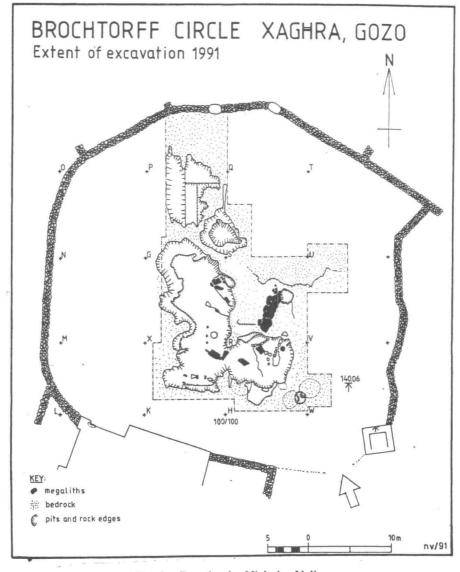


Fig. 2 - Drawing by Nicholas Vella.

The Maltese Bronze Age is fraught with numerous questions and problems which remain unanswered and unsolved by the general picture presented by Maltese prehistoric studies over the last 50 years. One should perhaps remember at this stage that after the solid contribution of field research and cataloguing undertaken by John Evans in the 1950s which resulted in his monumental survey of the prehistoric antiquities of the islands (1971), and the immensely rewarding excavation of the relatively modest megalithic site of Skorba by David Trump in 1962-4, no further field work was undertaken for more than twenty years until the excavations begun by the Cambridge-Malta research team in 1987. It should be said, however, that the series of radiocarbon dates produced by the Skorba excavations were in the meantime exploited by Colin Renfrew in various publications in the 1970s (Renfrew 1972; 1973a: 161-82) to place the Maltese prehistoric monuments back on the map of world prehistory and to claim for them a position of unrivalled importance. The only physical additions made in those two decades to the catalogue compiled by Evans were a temple unit of reduced proportions inadequately explored at the millennial sanctuary site of Tas-Silg, overlooking Marsaxlokk harbour (Missione 1964-71), a section of what appears to be a small megalithic temple at L-Iklin (Bonanno 1983) and another at Tar-Raddiena (M.A.R. 1986: 68) both in the vicinity of Birkirkara, in the centre of the island, as well as a small, improperly investigated hypogeum at Santa Lucija, to the southeast of Malta (M.A.R. 1973-4: 51). As for the Bronze Age, Tancred Gouder (then Curator, now Director of the Department of Museums) investigated a series of silo-pits together with traces of Borg in-Nadur huts of an already listed Bronze Age site at Il-Wardija ta' San Gorg (M.A.R. 1972-3: 72).

Among the problems that remain unsolved the most irksome and intriguing, and the ones that are related to the topic in discussion and beg for early attempts for solution are the following:

- 1. the so far total absence of not only settlements but also places of worship belonging to the *Tarxien Cemetery* people, who remain identifiable with some consistency only at Tarxien and, now, at the Xaghra Circle;
- 2. the process by which this same people eclipsed (to avoid the term «replaced») the temple builders;
- 3. in contrast with 1. above, the total absence of remains connected with funerary ritual (as well as religious worship) of the successive *Borg in-Nadur* folk who have left us numerous fortified settlements in both islands and whose presence is attested even in Sicily (Bernabò Brea 1966; 1976-7);
- 4. similarly, the process of encounter, conflict or peaceful sincretism between the *Tarxien Cemetery* and the *Borg in-Nadur* peoples in the first instance, between the *Borg in-Nadur* and the *Bahrija* cultures in the second instance, and between the latter two prehistoric cultures and the first historical inhabitants, the Phoenicians, in the final stage of Maltese prehistory.

Solutions to these problems fall within the ambit of another programme of collaboration launched this year, this time between the Universities of Palermo and Malta and the Museums Department of Malta. The subject of this paper limits itself to the discussion of the problem related to the transition between the two prehistoric ages, the Temple Period and the Bronze Age, in the light of the available evidence.

Apparent early signs of *Tarxien Cemetery* culture within the latest phase of the Temple Period were already noted by Evans (1971: 180, note 1, 221; 1984: 496). These signs consisted mostly of fragments of the so-called «Thermi Ware» or «Grey Ware», an imported type of pottery closely related to the *Tarxien Cemetery* pottery, two sherds of which were even found in a *Ggantija* level – i.e. very early in the Temple Period – at Skorba, while other sherds were found in *Tarxien* contexts both at Skorba and Tarxien (Trump 1976-7: 28-9). The complete specimen (a troncoconic bowl on a pedestal with a thickened rim decorated with dot-filled chevrons) recovered from the soil behind the decorated «tabernacle» altar in the southernmost temple at Tarxien when that altar was moved to the Museum in 1956 (*M.A.R. 1956-7*: v) is the strongest evidence, if any, of this ware belonging to the Temple Period. The closest connection of this Grey Ware with *Tarxien Cemetery* is claimed to come from the little Sicilian island of Ognina where it was found in association with pottery «closely similar» to the *Tarxien Cemetery* one.

Nevertheless, two points need to be emphasised in relation to this associa tion: 1) that the Grey Ware does not occur in the *Tarxien Cemetery* contexts either at Tarxien or anywhere else in Malta, as observed by Evans himself (Evans 1984: 496); and 2) that the material associated with it at Ognina is only very similar, but not identical to the *Tarxien Cemetery* ware. From this it seems that the whole relationship between Ognina proposed by Bernabò Brea as a Maltese colony in the Bronze Age (Bernabò Brea 1966; Lena et al. 1988:29-30; cfr. Tusa 1983: 307), and the *Tarxien* and *Tarxien Cemetery* cultures in Malta needs to be re-examined. It is hoped that the joint research programme projected between colleagues from Palermo and Malta will throw light on this question (see also Procelli 1981: 80-1). Even if the evidence of overlapping Maltese cultural contacts in Sicilian contexts, mainly *Castelluccio* ones, is convincing, this does not constitute in any way proof of cultural or ethnic continuity in Malta itself.

Break or Continuity?

The best way of examining whether there is any diachronical continuity of a resident population in a limited and, at the same time, physically isolated space, such as that of the Maltese islands, is by comparing the material cultures of the two phases in question.

Technology

Prima facie the Tarxien Cemetery people were technologically more advanced than their predecessors. They carried, and possibly manufactured, bronze tools and weapons whereas the temple builders appeared to be entirely ignorant of any metal. On the level of building technology, however, the Tarxien Cemetery people are dwarfed to Lilliputian dimensions by the impressive achievements of the temple builders. This is obviously not the place to illustrate the architectonic grandeur of the megalithic temples and the advanced technological devices perfected by their builders to quarry,

transport and erect these wonderful structures (Bonanno 1988; Trump 1979; 1981). With the appearance of the *Tarxien Cemetery* people all that was forgotten and replaced by the odd menhir and dolmen structure which have little comparable with their analogous structures in Puglia and northwest Europe (Evans 1956).

The Social Structure

Whereas we have ample evidence to suggest that the temple society grew into a pronouncedly stratified one by the *Tarxien* phase (Bonanno 1986: Trump 1990) we have next to nothing that could throw light on the social structure of the *Tarxien Cemetery* people. No proper investigation of the social differentiation that might be gleaned from the personal ornaments accompanying incinerated skeletal remains found in the *Tarxien Cemetery* layer has ever been undertaken. The social and the economic structures are, therefore, still imponderable for this earliest phase of the Bronze Age, and one hopes that further field investigation will shed more light on the matter.

Re-occupation of Sites

The re-utilisation of cave dwelling sites, or of religious buildings for funerary or dwelling purposes does not *per se* imply any cultural, let alone ethnic, continuity between the occupants of those sites. On the contrary, the radical change in the purpose of the latter type of site suggests an equally radical change of population and cannot be explained simply by the emergence of a new ritual expression which made monumental building unnecessary. The emergence of such a new ritual expression itself requires an explanation since we know too well from our own experience how difficult it is to replace a firmly established funerary ritual by a completely different one.

Figurative Art

If I may dwell for a while on a less materialistic, even if equally material, evidence, I wish to support my argument by illustrating the drastic change that took place in figurative representation especially, but not only, in the expression of the human figure.

The sculpture of the megalithic temples, in particular the highly sophisticated spirals and reliefs of animals decorating various stone blocks at Tarxien, Hagar Qim and Ggantija are evidence of skilled artistic talents nowhere present in the *Tarxien Cemetery* cultural expressions. The numerous clay statuettes, and statues, of squatting, standing, seated and reclining figures, carved out or modelled in various materials, impart a visualisation of the human form in stark contrast with the geometric abstractions of the *Tarxien Cemetery* anthropomorphic figurines, all in baked clay.

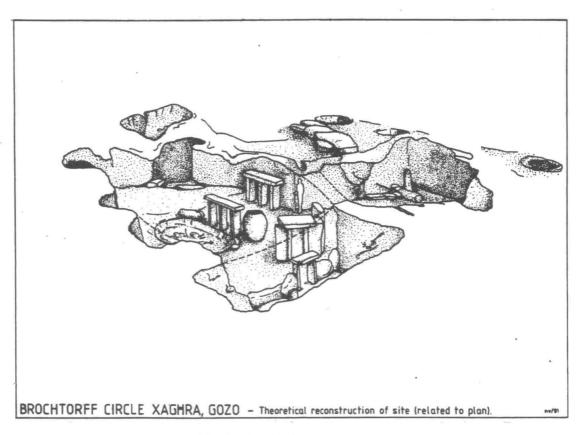


Fig. 3 – Drawing by Nicholas Vella.

Pottery

There is no doubt that the best indicator of culture change in the archaeological record is the ceramic kit. On a dispassionate, objective analysis of the pottery repertoire of the Tarxien temple culture and of that of the Tarxien Cemetery culture, one finds not even the slightest shred of evidence of continuity. If there had been only a collapse of the social network and a re-alignment of the social forces, as has been suggested, much the same type of pottery with the established shapes, fabrics and firing techniques, as well as decorative patterns, would have continued to be manufactured. Even if the temple population had been subjected into a dominated population by a more powerful, warlike group of invaders (a scenario which in itself would involve a movement of new peoples, albeit a limited one), the least one would expect is surviving traces of the previous ceramic manufacturing techniques in the successive cultural horizon. This is exactly what actually happened in the Maltese context after the islands were dominated by the Romans. The archaeological record provides ample evidence for the persistence of the language, religious pantheon, funerary traditions and ceramic repertoire for centuries after Malta had come to form part of the Roman world in 218 B.C. (Bonanno 1992: 14-5, 28). Besides, I do not know of cases of foreign domination of a flourishing culture which did not result in either influence on the culture of the dominators (see, e.g., the Mycenaeans and the Romans) or, at the very least, surviving patterns of material culture.

Conclusion

In dealing with cultural contact and cultural change in prehistoric studies we have experienced a tendency of moving from one extreme to the other. The radiocarbon «revolution» in dating has, indeed, exposed the errors of diffusionism. Unfortunately, the reaction to diffusionism led to extreme evolutionary models which set the stage for isolationism. It is because of this reaction to diffusionism that we are now so wary of speaking of «parent cultures» and even more wary of accounting for culture change by «convenient» migrations.

The archaeological evidence suggests the complete disappearance of the Temple culture and its replacement by the Bronze Age one, even though we should not be too concerned either with the hiatus posited by Zammit on the strength of his so-called «sterile layer» or the dramatic end of the gentle temple people at the hands of the warlike Bronze Age invaders proposed by Trump (1972: 21-2, 47-8) and previously by Evans (1959: 168-9).

The same reasons brought forward by John Cherry (1981: 58-64), and by John Evans before him (1977: 14-5), to explain the relatively late «colonisation» of small Mediterranean islands in the Neolithic, can be proposed for the collapse and disappearance of flourishing cultures. As opposed to continental contexts, or very large island ones (like Sicily), the restricted space and the absence of variable agricultural and pastoral territory in a small island like Malta would not have allowed for diversification of the economy in times of distress. This would have been compounded by the total absence of raw materials (such as the precious obsidian deposits on the island of Lipari) that could be traded in exchange of necessary commodities to allow a breathing space for recovery.

Once agriculture, the lifeline of a flourishing economy, failed (most probably as a result of climatic setbacks) it was the end. There was no way of reviving it and the only hope for survival was the less adverse climatic and environmental conditions somewhere beyond the sea.

Bibliography

- ABELA, G.F. 1647. Della Descrittione di Malta, Isola nel Mare Siciliano, con le sue Antichità ed altre Notizie. Malta.
- BERNABÒ BREA, L. 1966. Abitato neolitico e insediamento maltese dell'età del bronzo nell'isola di Ognina (Siracusa) e i rapporti fra la Sicilia e Malta dal XVI al XIII sec. a.C., *Kokalos* 12 (1966) 40-69.
- BERNABÒ BREA, L. 1976-7. Eolie, Sicilia e Malta nell'età del bronzo, *Kokalos* 22-3 (1976-7) 33-108.
- BONANNO, A. 1983. Two archaeological sites recently discovered at L-Iklin, *Hyphen* [Malta] II, 5 (1983) 212-20.
- BONANNO, A. 1986. A socio-economic approach to Maltese prehistory, the temple builders, in *Malta: Studies of its Heritage and History*, Malta.
- BONANNO, A. 1988. Tecniche costruttive dei templi megalitici maltesi, in A.F. ANATI & E. ANATI (ed.), *Missione a Malta*, Milano, 101-12.

- BONANNO, A. 1992. Roman Malta. The Archaeological Heritage of the Maltese Islands, Rome.
- BONANNO, A., MALONE, C., STODDART, S. & GOUDER, T. 1990. Monuments in an island society: the Maltese context, *World Archaeology* 22, 2 (1990) 190-205.
- BROCHTORFF, C. de. 1849. Series of Twenty-one Drawings of the Druidical Remains Discovered in the Island of Gozo near Malta. Taken on the Spot in the Year 1820, London-South Lambeth. National Library of Malta, Bibliotaca Ms. 1161.
- CARUANA, A.A. 1882. Report on the Phoenician and Roman Antiquities in the Group of the Islands of Malta, Malta.
- CARUANA, A.A. 1886. Recent Further Excavations of the Megalithic Antiquities of Hagiar-Kim, Malta, executed in the Year 1885, Malta.
- CARUANA, A.A. 1896. Further megalithic discoveries and explorations in the islands of Malta during 1892 and 1893, *Antiquaries Journal 53* (1896) 26-.
- CARUANA, A.A. 1899. Frammento Critico della Storia Fenicio-Cartaginese, Greco-Romana etc. delle Isole di Malta, Malta.
- CHERRY, J.F. 1981. Pattern and process in the earliest colonization of the Mediterranean islands, *Proc. Preh. Soc.* 47 (1981) 41-68.
- COOKE, J.H. 1893. Some evidence of the occupation of the Maltese islands by prehistoric man, *The Mediterranean Naturalist* 2, 21 (Feb. 1893) 315-20.
- EVANS, J.D. 1953. The prehistoric culture-sequence in the Maltese archipelago, *Proc. Preh. Soc.* 19 (1953) 41-94.
- EVANS, J.D. 1956. The «Dolmens» of Malta and the origins of the Tarxien Cemetery culture, *Proc. Preh. Soc.* (N.S.) 22 (1956) 95-101.
- EVANS, J.D. 1959. Malta, London.
- EVANS, J.D. 1971. The Prehistoric Antiquities of the Maltese islands; a Survey, London.
- EVANS, J.D. 1977. Island archaeology in the Mediterranean: problems and opportunities, World Archaeology 9 (1977) 12-26.
- EVANS, J.D. 1984. Maltese prehistory a reappraisal, in CHAPMAN, R.W. et al. (ed.), *The Deya Conference of Prehistory*, Oxford, 489-97.
- FURSE, P. 1869. On the prehistoric monuments in the islands of Malta and Gozo, Transactions of the Third Session of the International Congress of Prehistoric Archaeology at Norwich (1868), London, 407-.
- GROGNET, G. 1854. Compendio della Isola Atlantide della quale le Isole di Malta, Gozo e Comino sono Certissimi Resti, Malta.
- HOUEL, J. 1787. Voyage Pittoresque des Iles de Sicile, de Malte, et de Lipari etc., IV, Paris.
- LEIGHTON, R. 1989. Antiquarianism and prehistory in west Mediterranean islands, *The Antiquaries Journal* 49 (1989) 183-204.
- LENA, G., BASILE, B. & DI STEFANO, G. 1988. Approdi, porti, insediamenti costieri e linee di costa della Sicilia sud-orientale dalla preistoria alla tarda-antichità, *Archivio Storico Siracusano* III, 2 (1988) 5-87.
- LENORMANT, C. 1841. Monuments phéniciens de Malte, Revue Générale de l'Architecture et des Travaux Publics 2 (1841) 497, pl. 21.
- M.A.R. 1903. Museum Annual Reports 1903-4, Malta 1905-.
- MAYR, A. 1901. Die vorgeschichtlichen Denkmäler von Malta, Abhandlungen der K. bayer. Akademie der Wissenschaften I, Cl., XXI. Bd., III. Abt., Munich, 645-.
- MAZZARA, L. 1827. Temple ante-Diluvien dit des Géants dans l'Ile de Gozo, Paris.
- MISSIONE. 1964-71. Missione Archeologica Italiana a Malta. Rapporto Preliminare della Campagna 1963... 1970, Rome.
- MURRAY, M. 1923-29. Excavations in Malta, I-III, London.

- MURRAY, M. 1934. Corpus of the Bronze Age Pottery of Malta, London.
- PERROT, G. & CHIPIEZ, C. 1885. Histoire de l'Art dans l'Antiquité, III, Paris.
- PROCELLI, E. 1981. Il complesso tombale di C. da Paolina ed il problema dei rapporti tra Sicilia e Malta nella prima età del Bronzo, *Bollettino d'Arte* 9 (1981) 83-110.
- UINTIN, J. 1536. Insulae Melitae Descriptio, Lyons.
- RENFREW, C. 1972. Malta and the calibrated radiocarbon chronology, *Antiquity* 46 (1972) 141-4.
- RENFREW, C. (ed.) 1973. The Explanation of Culture Change: Models in Prehistory, London.
- RENFREW, C. 1973a. Before Civilization: The Radiocarbon Revolution and Prehistoric Europe, London.
- SMYTH, W.H. 1829. Notice of some remains at Goza, near Malta, Archaeologia, 22, 294-6.
- TRUMP, D.H. 1966. Skorba Excavations Carried out on Behalf of the National Museum of Malta, 1962-4, London.
- TRUMP, D.H. 1972. Malta. An Archaeological Guide, London.
- TRUMP, D.H. 1976-7. Contatti siculo-maltesi prima dell'età del bronzo, *Kokalos* 22-3 (1976-7) 23-32.
- TRUMP, D.H. 1979. I primi architetti del mondo, i costruttori dei templi maltesi, in M.J. FONTANA, T. MANNI PIRAINO & F.P.RIZZO (ed.), *Miscellanea di Studi in Onore di Eugenio Manni*, Rome, 2113-24.
- TRUMP, D.H. 1981. Megalithic architecture in Malta, in *Antiquity and Man: Essays in Honour of Glyn Daniel* (ed. J.D. Evans, B. Cunliffe, C. Renfrew), London, 128-40.
- TRUMP, D.H. 1990. The Maltese temples: function, development and social implications, Bollettino del Centro Camuno di Studi Preistorici 25-6 (1990) 161-6.
- TUSA, S. 1983. La Sicilia nella Preistoria, Palermo.
- VANCE, J.G. 1842. Description of an ancient temple near Crendi, Malta, *Archaeologia*, 29, 227-40.
- VASSALLO, C. 1853. Phoenician and Egyptian monuments in Malta, *The Art Journal* [Malta] 5 (1853) 221-4.
- ZAMMIT, T. 1930. Prehistoric Malta: the Tarxien temples, Oxford.

