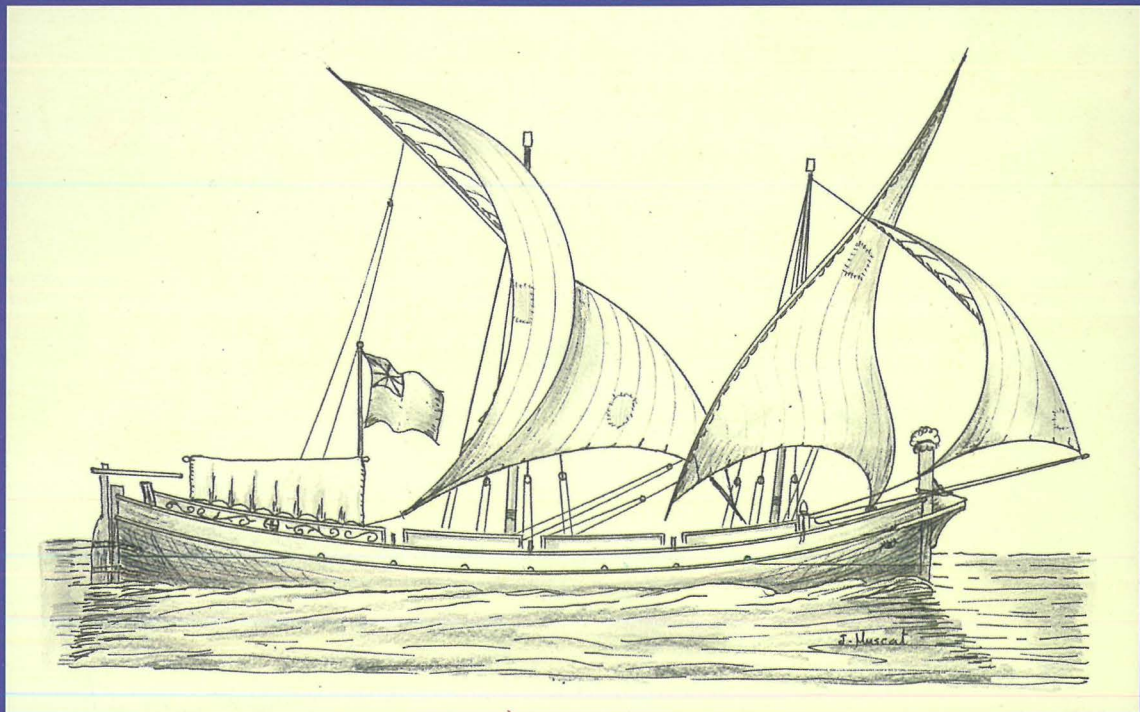

MALTA ARCHAEOLOGICAL REVIEW



THE ARCHAEOLOGICAL SOCIETY

The Archaeological Society is formed of members with a genuine interest in archaeology in general and that of the Maltese Islands in particular. Anyone with such an interest, whether a professional archaeologist or not, is welcome to join.

The Society is concerned with all matters pertaining to archaeology. One of its principal objectives is to promote and enhance the study of archaeology at all levels. It is not a pressure group. It believes that it is only when there is a sufficient interest in, and understanding of, our archaeological heritage among the public at large, that this priceless heritage can be protected and preserved.

The Society organises meetings and seminars, some of which are open to the public, as well as site visits both in the Maltese Islands and abroad. It publishes the *Malta Archaeological Review*. It endeavours to maintain close relations with Heritage Malta, with the Superintendence of Cultural Heritage and also the Department of Classics and Archaeology of the University of Malta and to support their activities. It also maintains a network of relations with archaeological societies and organisations abroad.

The *Malta Archaeological Author's Guidelines* turn issues, the Editor will be

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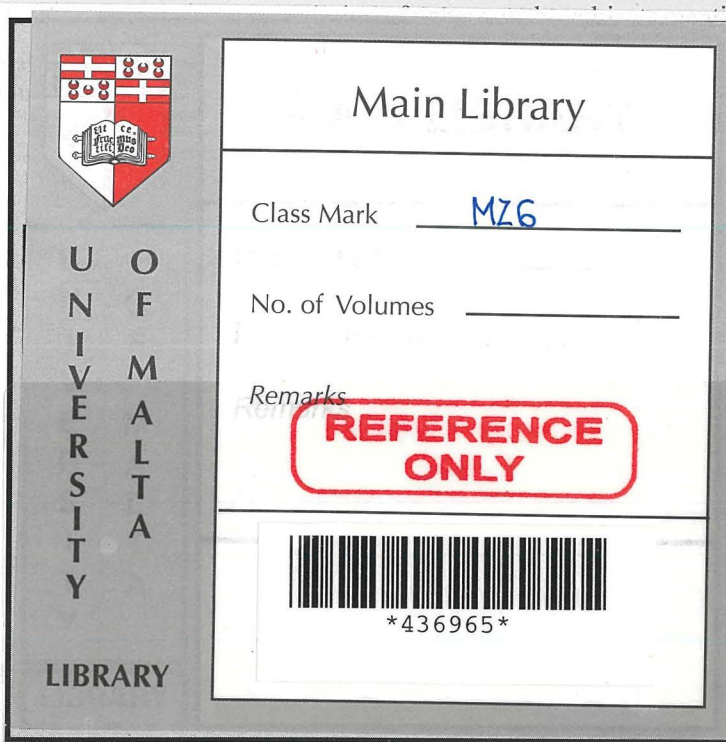
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* Paper read at the Conference on Maritime Archaeology, Maritime Museum, 2002
Convener: Mr Timmy Gambin
Chairpersons: Prof. Anthony Bonanno and Dr Antonio Espinosa Rodriguez

Front cover: Drawing of a Maltese Xprunara (1832) by Joseph Muscat

From the President

Antony de Bono

The Archaeological Society, founded over a decade ago, was formed to encourage a wider interest in the archaeology, particularly that of the Maltese Islands and that of the wider Mediterranean. Its aims and objectives, as stated in its statute, are broadly to promote a scientific interest in this archaeology among the public at large, and to accomplish this by engaging the professional interest of the University and public sector archaeologists (at that time, the Museums Department) in a dynamic *troika*. One of its purposes was to stimulate debate and discussion on archaeological topics of local interest. However constructive discussion has not been easy to stimulate and it is not always easy to keep a *troika* moving smoothly in the same direction.

Much has changed in the last ten years, and it seems appropriate to look back at some of the changes and forward to the future.

Interest in archaeology in Malta, has increased a great deal over the past decade, and the Archaeological Society can claim to have played a significant part in this. The Society has, at times, been criticised for not acting as a pressure group, but given the essence of its intellectual interest and the delicate nature of the equilibrium of its *troika* composition, this is hardly justified. Ten years after the Society's foundation the archaeological scene has indeed changed radically.

The coming into force of the Heritage Act has transformed the archaic Museums Department, bringing into play Heritage Malta which, *inter alia*, is now responsible for museums, collections and sites, together with the Superintendency which is responsible for policy and monitoring.

Quite apart from these sweeping administrative changes, the scene has been transformed by the emergence of a whole new generation of young archaeologists, trained at the University of Malta, many of whom have gone on the complete higher degrees abroad, mainly in the UK. The impact of these has been terrific. It has started to bring archaeology

in Malta out of the Dark Ages in more ways than one. To study archaeology in a small country, full of the most remarkable remains, in the centre of the Mediterranean, seems an ideal opportunity, providing full advantage is taken of opportunities to visit at least some of the famous archaeological sites round the Mediterranean, and vast and incomparable collections in museums abroad such as the British Museum, Ashmolean, the Louvre, Cairo, Athens and, not least, the neighbouring Paoli Orsi museum in Syracuse.

The National Museum of Archaeology was refurbished several years ago and now displays its treasures in a much enhanced light. There is still much to be accomplished and much more to be displayed from its stored reserves. The remarkable Neolithic Temple of the Dead, the Hypogeum, underwent a massive programme of stabilization and conservation and is now re-opened protected from the ravages of water seepage and other trauma; a great success story.

The Archaeological Society has held a long list of lectures and seminars starting with one on the Xaghra Circle, and taking advantage of the visits of all manner of distinguished archaeologists. Regular visits to sites have been held, often with large numbers of guests as well as members. However, one seminar, on "Archaeology in Education", was widely misinterpreted as "Education in Archaeology", and thus a great opportunity was missed. Another achievement has been the publication of this journal, for which much credit must go to the Editor.

A great deal has changed for the better, and there is promise of much to come; yet very much remains to be done.

The key question remains: **funding.**

It is very clear that no amount of administrative reform can avoid the need for a totally new order of resources to be made available if the archaeological heritage with which Malta has been so richly endowed, is to be preserved and

exploited as a unique asset underpinning the tourist industry upon which the economy of the Islands so heavily relies. Increasing competition from the burgeoning tourist development of neighbouring countries, Tunisia and Libya to name but two, serves but to emphasise this. Yet there seems absolutely no sign of the appreciation of this basic fact; and certainly no concept of the scale of funding required. It is surely not too difficult to comprehend that unless adequate funds are allocated to the preservation and conservation of these unique archaeological remains they will continue to deteriorate at an ever increasing rate, and unless fundamental improvements in presentation take place, their attraction to visitors will likewise wither away.

If the first vital objective is to recognize the key *economic* importance of our archaeological heritage, and the second to devolve a strategy to obtain funds of the right order of magnitude (much of which will clearly have to come from abroad), then the third objective is to work out in detail what needs to be done well before the funds are available.

While it is a very good thing that site and museum entry fees are now ploughed back into archaeology, a policy we have advocated for years, this, and the present subsidy from Government, is clearly totally inadequate to compensate for decades of neglect and under-funding. However, increasing fees for the relatively small percentage of *local* visitors may well be counterproductive, in that unless and until a critical mass of the Maltese public at large appreciate the importance of these assets, no government is going to begin to provide anything approaching adequate funding.

Indeed this interest can only be generated by the sustained cooperation of all concerned, led by Heritage Malta, and backed by all the stakeholders. This includes not only all the professional archaeologists and interested amateurs, but also the Education Department as well as local Councils, which should have a key role to play. The role of the Archaeological Society continues to be to act as a focus for the development of interest in archaeology and will, I hope, continue to explore how it can work closely with Heritage Malta and other organizations such as Fondazzjoni Wirta Artna (FWA) which has developed an excellent hands-on programme.

A universal problem, often either ignored or at best brushed aside, is how to engage the interest and concern of the public. This is not just an academic question but one of fundamental importance to the future of the preservation of archaeological heritage, not least its funding. The emergence of a highly trained body of archaeologists, armed with ever more sophisticated technologies, can so easily lead to a widening gulf between them and the public; the result of which is increasing alienation of public interest and ultimately a decrease in

funding. This tendency is all too easy to develop unless there is a conscious and sustained effort to stimulate and encourage an interest, indeed a proprietary interest, in their archaeological heritage by an informed public. Television and other means of communication have, in the UK and elsewhere, been powerful stimuli of public interest; although it must be said that the occasional programme is often complete rubbish. Interest can, and indeed should, be stimulated at an early age by teachers, but the occasional day out to sites or museums, supervised by untrained and unenthusiastic teachers is clearly useless. Does archaeology feature in teacher training courses? In this respect the organization of "experimental archaeology" activities, such as that recently organized by F.W.A., should be much encouraged.

Among the greatest challenges for the future, is that of preserving the Neolithic temple World Heritage Sites from further erosion; the move towards the erection of structures to provide at least temporary protection is moving slowly forward. A great deal more is required. Visitor facilities are essential. The presentation and interpretation of the sites leaves a great deal to be desired. There are virtually no pamphlets or other material explaining the sites. The Tarxien temple complex, in particular, is marred by well meant but ill-judged attempts at conservation in the past, that will require rectification, whether this can be achieved without unacceptable further damage is debatable. The road through the centre of the Tas-Silg site, that remarkable sacred site spanning millennia, remains as obtrusive as ever. Although there has been a certain amount of progress in enlightening the post-Roman and Mediaeval eras, much more remains to be done, particularly in the publication of reports. The "Stonehenge Saga", accessible at <www.britarch.ac.uk/stonehenge> is an excellent account of the breadth of discussion and consultation with all the stakeholders on the best way forward for this World Heritage Site. There are surely lessons to be learnt.

Interest in underwater archaeology has slowly grown and needs both funds and recognition; the irony is that it would take the discovery of a major wreck site to stimulate real development; yet this in turn depends on well planned and equipped exploration, and of course the development of facilities for the preservation of underwater finds; yet Malta is the site of one of the world's best known shipwrecks.

As I hand over the helm after a spell of over a decade, I look forward to the Society continuing to play its part in stimulating an ever increasing interest in archaeology in Malta. There is indeed very much to be done, in close collaboration with all the new players in the field, in the framework of the new Heritage Act and in the face of a realistic appraisal of the challenges to be faced by archaeology in Malta.

Society Activities

2002

TALKS

19 February 2002
Pilgrimage to Santiago de Compostela
Dr R. Reece

27 March 2002
Archaeology and the Sea-Breaking down the myth
Mr T. Gambin

16 April 2002
Art and Colour in Ancient Greece
Dr I. Kakoulli

29 May 2002
Prehistoria d'un isola del Mediterraneo occidentale: la Corsica alle sue origini
Dr M.J. Cesari

03 July 2002
Beyond Aphrodite: Kythera and the archaeology of Mediterranean island landscapes
Dr C. Broodbank

2002
Lost Arts of the Ancient Goldsmiths
Mr N. Cutajar

SITE VISITS

17 March 2002
Xemxija Sites
Fr E. Teuma

06 April 2002
Bingemma and the Victoria Lines
Mr S. Spiteri

04 May 2002
Ġgantija and Ras il-Wardija, Gozo
Dr N.Vella

11 July 2002
Excavations at Tas-Silġ
Dr N. Vella

27 July 2002
Archaeology of Dockyard Creek
Mr T. Gambin

December 2002
Hypogeum of Hal-Salfieni
Mr N. Cutajar

2003

TALKS

13 January 2003
Technical advances in ship design:1300-1600
Mr T. Gambin

03 February 2003
Khirbet Qumran and the Dead Sea Scrolls
Prof. A. Frendo

17 February 2003
Ventura Medical concepts in classical Malta
Dr C. Savona-Ventura

06 March 2003
Erich Becker and Malta Sotteranea
Ms K. Fenech

17 March 2003
The harbours of ancient Malta – *Mr T. Gambin*

18 September 2003
Identities in Iron Age Sicily: the impact of Greek and Phoenician colonisation on the native populations of Sicily as seen in the archaeology
Dr T. Hodos

06 October 2003
The Phoenicians in the West: Why Malta?
Dr C. Sagona

25 November 2003
Pompei: a city in space and time
Prof. A. Wallace-Hedrick

SITE VISITS

05 April 2003
Mnajdra and the Misqa Tanks & lunch at Ghar Lapsi – *Dr N. Vella*

10 May 2003
San Pawl Milqi – *Dott. D. Locatelli*

31 May 2003
Is-Simblija – *Mr J. Magro Conti*

15 November 2003
Wignacourt catacombs and shelter by kind permission of *Dun Gwann Azzopardi*

06 December 2003
Zabbar Sanctuary Museum – *Mr C. G. Bonavia*



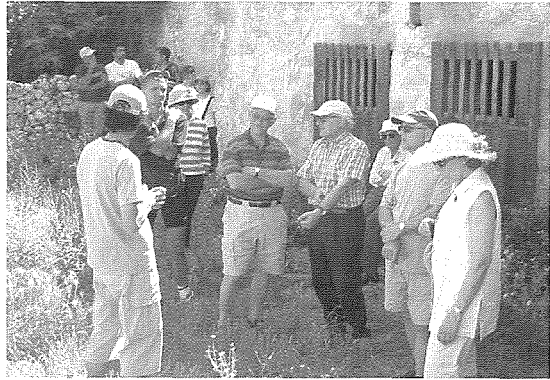
San Pawl Milqi



San Pawl Milqi



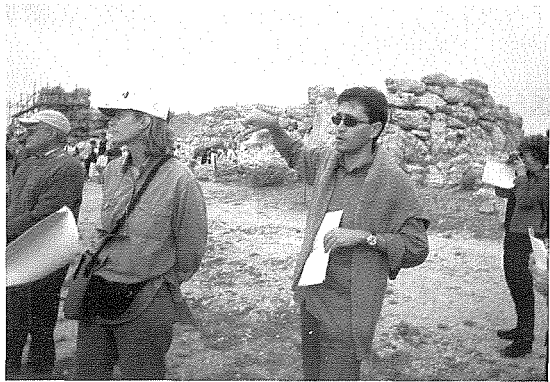
Is-Simblija Valley



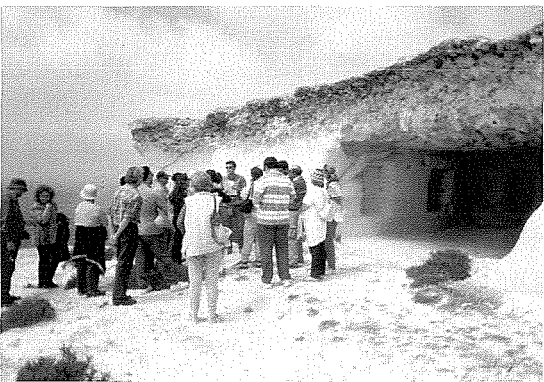
Is-Simblija



Catacombs below Wignacourt Museum, Rabat



Ġgantija Temple, Gozo



Ras il-Wardija, Gozo



Ras il-Wardija, Gozo

Maritime Archaeology in the Mediterranean

A. J. Parker

The archaeological study of the Mediterranean sea and its coasts is, for the most part, thought of as underwater archaeology, and the history of maritime archaeology in the Mediterranean has conventionally been conceived as the story of underwater exploration¹. However, the discipline of archaeology as a whole has continued to develop, and the concern with conceptual issues which has characterized much archaeological scholarship in recent years is having an effect on the study of cultural remains found, not just on land, but in the sea as well. This paper will start with a brief review of the history of maritime archaeology in the Mediterranean region, and proceed to consider some of the new approaches which promise to deliver stimulating insights into the function of the sea and the role of seafarers during prehistoric and historic times.

Although, even from classical antiquity, it had been realized that historic treasures might be raised from the sea, there was little thought until recently of any process of discovery or historical reconstruction, let alone of systematic exploration or recording. Salvage and happy chance were the only approaches, even after, in the eighteenth century, topographers and tourists noticed groups of material or submerged structures through clear, sunlit water. In the early twentieth century, the adoption of diving apparatus by sponge-fishermen led to the first exploration of wreck sites, at Antikythera and Mahdia, using the personnel and techniques of those fishermen². During World War II, efficient self-contained breathing apparatus was developed, and this

brought about a rapid change in the post-war years: not only was there now a cheap and simple means of descending to the seabed, but the autonomy and alert posture of the scuba divers led to a new approach to underwater exploration, in which responsibility would ultimately pass from the archaeologist on the surface to the excavators down below. This did not happen all at once, however – unfortunately! Popularizers of diving strove to maintain a mystique about the underwater environment and the skills of scuba divers, while archaeologists of the classical tradition were unwilling to transfer responsibility to those they regarded as mere operatives – the ‘savants v. servants’ division. In the end, two methodologies converged to establish underwater archaeological techniques: skilled practitioners, especially F. Dumas and P. Tailliez, saw how underwater engineering procedures could be used for scientific recording, while new-generation archaeologists, especially G. Bass and A. Tchernia, brought their experience of more systematic recording and more individually responsible excavators to underwater excavation³. It was also important that a new generation of archaeological graduates, especially in France, had grown up familiar with scuba sport diving, and found no difficulty in adopting underwater exploration as an adjunct of their research. By 1980 it was widely held that there were no outstanding technical problems affecting underwater archaeology in the Mediterranean, and that the study would henceforth be focused on nautical technology and maritime trade⁴.

Of course, it was not so simple. Not all sites enjoyed the clear visibility or calm water which enabled well-educated student divers to take control of the project; many sites were destroyed by looters before they could be recorded; sites which lay below the safe limit of compressed-air diving, and some of the deeper sites which could be dived on compressed-air, were inaccessible before the eventual development in the 1990s of mixed-gas apparatus for amateur divers. Nearly all the solutions to these problems are expensive, normally too expensive for archaeological research or state cultural resource management. Fortunately the continued emergence of cheap, simple robotic vehicles, effective systems of positioning and remote sensing, and high-definition underwater video has overcome these difficulties. In the abyssal depths, advanced technology has helped archaeology rather as a side-effect, though the latest report by R. Ballard and his colleagues on exploration in the Black Sea shows how good research can be done by a responsible interdisciplinary team if enough energy can be put into the fund-raising for it⁵.

Not just shipwrecks, but also submerged structures and changed coastlines have come to be studied effectively. Indeed, it was the realisation that scuba divers could be responsible for decision-making and recording on site that made possible the work, for example, of N.C. Flemming on coastal change or A. Raban on ancient harbours⁶. Such work made archaeologists in general aware of the

potentialities, not only of submerged sites, but also of waterfront or waterlogged sites on land. Influence from the North also alerted archaeologists, especially in Italy, to the likely richness of marshes and lakes for finding boats and other cultural material; and all these considerations, together with an appreciation of the complex history of shipbuilding technology which was derived from shipwrecks, produced a stronger response to the development of harbour-front sites, especially in France.

How ancient ships were built is something that was, in fact, known before the scuba age, from the Roman ships raised from Lake Nemi in the 1920s; however, it has been subsequent underwater discoveries which have revealed how widespread was the construction technique using multiple plank-edge joints, how many variations there were in the classical period, and how a change to edge-positioned planking (ultimately with no edge-fastenings at all) began as early as the fourth century AD. Other technical aspects, such as the size and potential performance of classical ships, or the use of sewn or stitched edge-fastenings instead of joints to assemble the planking in various periods or regions, have also emerged. All of this constitutes an important addition to the debate on progress, or the lack of it, in antiquity.

Archaeologists have been less successful, whether in the Mediterranean or elsewhere, with analysing distributions of single finds, or with

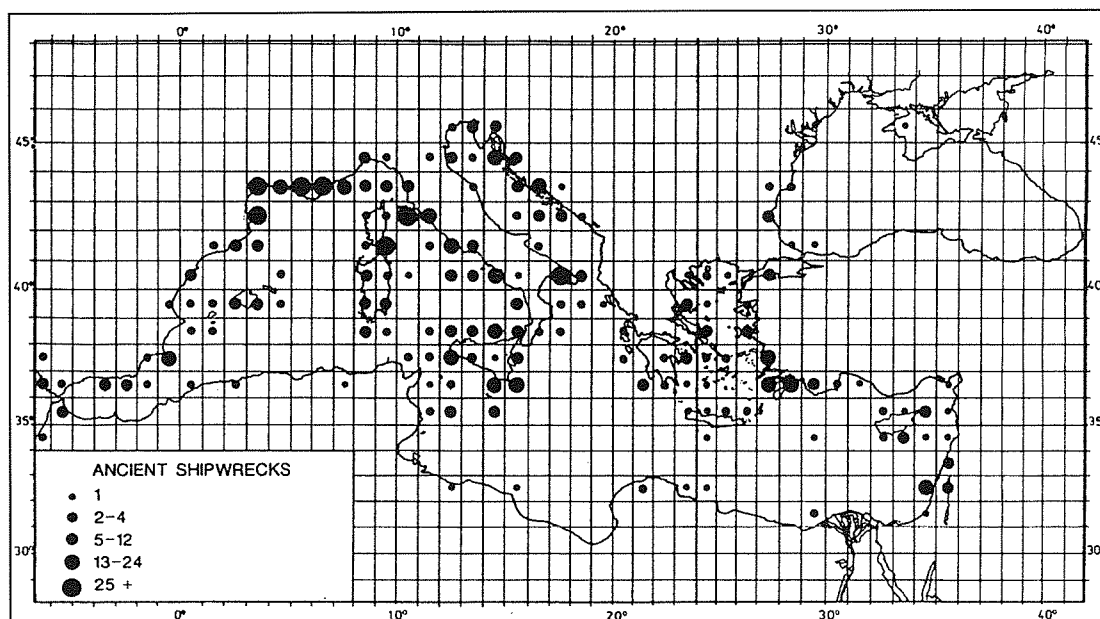


Figure 1. Ancient shipwrecks of the Mediterranean region. The many sunken cargoes, numbering well over a thousand, which are now known represent a new and growing resource for the history of the ancient world.

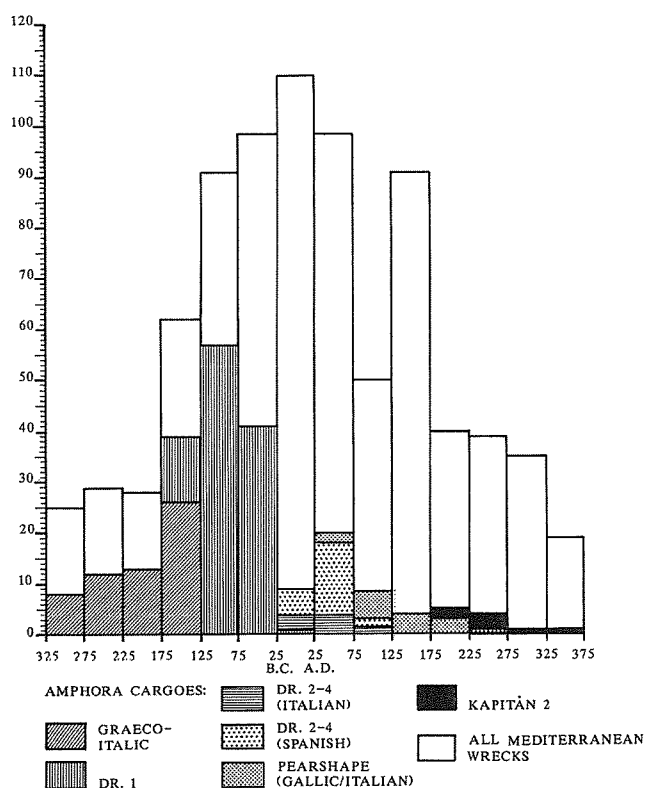
understanding scatters of anchorage debris or casual rubbish. It is clear that the distribution of goods which set out from their point of origin by ship will be different from the distribution of land finds; the latter reflects the movement of travelling salesmen or the passing of objects from hand to hand, whereas transport by sea will result in one or more **gaps** in a chain of deposits. Although some suggestions have been made by I. Hodder & C. Orton⁷ about recognizing the distinctive regression pattern of such distribution, their theory remains, for the most part, untested. As for the use of entrepôts and intermediate staging ports, several scholars, principally X. Nieto, have proposed models, but these have not been extensively tested⁸. Likewise, the definition of a port assemblage, the artefacts which might define a settlement as a port, remains unclear. These aspects of maritime archaeology remain primitive, but progress may yet come.

Another problem has been the definition of different types of underwater site. In the earlier scuba years, some archaeologists found difficulty

in recognizing a strewn of broken pottery as a wreck-deposit rather than a haphazard dump of rubbish; conversely, it was also considered that a shipwreck was a 'time-capsule' which had been frozen at the moment of sinking. Gradually, with a greater understanding of underwater conditions and a stronger interest in site-formation as part of processual archaeology, these difficulties were overcome, and a wide range of site preservation and situation is now generally accepted for the Mediterranean⁹. Site-formation process can often be understood by modelling the particular conditions, and this has become important for understanding wreck sites on exposed, gently-shelving coasts such as much of western or southern Sicily or the coast of Israel: a recent study by S. Kingsley¹⁰ has shown, using early modern travellers' accounts, that in such conditions cargo may be looted or scattered beyond recognition, but the degraded remains of a ship's hull will tend to remain in position and be capable of archaeological discovery. From such technical approaches has emerged increased confidence in the particular importance of shipwrecks as an archaeological and, indeed, historical resource in the Mediterranean.

Shipwreck cargoes, especially of amphoras, offer firm archaeological evidence for ancient commercial activity, unbiased by difficulties of rubbish survival or of recycling on land sites. When, back in the 1960s, the writer started to research new approaches to Roman economic history, it was clear that wrecks were of crucial importance; as a result, a process was set on foot of collecting and tabulating information about shipwrecks, first in the writer's doctoral thesis and then (twenty years later, in 1992) in *Ancient Shipwrecks of the Mediterranean* (Figure 1). Such a compilation can never be truly complete or up to date, and it is good to see people rewriting and correcting the original lists, which, it has to be admitted, are based on information which is often of very flimsy quality¹¹; however, the catalogue has been of interest to ancient historians, some of whom have made prominent use of my tables and graphs¹², and it has been useful in introducing new evidence for economic history, as with the statistics for changes in the Roman wine trade¹³ – especially the emergence of Spain as a major supplier in the reign of Augustus (Figure 2).

Figure 2. Shipwreck cargoes of wine amphoras (Hellenistic to late Roman period). The analysis shows how the export of wine from Italy in Graeco-Italic and Dressel 1 amphoras collapsed in the period of Augustus, and was to a large extent substituted (though on a smaller scale) by export of wine from Spain, Gaul and the Aegean during the Empire period.



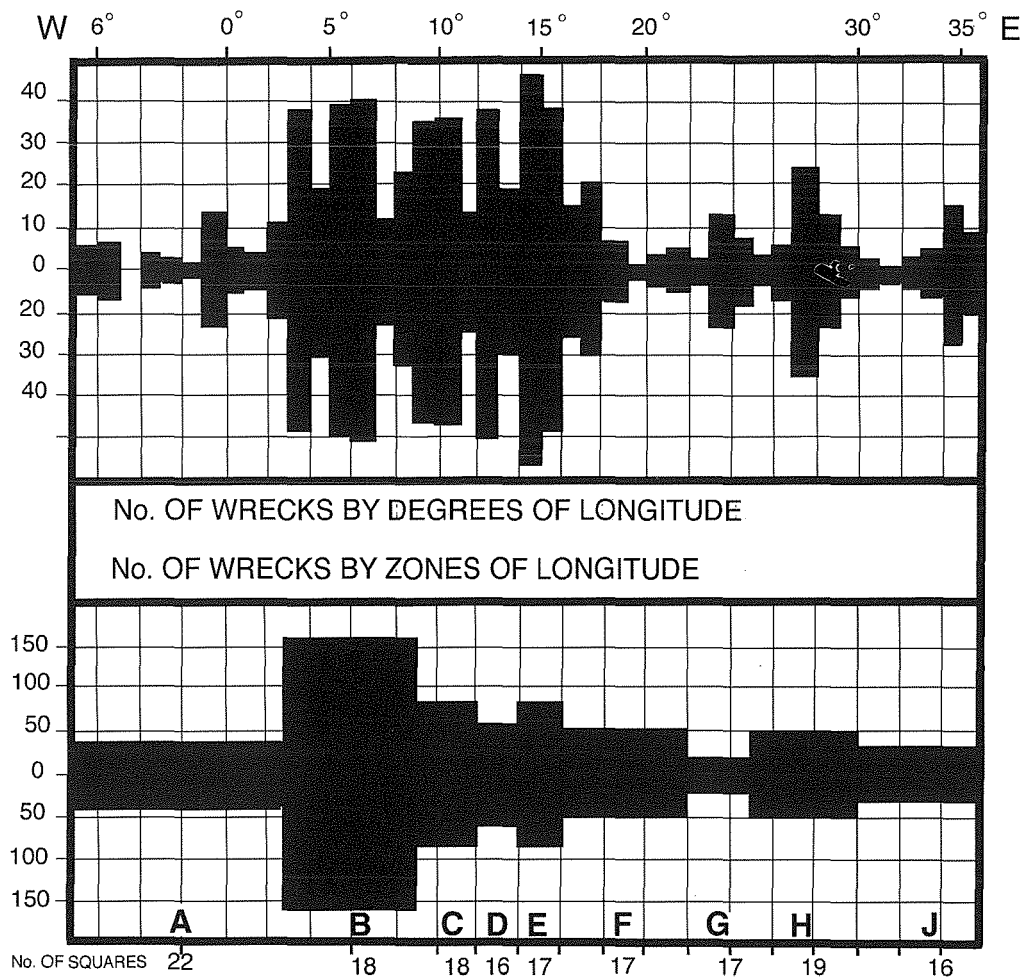


Figure 3. Ancient shipwrecks of the Mediterranean region: the distribution of wrecks (cf. Figure 1, above) is transformed into a schematic map of wrecks (upper) which can be further manipulated into a graph-type chart (lower).

By and large, the picture derived from ancient shipwrecks tends to support a view of the Roman Imperial economy as 'open', rather than 'embedded' or 'command-based', and that is a concrete historical conclusion which provides some reward for all the work which has gone into recording and listing them! But one has to confess that tools to construct even middle-range, let alone general, theory from the wreck-list have scarcely been developed.

It is very important to realise that sailing ships (and oared ships, which also sailed whenever they could) did not follow routes like railway lines, ruled across the surface of the globe, but made the best progress they could in the face of wind and sea. Of course, shelter, trade, revictualling and other factors led sailing ships to converge on focus points around the sea, but one cannot construct a 'route' by joining the dots of shipwreck sites. However, the data do mean **something**. We can model the dispersal of cargoes over the sea by a sort of weighted random walk formula¹⁴, but this work is

regrettably still to be done. Something similar, but simpler, has been done by the writer with an analysis of the West-East distribution of ancient shipwrecks. If one visualizes the Mediterranean as a long strip of flat space, the number of shipwrecks at each successive division along the strip can be shown graphically as a column (Figure 3, upper). If groups of columns are run together, this produces a statistic which is easier to manipulate (Figure 3, lower). To the ordinary person, like the writer, this is a sort of **map** of the Mediterranean, reshaped and distorted to show where the wrecks mostly are. Well, this diagram can be rearranged as a cumulative frequency graph (Figure 4): the curve represents the **normal** distribution of shipwrecks, but, of course, only along a linear axis from West to East. But then the equivalent curves for **selected** wrecks can be compared with this baseline curve, and the point of maximum divergence can be identified and the extent of divergence quantified; such a comparison can be seen, for example, in Figure 5. This shows cargoes of

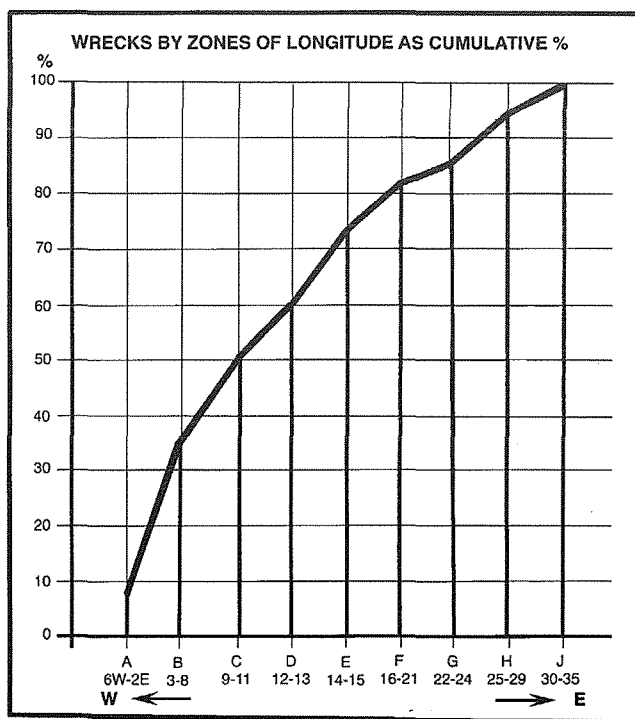


Figure 5. Ancient shipwrecks: the distribution of Dressel 1 and Dressel 6 amphora cargoes, compared with the 'normal' distribution of all wrecks, shows that trade went in different directions, and that the divergence from the 'norm' was especially strong in the case of Dressel 1.

two kinds of Italian wine amphoras - Dressel 1, from Lazio and Campania, with a strongly western distribution, and Dressel 6, from NE. Italy, much more biased towards the East. The same comparison can, of course, be judged from a straightforward distribution map¹⁵, but there the characterization of the distributions remains essentially subjective, and the degree of variation between distributions is not expressed in quantitative and readily comparable terms. The approach outlined here obviously has much to offer in terms of analysing the trends of cargo loss, even though a much more complicated and weighted model has still to be worked out before the method can reach its full potential. A similar analysis is impossible for almost any other part of the world until the modern period, and should yet contribute much more to Mediterranean historical understanding.

Such studies are largely the 'traditional' processual archaeology of the 1970s. In the last 25 years, however, maritime archaeology has been influenced by developments in other contexts and responded to more **interpretative** concerns. Foremost in this has been O. Crumlin-Pedersen¹⁶, who has set out to develop 'the

maritime perspectives of archaeology', entailing study of 'the maritime aspects of past societies' and 'the perception of landscape and settlements, as seen by sailors or fishermen in the past'. The maritime perspective is especially important for archaeology in that seaborne communications have so often been the means of introducing new cultural influences. This viewpoint is shared by P. Horden & N. Purcell¹⁷ who stress connectivity by sea as a distinctive characteristic of the Mediterranean region. In this they differ from the more formal approach of F. Braudel, who emphasized the compartmentalized seas and the linear routes of the Mediterranean in history as he saw it. Well, long ago as a schoolboy I learnt the apophthegm of A. Zimmern, 'In Greece, the land divides, the sea unites' - so the idea of the sea and sea travel as the unifying and distinctive characteristic of Mediterranean history and culture is not novel; however, it is useful, especially when (as with Horden & Purcell) stress is laid on the connectivity, the neural network of communications, at the expense of concern with the sequence of individual settlement sites. Indeed, the redesignation of harbours and ports as 'nodal points on networks' rather than, e.g., port cities with quays, porticoes, statues and temples is of help in understanding prehistoric or more primitive seafaring.

Political control and ritual observance are important factors in the emergence of such nodal points, and recognition of this important cognitive element in ancient interaction with the sea has been an important contribution of recent scholarship¹⁸. Such an approach has the advantage of emphasizing that human activity has to be studied in its setting, in a landscape. This is an important correction to the very site-specific emphasis of underwater archaeology as it has developed so far, and is part of the growth of **maritime landscape archaeology**, which is surely a significant and positive trend, to which I shall return.

'The land divides, the sea unites' is, of course, not just a geographical observation but an analysis of human attitudes. Thor Heyerdahl once said that an archaeologist lacked full understanding 'unless he had some salt in his beard' - a significant echo, and development, of R.E.M. Wheeler's dictum that we must have 'mud on our boots'. Just as the terrestrial

scholar needs to be alert to the archaeological potentiality of the submerged seabed, so the landlubber needs to understand that people's perception of the sea, and their attitudes to seagoing, can vary widely. To some people, the sea is a dangerous, unpleasant, hostile force which must be propitiated and as far as possible shunned; to others, it offers exciting opportunities to win new knowledge, riches and adventurous experience. How well the archaeologist can infer such 'maritimity' or 'maritime consciousness' from antiquity needs more study; however, as far as the Bronze Age Cyclades are concerned, one may mention the important work of C. Broodbank¹⁹. Relying largely on ethnographic parallels, Broodbank has shown the extreme importance of maritime links in Aegean prehistory; he has also been able to propose a theory that, as population grew and settlements became more numerous, the frequency and importance of maritime communications declined. This is a significant contrast to the 'longue durée' maritime connectivity proposed as a general theory of the Mediterranean by others. This an area of research from which one may well expect more in coming years, especially from Malta.

At one point Broodbank demands a new maritime archaeology, 'an archaeology of the dynamics of maritime culture'²⁰. This seems to mean 'a new awareness of maritime activities as archaeological explanation', for the problem which he is concerned to tackle using this new approach is, how (in Early Bronze Age II) to interpret such cultural changes as a rise in the richness of burials, especially of women²¹. He suggests that such a change should be ascribed, not just to increased affluence from overseas trade, but to the enhanced status of seafarers as men who brought home mysterious knowledge, magical objects, riches and even women. The status of such seafarers in their island communities was displayed in the adornment of their womenfolk, in death if not in life too. This may seem far-fetched, but it is an important example of more dynamic archaeological thinking in the post-processual era, and the general direction we should be moving. Also, it relates to the recommendation of Crumlin-Pedersen, mentioned above, that, since many new influences are due to contact by sea, an

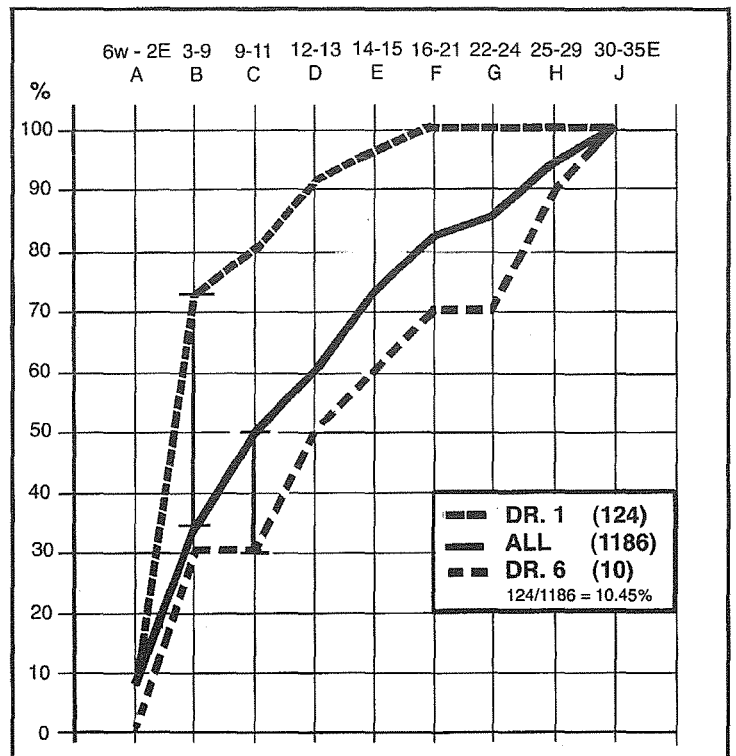


Figure 4: Ancient shipwrecks of the Mediterranean region: the distribution of wrecks along the West-East axis, using the data as organized in Figure 3 lower, is represented as a cumulative frequency graph. The shape of this graph can be used as a basis for comparing the distribution of particular classes of shipwreck as compared with the 'normal' distribution of all shipwrecks.

appreciation of past times must include at least the possibilities of overseas contact.

The influence of Scandinavian archaeology is clearly seen in the concept of the **maritime cultural landscape**, so named by C. Westerdahl²². This has not yet been made explicit, for the most part, in the Mediterranean. The notion of 'landscape' in archaeology is as the topmost term in a hierarchy which starts with the individual find at the bottom:

- LANDSCAPE
- ENVIRONMENT
- SITE
- CONTEXT
- FIND

The procedure of landscape archaeology can best be seen as three levels of activity, viz.:

- INTERPRETATION
- PATTERN
- PLOT

'Plot' is the work of the cultural resource manager, delineating sites on the topographical map; 'pattern' that of the field archaeologist, relating his site to others; 'interpretation' is

the setting of the pattern in a topographical landscape, distorted and weighted by factors of economic competition, ease of movement, accessibility of natural resources, and so on²³. Westerdahl introduced the concept of a structure, a model, on which an interpretative scheme should be erected. The structure includes ideas which are common to much geographical or even historical analysis – the importance of bridgeheads as transition nodes between sea and inland navigation, for example; but there are other concepts specific to the sea, such as coastal zones, demarcated by anchorages or straits, which often correspond to distinct traditions of boatbuilding or trade specialisms. Another concept is that of what D. Tomalin has called the ‘closing zone’ or ‘apron’, where the approach to a port is signalled archaeologically by a litter of artefacts and even shipwrecks²⁴. Tomalin has also carried out extensive searches on a sampling basis of the seabed to demonstrate how scatters of material in anchorages or on shallows can be added to the map of the cultural resources, and used to give an interpretative dynamic. Such structural interpretations can be summarized in a schematic plan or model, such as Figure 6 here, in which the various elements of the maritime landscape are arranged to show their relationships, and so enable the testing of historical and archaeological information as a means of reconstructing history. The structures derived by Nordic scholars from the situation in Scandinavia and northern Europe are not, at first sight, suited to Mediterranean conditions, but this is the basis on which the study of the Mediterranean maritime past can be advanced now – combining the systematic exploration and proper recording of the cultural resource, both submerged and at the coast, with a structured interpretation involving physical, cultural and cognitive elements of historical records and archaeological remains.

In conclusion, it can be seen that new approaches in archaeology generally have their specific counterparts in the marine context, and that maritime archaeology in the Mediterranean stands to benefit from the development of methods which are more analytical and conceptual than merely processual or data-gathering.

Acknowledgement

The Figures were drawn by Susan Grice, University of Bristol

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The Harbours of Ancient Gozo¹

Timothy Gambin

‘For off the South of Sicily three islands lie out to sea, and each of them possesses a city and harbours, which can offer safety to ships in stress of the weather.

After this island [Malta] there is a second, which bears the name of Gaulos, lying out in the open sea and adorned with well-situated harbours, a Phoenician colony’.²

The above quotation is taken from a passage written by Diodorus Siculus who wrote in the first century BC, and this description is a good point of departure for the study of the maritime

activity of Gozo in antiquity. The ancient name for the island, *Gaulos*, is thought to refer to a ‘beamy and rounded’ vessel used by Phoenician merchants, between the 5th and 3rd centuries BC.³ This could be an indication of how early seafarers perceived the shape of the island.⁴ Of Malta, Diodorus Siculus also wrote that ‘as they [the Phoenicians] extended their trade to the western ocean they found it [Malta] a place of safe retreat.’⁵

It is not unreasonable to assume that Gozo, too, was seen as a similar haven. However, on the basis that present day Gozo is devoid of any good natural harbours, some have, not unreasonably, dismissed the possibility that the

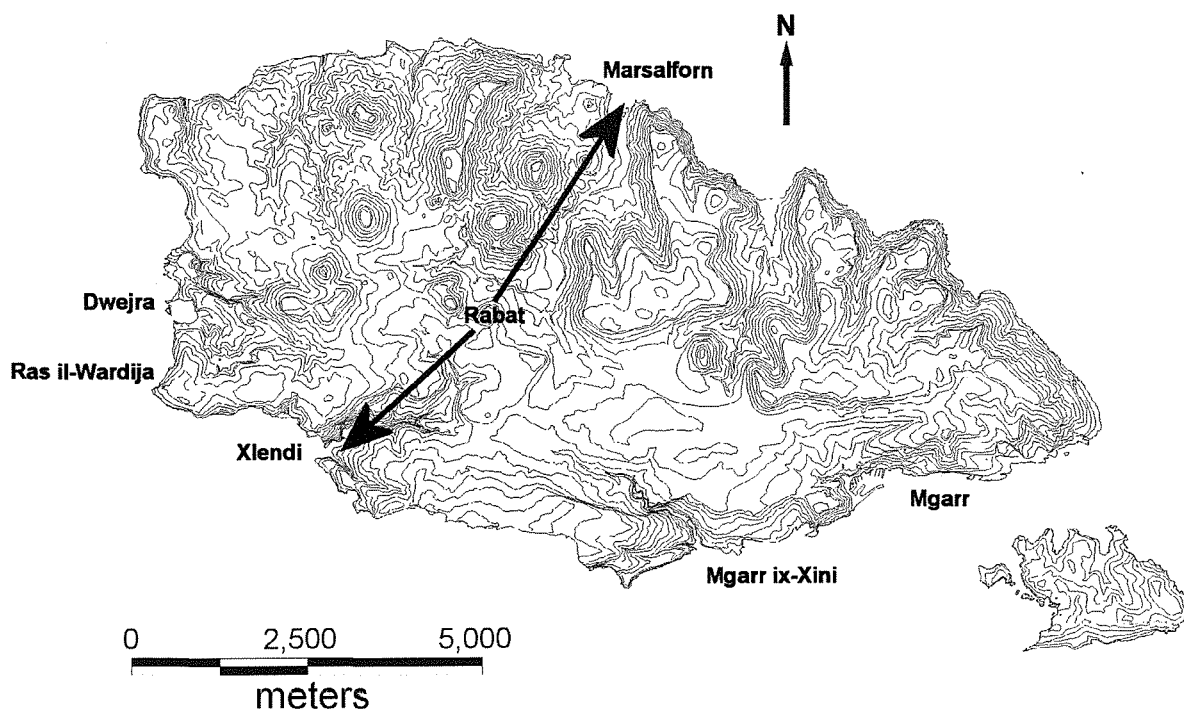


Figure 1: Map of Gozo showing various places mentioned in the text.



Figure 3: Some amphorae from Xlendi on display at the Gozo Museum of Archaeology (T. Gambin)

island could have had any significant maritime role in antiquity.⁶ Through this paper I intend to show that the island did indeed have its fair share of maritime activity, an activity needing more than small open bays to sustain it.

The starting point for understanding Gozo's maritime role in antiquity is the North African coast. Any ships crossing the north-south trade axis existing between North Africa and the east coast of Sicily would have had to pass by the islands in the central Mediterranean, namely Lampedusa, Pantelleria, Gozo and Malta. The first landfall for vessels approaching Gozo from the direction of Pantelleria, for example, would be Ras il-Wardija. Described as 'bold and perpendicular', the cape lies at the south-west extremity of the island and protrudes at a point where the steep cliffs turn west and east-south-east.⁷

It would be opportune to highlight some navigational practices of ancient mariners. One of the main tools used, at least since the 6th century BC, was the sounding lead.⁸ The maximum depth at which this was reliable was approximately 180 meters making it virtually impossible to use in the deep sea around Gozo until one was too close to the land. Therefore, a high landfall such as that at Ras il-Wardija, visible as it is from far out at sea, provided an indispensable reference to those at sea. It is important to note that the use of a landfall from a nautical point of view is conditioned by factors such as visibility. Mariners were also known to use the sighting of birds as an indication that land was nearby.⁹ Locally, the Cory Shearwater breeds on the cliffs of Gozo and Malta and are in abundance during the ancient sailing season of

March through to October.¹⁰ They are known to hover around vessels up to 40 km off the coast thus giving the mariner an early indication that land was near.

The cliffs in the area of Ras il-Wardija are marked on the Gozo Admiralty chart at 162 meters above sea level. This height makes it visible from about 12 nautical miles out at sea making it, together with the surrounding cliff, an indispensable landfall for approaching seafarers. Upon this headland are situated the remains of 'a site which can be described as an interesting example of sacred architecture in the Punic world'¹¹ which, according to the archaeologists that studied the site, 'must have been an exceptionally important sanctuary.'¹² This sanctuary 'occupies a unique and somewhat mysterious position both physically, at the very edge of a sheer cliff overlooking the sea away from all known ancient settlements of the island.'¹³ (Figure1).

What makes the sanctuary at Ras il-Wardija so relevant to this study is its proximity to what is in my opinion one of the island's main harbours in antiquity. Xlendi, situated just over 1 km south of the headland, would have been the first refuge available to vessels travelling to Malta and Gozo directly from Carthage or via the island of Pantelleria. Situated on such a prominent headland, this sanctuary may have been part of a 'cultic topography'¹⁴ that would have been familiar to ancient mariners sailing in the central Mediterranean.

Horden and Purcell state that 'particular features of the sea-voyage are marked as sacred, especially those of coastal havens, springs and landmarks.'¹⁵ A recent study has highlighted

the importance of headlands to ancient Greek navigation. Features such as headlands and offshore islands are thought to have ‘far more developed terrestrial and ‘socio-maritime’ roles’ than other parts of the coast. It therefore comes as no surprise that headlands are often marked by sanctuaries linked to navigation ‘not only directly, through the use of such shrines as leading marks and reference points in coastal pilotage, but also indirectly, through seafarers’ recourse to religion as an expression of their fears, hopes and concerns when sailing in an area of particular danger and navigational importance.’¹⁶ Ancient ships carried altars on the poop that were used specifically for religious activities at sea.¹⁷ Whilst those making landfall would pay tribute to the deity of the sanctuary upon successful completion of their voyage those leaving harbour, undertaking an outbound journey, would also have made offerings in ‘supplication of safety’.¹⁸ Here one must point out the difficulty of identifying loose underwater finds with such ritual. Loose finds are more often associated with accidental loss from a vessel or with the jettisoning of goods on board in case of emergency.

Given its prominent location and the sanctuary’s geographical position between the harbour of Xlendi and the small temporary anchorage of Dwejra, the sanctuary at Ras il-Wardija can be considered as a coastal sanctuary par excellence. The approach and entrance into Xlendi is narrow and very difficult in a variety of wind conditions. Archaeological finds from the environs of Dwejra bay, point to the area being used as an anchorage, possibly a place where vessels could wait for a favourable wind to enter Xlendi. This situation is not dissimilar to navigational practices elsewhere such as Lundy Island, ‘a vital sheltering-place in westerly gales and a key waypoint on the approach to Bristol.’¹⁹ Approaching the sheer cliffs on the north west of Gozo, it is not easy to distinguish the mouth of Xlendi. The only indication of the entrance to the harbour is a slight dip in the cliffs and a change of colour in the stone, signs that even by day would have been hard to discern by an untrained or inexperienced eye. It is not unreasonable to assume that fire and smoke from the sanctuary would have guided approaching vessels towards the harbour by day or night.

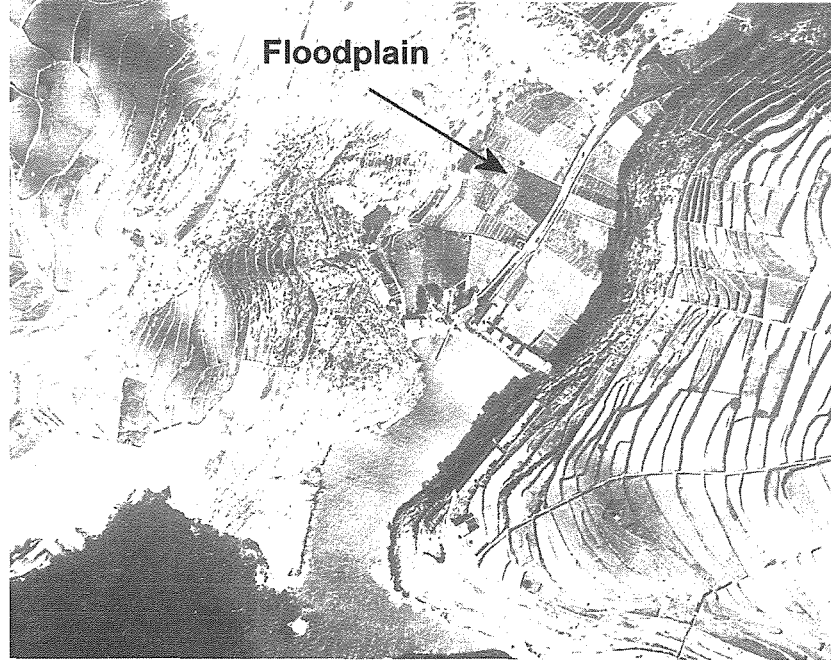
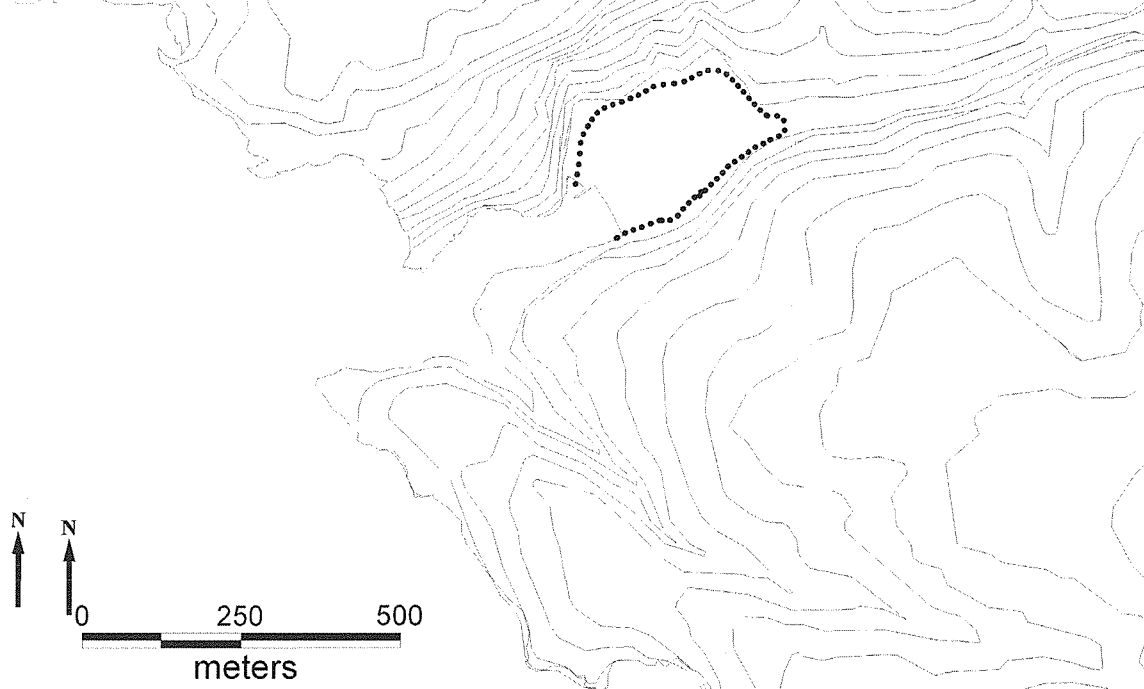


Fig. 4: Aerial photograph of Xlendi taken by the Royal Air Force taken in 1933. The clearly visible floodplain is the site of the ancient harbour of Xlendi (after Samut-Tagliaferro, A. (1993) *The Coastal Fortifications of Gozo and Comino* (Malta: Midsea Books): 149).

The number of wrecks identified in the area attests the fact that Xlendi was in use throughout a long spell in antiquity. Although not all scientifically investigated, various projects carried out on the site confirm the presence of more than one shipwreck from different periods.²⁰ Parker lists three wrecks that vary in date from the 2nd-1st century BC to the 5th century AD: Xlendi A c. 150-75 BC (?), Xlendi B 1st century AD (?), Xlendi C c. AD 350-450 (?) and another, Xlendi D, that is of uncertain date.²¹ The dating of the various Xlendi wrecks can be deduced from the numerous amphorae now on display at the Gozo Museum of Archaeology. These amphorae represent a small sample of the cargoes that, since the late 1950s have been recovered in a series of projects.²² Unfortunately, this site has also been witness to intense looting. Types of amphorae from this site include Mana 2C, Dressel 1A, Dressel 2-4, Lamboglia 2 and Keay XXV. The presence of a variety of Punic amphora types also suggests a wreck from circa the 4th-3rd century BC (Figures 2 and 3).

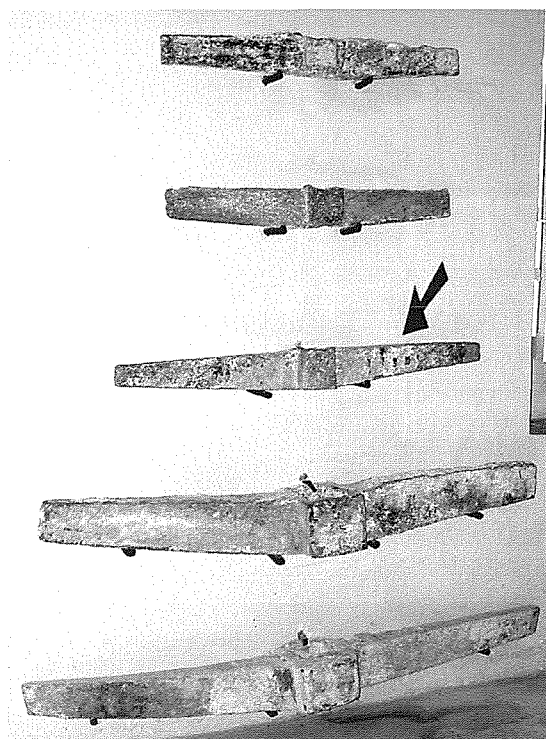
These wrecks are also proof of the treacherous approach to this harbour. Wind, waves, swell and currents interact and create difficult sea conditions in the area, a situation not uncommon in mid-summer. Added to this, there exists a reef at the mouth of the bay that is barely a meter under the surface. However, until a scientific survey of the objects still in situ is carried out it remains difficult to ascertain the exact site formation processes.

Fig. 5: Map of Xlendi. Extent of ancient harbour is marked by dotted line.



In spite of the abovementioned dangers, it is apparent from the variety of wrecks, that this harbour was used over a significant stretch of time. The current topography of Xlendi Bay does not lend itself to the idea of its being a safe harbour; mainly due to its exposure to north-westerly gales. However, after a close study of old aerial photographs and survey maps one gets a clear indication that the topography of the area must have been significantly different in the past (Figure 4). The harbour of Xlendi in ancient times covered the area that was the floodplain and is today a public car park.

Fig. 6: Lead anchor stocks found in the sea around Gozo and currently on display at the Gozo Museum of Archaeology, one of which with markings (T. Gambin).



Although no scientific studies have yet been carried out in the area, the extent of the harbour can be deduced from other factors. Firstly, the texture of the rocks inland shows evidence of wave action and erosion, indicating that the coastline extended approximately two hundred metres further in land than it does today (Figure 5). Secondly, persons who have excavated and carried out construction works in this area have confirmed the presence of pebbles, sand and marine molluscs. They also confirmed that despite excavating over three meters below ground level they did not reach bedrock and that a foundation of concrete had to be laid on the marine deposits.

Xlendi bay is at the head of a deep valley that is still capable of carrying vast amounts of water and alluvial deposits from the surrounding hinterland. Photographs taken during flashfloods and today displayed in many local catering establishments confirm the substantial amount of debris that can be deposited during a single storm. The inner harbour seems to have silted up to a point in the bay where the sea is too deep for sediments to build up. Further study could reveal some form of harbour works or structures such as wharfs that might shed further light on this hypothesis. De Lucca states that the link between Rabat and Xlendi is, albeit on a smaller scale, 'reminiscent of the Rome-Ostia relationship.'²² However, here one must point out that the proximity of Xlendi to the main Roman settlement in what is present day Rabat implies that goods destined for the island could be off-loaded and transported directly to the town less than 1.5 km away. This would

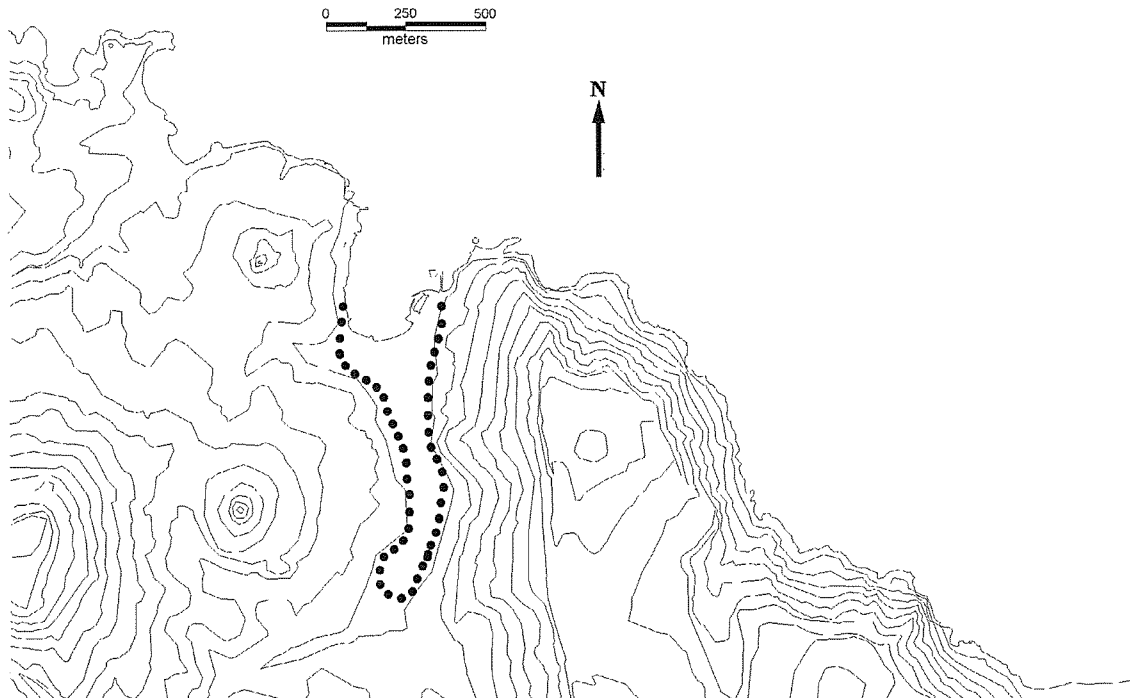


Fig. 7: Map of Marsalforn. Extent of ancient harbour is marked by dotted line.

reduce the need for large warehouses on the waterfront.

On Gozo the phenomenon of silted bays is not exclusive to Xlendi. Mgarr ix-Xini must have also extended further inland than it does today. Yet, even with this in mind one cannot but conclude that this bay was a temporary anchorage, mainly due to the lack of width available for vessels to manoeuvre. On the other hand, the Bay of Marsalforn in the north of the island, which is sheltered from southerly winds, may have been the second harbour referred to by ancient historians and geographers like Diodorus Siculus. Stray finds, including lead anchor stocks (Figure 6) and pottery indicate that the bay was witness to a certain degree of maritime activity. Vessels approaching from Sicily and intending to use Marsalforn probably used topographical features to identify the bay such as Qolla il-Bajda and Qolla is-Safra - the latter described from a maritime perspective as ‘a remarkable, isolated, steep, conical, yellow hill 206 feet high.’²³

Aerial photographs again give a clear clue as to the nature of the environment in the area. In the valley just behind the bay evidence of heavy alluvial deposits again suggest a drowned valley that has silted up over the years. This idea is substantiated by an eighteenth century description: ‘In ancient times this place [Marsalforn] used to extend to the Srawel Valley where the boats and ships used to be moored. The places where the boats and ships were secured can still be seen.’²⁴ (Figure 7)

An explanation for the existence of two harbours on such a small island is difficult. One

can assume that due to their geographically opposed positions, weather played an important role in the choice of which harbour to use. More specifically, the wind blowing on the day may have persuaded the master of a vessel to sail round the island to seek shelter in the more protected harbour. From a terrestrial perspective, one must mention the advantage of being able to observe the approaches to both harbours. From a specific position in the Gozo Citadel one can do this by simply turning approximately 180 degrees (Figure 1). Alternatively, a case could conceivably be made for two distinct harbours serving different purposes, one civilian and the other military. However, this hypothesis is not backed by any evidence.

During the Roman period Gozo enjoyed its own municipal status and its own administrative autonomy at least since the middle of the second century AD (AD 138-161).²⁵ This autonomy probably extended to commercial self-sufficiency and would partly explain why vessels called on Gozo directly. Also relevant is the increased trade between North Africa and mainland Europe in the 3rd century AD.²⁶ Studies of the distribution of amphora type Africana 2a show that these are found both on the Maltese islands²⁷ and in southern Sicily.²⁸ Malta and Gozo would have provided the ideal stop over for the vessels carrying North African produce travelling from modern day Tunisia and Libya.

For vessels on certain routes, Xlendi would have been the first harbour of the Maltese islands available for shelter and for other services that may have been needed. Merchants may have

used this opportunity to pick up some local produce such as cloth or olive oil. However, the lack of evidence for warehouses points away from the use of Gozo as an entrepot. With regards to Mġarr, when dredging took place in the bay the early seventies, fragments of pottery were brought up in the silt.²⁹ Unfortunately, these are not available for further study. However there can be no doubt that the bay was, as in later times, used as an anchorage and as a place where water could be brought aboard. Other advantages with regards to the use of Mġarr are its proximity to Malta for any inter-island trade and that it is well sheltered from north-westerly winds.

The maritime culture of Gozo in antiquity

So far this study has focused mainly on natural topography, land remains and shipwrecks within the broader context of shipping routes as well as the perception of approaching mariners. It would now be opportune to attempt an understanding of who, besides visiting seafarers, used these harbours and whether the existence of these harbours gave impetus to a maritime culture on the island.

On a micro level there is not much to shed light on such aspects as fishing or local boat building at the time. The geographical settings of the Maltese archipelago leave little room for doubt that fishing must have played some part in the economy of the islands, however there is no evidence regarding fishing communities or related industries such as the production of *garum*.³⁰ On Gozo, the only ancient coastal settlement is in the form of a Roman villa placed very close to the water's edge.³¹ However, despite this proximity to the sea there is, to date, no evidence linking the villa to an industrial activity related to marine resources.

Upon observation of the picturesque situation of the villa one cannot help but think that the site was chosen for aesthetic reasons and was used for residential and recreational purposes.³² The site, however, does bring to light two not unrelated observations: firstly that sea-levels were not significantly higher than those of today, and second, that the coasts of the island were safe enough (from pirates) to enable the construction of a residential villa at the water's edge. This security was to contrast sharply with the situation on Gozo in later times.

For ancient Gozo, one may safely assume the existence of some form of 'maritime culture', although not in the sense propounded by Muckelroy.³³ Services such as those of pilots, carpenters, rope makers and sail makers may have been offered to visiting vessels, as well as to craft operating locally. However, it is difficult to identify 'a specialised community archaeologically'³⁴ and it could well be that these services were extensions of the similar or related services that already existed within the local economy. The fisherman may act as a pilot when and if required; the carpenter may be required to carry out minor repairs on a vessel, and the local weaver may work on the sails.

Parker points out that 'one has to recognise that it is not so much maritime consciousness, as the demand of economic or social factors, which induce a seafaring response.'³⁵ I would like to extend this to persons on land responding to an economic demand from a maritime source, and which in turn gives rise to a 'maritime awareness'. This does not dismiss the possibility of the odd individual whose livelihood depended solely on the sea.

Another activity related to the coast and the sea may have been the harvesting of salt. Natural rock features such as those at Dwejra are still in use today.³⁶ A Gozitan salt harvester, when interviewed in 1992, claimed that in Roman times Sicilians crossed over to Gozo to work the salt pans and lived on the coast to the west of Marsalforn for the duration of the summer.³⁷ This suggestion is based on folklore and is not backed by any evidence.

That the island had no coastal or harbour settlements comes as no surprise. Due to the proximity of Xlendi and Marsalforn to the main settlement in present day Rabat, there would have been no need for persons offering maritime related services to be based by the sea, this because both harbours can be reached within thirty minutes on foot. Therefore, upon the observation of a ship on the horizon those wishing to meet the vessel could do so by the time she was in port.

Conclusion

This short contribution is not intended as an end in itself. On the contrary, it is simply a reinterpretation of archaeological work carried

out both on land and underwater. There are new areas that must be looked at and surveyed, such as the spaces that have not yet been built over in Xlendi and in Marsalforn. I believe that the time is ripe for revisiting the field notes and other information available from past projects that will help in reinterpreting the wreck sites that have, over the years, been excavated but unfortunately also looted. The plotting and interpretation of loose finds may also come to play an important part of a broader study. By doing so we will be tapping a source of information that has so far been largely peripheral but is nevertheless significant. This paper may be thus considered as a contribution towards a new understanding of Gozo's harbours and maritime role in ancient times.

Acknowledgements

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- 22 D. De Lucca (1990): 130
- 23 Archives of The United Kingdom Hydrographic Office: *OD 248*
- 24 G.P.R. Agius de Soldanis, (1746), *Gozo Ancient and Modern Religious and Profane* (English translation printed in Malta 1999): 53
- 25 A. Bonanno (1990): 46
- 26 D. Gibbins, (2001), A Roman Shipwreck of c. AD 200 at Plemmirio, Sicily in D. Gibbins and J. Adams (2001), *World Archaeology Shipwrecks*, Volume 32 Number 3, 311-334, 330 Also, P. Throckmorton, and A.J. Parker (1987) The Amphora: Jerrycan of Antiquity in Throckmorton P. (ed.), (1987), *The Sea Remembers, From Homer's Greece to the rediscovery of the Titanic, Shipwrecks and Archaeology*, London, 64-71, 70: 'In the meantime the exports of other provinces began to compete successfully; then, at the end of the century, many Spanish landowners lost their estates as a reprisal for opposing Septimius Severus, while Severus gave favours to Tripolitania, his home province.'
- 27 A.J. Parker (1992): 375
- 28 For map of Africana 2a distribution in central Mediterranean see Gibbins: 315
- 29 Pers. com. from Gozitan port officials.
- 30 A. Bonanno, (1992) Roman Malta in Cini, C. (ed.): 13-35: 25
- 31 Ibid. 32
- 32 A. Bonanno (1992): 32
- 33 K. Muckelroy, (1978), *Maritime Archaeology*, (Cambridge: Cambridge University Press): see chapter 7
- 34 A.J. Parker (2001): 27
- 35 A.J. Parker (2001): 38
- 36 See P. Dingli, (1999), *A Resource from the sea, A spatial study of salt pans around the Maltese Islands*, unpublished B.A. (Hons) as submitted to the Department of Geography at the University of Malta: 3
- 37 Ibid.

A 16th century Iron Breech-Loading Swivel-Gun

Michael Stroud

Early in May 2000, the Mediterranean gave up another of its jealously kept treasures. While pleasure diving off Malta's southern coast, Michael Spiteri, a technical staff member of the Museums Department Archaeology Section discovered a rare and unusual gun. Lying there on the seabed was a sixteenth century, breech-loading swivel-gun. Seafarers of various nations used small swivel-guns of this type extensively on ships, for many centuries. However, not that many have survived and at the time it was found, this was the first officially recorded discovery in Maltese waters of an early, breech-loading gun. Certainly not as sensational as the Riace Bronzes, this fascinating relic is nonetheless of considerable importance even by international standards. (Plate 1)

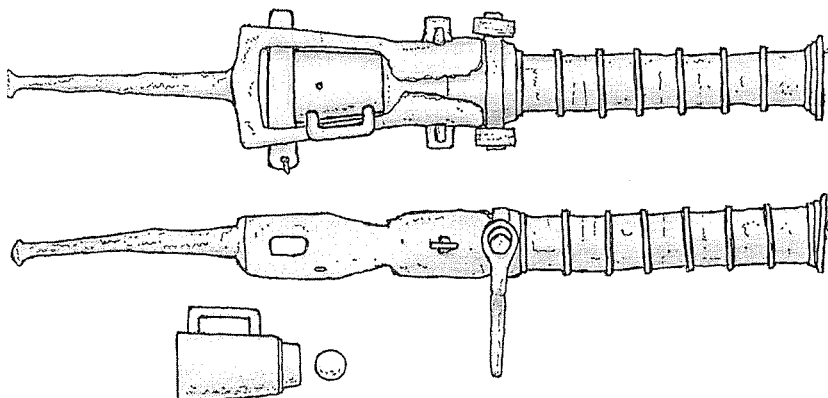
Before examining this intriguing gun too closely to establish its approximate date of manufacture or possible provenance, it would be easier to proceed by first placing it in its right perspective as a particular gun-type in the overall evolution and development of firearms. In this regard, it would certainly be useful to those unfamiliar with firearms, to understand

the basic difference between the terms, *Muzzle-loading* and *Breech-loading* guns. To start with, the terms *muzzle* and *breech* refer to specific parts of the *barrel* of a gun, the muzzle being its forward or front end, while the breech is the rear or back end.

During its long period of use, the particular type of swivel gun we are dealing with would normally be classed in a category on its own (Figure 1). The general term for this gun in Spanish speaking countries was '*Falcion Pedrero*' or simply '*Pedrero*'. In Italian it would be '*Peterara*', or, as it was also known '*Pezza di Braga*'. '*Perrier*' would be the French term, with '*Sling*' or '*Murtherer*' in English. In other words a '*Stone-firing Gun*'. This was to identify it from another category of swivel guns, which were not breech-loaders. Recent English publications refer to this type of gun as a '*Breech-loading Petarara*', or simply as a '*Breech-loading Swivel Gun*'.

After consultation with the Conservation Department of the Royal Armouries, in Leeds, the delicate task of carefully removing marine concretions that encased the gun was undertaken. (Plate 2) Pending a more complete conservation programme, a purpose-built holding tank at the Maritime Museum ensured the gun's stable condition. A preliminary examination revealed that this swivel gun is of wrought iron, i.e. hammered, built-up construction and its early style suggests mid-sixteenth century manufacture. However, old styles died hard and more precise scientific dating is required. The gun is around 1.840 mm. long overall. The barrel section is approximately 1.110 mm. long,

Figure 1: Breech-Loading Iron Swivel gun - European, first half of 16th century



with a bore of 40 mm. (Plate 3) The gun is of quite plain form with a slender, round barrel tapering slightly towards the muzzle end where it flares out in a rather unusual, archaic style muzzle-reinforce. Unlike the rounded muzzle mouldings normally encountered on swivel guns, this muzzle-reinforce is octagonally faceted in the style typical of early fifteenth century artillery or the muzzles of primitive arquebuses and muskets.

The barrel's breech end shows traces of what could have been simple, crude mouldings where the barrel-breech widens to meet the powder chamber trough. The trunnions, i.e. the cylindrical pivots projecting from the side, are constructed as one with the barrel, simply protruding from the barrel wall, 865 mm. from the muzzle. The sturdy iron swivel, supporting the gun at the trunnions, and which gives this particular type of gun its name, is still in place. (Plate 4)

The powder chamber holder or trough, which extends rearwards from the barrel breech, is here constructed as an integral part of the gun. This trough is roughly rectangular in plan, approximately 260 mm. long by 170 mm. wide, widening slightly towards the rear. The inner front part of the chamber trough is tapered at the breech opening to take the shaped mouth of the powder chamber. There is a rectangular hole cut in the bottom of the trough, which served to expel any accumulation of black powder residue. Further back at its rear the trough is pierced on either side with a rectangular slot approximately 60 mm. long, by 25 mm. wide. Into these slots a substantial iron wedge was inserted and hammered in to force the powder chamber forward into the breech of the barrel and hold it firmly in position for firing. The powder chamber and its locking wedge are unfortunately missing. From the center of the rear face of the chamber holder, which is roughly rectangular in shape, extends the long iron tiller or handle with which the gun was manoeuvred for aiming and was held firmly in position for firing. The tiller retains the usual knob at its end. There would normally be a mark on the top face of the rear of the chamber holder that matched identical marks on this particular breech-loader's set of chambers.

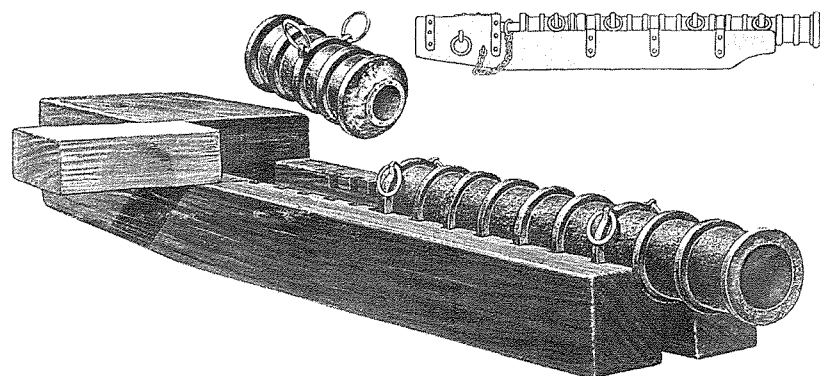
Understandably, the gun has suffered considerably through the effects of being

submerged in the sea for some four hundred years. This resulted in extensive corrosion in varying degrees over the entire surface. Unfortunately, certain areas are affected by more noticeable metal loss. However, it has nonetheless survived remarkably well overall, and appears to be reasonably sound structurally. The more serious, immediately visible damage is at the forward section of the barrel where the corrosion has caused a fairly large hole in the barrel wall. Further investigation will determine the full extent of the damage.

The evolution of the breech-loader in the history of firearms is certainly intriguing. The earliest guns appear to have been mainly muzzle-loaders, i.e. loaded from the front. Putting a charge of powder down the bore from the muzzle, followed by a wad, then inserting the shot and following this by another wad, and ramming each element home was certainly time-consuming business. After firing, muzzle-loading guns had to be withdrawn each time from their position in the loophole or gun-port, then they were mopped out, re-loaded and re-positioned. Gunners in action usually had to reload while standing exposed to enemy fire. Meanwhile, the enemy had ample time to reform between shots. The difficulty of loading a gun at the muzzle in the narrow space of a fortification, or even more so, on the cramped decks of early fighting ships, must have been the prime motive for the development of early breech-loaders. It soon became clear that it was easier and quicker to load a gun from the breech than from the muzzle.

There seems little doubt that the first breech-loaders made their appearance during the first half of the fourteenth century. There are numerous references from this period to guns in use with separate powder chambers that were removed for loading. Many medieval and Renaissance cannon were

Figure 2:
Wrought iron
Breech-Loading
Perrier c. 1400



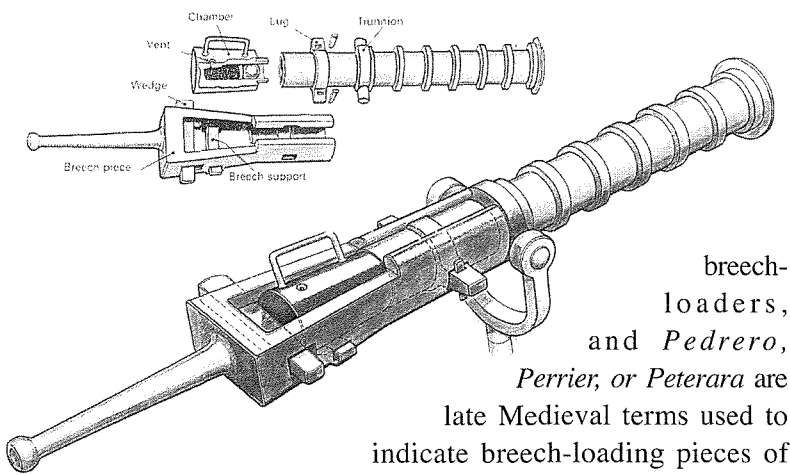


Figure 3: Breech-Loading Petarara c. 1470

breech-loaders, and *Pedrero*, *Perrier*, or *Peterara* are late Medieval terms used to indicate breech-loading pieces of artillery designed to throw stone missiles. Two types of early breech-loaders were developed. The first earlier version, was no more than a wrought iron tube, or barrel open at both ends, laid in a heavy wooden bed and lashed down firmly. The separate, pre-loaded powder chamber was placed against the rear barrel opening, and then held firmly in position by driving wooden wedges between the base of the chamber and the upstanding block of wood forming the rear end of the bed. A typical example complete with its wooden bed was recovered from the Mary Rose wreck, and an actual wrought iron chamber still retaining its iron lifting-ring, is exhibited at the Palace Armoury in Valletta. Unfortunately, the provenance of this rare item is unknown. (Plate 5)

In the second, later type of breech-loader, the earlier basic design was improved when metal arms were extended rearwards from the barrel as an integral part of the construction. These arms were formed into an open-topped trough into which the removable chamber fitted more surely. Provision was also made for a strong metal wedge to be inserted behind the chamber to force the chamber mouth tightly against the breech opening.

This system of construction made for a more rigid, certain connection between chamber and gun, and hammering home the locking wedge no longer forced the barrel forward as often happened with the earlier breech-loader. However, although the all-metal variety proved to be quite sound and efficient, probably due to early technical difficulties it was only produced in limited sizes. Nonetheless, both types were extensively used contemporarily both on land and at sea. Before the wheeled gun carriage came into general use, the heavy, wooden-bedded breech-loader proved useful as a fixed-position

gun when put to siege use, or fired from a ship in a broadside. On the other hand, when mounted on a swivel, with a long iron tiller to maneuver it, the lighter, all-metal breech-loader was indispensable as a very handy, quick-firing, anti-personnel weapon, especially in close combat. In both cases, by providing the gun with a number of spare chambers, pre-loaded before the start of battle, a fairly rapid fire could be kept up by removing the fired chamber and replacing it with a loaded one. Doubtless a slow but steady fire could then be kept up by reloading the chambers as they were removed. Except for the inherent weakness of the gun, and that a gas-tight fit could not be obtained for the chamber so that some of the force of the exploding powder escaped, they were ingenious, considering that muzzle loading cannon little different in concept from the earliest guns, were to continue in use until the 1860's. The wrought iron breech-loading swivel

gun was used extensively virtually unchanged, from the rails of ships and the crenellations of castles and forts for many centuries. In fact, it would appear these swivel guns were still in use in ships as late as the later part of the 16th century, as examples of these guns were raised from ships known to have been wrecked around that date.

The Spanish *Pedrero*, Italian *Peterara*, French *Perrier* and the English *Sling* are often encountered in sixteenth century ordnance inventory lists and stone-throwing, breech-loaders produced in all dimensions, including a few monsters, were used extensively by various nations. However, although the breech-loader idea was ingenious the system was undoubtedly an unsatisfactory one. There was no efficient method of obturation, i.e. of preventing the violent backward leak of hot gases from the exploding charge through the juncture of the chamber and the barrel. Soon, wheeled gun carriages replaced the old cumbersome gun beds and efficient, bronze, muzzle-loading cannon proved safer than the old wrought iron gun. Also, a quicker, more efficient method of muzzle-loading was introduced. Consequently, heavy breech-loaders were rarely made after the second half of the 16th century. However, the old term *Pedrero*, *Peterara*, *Perrier* and *Sling* continued to apply to the lighter, versatile breech-loading swivel gun, which remained popular for another century or so. In fact, most

English publications still refer to this type of swivel gun as a *Breech-loading Peterara*.

The majority of breech-loading swivel guns were of wrought iron construction, however there are also examples where a wrought iron breech-trough was fixed to a bronze barrel. However, these are rare. Apparently, quite a number of breech-loading swivel guns were cast completely in bronze as these are frequently encountered on underwater wrecks, with some fine examples found in various museums. The bronze variety is usually termed simply *Bronze Breech-Loading Swivel Gun*, to distinguish them from the wrought iron guns.

Having mentioned previously the basic principle behind the early breech-loading system, it would certainly interest even the least mechanically minded person to learn a little more on the actual loading procedure. The breech-loading swivel gun was loaded by means of a separate powder chamber with a handle, much like a large beer mug. The chamber might be of iron or bronze and had a priming vent at its base. Three re-loadable chambers were usually supplied with each gun, and each chamber would be stamped with the gun's own identity mark. The chamber mouth narrowed to engage with the tapered opening of the barrel-breech. After being loaded with the powder charge, the chamber was sealed with a wooden plug or some other strong wad. The handle was positioned so that when the chamber was rotated in the trough and the handle rested on the trough-frame, the priming vent presented itself centrally on top. The chamber was held firmly in position by a strong iron wedge called a *Leichet*, which was secured to the gun by a short chain against accidental loss.

The first step in the loading procedure was for the gunner to knock out the wedge locking the chamber in place and to remove the chamber from the breech-trough. The chamber was handed to an assistant for re-loading. The gunner cleared the breech opening from smoldering waste from the previous shot and inserted a wad into the breech opening. The projectile was next inserted into the barrel. Depending on the nature of the target, the shot could be a solid stone or iron ball, or else a quantity of scrap iron shot or fractured pieces of flint. The ball was usually wrapped in a cloth patch and loose shot would be pre-packed in cloth or paper bag. After the

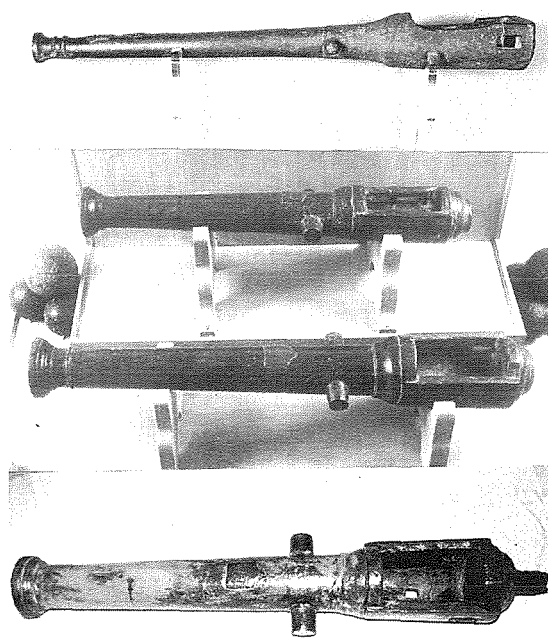


Figure 4: Various Breech-Loading Swivel Guns. 16thC

powder chamber was placed in the trough and pushed forward so that the chamber mouth engaged the breech, the wedge was inserted in the slots and hammered home, forcing the chamber mouth into the breech opening. The chamber often had a lug protruding from its base, positioned to engage with the underside of the wedge, thus ensuring a rigid lock. The gunner then primed the chamber vent and the gun was ready for firing. The priming was ignited in the normal way by the glowing match of the gunner's linstock.

Because their recoil was relatively slight, these swivel guns were commonly fixed to the sides or bulwarks of ships and discharged from there during boarding operations. These swivel guns were most effective when used as close-range, anti-personnel weapons, and were quite lethal when loaded with scrap iron shot or fractured flints. They were used in attack to break up the troop concentrations on an enemy's deck, and when mounted on the superstructure fore and aft they could be used defensively to bring cross-fire down on enemy boarders in the ship's own waist. A skilled gunner could probably reload one of these guns in around a minute or so, making it possible to fire off a number of shots in fairly rapid succession. Doubtless, in the hands of a competent gun team, a slow but steady fire could then be kept up by reloading the chambers as they were removed. These weapons made up for their poor range by a rate of fire remarkable for the period and breech-loading pedreros were used with little or no modification from the 15th to the 18th century.

(See plates in colour section)

Traditional Boats of Malta

Joseph Muscat

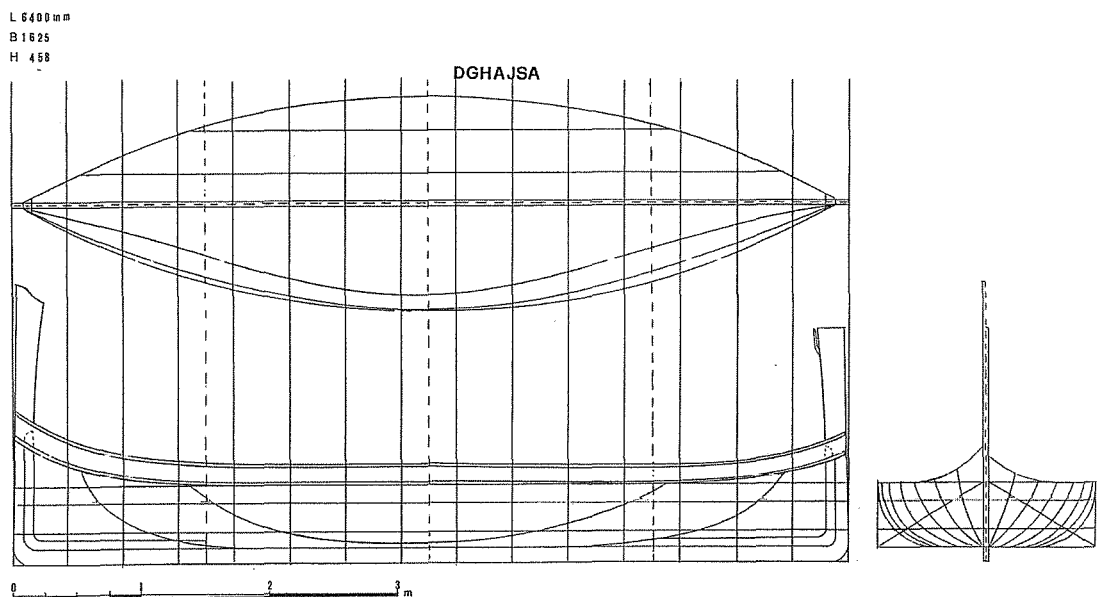
Around the shores of the Maltese Islands, one can see various small, working boats which developed over a period of hundreds of years. When we refer to the traditional boats of Malta we refer to the five¹ that have survived and which show the same constructional characteristics. It is interesting to note that one may come across certain local boats which originated after 1800 with the introduction of British rule in Malta but which do not comply with the traditional characteristics.²

The *xprunara* or *speronara*³ was the prototype of all traditionally built Maltese boats. During the time that it was in service - a period of almost two hundred years - other smaller local boats showed the same characteristics as those found on the *xprunara*. The *dghajsa tal-pass* or passenger boat appeared early in the seventeenth century while

the *ferilla* and the *kajjikk* evolved some time later in the same century. The Gozo boat or *tal-latini* evolved from the *xprunara* and appeared during the last decades of the nineteenth century. The *luzzu* evolved from the Italian *gozzo* as the principal fishing boat by the first decades of the twentieth century.

The main characteristics of traditional Maltese boatbuilding techniques were and still are the high stemposts fixed at right angles to a straight keel. Washboards were fitted on the gunwales while the catwalks to the sides joining the fore and aft *tambourets* were provided with drainholes. Maltese boats were carvel built - the open type without a deck - and they were normally powered by sails and oars. The highly decorated and brightly painted local boats have retained this characteristic up to present day.⁴

Figure 1:
A line drawing of a
dghajsa tal-pass



Looking at the first images of boats represented in Maltese maritime graffiti and which go back to the second millennium B.C., one may get the first inklings of the ships or boats of the period. The Tarxien graffiti refer mostly to open boats which came to Malta from the Levant.⁵ The *corbita* type of boat found at Hal Far, dating to the first century B.C. and first century A.D., might reflect the Roman influence on local boatbuilding. The interesting boat graffiti found at St Paul's and Tad-Dejr catacombs in Rabat show the open type of boat with high stemposts but most probably they were provided with sails and dated between the fourth to the sixth century A.D.⁶

It is not yet possible to come across a single image of a boat referring to the Phoenician period in Maltese history. Elsewhere, Phoenician open boats show high stemposts and they are rowed by men standing and facing the bows. It should be noted that similar characteristics could be traced on boats of various harbours in the Mediterranean and not exclusively in Malta. There is practically no tangible proof to connect Maltese boats with their Phoenician counterparts.⁷

A Maghreb-Siculo ceramic bowl dated to the twelfth century show certain interesting characteristics depicted on an open type of boat which deserve to be studied carefully.⁸ The boat shown on the bowl must have been one which travelled round the central part of the Mediterranean, especially between Tunisia and Sicily. This image on the bowl could well be the first and best reliable source of information for the study of Maltese boats. During the eleventh century, Malta was still under Arab domination and one can imagine how Muslim influences affected all aspects of life including boatbuilding. When examined attentively, the boat reveals the 'eye' at the bows, intricate decorations on the sheer strake or *tappiera* and the high stemposts fore and aft. The lateen rig was very popular among the Muslim masters and such a rig has also been employed on Maltese boats since time immemorial.

The idea of a link between a *dghajsa* and a gondola can hardly be taken seriously.⁹ There was once the Wignacourt gondola, which was specifically built as a ceremonial barge for that Grand Master, having the spiral type of stems fore and aft. When examining the model of this gondola

which dates to the first decades of the eighteenth century,¹⁰ one can see that it follows the traditional Maltese boatbuilding techniques. There is not the least connection with a Venetian gondola.

The British authorities in Malta introduced a ceremonial gondola for use by the Admiral and a few other V.I.Ps.¹¹ Notwithstanding its name, the boat was constructed according to local boatbuilding techniques and had absolutely no connection with its Venetian counterpart. There were local owners of the *dghajsa* who fitted a gondola type of stem on their boats and referred to them as gondolas. But the boats themselves were constructed strictly according to local, well known boatbuilding techniques.¹²

To see a *dghajsa tal-pass* under construction is an impressive sight. The frail skeleton is held in place and perfectly balanced by a system of props fixed from ground to certain vital parts of the frames. It remains on the stocks until such time as the boatbuilder decides that it is perfectly weighed and aligned according to the empirical rules of boatbuilding.

The exceptionally thin timbers employed on a passenger boat were intended to lower the construction costs and to produce a light craft which was strong enough to carry ten passengers but light enough to be handled quite often by one rower. However, looking at a *kajjikk* under construction one notices stronger timbers than those employed on a passenger boat, the reason being that a *kajjikk* was normally employed for fishing and had to face the open sea away from the sheltered bays and harbours of Malta. A *luzzu* and a Gozo boat carried still stronger timbers than those found on a *kajjikk* because they had to carry heavier cargoes and travel longer distances.

It is interesting to note that, while local boat builders, with the introduction of British rule in Malta, lost a certain amount of technological knowledge acquired under the Order of St John, they assimilated the latest technical innovations of building, for example, diagonal and clinker type of hulls. However, these last two types of hull never attracted the attention of local boat owners and consequently they were not built in great numbers.

One cannot underestimate the important role played by workers employed at the H.M. Dockyard who gleaned the necessary latest technologies working at the docks, subsequently

passing their expertise to local boatbuilders.¹³ The best local experts in boatbuilding learned the ropes at H.M. Dockyard and consequently new types of boats were introduced to meet local demand and others were acquired by British individuals living in Malta and elsewhere.¹⁴

The construction of the modern September regatta boats requires separate consideration as these boats are projected first and foremost for speed and consequently certain traditional characteristics are sacrificed to achieve improved velocity. Such racing boats were originally the same type and of the same construction as those commonly employed in the Grand Harbour. In the 1930s local competitors were demanding ever lighter boats from the local builders. Examining, for example, the racing *dghajsa* to be manned by four rowers, one wonders how such a frail boat constructed with very thin timbers could withstand the stress of four men, two of them rowing in a standing position and two sitting on their benches. Modern local racing boats such as the *dghajsa*, the *kajjikk* and the *fregatina* are unique in concept, light in construction and decorated but unfortunately they have lost a good number of their traditional characteristics.¹⁵

Boat Construction

The Cottonera boatbuilders were unsurpassed in their expertise and during the nineteenth and twentieth centuries they constructed hundreds of boats of all types. Certain builders from Senglea, Cospicua, Vittoriosa and Kalkara established themselves as the real experts in the trade. Others, working at Marsa, Marsamxett, Msida, Gzira, Birzebbuga and Gozo turned out excellent examples of Maltese boats.¹⁶ Local builders worked from family moulds and the father to son apprentice system proved its worth over the centuries.

While it must be said that there were no secrets attached to boatbuilding, certain builders did produce better boats than others. There were boatbuilders who never went to school yet they produced excellent drawings, moulds, cross-sections and profiles of their boats through trial and error. There were self-taught builders who succeeded in making a name for themselves without ever having attended an apprenticeship period with a well-established boatbuilder.

During the Knights period, boatbuilders followed the French type of technology and one can still trace French terminology in local boatbuilding. The knights constructed their galleys and third rates according to French technology and consequently the local workforce assimilated such knowledge and also applied it in the construction of small boats.¹⁷ Similarly, after 1800, with the introduction of British expertise as applied to ship and boatbuilding Maltese workers assimilated the latest innovations in ship and boatbuilding techniques.

One major British innovation in naval construction which affected local boatbuilding was the preparation of moulds for each frame required when building a boat. Moulds were normally prepared on a lofting board taken from the contours of a half model of the hull.¹⁸ The 'old' system based on empirical rules required a sliding type of half frame composed of a flat frame and a futtock duly marked with the required number of frames which composed the symmetrical part of a hull but not the entry and the exit of a boat.¹⁹ These last parts were constructed according to the expert 'eye' of the builder following traditional rules.

After fashioning the required frames, the keel and the stems, a boatbuilder laid down the straight keel on the prepared stocks. All frames made up of one flat frame with a futtock on either side were temporarily fitted on the keel, duly marked with the required equal spaces. All frames were held in place with a temporary stringer. When all frames were aligned and nailed down to the keel the sheer_strake was fitted to the frames and the internal stringer reinforced the frail framework. The rubbing strake below the sheer one with the gunwale on top ascertained the solidity of the upper part of the boat; the thwarts or benches strengthened the sides.

The fore and aft *tambourets* were fitted together with the side catwalks. When the skeleton was strong enough to be turned on one side the builder proceeded with the planking. The floor frames were strengthened with the floor stringers and the benches were fitted on the upper risings. It should be noted that a keelson was fitted only on a *xprunara* and on the Gozo boat. Mast benches were provided on boats as required, near the fore *tambouret*, only in the

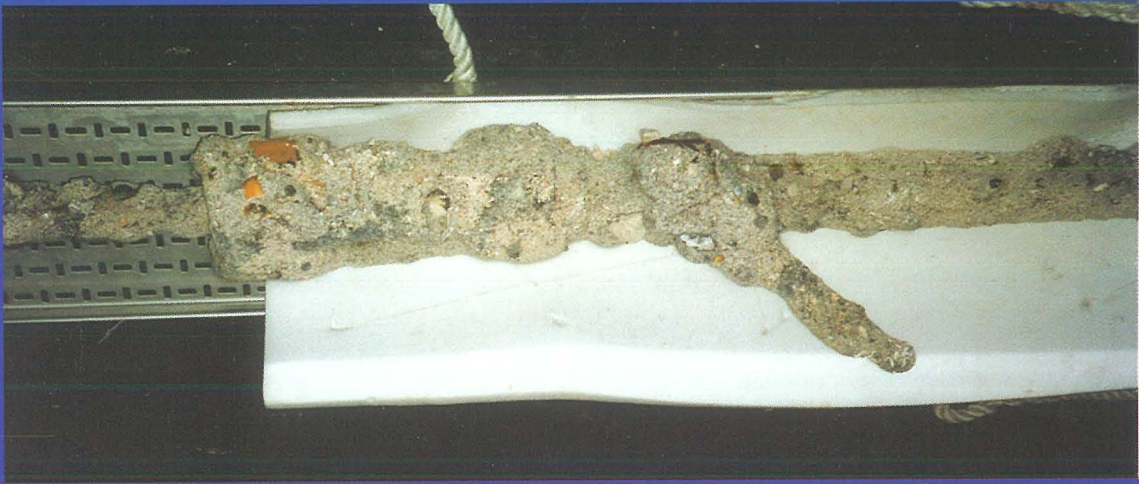


Plate 1. The breech-loading swivel-gun as recovered from the sea bed still completely encased in marine concretions.

Plate 2. Removing concretions from the Swivel-Gun



Plate 3. The breech-loading swivel-gun being lowered into the purpose built holding tank at the Maritime Museum.

*Plate 4.
Details of
the breech-
loading
swivel-
gun taken
at the
maritime
Museum
showing
swivel.*



*Plate 5. Wrought iron chamber of breech-
loading Perrier c.1500 at the Palace
Armoury, Valletta. Provenance unknown*





Plate 1. Funerary monument, 2nd century A.D., Roman Domus, Rabat



Plate 2. Detail showing lyre with parallel carved arms and cross-bar.



Plate 3. Apollo holding a very similar lyre. 3rd Century mosaic, Bardo Museum, Tunis

Plate 4. A banquet scene - 4th century mosaic with female musician/dancers playing clappers and a male musician playing pan pipes. Bardo Museum, Tunis.

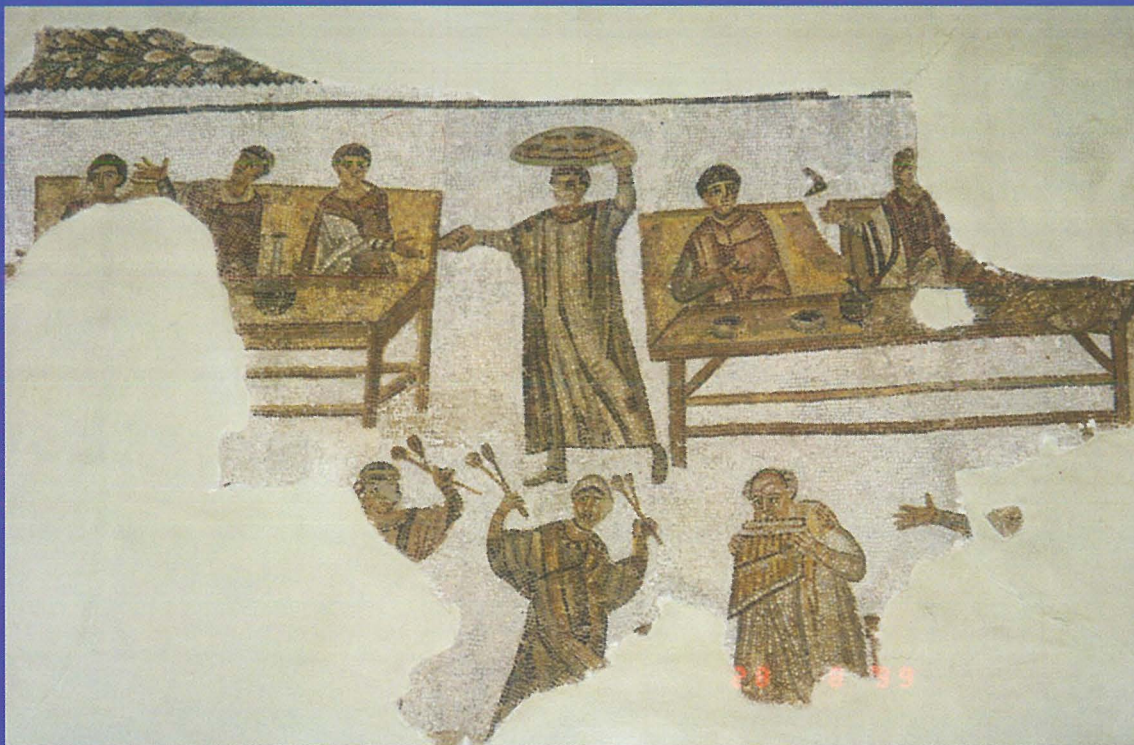
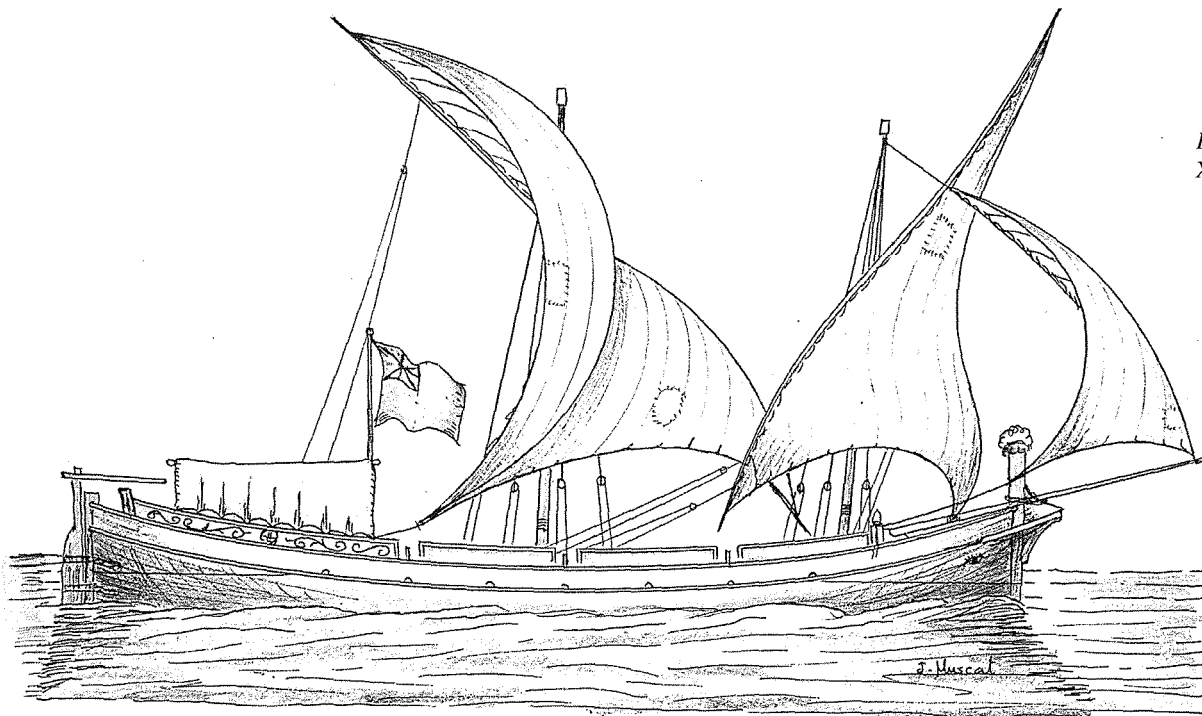


Plate 5. Terracotta theatrical masks, small versions of those used in comedy, Roman Domus Rabat.

Plates 6/7. Two theatrical masks depicted on the mosaic floor of the Roman Domus, Rabat.



Figure 2: Maltese Xprunara (1832)



case of a sprit rig or at the middle too when two lateen rigged masts were fitted. Washboards were provided on the gunwales of all traditional Maltese boats.

The Xprunara (Figures 2 & 3)

This vessel presents the first characteristics of local boatbuilding and its origin can be traced to the early sixteenth century. Unfortunately, its first iconographical evidence only goes back to circa 1740 and can be seen in an *ex voto* where it is shown under a sprit rig and with all the characteristics of a Maltese boat.²⁰ Presumably, there are earlier undated *ex voto* paintings showing the same boat in various predicaments at sea.

It is probable that the first *xprunara* carried a long *sperone* or spur at the bows like the other lateen rigged contemporary brigantine and *fregata* and used a lateen rig.²¹ Indeed, the first *xprunara* evolved from the brigantine which together with the *fregata* were the three principal small Maltese merchantships which kept the Island supplied regularly with all types of food provisions.

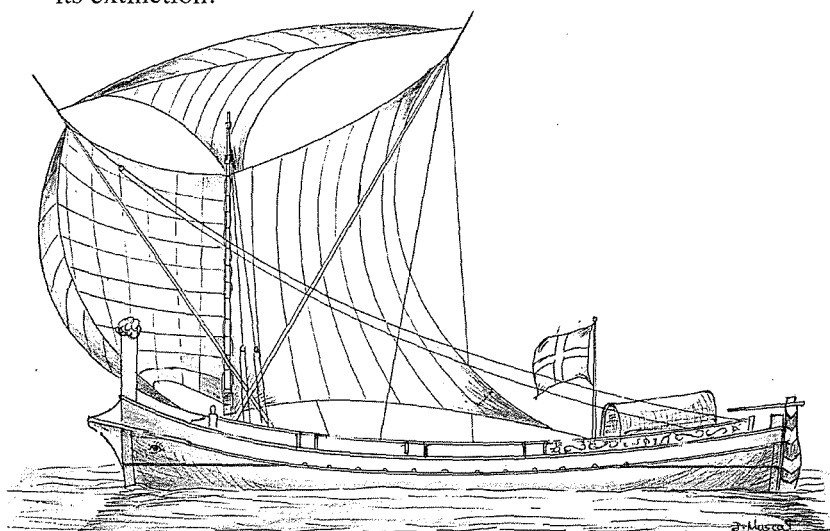
The hull construction of a *xprunara* was similar to any type of traditional Maltese boat but it carried a type of cabin at the stern for the benefit of any paying passengers.²² The *xprunara*, amongst other roles, was the principal passenger-carrying vessel that operated regularly between Malta, Sicily and Naples. Utilizing oars with its sails, a *xprunara* normally crossed from Sicily to Malta in twelve hours.

During its evolutionary life the *xprunara* changed its sail arrangement several times. It

probably started with a single lateen rigged mast and a jib like that carried by a brigantine. During the seventeenth century, it was provided with a sprit rig and a jib. In fine weather, the greater spritsail was rigged to one side and the smaller sprit to the other with the jib rigged as a topsail. By 1850, the *xprunara* was rigged with a small lateen sail at the stern and by then the oars were not employed anymore.²³

With the abatement of the Algerian corsairing activities in 1830,²⁴ there was no longer need for the oars but it is interesting to note that by then the hull of the *xprunara* had attained greater dimensions and hence a second mast was required. That was the time when a *xprunara* was equipped with two lateen rigged masts and by 1853²⁵ a great *xprunara* carried three such masts. By 1900, there was an attempt to provide a *xprunara* with a schooner rig²⁶ but by then the boat had entered its last phase of evolution – its extinction.²⁷

Figure 3: Maltese Xprunara (1740)



The *Dghajsa* (Figure 4)

The *dghajsa* or passenger boat occupies a major facet in the history of the Grand Harbour of Malta. Keeping in mind that the Cottonera area was very thinly populated before 1530, with the coming of the Order in Malta and its settlement at Birgu the whole area attained a definite change. The building of Valletta and the expansion of Bormla and Senglea greatly increased the ferrying of passengers and consequently required an adequately equipped passenger-carrying service.

It is interesting to note that the ferry or *dghajsa* service in the Grand Harbour and subsequently at Marsamxett, was introduced by those first individual boatmen who perceived in such a service a very remunerative activity. If, before the arrival of the Knights of St John in Malta, there was some type of boat service in harbour, that activity must have grown rapidly with the increase of services round the harbour. By 1601, we come across the first written reference to the harbour boats as a ferry service.²⁸ Schellinks drew the first iconographical evidence of a passenger boat in 1664.²⁹ After Schellinks, one can trace the whole evolutionary stages in the life of the Maltese *dghajsa*.

One can see in the Schellinks ferryboat certain similarities with the Sicilian one. Indeed, the connections between Malta and Sicily were close and people frequently moved about between the two Islands.³⁰ This earliest known type of Maltese *dghajsa* carried a slanting fore stempost and an awning for the passengers but it does not show any washboards on the sides.

The *dghajsa* depicted in the *Piccola Barriera* painting dated c. 1750, and exhibited at the Fine Arts Museum in Valletta shows the same slanting fore stempost and the washboards

together with the awning. This boat and the earliest known type were most probably not painted in bright primary colours. By 1750 there must have been a great number of passenger boats and their movements in and outside harbour were regulated by the codes of Grandmasters Vilhena and de Rohan. All regulations were mostly directed at suppressing any attempts by Muslim slaves to escape from Malta on a *dghajsa*.³¹

Vincenzo Fenech in c.1790, depicted a *dghajsa* showing high fore and aft stemposts, the washboards, the sheer strake with its drainholes, the awning and tholepins for two oars on each side. For the first time bright colours are shown on the *dghajsa* but no other decorations.³²

The Schranz painters left us a number of pictures showing further evolution of the *dghajsa* after 1800, during British rule in Malta when the boat attained its greatest glory as a passenger boat in the Grand and Marsamxett Harbours. By 1850, the *dghajsa* maintained its slightly curved, tall fore stempost, the sheer strake, the awning and between the rubbing and the sheer strakes, moustaches or triangular spaces were painted mostly in red with the eye of Horus depicted on the fore.³³ By 1880, the great passenger *dghajsa* or *ferilla* was highly decorated with floral designs all along the sheer strake and brightly painted in combinations of primary colours.³⁴

The *dghajsa* entered its last phase of evolution by the first decades of the twentieth century.³⁵ The high, straight, scimitar type of fore and aft stems fixed at ninety degrees with the keel had a practical function. The boatman steadied his boat while holding the fore stem with one hand as he helped passengers to embark or disembark. With his other hand he received the fare from the passengers. The *dghajsa* retained

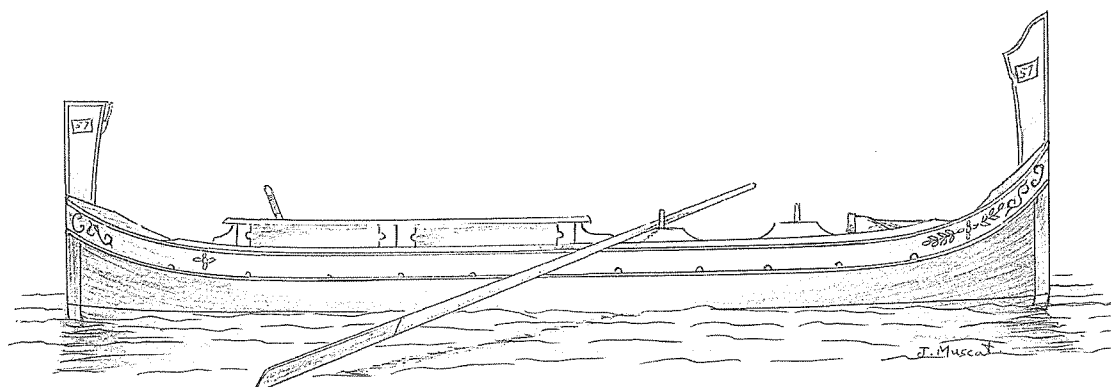
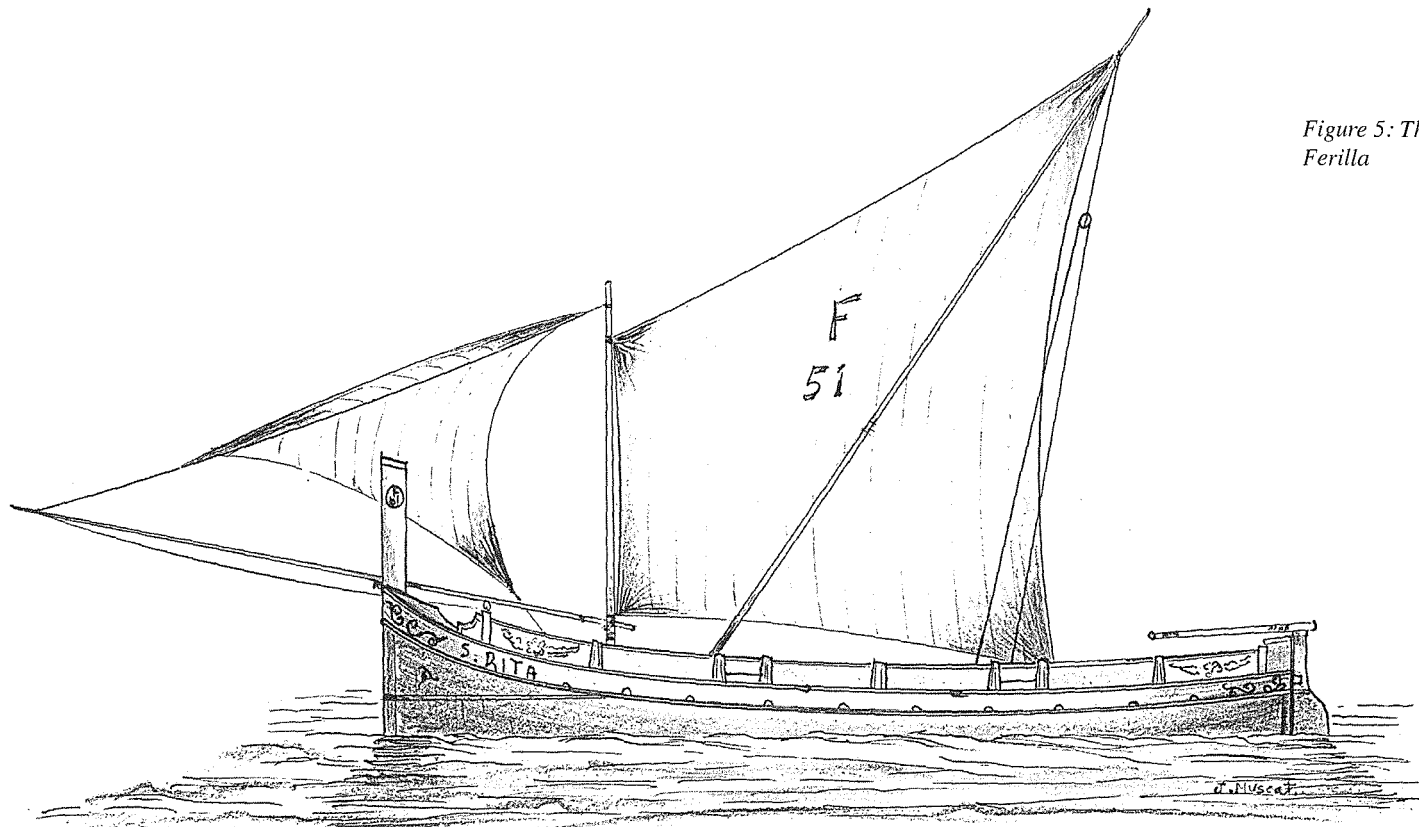


Figure 4:
The Maltese
dghajsa

Figure 5: The Ferilla



those characteristics up to present times but unfortunately by 1970, outboard motors were fitted at the stern and the oars are not employed any more except perhaps when approaching or departing from a landing place.

One can judge the importance of the *dghajsa* by the great number of rules and regulations issued from time to time by government officials.³⁶ There used to be hundreds of passenger boats hovering around a liner arriving at the Grand Harbour. There was a time when boatmen used to line up in their boats near the Customs House awaiting the arrival of a liner.³⁷ The British navy employed a great number of passenger boats as ship's company.³⁸ Any *festa* in harbour involved hundreds of *dghajjes* carrying people around various spots in harbour. Boatmen worked hard and, for those who wanted to work harder than others, there was enough work for every one and there were many amongst them who earned good money. With the introduction, in 1882, of the steam ferryboats first in Marsamxett and in 1906 in the Grand Harbour³⁹ and then, in 1918, the buses⁴⁰ the *dghajsa* service lost its importance. The mortal blow for the *dghajsa* came with the rundown of the British forces in Malta.⁴¹ At present, there is a slight revival of the *dghajsa* service but it is not enough to provide a decent remuneration for fulltime boatmen.⁴²

The Ferilla (Figure 5)

There was a time during the eighteenth century when the nomenclature *ferilla* was connected solely with the small passenger boat that plied between Birgu and Senglea. It was much smaller than the normal *dghajsa* which crossed the Grand Harbour, was very swift and was handled by one boatman.⁴³ Concurrently there was a fishing boat without a specific nomenclature⁴⁴ but it seems that by the turn of the nineteenth century the name *ferilla* was attributed to one of the principal Maltese fishing boats.⁴⁵ Indeed, there was not much difference between a *dghajsa* and the fishing *ferilla* and the latter was occasionally described as being a large *dghajsa*.⁴⁶

There was hardly any difference in the building of a *dghajsa* and a *ferilla* except that the latter had a much taller forestem and a higher free board. As the *ferilla* was expected to sail away from the sheltered waters of the Grand Harbour it was built to be stronger than the *dghajsa* and carried the eye of Horus on the bows for good luck.

Apart from its sprit rig, a *ferilla* was normally rowed by four men who were also fishermen. The boat was provided with washboards which were usually pulled out of place when hauling in a fishing net but not when letting down or pulling up fish traps.

The *ferilla* was hardly ever longer than 30 feet⁴⁷ and consequently it did not travel far out

Gozo *xprunara* was identical to the normal one which travelled to any part of the Mediterranean but it carried no awning at the stern. The two typologies continued to operate together up to the last quarter of the nineteenth century. By that time the *xprunara* was losing its popularity with local masters as they preferred the larger type of merchant ships like the brig and the bark for their mercantile activities. The Gozo *xprunara* remained as the principal vessel that plied between Malta and Gozo.

The Gozo boat or *tal-latini* was provided with two masts rigged with lateen sails and a jib. It seems that by the first decade of the twentieth century the lateen sails were enlarged by adding a kind of a bonnet at the foot whereby they attained the shape of a settee sail which was maintained up to the 1950s. By 1920, the first engines were introduced with success on the Gozo boat although sails and oars were retained.⁵³

It should be noted that a sprit sail was occasionally rigged on a Gozo boat up to the first two decades of the twentieth century and the spur or *taljamar* was retained on the bows. When entering harbour the mainsail was lowered first and then the foresail and the boat was manoeuvred into position alongside a quay with the oars. After 1920, the majority of the Gozo boats were equipped with engines but they kept their masts and sails ready for any emergency.

The Caruana family of Kalkara were reputed to be the best Gozo boatbuilders. Most probably the last one to be built was the *Sacra Famiglia* in 1934. Such boats, sometimes 45 feet or more in length between the perpendiculars, were built with very thick timbers on a green heart keel.⁵⁴

Their construction followed the same rules as those pertaining to any other Maltese traditional boat. Their huge bulky bows were projected to ride over a wave and their wide beam provided a spacious hold capacity.

The Gozo boat was used as a passenger boat up to such a time when the great ships started to operate between Malta and Gozo. The *tal-latini* was kept as a transport vessel carrying agricultural products from Gozo and various items of merchandise from Malta.⁵⁵ The shuttle service between the Maltese Islands was maintained even during the dangerous period of World War II when one of them was lost as it hit a mine. The last Gozo boat, the *Sacra Famiglia*, is at present being restored and hopefully it will be exhibited in a museum for all to be aware of a dying craft.

Local and foreign artists painted numerous pictures of the *tal-latini*, presenting it under various sail arrangements. Old photographs show it under its *kabuz* or awning at Mgarr Gozo or entering the Grand Harbour. Eye witnesses still remember the days when certain Gozo boats were seen going out of the Grand Harbour in inclement weather, disappearing behind a wave and appearing again riding another one. No Gozitan master ever lost his boat at sea. Those hardy Ghajnsielem *padruni*/masters defied all weather conditions to maintain communications between the Maltese Islands.⁵⁶

The Luzzu (Figure 8)

This working craft was the last in the family of local traditional boats to appear round the shores of the Maltese Islands. It probably evolved from

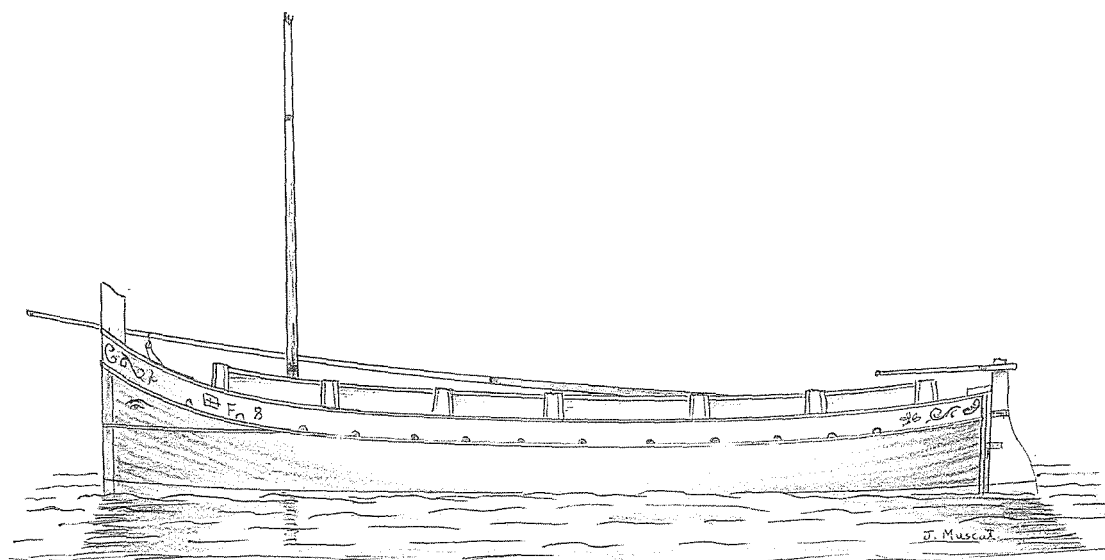
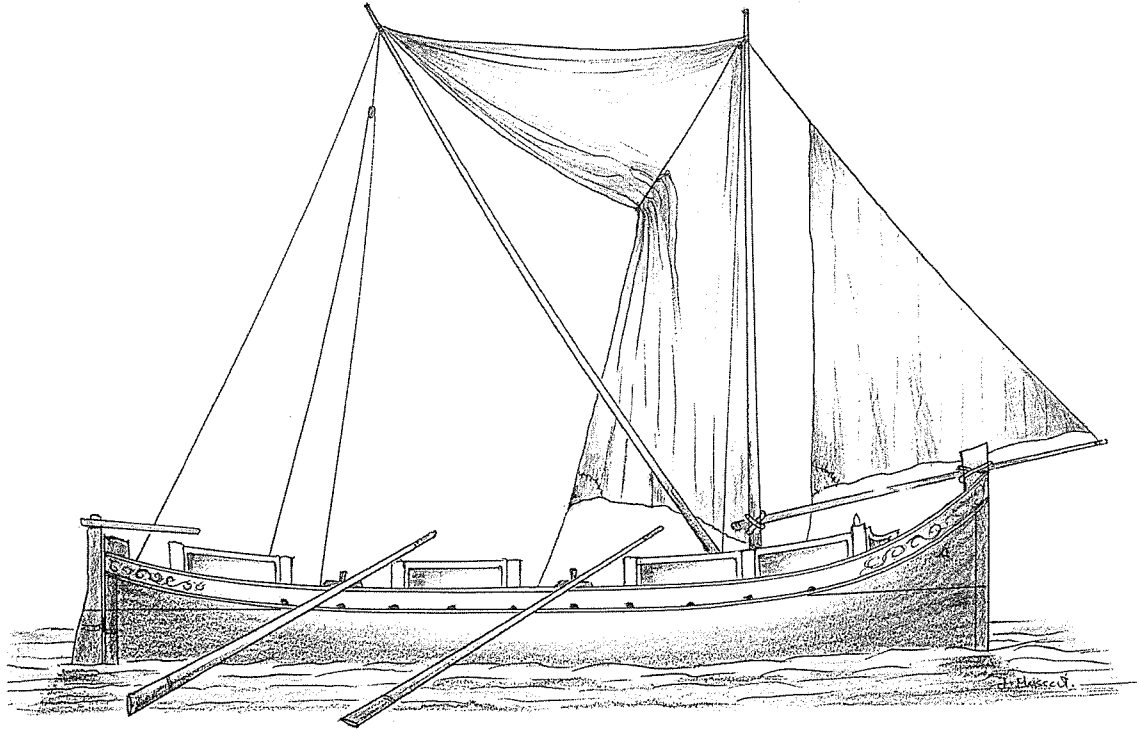


Figure 7: The *Kajjikk*

Figure 8: The Luzzu



the Italian *gozzo*⁵⁷, a boat which visited Malta quite frequently, especially in the 1880s.⁵⁸ With the introduction of marine engines on local boats stronger constructions were required to take the weight and stress, especially on the floor timbers.

The *luzzu*, a carvel built, double ended open boat was almost a replica of the *ferilla* but having a much shorter fore stem and a higher freeboard. The construction followed in all details that of all local traditional boats except for the fact that it was made of much stronger timbers. From a distance the profile of a *luzzu* looked exactly like that of a *ferilla* except for the fore stem and a higher freeboard. The plan view showed a fore *tambouret*, side catwalks and a stern *tambouret*.⁵⁹

The early *luzzijiet* were rather small, not larger than 30 feet between the perpendiculars⁶⁰ and were employed mostly as transport vessels. They were rowed regularly by four men when engaged in harbour services but when employed as a fishing boat they were rigged with a sprit sail and a jib. Subsequently, when the *luzzu* was adopted as the main local fishing boat it was powered by one or more inboard engines.

The *luzzu tal-gadraj* was provided with the necessary hold space and facilities to supply the required provisions to ships in harbour. The fishing *luzzu* is at present equipped with a deck and a midship cabin together with powered winches and navigational instruments. At Marsaxlokk, one can see a good number of such boats kept in perfect working condition by their owners and although no more are built it is hoped that at least the last few hundred that

are still seaworthy will be kept in working order for many years to come. A few *luzzijiet* are nowadays engaged in tourism and are equipped with the necessary amenities to comply with tourism regulations.

A *luzzu* is painted in the traditional blue, green, red and yellow colours. On the red or yellow ochre painted fore *moustache* one invariably find the eye of Horus but owners normally select a holy name for their boat. Together with the licence number a *luzzu* is decorated with floral designs on the sheer strake.

There are hardly any more local traditional boats being built as the construction costs are prohibitive. Consequently there is little demand for such craft, especially as fibre glass ones require hardly any maintenance work.

The last few professional boatbuilders are nowadays more engaged in maintaining and repairing the existing traditional boats rather than building new ones. Indeed, there exists the possibility of losing the technology of boatbuilding but on the other hand one can notice the flourishing of professional model makers of traditional boats especially round the Cottonera area. Hopefully, the pendulum will swing the other way and the love for the old wooden boat will once again attract the attention of local owners as is happening in other countries. It is hoped that the remaining boatbuilders in Malta and Gozo will pass their expertise to others. The Malta Maritime Museum's collection of local traditional boats is quite substantial and together with a fine collection of old models, constitutes a good

point of reference for the history of the evolution of Maltese local, traditional boats.

One cannot but emphasize the fact that the first typologies of local boats, with the exception of the fregatina, to disappear into oblivion were those which were introduced after 1800 under the influence of British rule in Malta. The phenomenon of natural selection for the survival of the traditional boats depends on those empirical rules constituting the modalities for the transmission of culture. It is hoped that one will be able to see around the shores of the Maltese Islands for many years to come the sturdy fishing *luzzu*, the omnipresent *kajjikk* and the elegant *dghajsa*.

References

- 1 These are the Gozo or *tal-latini* boat, the *luzzu*, the *ferilla*, the *kajjikk* and the *dghajsa tal-pass*.
- 2 The most popular ones were the *fregatina*, the *gigg*, the *baghal tal-gig*, the *barkun*, the racing *gigg*, the *wejla* and the *skiff*.
- 3 J. Muscat, *The Xprunara*, (Malta, 2000), *passim*
- 4 J. Muscat, Maltese Ship and Boatbuilding 18th and 19th centuries in K., Damianidis, *The evolution of wooden shipbuilding in the Eastern Mediterranean during the 18th and 19th centuries*, (Athens, 1993), 69-89
- 5 J. Muscat, The Tarxien Ship Graffiti Revisited in *Melita Historica*, vol.xiii, no.1, (Malta, 2000), 49-57
- 6 J. Muscat, Maltese Ship Graffiti in C. Villain-Gandossi, *Medieval Ships and the Birth of Technological Societies*, (Malta, 1991), vol.ii, 323-378
- 7 See A.F. Tilley, A Phoenician Survival in *The Mariner's Mirror*, (London, 1969) vol. lv, 467-9 and *ibid.*, The Survival of Ancient Mediterranean Boat Designs, in *The Mariner's Mirror*, (London, 1975), vol. lix, 373-84 where the author insists on the theory of a Phoenician origin and the connection of the Maltese *dghajsa* with the Venetian gondola. But see also L. Basch, De La Survivance de Tradition Navales Phoeniciennes dans la Mediterranee de nos Jours, in *The Mariner's Mirror*, (London, 1975), vol.lxi, 229-53 where he aptly confutes Tilley's theory.
- 8 Thanks to Honor Frost who provided me with a picture of the bowl; see also *The American Neptune*, (Salem Massachusetts, 1989), vol. xlix, no.3, 173 item 13 and 174 pl. 13
- 9 P.G. Camenzuli, *Is-Sengha tal-Bini tad-Dghajjes f' Malta u f' Ghawdex*, (unpublished B.A. thesis, University of Malta, 1968), 15-17 for his idea about the possible relation of the *dghajsa* and the Venetian gondola but unfortunately he fails to give one contemporary reference. For more information see J., Muscat, The Dghajsa - In Memoriam in *The Mariner's Mirror*, (London, 1991), vol. lxxvii, no.4, 404 note 1 and 2.
- 10 One may see this model exhibited at the Malta Maritime Museum.
- 11 A model of the Admiral's gondola can be seen at the Malta Maritime Museum.
- 12 The last 'gondola' type of *dghajsa* was put to sea for some time recently but it was subsequently stowed away in a garage.
- 13 Anthony Muscat, a foreman employed at the boathouse at H.M. Dockyard, recalled the dockyard *dghajjes* kept near his workshop for use by dockyard workers to move from one dock to another.
- 14 It is known, for example, that racing gigs, built at Kalkara, were bought by British individuals in Gibraltar and in Israel.
- 15 For further information see J., Muscat, *The Dghajsa and other Traditional Maltese Boats*, (Malta, 1999), 168 *et seq.*
- 16 Such names as Guli, Pule, Del Ceppo, Bengala, Caruana, Rodo, Toscano and others are still remembered for their expertise in boatbuilding.
- 17 J. Muscat, French Influence on Maltese Ship and Boatbuilding in *Proceedings of Seminar: Aspects of Maritime Relations with France Through the years*, Malta Maritime Museum, (Malta, 1998), 1-4
- 18 Half models of local boats are exhibited at the Malta Maritime Museum.
- 19 J. Fennis, *Un Manuel de Construction des Galeres 1691*, (Amsterdam, 1983), figs, 14-16
- 20 One can see the *ex voto* at Tal-Herba Sanctuary, Birkirkara.
- 21 J. Muscat, *The Xprunara*, (Malta, 2000), 33
- 22 *Ibid.*, 2, 4, 6, 8
- 23 It was possible to trace the evolutionary stages of the sail arrangement through the ages by studying the *ex voto* paintings in several churches of Malta and Gozo; see also J. Muscat, Le Xprunara - Un Batiment traditionnel maltais in *Neptunia*, (Paris, 1992), no. 185, 22-32
- 24 P. Jullien, *Journal de la Prise d'Alger 1830*, (Paris, 1960), *passim* for a full account of the fall of Algiers which was the last stronghold of the Barbary corsairs in 1830.
- 25 See *ex voto* painting dated 1853 at Tal-Herba Sanctuary, Birkirkara.
- 26 See *ex voto* painting dated 1904 at the Mellieha Sanctuary.
- 27 For more information see J. Muscat, *The Xprunara*, (Malta, 2000) and J. Muscat, The Xprunara in K., Sciberras, *Proceedings of History Week 1993*, (Malta, 1997)
- 28 A. Contreras, *The Life of Captain Alonso de Contreras*, (London, 1926), 52
- 29 W. Schellinks, *Journey to the South 1664-1665*, (Rome, 1983), *passim*
- 30 NAR Lib which is a series of arrival booklets for the years 1743-47, reveals a vivid picture of the movements of passengers especially round the central part of the Mediterranean.
- 31 *Del Dritto Municipale di Malta*, (Malta, 1784), *passim* and *Leggi e Costituzioni Prammaticali*, (Malta, 1724), *passim*.
- 32 The water colour by Vincenzo Fenech is exhibited at the Malta Maritime Museum.
- 33 At the Fine Arts Museum in Valletta one can see two harbour scenes by Schranz which include the iconography of the *dghajsa*, also.
- 34 A model of the 1880 *ferilla* type of *dghajsa tal-pass* is exhibited at the Malta Maritime Museum.
- 35 During this period, numerous photographs have been produced showing the *dghajsa* in various positions and under various roles.
- 36 The rules and regulations governing the employment of the *dghajsa* as a passenger boat are included in a series of documents NAR Customs, the Malta Govern-

- ment Gazette and the Police Laws.
- 37 J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 65, 69 for an explanation of the *venda* system or how boatmen used to line up waiting to be called for service.
 - 38 Ibid., 51 *et seq* where the author explains at length the ship's company system.
 - 39 G. Belli, *Storja ta' Malta u Ghawdex*, (Malta, 1932), vol.vii, 2569-72
 - 40 Ibid., 2574. The public bus service started to operate by 1918.
 - 41 J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 68
 - 42 For a lengthy description of the Maltese *dghajsa* see J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 19-77
 - 43 Del Dritto, 271, item xii; Leggi, 77, item xii
 - 44 Leggi, 77, item xii
 - 45 NAR RB, license no. 13 (1894) the entry reads: Fishing boat *Ferilla*; see also V., Busuttill and T., Borg, *English Encyclopaedia*, (Malta, 1921), vol. D-F, 1127
 - 46 One can see a model of the great *dghajsa* denominated as *ferilla* at the Malta Maritime Museum.
 - 47 For more details see J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 86; see also NAR RB *passim*.
 - 48 For more information about the *ferilla* see J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 85-88
 - 49 NLM LIB 223 s.v. *Caicco*; NLM LIB 280, ff.48, 83, 167; see also J. Muscat, *The Maltese Galley*, 20
 - 50 G. Scarabelli, *La Carovana Marina di Fra Francesco Antonio Mansi 1728-1729*, (Lucca, 1986), 70
 - 51 E. Serracino-Inglott, *Il-Miklem Malti*, (Malta, 1975-1989), s.v. *Kajjikk*
 - 52 For more details about the Maltese *kajjikk* see J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 88-91
 - 53 NAR CD, F 33, 30 mentions the first Gozo boat which was fitted with a motor on 31-12-1920.
 - 54 Information kindly provided by Peter Caruana of Gozo.
 - 55 See J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 130, 131
 - 56 For further information see J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 127-133
 - 57 NAR VB, *passim*
 - 58 NAR CD, I 37 for the years 1889, 1890, 1891, *passim*

- 59 See profile and plan view of a *luzzu* in J. Muscat, *The Dghajsa and other Traditional Maltese Boats*, 96
- 60 J. Muscat, *The Dghajsa and other Traditional Maltese Boats*. 96

Glossary for Traditional Boats of Malta

- Buonavoglia:** a freeborn person who commuted a debt into an agreed period of rowing service on the Order's galleys. He was treated just like a slave but could keep a moustache as a special privilege.
- Carvel:** carpentry work in a boat having the planks of the sides fitted edge against edge.
- Clinker:** carpentry work in a boat having the planks fitted overlapping each other slightly .
- Corbita:** a Roman type of merchant sailing ship.
- Flat frame:** the part of the frame of the skeleton of a boat resting on the keel.
- Freeboard:** the part of the hull of a boat or a ship comprising the area from the gunwale to the level of the sea.
- Futtock:** part of a frame of a boat on each end of the flat frame.
- Gunwale:** the strong timber on the upper edge of a boat's side.
- Keelson:** the timber fitted on the flat frames of a boat and nailed to the keel.
- Lateen sail:** sail which had a triangular format.
- Sheer strake:** was the timber from bows to stern of a boat found below the gunwale which delineates the shape of the profile.
- Sprit rig:** denotes the manner of rigging a boat with a sprit sail.
- Sprit sail:** a rectangular sail having a spreader yard at its peak to keep it open in the wind.
- Stem post:** the straight or curved strong timber fitted upright at both ends of the keel.
- Stringer:** the timber fitted at the heads of the futtocks from bows to stern on which were fitted the benches and waterways of a boat.
- Tambouret:** the triangular deck level at the bows and stern of a boat.
- Tappiera:** see sheer strake.
- Tholepin:** the upright strong peg fitted in an oar chock and to which the oar of a boat was tied with a stropp.
- Transom:** the flat timber at the stern of a caique.
- Washboard:** the flat upright timber fitted on the gunwales of traditional Maltese boats.

New light on Fr Magri's exploration of the Hypogeum

Notes from correspondence with the British Museum

Josef Mario Briffa, S.J.

In November 1903, a century ago, the Committee of Management of the Museum proposed Father Emmanuel Magri S.J. to supervise the exploration of the Hypogeum in Paola. Dr Temi Zammit, in the *Museum Annual Report* for 1903 wrote:

“The exploration [of the Hypogeum] is being carried on under the supervision of Father E. Magri, S.J., whose competence is unquestionable and who will undoubtedly give us a full report on the completion of the work.”¹

Unfortunately, Fr Magri died unexpectedly on 29 March, 1907, in Sfax, Tunisia where

he had gone to preach spiritual exercises, and celebrate Easter. With the Report undelivered, and his notes not traced, his work seems completely lost.

Magri's notes and correspondence

Though very active, Magri left few publications related to archaeology.² His notes have never been found, no material related to archaeology has ever been traced in Jesuit archives. But is the picture actually so bleak?

Magri's correspondence proves to be a goldmine. Several letters related to archaeology have actually been traced. Some thirty-five of them, addressed mainly to the

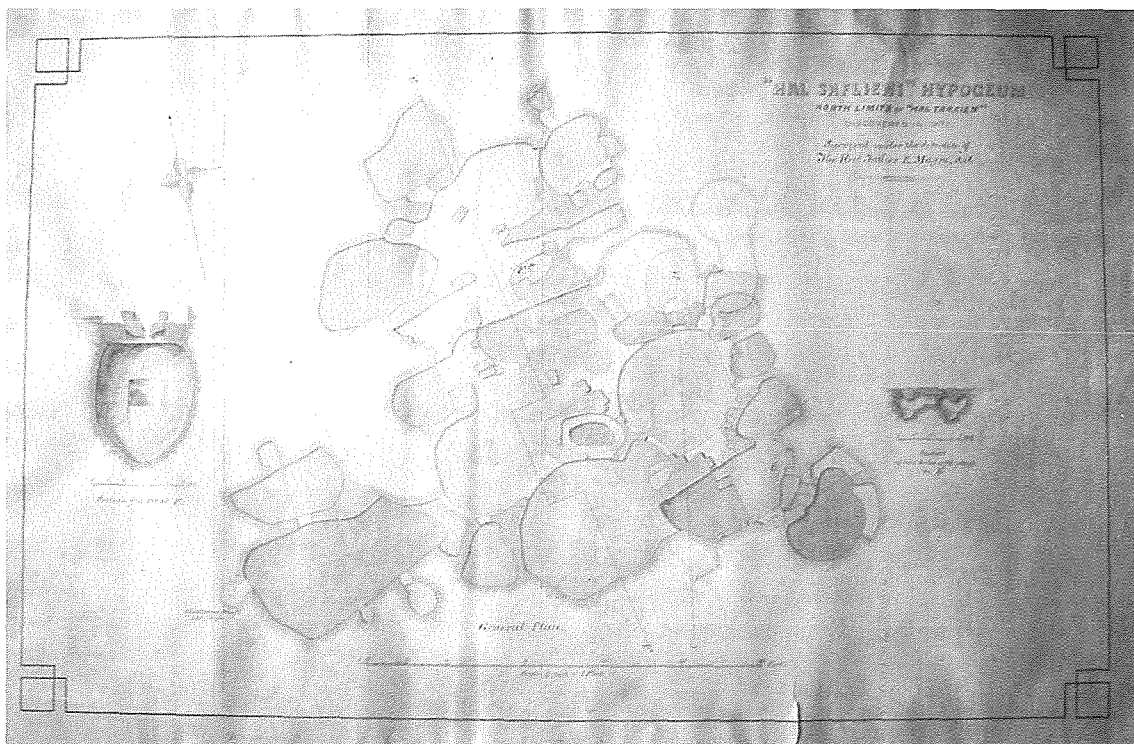


Figure 1. General Plan, surveyed under Magri's direction. (National Museum of Archaeology)

Lieutenant Governor were found some years ago in the Palace Archives, Valletta.³ These letters are now in the National Archives, in Rabat.⁴

I have retraced a new series of letters at the British Museum, eleven letters written by Fr Magri to Dr E.A. Wallis Budge, the Keeper of Assyrian and Egyptian Antiquities at the British Museum.⁵ These letters shed new light on Magri's exploration of the hypogeum.

Magri's appointment as Director

When the Committee proposed Magri for the task, he was Rector of the Seminary in Gozo. Magri wrote to Dr Temi Zammit, laying down a series of conditions for accepting the task, which reveal the way he conceived his role.⁶

Knowing that he would be unable to be present on site often to direct the work, the most important condition was the appointment of an "experienced, trustworthy and educated Overseer or Caretaker". Magri proposed Mr Anthony Doublet, then temporarily attached to the Public Works Department.

"Mr. Doublet can take notes and plans and correspond with me. I consider these qualifications as necessary."

It is clear that, while remaining Director of the excavations, he knew that he needed a trustworthy site supervisor.

Magri's presence, though limited, remained important. He would be present "as often as necessary and convenient to direct the works and to prepare materials for the description of the place." He even considered the possible situation where his presence is required, but he prevented from leaving Gozo:

"I shall direct the Overseer to suspend that particular work which will require my presence and remit it to another time."

Zammit wrote to the Lieutenant Governor informing him of the Committee's proposal, and included Magri's letter. Magri's appointment was approved by the Governor.

Excavations

The work proceeded in the first months of 1904. The first work to be done was the removal of construction material thrown in during the building of the houses above. This work was

such that not even the presence of Mr Doublet was considered necessary by Magri though he adds that it was

"absolutely required during the removal of the rubbish preexisting in the Catacombs. As there is a large stone table under this rubbish, the greatest care should be taken by the workmen."¹

The excavations did not proceed without difficulties. A major drawback was the water which continued to seep in, a problem which was only solved in the 1990s, during the latest conservation project. Water flooded the place, rendering the excavation and surveying very difficult.

By September, work on the clearance of the hypogeum must have proceeded quite well. Magri writes his first letter² to Dr E.A. Wallis Budge with regard to the excavation of the hypogeum. He intended to forward a few of the finds from the Hypogeum to the British Museum, to ask Dr Budge's opinion. The finds were not actually forwarded before January 1905. Another letter,³ sent with the material provides precious information.

The Site

Architectural features

"Only on the top we found distinctive Phoenician tombs; they were opened, etc.

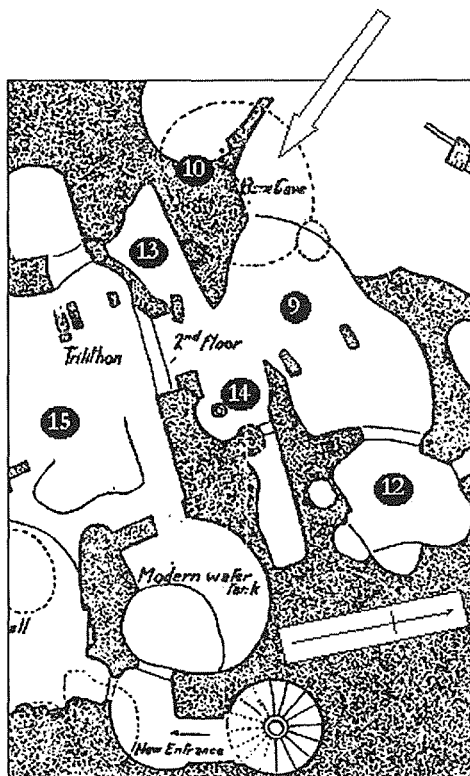
The style of architecture of the lower tombs, and of what I may call the Chapel, reminds me of the megalithic monuments of these Islands."⁴

Magri links clearly some architectural elements with those of the Temples; but what did he mean with the "distinctly Phoenician tombs"? Magri did, at least initially, consider the Temples as Phoenician, but no Temple period tombs were known at the time, only actual Phoenician ones.

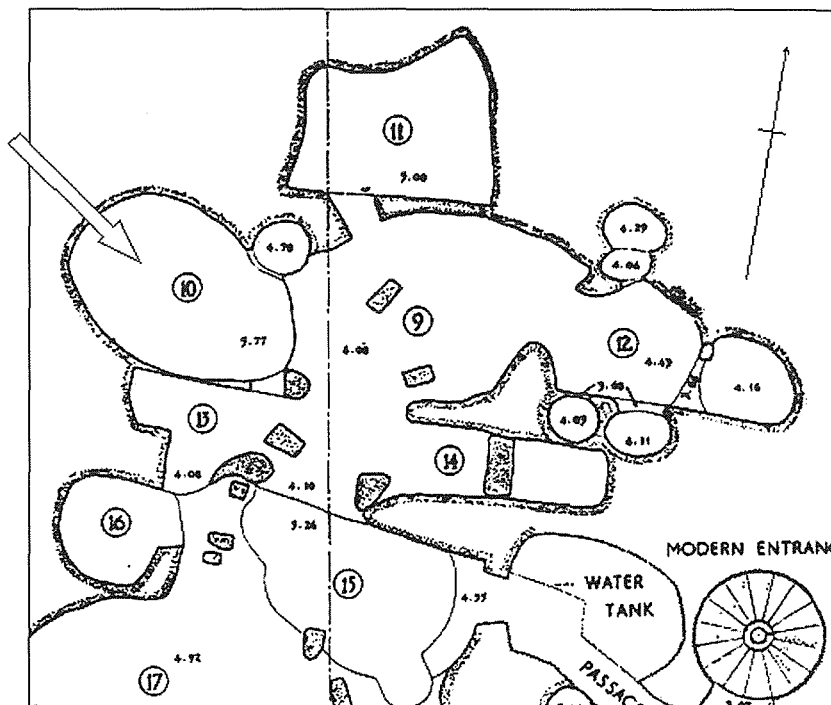
Site formation

Magri referred to the site as the "Necropolis", and had clear views about its formation.

"Its peculiar feature is that bones, earth & broken pottery from other graves have been thrown in pellmell for successive generations in the graves, passages and on the ground floor of the Necropolis – a



after Zammit 1925



after Evans 1971, plan 14B

regular reburial, in many instances, with a few inches of earth over the bones. This system is still, to some extent, carried on in the local Christian burial grounds, the body being allowed to remain in its grave for a few years, then the bones, without the coffin, are thrown into a common pit. Care, however, must have been taking [sic] in our Necropolis to remove beforehand valuable articles from the original graves; for we have, comparatively, found very few things of interest.”⁵

The finds

Bones

The humidity had been very detrimental to the bones – as Magri writes:

“I have been able to save very few skulls, because the place is extremely damp; they appear to me of the Maltese or Syrian type.”¹

John D. Evans’ suggestion that the bones were thrown away² must be dismissed. It would have been inconceivable for human bone to be simply discarded early in the 20th century, even more so in an excavation directed by a priest. Neither would the bones have found themselves in the common ossuary of the village cemetery, as the bones were clearly not from a Christian burial site.

Temi Zammit clearly indicates where the bones ended up – the “Bone Cave” (see figure 2):

“All the human bones found buried in red earth when the Hypogeum was excavated, were deposited in this cave. The bones are mostly reduced to dust for dampness and the deep layer of soil crushed the bones and disintegrated them.”³

Figure 2: The identification of Zammit’s “Bone Cave”, with Evans’ Chamber 10. (To help the reader, the numbers from Evans’ survey are added onto Zammit’s plan; “Bone Cave”/chamber 10 is indicated with an arrow.)

Evans mistakes the contents of this chamber (10 in his plan, see fig. 2), describing it as “still partly filled with original deposit, containing bones and fragments of pottery.”⁴

Beads, fossils, and pendants

Magri describes the finds in some detail, especially in the letter which accompanied the material sent to London:

“Nos. I and III are almost the only paste beads we have found. Of No. II we have a few dozens, made of natural whitish shell, nicely striated. They appear to me prehistoric Egyptian. Of the same material are made, what appear to be buttons (No. VI); some of these are very nicely hollowed out in the shape of a rosette; one of them bears traces of a metal (silver?) appendage.

We have found local fossiles [sic] of the hardest quality, approaching in composition to the phosphorus nodules of the bottom

of the Pacific, bored with the utmost perfection.

Nos. IV and V are specimens of numerous pendants in very highly polished green stone of different hues; similar pendants, slightly different in shape, are cut in local mottled hard stone.

No. VII (natural size) is in dark stone; we have found another one in white alabaster.”⁵

Magri had taken great care in sending over a sample which represented the variety of material: beads, green stone pendants, and a selection of pottery. He also sent over a photo of one of the painted rooms. No. VII in the list above is, presumably, a headless statuette in stone similar to the one in alabaster.

The pottery

Magri goes on to describe the pottery.

“The pottery is very peculiar. Series X – XVI is covered with black, or rather blackish, varnish, the incised pits being red. The latter colour may, however, be due to red paint, often found in our tombs. No such potteries have been found at Carthage. Very likely this is due to the fact that the excavations there have not gone deeper than the graves of the VII or VIII cent. B.C.

If the motive in No. XIII & XIV is an olive, or holm oak leaf, we certainly have it on local monuments approaching our era. [...]

No. XVII is a fragment of a vase made of local clay (reddish when baked), the two holes on both sides, being intended for inserting fingers to hold it.

I have discovered a similar vase in the foundations of a megalithic ruin in Gozo.”⁶

Statuettes

It is from the first letter, however, that we may recover a description of the statuettes that came to light during the excavations.

“A few alabaster and terracotta statuettes. The former represents one of the “Hagiar Kim” gods (see Perrot & Chipiez’s History of Art, the Maltese Temples). It has the Egyptian close fitting cap and holds his hand on his breast: he is close shaved and looks very quiet. Among the terracotta statuettes we found a

lady wearing what may represent a crinoline. The lady reminds me of the “Princess of Punt”; only she is not grotesque at all. Many fragments of busts (no heads) with flabby, long and empty (not bulky) woman’s breasts as those found in the “Hagiar Kim” further excavations.”¹

Surface Tombs and the “slingstones”

A further letter, dated 19 April 1905, speaks about other finds in the neighbourhood, including the “slingstones”.

“The fragment of the pottery dated 2000 B.C. was not found at the Necropolis, but in the neighbourhood. When I inspected the place, I found the remains of several graves dug in the rock in rectangular trenches; they belong to poor people; their contents had been removed. Talking with the landlord I was presented with two stone “glandes”² found in excavating the foundations of new buildings. On further inquiry and fresh excavation many similar glandes were found, lying closely together, covered by a layer of beaten earth. They are of different size, ranging between four and eight inches. They are perforated on one side, but not provided with letters, as those found at Carthage a few years ago. The use of the sling is very common here. Old people made it with a sort of netting. We found two or three similar glandes in the lower parts of the necropolis.

I fail to find a plausible explanation of these glandes, used as a foundation to a beaten floor or pavement. Stone is so common here that no one would think of using a wrought and polished war implement instead of it. It is true that earthenware jars in juxtaposition have been found in Malta as a foundation to a road or floor.”³

Dating the Hypogeum

An issue of particular interest is the date Magri assigns to the Hypogeum. A development in his thought emerges.

In the first letter Magri notes:

“All this [*the statuettes, vide supra*] may give a clue to the Nationality of the Megalithic Monuments of Malta. Perrot holds they are Phoenician; more modern writers say they are Libyan and, I hear quite lately, Mr [Arthur] Evans holds they

are connected with the ancient civilisation in Crete.”⁴

And when actually sending the material, he states

“It is very important to determine the epoch of our finds, as they are connected with the antiquities discovered in the large stone monuments of these Islands.

The top graves of our Necropolis are certainly Phoenician of the Greek period; we must determine the origin of the rest.”

The answer Magri received appears to have been quite unexpected. We learn from another of Magri’s letters that Mr Read, of the Ethnology Department, to whom Dr Budge had shown the material, had dated some important finds to 2000 B.C.: the two green stone pendants, one of the shell “buttons”, and one of the sherds of the blackish incised series with red infill.⁵

Magri inquires:

“And now the great question arises: to what nation belong the pottery 2000 B.C.? Incised and pitted pottery is still made in these Islands; the motives are still geometrical with the addition of very poor attempts of floral decoration. Could the first settlements of the Phoenicians in Malta be stretched to 2000 B.C.?”¹

Magri goes on to draw in from his knowledge on Maltese popular narrative, which he took very seriously.

“The ancient and modern tradition of the Maltese is that they are the children of the Phoenicians, who when they landed here found the place uninhabited, no buildings, no trees, but only some cave. If it will be found really necessary to admit that several megalithic temples in Malta were first built by the Libyans, the same tradition appears to give us a clue to solve the difficulty: the Phoenician stole two young Libyans, a boy & a girl, from the Continent, and married the girl in Gozo, and the boy in Musta (Malta); the “girl” introduced that style of architecture.

Of course the data would have to be developed and corroborated by topography and anthropology, it is a fact that the Maltese

skull and Semitic instep are in favour of the local tradition; there is only one place in Malta, viz. Lower Zeytoun (“Zeitun”), where the inhabitants have flat feet, and often blue eyes and fair hair. They are not liked by their countrymen.”

The dating of the pottery, and the cultural connection, was an important issue for Magri. He forwarded to Dr Budge some pottery from Ġgantija and from Rabat, Gozo.¹ Magri realized that the dating was a complex issue:

“What you write on my fragments of pottery and Mr Read has given me great consolation; for if Mr Read with his great knowledge, experience and so many specimens at hand requires study to date my ware, I may be allowed to indulge in the persuasion that with my little knowledge & experience, I am not loosing [*sic*] my time in collecting material for a future historian of these Islands.”²

This interest in pottery emerged even in the Xewkija report. Magri clearly understood that only the slow construction of a pottery typology could then enable the dating of the sites, including the Hypogeum.

Epilogue

Leaving for Sicily, Magri seems to have considered the exploration complete, at least for the time being. Magri actually come down to Malta in November 1906, as part of his work on the Report.

Magri then writes to the Lieutenant Governor, from Catania on 2 January 1907.³ He postulates that the original entrance could be found through another tenement which he suggested buying.

He mainly brings up practical issues (especially the problem of the water seeping in the Hypogeum), and some proposals to enable visitors to enjoy the site. He also proposed placing some slabs back *in situ*, but wanted to be on site for this operation.

Magri then died suddenly. Considered so competent during his life, he left little published testimony to it. This is ample reason to hope that, painstakingly collecting his papers, we may arrive at reassessing Magri’s contribution to Maltese archaeology at the beginning of the 20th century.

Acknowledgements

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Sincere thanks also to D^r Nicholas Vella, for his encouragement, comments, suggestions, and help.

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- 2 *Three Punic Inscriptions Re-discovered in Malta. Edited with translation and commentary by the Rev. Emmanuel Magri, S.J.*, Malta, Government Printing Office, 1901. *Ruins of a Megalithic Temple at Xéuchia (Shewkiyah) Gozo. First report.* Malta, Government Printing Office, 1906.
- 3 S. Mallia, "Fr Manwel Magri's Contribution to the Conservation of Malta's Archaeological Heritage" in *Melita Historica* 9 (1985): 2, 145-169; and a postscript in *MH* 9: 3, 245-246
- 4 National Archives of Malta, Chief Secretary to Government fond. (henceforth NAM, CSG). The files form part of CSG 01 (Departmental files) and CSG 02 (Petitions).
- 5 The letters are part of the correspondence of the *Department of Egyptian and Assyrian Antiquities*. This department was split in 1955, to form the departments of *Ancient Egypt and Sudan* and *Ancient Near East*. The bound volumes containing combined correspondence are kept in the library of the Ancient Near East department.
- 6 NAM, CSG 01, Misc. 3965/03. Letter of 17/11/1903
- 7 NAM, CSG 01, Misc. 808/04. Letter of 20/04/1904
- 8 BM (British Museum), ANE (Departmental Library of the Department of the Ancient Near East), BC (Bound Correspondence of the Egyptian and Assyrian Antiquities Department), 1904, 652. [Letter of 16/09/04]
- 9 BM, ANE, BC 1905, 463. [Letter of 03/01/05].
- 10 BM, ANE, BC 1904, 652. [Letter of 16/09/04]
- 11 BM, ANE, BC 1905, 463. [Letter of 03/01/05]
- 12 BM, ANE, BC 1904, 652. [Letter of 16/09/04]
- 13 Evans postulates that the bones were "presumably later thrown away since nothing further was heard of them." (J.D. Evans, *The Prehistoric Antiquities of the Maltese Islands*. Oxford, Athlone Press, 1971, p. 45.)
- 14 T. Zammit, *The Hal-Saflieni Neolithic Hypogeum at Casal Paola*. 2nd edn., Malta, 1926, p. 39
- 15 J.D. Evans, op. cit, p. 47
- 16 BM, ANE, BC 1905, 463. [Letter of 03/01/05]
- 17 same letter
- 18 BM, ANE, BC 1904, 652. [Letter of 16/09/04]
- 19 slingstones (in Latin, *glans/glandis*, pl. *glandes*)
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- 22 BM, ANE, BC 1905, 464. [Letter of 26/03/05]
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The Lyre Player in Roman Malta

Anna Borg Cardona

All knowledge we have of music-making in the Roman period is based on literary or iconographic sources, and occasionally on extant musical instruments. Evidence shows that music was an integral part of festivals, religious rituals, ceremonies, social occasions as well as military life and thus a very important part of a wide spectrum of Roman life.

Roman culture was transported to each of the Empire's conquered lands, and one would expect the same to have happened sooner or later in Malta.

Little is, in fact, known of musical life on the Maltese islands under Roman rule, a period spanning between 218B.C. and 535A.D. Large-scale theatres in which music would have played a major part, have not been discovered in Malta or in Gozo. However, this does not exclude the possibility of dramatic and musical performances taking place on the Islands either in some form of public theatre or in small private areas reserved for the purpose. We do find remains or iconographic evidence of various types of instruments, amongst them representatives of the string, wind and percussion type, indicating a local society with some degree of musical interest. This article concentrates on an archaeological find which sheds interesting light on one type of musical instrument which used to be heard in Roman Malta.

A monument to a comedian & lyre player

A funerary monument from the 2nd century A.D. was discovered in 1951 at an area of Rabat known as *Taċ-Ċagħaqi*.¹ The monument is preserved in the Museum of Roman Antiquities

in Rabat, now renamed The Roman Domus. The large gravestone 74cms high x 152cms long and 53cms broad (Plate 1), bears a Greek inscription which in translation² reads:

Dedicated to the Gods of the underworld
Hail
P[ublius] Aelius Hermolaos, a Comedian
And Lyre player from Pergamon
Lived 25 years, Farewell.

Above the inscription is a festoon. On the left we find a comic mask and a rolled scroll, and on the right, a lyre. It is not very frequent that one finds the name of an instrument together with a depiction of it as we do on this altar. We are indeed fortunate in this case to have both, leaving little or no doubt as to the instrument in question.

In the centre, beneath the inscription, there are two objects. The one on the right is an arrow-shaped plectrum used in playing the lyre. Regarding the object represented on the left, scholars are not entirely in agreement. It has been variously described as a 'plectrum' (J. G. Baldacchino) and as a 'hammer with which the lyre was played' (E. Coleiro). This will be discussed below.

The large, rather elaborate monument to the young musician suggests that the musical profession must have been held in high esteem here in Malta, as elsewhere in the Roman world. At this same time, talented musicians from various provenances such as Greece, Egypt, Spain, Syria, were arriving in Rome where they knew they would be treated respectfully, and where they were

also generally well remunerated. We do not know under what circumstances the Greek Publius Aelius Hermolaos reached Roman Malta. The Islands were then enjoying a flourishing economy and social stability offering fertile ground for cultural enjoyment. Before the arrival of the Romans, the islands had already succumbed to a degree of hellenization, through the Carthaginian colonisers who certainly appreciated Greek art and craftsmanship.³ This Greek culture was subsequently further strengthened with the arrival of the Romans.

Hermolaos may have arrived here as slave or servant and it has been suggested that he may very well have been a freedman, perhaps of the Emperor Hadrian⁴. It is interesting that with him Hermolaos brought his essentially Greek instrument, music, and presumably also Greek Comedy, which were all highly valued at the time in cultured Roman (or Romanised) society. The Emperor Hadrian (AD 117 - AD 138) himself boasted of being a skilful lyre player (*kitharode*) and singer and also patronised and supported musical study.⁵

The Greek lyre

The string instrument represented on the tombstone shows a box-shaped 'resonator' or sound box with two parallel carved arms supporting a cross-bar. Both arms and strings are symmetrically arranged, with the six strings of equal length running parallel (rather than fan-shaped). These are wound and wrapped upon the cross-bar and have small tuning sticks attached to each string.

By the characteristic feature of strings running from the yoke, over the resonator to the cross-bar, the instrument is classified by Hornbostel and Sachs as a lyre, as opposed to a harp⁶. The strings of a harp would run at an oblique angle from the resonator to the neck. The lyre was held vertically and was generally played with a metal or ebony plectrum held in the right hand. The left hand fingers were used to dampen the strings after they were plucked by the plectrum. However, the lyre could also be played with the fingers alone if desired, or with plectrum in the right hand and with the fingers of the left hand. As a common rule, singing was accompanied with the fingers, whilst solo intermezzi were played with the plectrum, which produced a brighter sound.

The plectrum represented on the right hand side beneath the tombstone inscription, was in use in ancient Greece, but was also adopted in Rome. Its distinctive arrow-shape may be seen on various iconographic sources. It is particularly clearly depicted in the hands of Orpheus, on a fresco found in the Catacomb of Petrus and Marcellinus in Rome.⁷

The other object beneath the inscription may be another type of plectrum or possibly a lever with which to tighten the whole set of strings. It is not a hammer, since the lyre was not struck with a hammer.

Lyra or Kithara?

Greek lyres existed in various shapes and sizes. There were two distinct types, one known as *kithara* and the other known as *lyra*, however, the term *lyra* was commonly used as a generic term for all types of lyre, including the *kithara*.

The *kithara* was the professional musician's instrument and was large with two wooden carved arms rising from the soundbox to the cross-bar. The wooden arms were often hollow. The sound of the *kithara* was louder and clearer and lent itself more easily to public performances. The *lyra* was a smaller, more loosely constructed instrument. It usually had a tortoise shell (*chelys*) resonator with animal skin stretched across it, and its yoke consisted of animal horns. Many depictions of lyras and kitharas have been preserved on Greek earthenware vases, a large number of which may be seen in neighbouring Syracuse's *Museo Paolo Orsi*. These vases show amazing detail of the instruments as well as of performing practices. Whereas the *kithara* became very popular in Roman society, the *lyra* was never actually adopted. Both types would normally have been more curved on the sides than the lyre represented on the tombstone. However, at a time when instruments were not mass produced and therefore not standardised in any way, it was not unusual to have discrepancies in shape and size as well as number of strings and tunings. The solid shape of this instrument and the fact that it belonged to a professional Greek musician suggest that it is more likely to be a *kithara*. A strikingly similar instrument to the one on Hermolaos' tombstone is to be found in the hands of Apollo, God of the Arts, in the Bardo Museum, Tunis (Plate 3). This mosaic from the 3rd century was originally retrieved from El Jem.

Tunings

At the top of the strings near the cross-bar we can clearly see six small sticks carefully carved into the limestone monument. A slight movement of these sticks (or possibly leather strips) could alter the tension of the strings and thus adjust tuning.

Musicologists, among them Curt Sachs, have gone to great pains to prove that customary tuning of the lyre was pentatonic.⁸ However, not all musicologists are in agreement with this hypothesis. Most will nevertheless agree that with strings made of animal gut or sinew of variable thickness and elasticity, there is no guarantee that the tuning was perfectly accurate or reliable. A perfect tuning of any sort on these instruments is considered to have been far out of reach.⁹ Though the basic system of Greek musical theory was the tetrachord (4 consecutive notes), in practice tunings would probably have varied from instrument to instrument and also according to the nature of the music played.

Comic actor and musician:

Considering the absence of any formal theatres discovered on the Islands, it seems very likely that Hermolaos would have been employed with a well-to-do family. At a time when poetry, song, dance and some form of acting were inseparable, his work would probably have included all of these. He is likely to have performed during the arrival of guests, during banquets, during visits to the baths, during acted comedy and during religious ritual. He might also have been instructed to teach his art to members of the family. A lovely mosaic in the Bardo Museum, depicting a Roman Banquet in the 4th century (plate 4) gives an idea of the importance of the musician in Roman culture.

We certainly know that Hermolaos played the role of comedian as well as musician. The tragic and comic masks found among Roman remains in Malta, the lovely *oscillum* found in Gozo,¹⁰ as well as the depictions on the mosaic floor of the Roman Domus in Rabat, Malta, all suggest a local theatrical interest in keeping with the rest of the Roman world (Plates 5,6,7). Music would have been a natural integral part of this. In view of the ostentatious houses such as those discovered in Rabat, Ghajn Tuffieha, and in Ramla, Gozo, it would not be amiss to

presume that there may have been other actors and musicians like Hermolaos on the Islands. No self-respecting Romanised family would have done without such services.

Fitting tombstone

At a time when it was not unusual for the poor to have no tomb at all, this large decorated tombstone in Malta leaves no doubt that the Greek Publius Aelius Hermolaos had acquired some local importance. He must have excelled enough in his art to earn the full respect of those he left behind. He was sent off on his final journey with a very befitting farewell which has preserved for us some tangible evidence of the musical culture in Malta during Roman times. (see plates pp. 29 & 30)

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- 7 *The New Grove Dictionary of Musical Instruments* (London: Macmillan, 1984), *sub voce* 'Lyre'.
- 8 C. Sachs, *History of Musical Instruments* (London, Dent & Sons, 1942), 131
The Pentatonic scale contains only 5 notes rather than the 7 notes of the better-known diatonic scale. For example, using white keys only and beginning on C, this would be C, D, E, G, A, (C). The fourth note F and the 7th note B are omitted. This scale is very widespread and commonly found in folk music.
- 9 Comotti, G. op. cit. 58-59
- 10 A. Bonanno, "Research on Prehistoric and Roman Gozo: past, present and future," Farrugia, J. & Briguglio, L. (ed.) *Focus on Gozo*. (1996): 41-57 in A. Bonanno, *Roman Malta - The Archaeological Heritage of the Maltese Islands*. (Rome: 1992).

Quintius Lutatius Longinus and his wife Lunia in a funerary inscription from Gozo

George Azzopardi

A marble funerary inscription¹ of the Roman period is recorded by A.A. Caruana to have been discovered in Gozo in the district known as *It-Tomba*, in Victoria²; the place-name itself also denotes a funerary context: *Tomba* – in Italian – meaning a tomb. But Caruana seems to be confusing the exact location of *It-Tomba* (in Victoria) with the whole area which, in Classical antiquity, contained the extra-mural necropolis of the town of Gozo.³ On the basis of burial finds, this necropolis appears to have been contained within the entire area starting from Victoria's suburb Ghajn il-Kbira to St Augustine Square (in Victoria) and extending through Vajringa Street and St Francis Square to Ghajn Qatet and Archbishop Pietro Pace Streets ending at Tal-Ibrag on the eastern outskirts of Victoria but extending also northwards to Republic Street and the surrounding area. Therefore, if we are seeking the location of the inscription's discovery through Caruana's documentation, we have to take *It-Tomba* as understood by Caruana and, thus, the discovery's location could have been anywhere in the above-mentioned area. However, having always been in Augustinians' hands (*infra*), it is likely that the inscription had been found somewhere near the Augustinians' friary in Gozo, indicating St Augustine Square or its immediate vicinity as the most probable location of the inscription's discovery. Without mentioning his sources, J. Bezzina claims that this inscription was found in 1845 by Don Carlo Borg.⁴

The text of the inscription as recorded by Caruana ran as follows (textual reconstruction⁵ and translation are provided by the present writer):-

Q(VINTVS) LVTATIVS Q(VINTI) F(ILIVS)
QVIR(INA TRIBV)
LONGINVS VIVOS SIBI ET
IVNIAE C(AII) F(ILIAE) VERAT[----]
VXORI SANCTISSIM<A>E FECIT

Quintus Lutatius Longinus, of the Quirine tribe and son of Quintus, prepared (this grave) for himself and for Iunia, his most virtuous wife and daughter of Caius, in their lifetime.

In Caruana's times, this sepulchral inscription was kept at the Augustinians' friary in Valletta where it was brought from the friary of the Augustinian fathers in Rabat (Malta) to whom it had been earlier presented.⁶ But, on contacting the Augustinian fathers of Valletta, the present writer was informed that no inscription of the sort exists at present in their friary and that, if it was ever kept there, it must have been probably lost when the friary was hit during the Second World War.

The inscription throws some light on the social status of this couple living in Gozo evidently before the 3rd century A.D. (*infra*).

First of all, their use of the patronymic (i.e. the respective fathers' names) in their respective nomenclatures shows that both of them were freeborn.⁷ As indicated by his enrolment in the Quirine tribe (a rural tribe), Quintus Lutatius Longinus was a Roman citizen, although not by birth but by being granted Roman citizenship at some stage in his life as shown also in the case of the majority of Roman citizens, themselves also ascribed to the Quirine tribe and known to us from most of the surviving Roman inscriptions in Malta and Gozo. Every Roman citizen



Figure 1:
St Augustine Square,
Victoria, Gozo: the
possible location of the
funerary inscription's
findspot.

belonged to one of the 35 voting-tribes / voting-districts which, from early times, formed the basis of voting in the assemblies of the Roman People.⁸ The Quirine tribe, which (together with the Veline tribe) was established in 241 B.C.⁹, was specifically created for enfranchised (Roman) citizens. However, by the late 2nd century A.D., the inclusion of the voting-tribe in the *tria nomina*¹⁰ of Roman citizens started to disappear from inscriptions¹¹ and, thus, this phenomenon places our inscription probably not later than the end of the 2nd century A.D.

Moreover, it is to be noted that Quintus Lutatius Longinus' Roman citizenship was granted to him before emperor Caracalla extended Roman citizenship to all freeborn inhabitants of the Roman Empire in 212 A.D. and, therefore, must have been a special favour or a privilege he achieved perhaps on account of any merits of his or of any of his fore-fathers.

If, on the other hand, the initials *CF* (in the third line of the inscription) – standing for *Caii Filiale* (daughter of Caius) – are taken to stand alternatively for *Clarissimale Feminale* (most distinguished lady), they would indicate, in that case, a senatorial rank for his wife Iunia¹²: perhaps being the daughter of a member of the *Ordo Decurionum* (or, the local senate / council) of the Gozo *municipium*.

Furthermore, from her own name Iunia we can also deduce that the family name / *nomen gentilicium* of her father Caius must have been Iunius, as the woman in Roman society used to be known by the feminine form of the family name of her father and retained her name even when she got married, adding to it the husband's *cognomen* in the genitive case showing that, once married, she “belonged” to her husband legally.¹³ Thus, after getting married to Quintus Lutatius Longinus, Iunia must have added to her name the genitive form of her husband's *cognomen*: Longini; though this does not appear in this inscription.

As a *matrona* / married woman, Iunia must have had the right of wearing the *stola*. The *stola* was a long dress with a sort of flounce at the bottom, the *instita* (a symbol of a chaste Roman *matrona*), that thoroughly covered the woman to her feet.¹⁴ A possible indication of Iunia's chastity may be the reference to her – in the last line of the inscription – as an *uxor/i sanctissimale* (most virtuous wife).

We may remark that Quintus' family name / *nomen gentilicium* (i.e. Lutatius) is also met with in another inscription from Gozo which is now kept in the Gozo Archaeology Museum. This inscription¹⁵ of the 2nd half of the 2nd century A.D. was set up by Marcius Marcianus

in honour of ---- Cestius Gallus and Varenianus Lutatius Natalis Aemilianus, *patronus* of the Gozo *municipium*. And, following what we have said above in connection with the father's family name, the same family name (i.e. Lutatius) is also indirectly met with in another inscription from Gozo, which is also kept in the Gozo Archaeology Museum. This inscription¹⁶ of the first half of the 1st century A.D. is dedicated to Julia Augusta (Livia Drusilla), second wife of the first Roman emperor Augustus and mother of the second emperor Tiberius from an earlier marriage with Tiberius Claudius Nero. In this inscription, she is identified with the goddess Ceres.¹⁷ The dedication is made by the priestess Lutatia, daughter of Caius. In the light of what we have said earlier (*supra*), the family name / *nomen gentilicium* of Caius, Lutatia's father, must have been Lutatius. Thus, the common family name shared by Varenianus – or perhaps, his adoptive father¹⁸, by Lutatia's father and by Quintus does indicate that all of them somehow hailed from the same *gens* / family, namely the plebeian family of the Lutatii.

This couple (Quintus Lutatius Longinus and his wife Iunia) is likely to have found the final resting place somewhere in present-day St Augustine Square or its immediate vicinity in Victoria and, as in ancient Mediterranean cultures the dead were not allowed within the precincts of the living, their burial's location must have formed part of the necropolis which was to be found outside the walls of the Roman *oppidum* (or, town) of *Gaulos* / Gozo; also in accordance with the regulation, laid down in the Twelve Tables and normally observed until the late (Roman) Empire, requesting that all burials, whether of corpses or of cremated remains, had to take place outside the city / town.¹⁹

References

- 1 Corpus Inscriptionum Latinarum, X, 7511.
- 2 A.A. Caruana, *Report on the Phoenician and Roman Antiquities in the Group of the Islands of Malta*, Malta, 1882, p.154.
- 3 ID., *Ancient Pagan Tombs and Christian Cemeteries in the islands of Malta explored and surveyed from the year 1881 to the year 1897*, Malta, 1898, p.11.
- 4 John Bezzina, 'Fdalijiet tal-Imghoddi misjuba fir-Rabat t'Ghawdex u fl-Idwar Tieghu(1)' in *Festi San Ġorġ*, Gozo, 1995, p.69.
- 5 Textual reconstruction given here follows the epigraphic conventions as in Lawrence Keppie, *Understanding Roman Inscriptions*, London, 1991, p.140. Although, to be grammatically correct, VIVOS in the second line of the text should be VIVIS, it is hereby being reproduced as recorded by A.A. Caruana.
- 6 A.A. Caruana, *Report on the Phoenician and Roman Antiquities in the Group of the Islands of Malta*, Malta, 1882, p.154.
- 7 While freedmen and freedwomen (i.e. ex-slaves or freed slaves) carried the name of their former master in their official nomenclature, generally adding a Greek *cognomen*, freeborn citizens enjoyed the right of carrying the patronymic (i.e. the father's name) in their official nomenclature.
- 8 Lawrence Keppie, *op. cit.*, p.19 and Andrew Lintott, *The Constitution of the Roman Republic*, New York, 2003, pp.50-1.
- 9 Edward Coleiro, *The Story of Rome*, Malta, 1974, p.158; Andrew Lintott, *op. cit.*, p.50; and J.E. Sandys (ed.), *A Companion to Latin Studies*, Cambridge, 3rd edn, 1921, p.264.
- 10 As required by the Gracchan *lex repetundarum*, Roman official nomenclature of male citizens consisted of three main elements in the following order: 1. the *praenomen*: forename or the name given on birth; 2. the *nomen* or *nomen gentilicium* (usually ending in *-ius*): the *gens* (or family) name followed, first, by the patronymic (or father's name) and, then, by the name of the voting-tribe to which, as a Roman citizen, the individual was ascribed; and 3. the *cognomen* (sometimes, two *cognomina* and, rarely, even more): a sort of a nickname which served as a distinguishing factor.
- 11 Lawrence Keppie, *loc. cit.* See also Ida Calabi Limentani, *Epigrafia Latina*, Milano – Varese, 1968, p.160 wherein she states that the indication of the tribe tends to disappear from inscriptions in the 3rd century A.D.
- 12 J. Stevenson, *The Catacombs. Rediscovered monuments of early Christianity*, London, 1978, p.161.
- 13 Joseph Busuttil, The Ceres Inscription. *Journal of the Faculty of Arts*, Malta, 1972, V, 2, pp. 158-9; Ida Calabi Limentani, *op. cit.*, p.157; and Lawrence Keppie, *op. cit.*, p.20.
- 14 Amy Richlin, 'Carrying water in a sieve: class and the body in Roman women's religion' in Karen L. King (ed), *Women and Goddess Traditions in Antiquity and Today*, Minneapolis, 1997, pp.346. 363. For *instita* as a symbol of a chaste Roman *matrona*, see Ovid, *Ars Amatoria*, 1.31-32.
- 15 Corpus Inscriptionum Latinarum, X, 7506.
- 16 *Ibid.*, 7501.
- 17 Joseph Busuttil, *op. cit.*, p.156-7.
- 18 Already in republican times, one could have more than one *cognomen*. In republican times, the second *cognomen* (or *agnomen*: often, a personal epithet) could have come about as a result of adoption. In such a case, the adopted son used to adopt the *tria nomina* of his adoptive father, turning his own *nomen* into a second *cognomen* / *agnomen* ending in *-anus* (see Ida Calabi Limentani, *op. cit.*, p.158). Thus, Varenianus Lutatius Natalis Aemilianus may have been adopted by a certain Varenianus Lutatius Natalis, whose *tria nomina* he may have adopted, turning his own *nomen* Aemilius into Aemilianus, adding it as a second *cognomen* / *agnomen*. In such a case, his original *praenomen* and *cognomen* would remain unknown to us.
- 19 J.M.C. Toynbee, *Death and Burial in the Roman World*, Baltimore, 1996, p.48.

Review

Brunella Bruno, *L'Arcipelago Maltese in Età Romana e Bizantina: attività economiche e scambi al centro del Mediterraneo*, Bari, Edipuglia. 2004.

ISBN 88-7228-376-0. 189pp.*

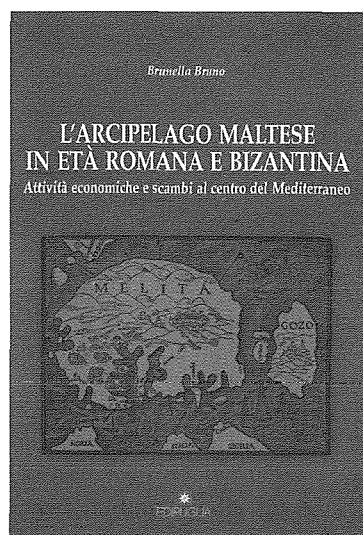
Anthony Bonanno

Questa nuova opera sull'archeologia maltese viene accolta con caloroso entusiasmo e con molta soddisfazione; per diversi motivi, ma soprattutto per due ragioni principali. Prima, perché fra tante pubblicazioni sul patrimonio archeologico della preistoria maltese che abbiamo visto nascere in questi ultimi anni, su quello dell'età classica è da tantissimo tempo che non viene pubblicato niente. Articoli e contributi a convegni su vari aspetti sì, ma non saggi o monografie d'insieme. Se non erro l'ultimo volume su Malta romana è stato quello del sottoscritto, intitolato appunto *Malta Romana*, pubblicato nel 1992, più di dieci anni fa. Prima ancora, l'ultimo saggio di una certa consistenza su Malta romana era stato il lungo articolo - perchè di un articolo si tratta - pubblicato da Thomas Ashby nel *Journal of Roman Studies* del 1915; eccezion fatta, naturalmente, per gli otto splendidi volumi sugli scavi della Missione Archeologica Italiana a Malta pubblicati fra il 1964 e il 1973.

La seconda ragione è legata proprio a questi ultimi, cioè

agli scavi condotti dalla stessa Missione Italiana fra il 1963 e il 1970 in tre siti archeologici di età classica: Tas-Silġ, San Pawl Milqi e Ras il-Wardija. Ebbene, questo è il primo volume della serie in preparazione che è intesa a colmare quel vuoto che si era creato dopo i rapporti definiti 'preliminari' di quelle campagne di scavo. Questa monografia è una di tante che formeranno non un solo *Rapporto* definitivo (come forse si è venuto ad aspettare) ma una serie di monografie specialistiche, frutto di ricerche tuttora in corso, alcune delle quali sono elencate nell'articolo firmato da Antonia Ciasca e Maria Pia Rossignani apparso nel *Malta Archaeological Review* del 2000.

A dire la verità, nella prospettiva che ho appena delineato, cioè in quella dell'attesa di un rapporto definitivo, o di una serie di rapporti definitivi, sugli scavi della Missione, e considerando le competenze specialistiche della stessa Bruno, dimostrata già in una serie di interventi sia in sede maltese sia in congressi internazionali, mi aspettavo qualcosa di diverso



in questa pubblicazione. Mi aspettavo soprattutto di vedere il censimento del materiale sul quale si basano principalmente le ricostruzioni storico-economiche eseguite dall'autrice, cioè un catalogo ragionato delle anfore trovate nei siti scavati dalla Missione Italiana, seguito da un'analisi di queste testimonianze, tenendo conto anche del materiale anforario proveniente da diversi interventi di scavo eseguiti in passato. Mi aspettavo, in breve, più o meno lo stesso formato della monumentale monografia su *Malta Punica* pubblicata da Claudia Sagona nel 2002. Invece qui l'autrice ha fatto il contrario. Ha preso in esame prima le testimonianze letterarie, epigrafiche e archeologiche già acquisite e poi, analizzando di lungo e di lato le anfore portate alla luce da questi nuovi scavi, ha elaborato uno scenario vivace e convincente della vita nelle nostre isole, che vediamo evolversi davanti ai nostri occhi, e che copre un lasso di tempo che inizia con le ultime fasi del periodo punico, prosegue per tutto il periodo romano e bizantino e si addentra persino in certi aspetti del periodo arabo.

Ciononostante, il risultato finale non è per niente negativo o spiacevole; anzi, al contrario. La Dottoressa Bruno ha ampliato il respiro della sua opera, allo stesso tempo risparmiando al lettore probabilmente centinaia di pagine di catalogazione, per immergersi direttamente nell'argomento, illustrato, com'è difatti, dai risultati del suo studio del materiale anforario. Per gli studiosi, però,

ai quali interessa anche vedere, in genere per motivi di ulteriori analisi, la documentazione del corpus di anfore sul quale la ricercatrice ha basato le sue deduzioni, la mancanza del catalogo rimane un vuoto rimpianto. Speriamo che questo catalogo che, sono convinto, l'autrice ha già redatto, sarà messo a disposizione degli studiosi nei tempi più brevi possibili, magari su supporto digitale se i costi editoriali risultano troppo alti.

La monografia di Brunella Bruno, che è il frutto di una tesi di laurea per il conseguimento del Dottorato di Ricerca, tra i tanti altri meriti, ha il pregio di essere *self-supporting*. L'autrice ha seguito lo stesso parere che mi veniva dato dai miei relatori durante la stesura della mia tesi di dottorato di ricerca, cioè di far sì che la tesi si regga da sola, senza che il lettore debba informarsi su diversi aspetti prima di poter capire il nocciolo dell'argomento. Aveva ragione il Professore Manacorda a sollecitare la ricercatrice ad ampliare il raggio d'investigazione nell'ottica di una "archeologia globale". A tale scopo, la Dottoressa Bruno ha incorporato un capitolo che delinea lo sfondo storico dell'arcipelago, dalla conquista romana a quella araba; un breve sguardo sugli studi e sulla letteratura precedenti e sui programmi attuali di ricerca; e un altro capitolo dedicato all'assetto geografico e ambientale delle isole maltesi. Per facilitarne la consultazione, ha anche aggiunto in appendice i testi delle fonti scritte antiche relative all'argomento, sia nella lingua originale che in traduzione italiana.

A proposito della sezione del Capitolo Secondo riguardante gli studi in corso, una fonte che non è stata usufruita dall'Autrice, benché ne fosse a conoscenza, sono le tesi di laurea redatte presso il dipartimento di archeologia all'Università di Malta. Vorrei accertare l'Autrice e tutti gli studiosi che le vogliono consultare, che le tesi di laurea dei nostri studenti, di alcune delle quali ho dato notizia in un mio articolo nel *Malta Archaeological Review* del 1997 (citato dall'Autrice nella nota 18), sono disponibili e si possono consultare presso la sezione "Melitensia" della biblioteca univertitaria. Oltre alle tesi del B.A. di George Azzopardi e Magro Conti, vi si trova anche quella del Masters di George Azzopardi sull'assetto amministrativo e politico delle isole maltesi in età romana e quella del B.A. sui mosaici di Antonio Caselli. Negli ultimi anni si sono aggiunte la tesi di Elizabeth Degaetano sulle cosiddette 'torri romane' e quella di Dennis Mizzi sulle tecniche di costruzione a Tas-Silġ.

Il quarto capitolo è dedicato all'insediamento e al popolamento delle isole. Qui la Dottoressa Bruno dà uno sguardo d'insieme e allo stesso tempo particolareggiato sull'abitato, sia quello urbano che quello rurale. Fra l'altro ha raddoppiato la mia lista del 1976 dei resti di edifici antichi anche se, come ammette lei stessa (pp. 44, 48), la presunzione che tutte le strutture elencate siano "ville" è alquanto arbitraria. Basti pensare ai resti che si conservano tuttora ad Ghajn

Tuffieha, dove tutti gli elementi conservati si spiegano in chiave balneare e dove mancano gli altri spazi appartenenti alla presunta villa. Molto meno probabile è l'attribuzione a "ville" delle tre strutture menzionate da Gianantonio Ciantar nel suo primo volume del 1772 (numeri 31-33 nella lista dell'Autrice, il primo dei quali nella figura 7 dovrebbe essere localizzato sulla sponda opposta del Porto Grande), alle quali ho potuto recentemente aggiungere altre due, sempre sull'indicazione di Ciantar (pp. 151-152), e sempre nella zona di Marsa del Porto Grande.

Quanto all'ubicazione dei resti del tempio di Giunone da parte di Quintino Heduo, devo ammettere che la lettura e l'interpretazione del brano in questione nella sua *Insulae Melitae Descriptio* (1536), non è priva di ambiguità. Come sappiamo, tradizionalmente, sempre seguendo le indicazioni di Quintino, il tempio di Giunone si poneva vicino al Castello di Sant'Angelo sulla penisola di Birgu. L'autrice propone una nuova identificazione della località proposta di Quintino, cioè con il Cortin, oggi conosciuto come la Collina dei Gesuiti, ai piedi della quale furono ritrovati resti di ampie strutture solo nel 1768. Secondo me, tutto dipende dalla identificazione dell'*oppidum* di Quintino, cioè se sia Birgu ovvero Mdina. Personalmente opto per Birgu. Bisogna tenere presente che ai tempi di Quintino, a Malta c'era un'altra città (appunto Birgu) oltre a quella di Mdina; mentre ai tempi di Cicerone, che era la fonte di Quintino, c'era soltanto Melite. Ammenoché non si

possa risalire alla presenza di una chiesetta dedicata alla Vergine Maria in cima alla collina dei Gesuiti, come indicato da Quintino, non credo di poter accettare la nuova proposta dell'autrice. A parte il fatto che la descrizione dei ruderi menzionati da Quintino conduce a pensare a pietre di smisurata grandezza e, dunque, a resti preistorici, come quelli che si erigevano sull'altro promontorio nel Porto Grande che portava, e porta tuttora, lo stesso nome di Cortin (Corradino).

In questo capitolo, benché l'Autrice abbia fatto la dovuta distinzione nella sequenza cronologica tra la possibile proprietà imperiale nelle isole maltesi, suggerita dall'iscrizione di Chrestion (liberto e procuratore di Augusto), e le proprietà ecclesiastiche menzionate nelle lettere di Gregorio Magno, datate alla fine del sesto secolo d.C., mettendo insieme i due tipi di proprietà nello stesso paragrafo, si crea il rischio che qualcuno li mescoli insieme e ne deduca uno scenario di contemporaneità, come succede spesso nella trattazione storica del periodo romano a Malta.

Con i capitoli quinto, sesto, e settimo la Bruno si addentra nel cuore dell'argomento della tesi col trattamento storico-economico di aspetti particolari. Il capitolo quinto tratta dell'attività economica in generale, con particolare riferimento alle attestazioni epigrafiche di evergetismo e di personaggi particolari. A uno di questi, Demetrio siracusano, soggetto della iscrizione su bronzo del decreto di prossenia, ho dedicato recentemente parte

della mia ricerca all'estero e posso confermare dalle nuove acquisizioni che ho fatto, la datazione prescelta dall'Autrice, cioè attorno alla metà del primo secolo a.C..

Il capitolo sesto tratta dello sfruttamento delle risorse locali. È qui che l'Autrice propone, con ammirevole perspicacia, una attività economica fervida, per certi versi molto diversa dallo scenario di un paesaggio tranquillo ma sonnolento, che ci presenta la documentazione scritta. È qui, come ammette la stessa autrice, che ci si trova in zona piuttosto nebulosa. Secondo lei stessa, quelle del capitolo sesto sono "riflessioni ... basate ... anche su informazioni desunte da fonti letterarie, documentarie e archeologiche di periodi diversi" (p. 59). Qui, e più estesamente nel capitolo seguente, la Dottoresa Bruno secondo me fa una trattazione molto sobria e acuta sulla tradizione storiografica a proposito della bonifica di terreno agricolo e dell'importazione di terra dall'estero (pp. 60, 93-95). Contrariamente, non capisco perché lei accetta la tradizione sbagliata iniziata da Quintino, e ripetuta da diversi autori, a proposito della coltivazione delle rose (p. 64). Si tratta di una lettura, ripeto, errata di un brano di Cicerone (fonte n. 9) di cui, invece, l'autrice presenta una lettura corretta. L'aggettivo *Melitensis* concorda col sostantivo *pulvinus* (cuscino), perciò di 'stoffa maltese', non col sostantivo *rosa*, in ablativo. Sono d'accordo con lei anche sulla lettura - sbagliata anche questa da Quintino e dagli autori che lo seguono

- di un altro passo di Cicerone dove parla di miele, ma non necessariamente prodotto a Malta (p. 65).

Sempre a riguardo di questo capitolo, vorrei precisare che, al contrario di quanto suggerisce Thomas Ashby, il materiale della statua panneggiata comunemente interpretata come Astarte, non è pietra locale (n. 124), bensì marmo bianco, come si è potuto verificare nelle recenti operazioni di conservazione. Mi ha sorpreso anche l'osservazione che manufatti ceramici di tradizione punica, come le lucerne bilicni, "si ritrovano ancora nei contesti bizantini e delle età successive" (p. 83). Purtroppo non ho potuto controllare l'esempio dato, perché non riporta un riferimento bibliografico.

Il capitolo settimo si occupa della produzione di derrate e di anfore. Il sottotitolo è accompagnato da un punto interrogativo, segno che, mi pare, suggerisce un grado di incertezza da parte dell'autrice. È qui e nei seguenti capitoli che lei presenta le scoperte di maggiore importanza, soprattutto l'identificazione di due altri tipi di anfora di produzione locale, oltre a quello "punico-maltese" conosciuto da tempo. Ma qui si entra in una zona specialistica per la quale lascio il giudizio ai colleghi più competenti. A loro rimando, per lo stesso motivo, anche la trattazione dei seguenti capitoli.

Prima di concludere, mi complimento con l'autrice perché, in quest'opera, per la prima volta negli studi del periodo romano e bizantino a Malta, si è fatta una netta distinzione tra le varie fasi di questo lunghissimo periodo

storico, di più di undici secoli. Ho cercato di fare lo stesso nella monografia su *Malta fenicio-punica e romana*, che avrebbe dovuto essere già pubblicata presso la casa editrice Midsea, ma che, per motivi editoriali legati all'attesa riapertura del Museo di Rabat, aspetta ancora di vedere la luce del giorno. Nelle trattazioni anteriori di questo periodo tutto veniva accatastato e mescolato insieme senza alcuna distinzione cronologica; cosicché si parlava di *status* municipale sia per Malta che per Gozo già dal primo secolo dell'occupazione romana. La Bruno non ha soltanto distinto tra fasi cronologiche generali, per esempio, fra età repubblicana e quella imperiale, ma per farci seguire l'andamento economico delle isole maltesi basato sulla frequentazione di anfore, ha suddiviso tali fasi in fasce cronologiche più affilate.

A questo proposito, molto suggestiva è l'identificazione di un ceto di *negotatores*, possibilmente italici, attivi a Malta nel secondo e primo secolo a.C., fase di maggiore presenza di anfore, dunque di attività commerciale, sia a Tas-Silg e San Pawl Milqi che altrove a Malta. La committenza del grandioso progetto di monumentalizzazione del santuario di Tas-Silg viene ipoteticamente attribuita a tale ceto.

Per concludere, mi congratulo vivamente con la Dottoressa Bruno, e la ringrazio, per averci offerto un'opera così compiuta nella quale si può trovare una miniera di notizie raccolte con la massima diligenza e

discusse e ponderate per trarne osservazioni che saranno utilissime per i futuri studi sul periodo romano a Malta. Nessuno studio d'ora in avanti potrà fare a meno di consultarla e di trarne beneficio. Purtroppo, il sottoscritto non può fare altrettanto nei riguardi del proprio volume su Malta in età fenicio-punica e romana che dovrebbe essere pubblicato il mese prossimo, per coincidere con la riapertura del Museo di Rabat. Il testo è stato consegnato agli editori nel dicembre del 2002 ed è in fase di bozze da più di un anno. Mi rincresce che non mi sarà possibile fare i debiti aggiustamenti e aggiungervi nuove osservazioni ispirate dal volume che abbiamo in mano.

* Si riproduce qui, *mutatis mutandis*, il testo della presentazione di questo volume fatta dallo scrivente il 10 gennaio 2005 presso l'Istituto Italiano di Cultura, Valletta, Malta. Sono molto grato al Professore Joseph Brincat per le sue tempestive correzioni.

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Authors' Guidelines

The Journal welcomes submissions in the form of articles up to 5,000 words. The editors are sympathetic to a broad range of critical and theoretical approaches.

In order to expedite the publishing of the Journal, please read the following instructions carefully regarding the submission of manuscripts for publication in the Malta Archaeological Review.

Form of Manuscript

Papers for publication must be emailed as Word attachments with files saved as RTF or text only. Documents must be justified, plain run on text. Formatting and use of tabulation are to be avoided except for the use of italics in the case of a foreign word or title of book. A hard copy showing suggested formatting and including references must also be supplied.

Quotations of more than thirty words should be separated from the main text block and indicated by single quotation marks at the beginning and the end. Quotations within quotations should be indicated by double quotation marks. All punctuation (commas, semi-colons, full-stops etc.) should be placed before the closing quotation mark. Where parts of the original quotation are omitted, this should be indicated by [...].

Endnotes/References in the text should be indicated by superscript numbers cited in order throughout the article, after punctuation marks, and should be presented at the end of the article in the following format:

E. Hooper-Greenhill, *Museums and the Shaping of Knowledge*, (London. Routledge, 1992).

E. Hooper-Greenhill, *Museums and the Shaping of Knowledge*, (London. Routledge, 1992), 12.

Ibid., 22.

Subsequent references would be indicated as:

Hooper-Greenhill, 35.

Where two or more works by the same author are quoted, having given the initial full reference, these would then be indicated by giving a half-title as follows:

Hooper-Greenhill, *Museums and the Shaping of Knowledge*, 54.

Hooper-Greenhill, *Museums and the Interpretation of Visual Culture*, 43.

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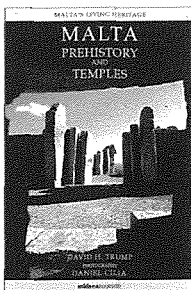
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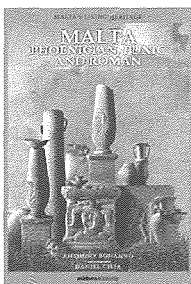


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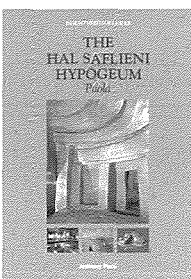


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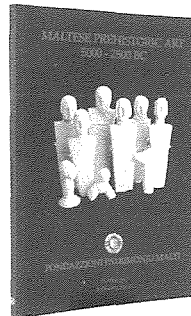
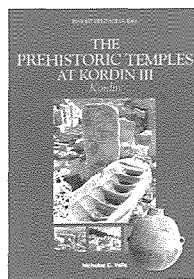
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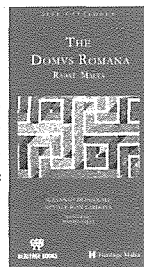
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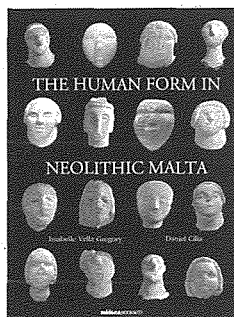
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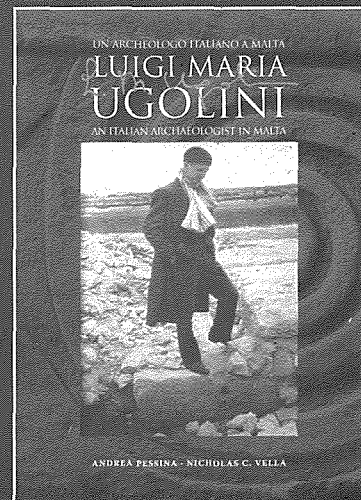
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LUIGI MARIA UGOLINI MALTA PROJECT



Midsea Books together with Heritage Malta are pleased to announce the commencement of the project, head by Nicholas C. Vella and Andrea Pessina, to publish the archaeological survey carried out between 1924 and 1935 by the Italian archaeologist Luigi Maria Ugolini. The aim of the visits was to record and study the prehistoric sites and the artefacts held at the Valletta Museum and to publish the results of the survey. In 2000 the archive of Ugolini's photographs and notes, believed to have been lost, were "rediscovered" in the Museo Nazionale Preistorico Etnografico "Luigi Pigorini" in Rome. Towards this aim an exhibition and an introductory publication has been prepared to commemorate the research of Luigi Ugolini by displaying, for the first time in Malta, part of the archive documenting the survey work undertaken by him and his collaborators. The Ugolini archive is not only a precious historical document but it is also a useful tool in the management and conservation of Malta's prehistoric sites and artefacts. Following the publication of *Malta: Origini della civiltà mediterranea*, Ugolini had wanted to publish four additional monographs in a series entitled *Antica Malta*: I) *the Neolithic temples of Tarxien*; II) *the major Neolithic temples and the Hypogaeum*; III) *Minor Neolithic temples and megalithic monuments*; IV) *Temples, necropolises and artefacts of the Copper Age*. Ugolini's work will be published by Midsea Books in five volumes between 2006 and 2007.

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