

AGGRESSION AND DEFENCE IN PREHISTORIC MALTA

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Aims and difficulties of the study

Much has been written about the history of Malta regarding fortifications and warfare which has evolved from the Renaissance to recent times. No specific study has ever been attempted about the local aspects of aggression and defence in ancient times. This article attempts to investigate the causes of and the attitudes towards aggression in prehistoric times and the scenario of hostilities within the Mediterranean sphere in relation to evidence from the Maltese islands.

The world-wide lack of subject study in prehistory has been expressed by those authors who have remarked that we will never know very much "*for scarcity of evidence ... one of the most important aspects about pre-classical world is largely ignored*" (Drews 1993: 97; Dark 1995:108, Renfrew & Bahn 1991: 193). Dark (1995: 105) further adds that "*there has been little discussion of the theoretical basis for recognising warfare in archaeological sources, although the archaeology of warfare has been an important topic in the study of the Roman period and later times*". Military history has been of little interest in most academic circles, and this is probably attributable to vivid memories of World War II (Mercer 1989: 19; Drews 1993: 98). In the past decade substantial archaeological investigations were undertaken in Europe and the Near East.¹ Despite this, little has been attempted on

this theme with regard to the Maltese islands.

The local prehistoric material evidence, particularly that related to combat, is very fragmentary, at times unprovenanced or unstratified, and often ambiguous. The few instances of available evidence need to be interpreted without forcing, forging or fantasising. Records may be biased, depending on the recorder's awareness, methodology of recording and his expertise in armed conflict. Frequently records are descriptive only, with hardly any drawing or photograph of the presumed weapons. The remains themselves are often in a fragmentary state at the time of discovery, and have further deteriorated since. The physical evidence itself may not be sufficient to give a clear indication of how a presumed weapon or fortification has been utilized, against who or what, and what the resources and strategies of the enemy were.

Weapons and fortifications are an integral part of any cultural expression. Their distribution and nature instigate us to inquire why they were required, how they were made, how successful they were. What do these objects tell us about the people who utilized them? Were there foreign influences and local variations? Queries like these are best answered by comparison with other local and foreign examples, where the archaeological record has been investigated more scientifically. This overview is not a typological or technical analysis of prehistoric weapons, but more of an anthropological approach to human behaviour towards aggression and defence within a particular natural and cultural environment.

A host of uncertainties present themselves in the detection of weaponry. Most of the implements found locally cannot be definitely identified as weapons. Hawkes (1963: 321) and O'Connell (1989: 13) emphasise the difficulty in distinguishing between hunting gear and

¹ Recent studies in Britain include P. Dixon's (*Current Archaeology*, 1981: 76, 145-7) study of distribution of arrowheads around the gate of a Neolithic enclosure at Crickley Hill, and J.S. Dent's (*Archaeological Journal* 1983: 140, 120-8) study of Iron Age weapons from burials, and the evidence of wounds found on skeletons (Dark 1995: 106). Also, Drews (1993) regarding changes in warfare at around 1200BC, Philip's (1989) study of Syro-Palestinian Bronze Age metal weapons, Sandars's (1978) study about the Sea Peoples and Watkins's research work on the beginnings of warfare, in Hackett's *Warfare in the Ancient World* (1989).

weapons of war, since several objects tend to diffuse the concept of their actual use and add ambiguity as to what actually constitutes a weapon. An arrowhead could have been used in hunting, in self-defence or in ritual, as an offering to deities or as part of a funerary kit. The same object would have probably served all the above. Before defining an object as a weapon, its primary use needs to be established, together with the possible subjects of aggression or defence.

No study of wear on weapons has ever been carried out on such artefacts from Malta. Such a study might sort out the actual use of the implement. Furthermore, most of the lithic implements had probably been retouched and sometimes transformed into other implements to suit other purposes (Bordaz 1971: 45).

Tell-tale signs of aggression could be revealed in the study of bones belonging to the Late Neolithic burials retrieved from the Xaghra Stone Circle in the early 1990's, for instance.² In most cases in the Maltese islands, weapons were found not within a domestic context,³ but in graves and cultic sites.⁴

The aim of this work is to stimulate an awareness of the subject. It should serve as a platform for further studies about the earliest evidence of a much evolved, long-standing tradition of fortification development and warfare in the Maltese islands.

Combat within prehistoric societies with particular reference to the Mediterranean and Malta

The impulse driving man to be aggressive

² Skeletons datable to the late 3rd millennium were found in tombs at Roaix in the Rhone Valley with flint arrowheads wedged in the bones (Trump 1980: 150). A projectile point of the Late Upper Palaeolithic was found embedded in the pelvis of an adult female buried at the Grotta di San Teodoro, Messina. A similar example, datable to c. 10,000 BC was found in the sternum of a child in the Grotta dei Fanculli in Balzi Rossi, Italy (Bachechi 1996: 224-235).

³ Tools and weapons amounted to 10% of the finds in domestic contexts of middle Bronze Age Palestine (Davidau 1993: Ch.3 and 6).

⁴ Compare the percentages of weapons, tools and pottery in the catalogue of finds (Evans 1971).

is a complex phenomenon with a variety of purposes, such as territoriality, dominance, sexuality, and survival (O'Connell 1989: 15). Acquisition of these often results in conflict between groups by force or other means (Preston *et al.* 1962: 9). The serene megalithic temples of Malta overshadow our perception about life in prehistory, that it might have been rough and dangerous, especially before the Bronze Age. Essentially, we need to probe into the psychological and material remains of these communities and the circumstances which may have affected their peace of mind.

Armed conflict may be launched for prestige in terms of display of skill, bravery, and acquisitions. This is due to the "*human psyche linking manliness with man-destruction*" (Margaret Mead, quoted by Mercer 1989: 19). Possession of a weapon and group identity adds self-confidence and urge one further to show off his *manliness*. Fighting was largely the province of the male, probably arising from the practice of hunting. Mycenaean grave weapons often depict scenes of war and the chase, patterns of behaviour which are synonymous in the deployment of weapons, tactics and adrenaline. In observing prey, man also observed the male animals compete, chase, and taking advantage of their natural weapons, such as horns (O'Connell 1989: 17). Nature can be violent, and man evolved by learning how to defend himself initially from animals, and subsequently also from other men (O'Connell 1989: 14). Nonetheless, warfare is a prerogative of mankind, which distinguish him from other species. Others are of the opinion that most stone-age tribes, like the Eskimos, were peaceful. Thus, man is not by nature essentially bellicose and war is *unnatural*, as it is the product of civilization. This may be applicable to the Late Neolithic people of Malta, who seem to have been more devoted to their cults rather than waging armed conflict.

Invasions and migrations are attributed as the main catalysts of warfare, but war need not be undertaken with the objective of occupying the lands of the conquered in a process of territorial expansion (Renfrew & Bahn 1991: 193). At a time when agriculture and animal husbandry

could produce surplus food reserves, man was able to settle in villages. Prosperous settlements were the envy of others who did not succeed in this venture, or who found it easier to prey on the wealth of their prosperous neighbours. Settlements were required to defend their interests also from preying animals and marauders by providing a variety of barriers and weapons. Both measures were employed in unison through tactics, which were the grass roots of later fully-fledged military strategies.

Disputes about water are amongst the oldest causes of litigation in prehistoric societies (Hawkes 1963: 267). Cattle rustling was also a recurring problem. O'Connell (1989: 30) deduced a consequential behaviour brought about by the practice of agriculture towards armed conflict, which increased during the Middle and Late Neolithic in most part of Europe and the Levant (Milisauskas 1978: 177).⁵ The economy of the early agriculturalists depended upon the possession of flocks and crops, which were considered as objects of value and implied ownership which had to be protected. We cannot state with any certainty that any of the above mentioned situations actually transpired in Malta during prehistoric times. However, the occasional clue here and there may lead to further studies.

Competition can be peaceful or violent (Dark 1995: 104). In the former there is greater resource expenditure and competitive emulation. Probably the

⁵ Conflict is demonstrated at a Neolithic causewayed enclosure at Hembury in Devon, which was attacked by archers, its rampart disrupted and burnt. Some 120 arrowheads were found within the ditch near the entrance (Mercer 1989 I: 21). At Carn Brea in Cornwall, a Neolithic site defended by stone walls and ditches datable to c. 3000-2700 BC was also attacked by archers. Thousands of flint arrowheads were found, evidence of burning is everywhere, and the site was never re-occupied (Mercer 1989 II: 4). At Hambledon Hill in Dorset a Neolithic site having timber encased earth ramparts with gates and causewayed ditches was attacked in c. 2600 BC. Burning caused part of the walls to collapse, burying three males and an aged woman. One man was shot by an arrow in the back while carrying a child. Another was buried with some goods, and his grave was backfilled with the scorched earth of the rampart; he was probably a casualty of the victors (Mercer 1989 II: 5-8).

numerous Late Neolithic temples of Malta were built in peaceful competitive emulation. At some point open conflict was bound to break out between groups involved in the constant struggle for the acquisition and retention of prestige and resources. Hence the communities involved resorted to defending themselves by fortifications (Philip 1986: 212); this may apply to the late Bronze-Age fortifications, possibly erected as a precaution against threats of aggression. Malinowski (quoted by Mercer 1989: 19) recognised three types of armed conflict in primitive societies:

1. Man-hunting, in search of anatomical trophies,
2. As an arm of policy between tribes or states,
3. As a means of economic gain - occurs where portable wealth exists, is easy to get and transport, and is not perishable.

No evidence exists that any of these occurred during Neolithic times in Malta, but 2. and 3. may have been causes for alarm to the Bronze-Age people to prepare themselves against attack.

Further considerations may be applicable through the Wright classification of war (quoted by Mercer 1989: 20):

1. *Defensive war* - communities who have neither weapons nor military organisation and do not fight unless attacked;
2. *Social war* - fighting for revenge, 'anatomical trophies', display, game or religion;
3. *Economic war* - to correct or re-direct the means of exchange, booty or profit.
4. *Political war* - waged as policy by one community against the other.

The first is applicable to the Neolithic people in Malta, though no sufficient evidence of self-defence is available. So far, we have no evidence for the *social* type of conflict. *Economic* and *political* forms of war are hinted at through the threat situations imposed by foreign sea rovers or local rival groups during the Bronze Age.

The explanation of the difference in attitude towards aggression between the assumed peaceful Neolithic people and the attested warlike Bronze Age people in Malta may be explained in terms of differentiation of political institutions. Political evolution often brings about changes in methods of combat (Preston *et al.* 1962: 10, 11). Evidence of aggression during Bronze-Age Malta is one primary indicator of cultural change. This is thought to be the result of communities who experienced war elsewhere, and had a group organisation which included self-defence, and possibly aggression as well. By 1200 BC there was a long tradition, in the eastern Mediterranean, of armies, campaigns, pitched battles and siege warfare (Watkins in Hackett 1989: 15). The neat cultural break between these periods do not point to a change as a result of internal innovations within the Neolithic community, but as a result of influences from other cultures of the incoming Bronze Age peoples, particularly through the mustering of metallurgy for weapons.

We cannot speak of warfare proper during prehistoric times in Malta, but we may suggest the eventuality of small-scale combat, such as deduced by Preston *et al.* (1962:10). In primitive societies the simplest form of attack was to ambush the enemy, preferably by discharging projectiles from a distance. Many primitive groups were not prepared to stand up to close-hand fighting or to attack fortified places. Usually it was every man for himself. Primitive communities were rather small, and the loss of a few of their members was greatly felt. Therefore armed conflicts tended to frighten the enemy away rather than annihilate him.

Warfare is institutionalised conflict with an on-going effort to improve weapons, fortifications and tactics. For the small prehistoric communities of Malta war was not feasible. Defeat would have meant extinction, as total destruction was inherent in the process (Hackett 1989: 8); this occurrence has been proposed by some to account for the disappearance of the temple folk. Warfare was a concern for all and demanded total commitment by every member of the community, both

combatants and their families (Hackett 1989: 7); but the Late Neolithic communities seem to have been absorbed in temple building rather than in conflicts. On the other hand the Late Bronze-Age people were actually committed in seeking to defend themselves from an enemy no one has yet defined.

The Late Neolithic period in Malta was relatively peaceful as demonstrated by the building of temples, trade with Sicily and its islands, the artistic crescendo, and by the lack of evidence of fortifications and definite weapons. However, the unexplained and sudden extinction of these people has been at times been attributed to war launched by foreigners, who after all, may have not settled here afterwards. However, it seems that there was a period when the Maltese islands were uninhabited before the Early Bronze Age people settled here; invasion, implying violence, has been proposed. However, migration, a non-violent encroachment, seems to be more plausible.

The origins of the Early Bronze Age peoples who occupied Malta, the Tarxien Cemetery culture, is yet unknown. Contemporary pottery styles were also found in Sicily, Lipari, southern Italy and western Greece (Trump 1990: 22). These people, who brought with them the use of metal, seem to have had the notion of the warrior class, attested by the presence of copper daggers and axes found within their cremated burials. This is in contrast to Neolithic burials in which no weapons have been detected. Preston *et al.* (1962: 10) argue that in a warrior society the chiefs were probably those who distinguished themselves by their individual exploits. That the Tarxien Cemetery people were warriors favours Philip's differentiation between small groups of warriors who fought one to one combat using dagger, sword and axe, and the disciplined soldier who fought within ranks, using pole arms and archery (1986: 151). The Tarxien Cemetery people could not meet with Hackett's criteria for the subsistence of an ancient army. This would have been handicapped by the shortage of metals and manpower which could not be safely withdrawn from

agriculture (Hackett 1989: 8). Despite the presence of Tarxien Cemetery weapons we have no evidence of actual armed conflict or fortifications during this phase.

Clear evidence of fear from assault was suddenly manifest during the Borg in-Nadur phase, datable to around 1600-800 BC (Trump 1990: 22). Naturally defended settlements perched on top of precipitous spurs of land were sought inland, such as in-Nuffara, the Cittadella, Il-Qlejgha, Wardija ta' San Gorg, Qala Hill, Fawwara, Misrah Ghonok, Mdina and Bajda Ridge. Only Borg in-Nadur is close to the coast, but this settlement was heavily fortified. Some traces of defences were still visible at Wardija ta' San Gorg, Qala Hill, Fawwara, and Misrah Ghonok up to a few decades ago.

What appear to be defended sites may not necessarily mean that they were intended as fortifications. Perimeter walls and ditches may have been erected as status symbols, religious boundaries or stock enclosure, to avoid floods, or to enable the occupants to view a symbolic location (Dark 1995: 107). Most likely, the steep declivity of the several Late Bronze Age settlements in the Maltese islands was chosen for defence, since sloped hills were also available nearby. Additionally, criteria singled out by Dark may also have been accommodated by the selected perched locations. The Borg in-Nadur fortifications are enormous engineering works in their own right. In this feat we may identify a deliberately planned settlement, a concept which may be taken as evidence of a planner's insight (Dark 1995: 164-5). Compared with foreign examples described by Watkins (in Hackett 1989: 25), the Borg in-Nadur defences were not simply built to keep out nocturnal marauders, but designed to counter major attack and also to cater for defence by archers.

The escalating fear of aggression during the latter part of Maltese prehistory fades out on the eve of local history. We have no evidence of aggression between the local Bronze Age population and the incoming Phoenician merchants from the Levant sometime during the 7th century BC. Peace and prosperity seemed to prevail as Levantine artefacts and

customs gradually became the standard culture of the Maltese islands.

THE NEOLITHIC PERIOD IN MALTA *Defences*

The Neolithic period is universally considered as rather a peaceful one, though it was not exclusively so. There was lack of development of lethal weapons and only a few settlements were defended, mainly by simple ditches and fences meant to keep preying animals at bay. However, Jericho was substantially defended against possible attack by man, and Mercer (1989: 17) noted that at around 3500-3000 BC there was a sudden and apparent emergence of the causewayed enclosure on a very substantial scale in western Europe.⁶

Still, there is lack of evidence of fortifications and a general absence of weapons pertaining to Neolithic Malta, whereas these become increasingly common during the Bronze Age as in most parts of the world. The rarity of foreign pottery in the Neolithic and Temple periods indicates a continuation of the same culture (Trump 1966: 51), which may imply a period of peacefulness and hence reconciles the scarcity of defences and weapons.

Fortification technology is very much related to the availability of resources and the landscape. Stonewalls, pit-traps, ditches and perhaps stake-post defences were the measures most likely employed locally by Neolithic man. Temple clusters and nearby mass burial sites have been discovered, but evidence of contemporary habitation sites is next to nothing, due to their rudimentary and perishable nature (Trump 1961; Malone *et al.* 1988). Urban sprawl and land reclamation have been the culprits for the eradication of the fragile and inconspicuous Neolithic settlements of the Maltese islands. The only record which may be ascribed to a Neolithic settlement enclosure, though not necessarily a fortification, was excavated at Skorba.⁷

⁶ This is also evident nearer to Malta at Passo di Corvo in Apulia in southern Italy, where circular huts are encircled by a series of concentric ditches.

⁷ One wall was an 11m stretch of quasi straight wall set directly on the bedrock, consisting of two skins of

Weapons

Most of the objects discussed here may have served different functions, including that of a weapon. Weapons of bone, antler or wood used as clubs or hafts are difficult to survive in the local environment, unless they are within stable environments, as in caves. Antlers and long bones could have served as ready-made weapons, the latter as clubs or as axe hafts, while bone splinters could have been used as javelin points. Rough stones could also have been easily utilized as percussion weapons or as missiles, much in the same way as they are still used in modern urban riots all over the world.

The use of the bow⁸ is poorly represented in local context and inferred by the occasional find of a few arrowheads, which may have been availed of as javelins or fishing spears, while the larger examples may have been spearheads. The discovery of arrowheads within temple contexts may infer a votive use, perhaps offered in gratitude of a prosperous hunt, or after a triumphant engagement. The bow was a "silent" weapon ideal for surprise attacks on animal and man. Arrowheads were attached to wooden shafts sometimes exceeding a metre in length, and were notched at one end to engage the bowstring, as well as being fletched with feathers to steady the flight (Clarke 1967: 93). Arrowheads consisted of microliths retouched into triangular forms. Some local examples of flint and chert, measuring approximately 2-3cm in length and up to 2cm in breadth, from Tarxien, and others which are unprovenanced, have a small projection or tang at the butt

stones filled with rubble in between, about 60-80cm thickness, and datable to the GhD. phase. No floors or other related structures were detected. One suggestion by Trump was that it was an enclosure wall to a group of buildings (Trump: 1966: 10). A similar wall was about 1.5m thick and 8m in length. Trump suggests that this wall, and another at the northern part of the Red Skorba shrine, may have acted as retaining walls (Trump 1966: 13). The proper domestic huts were smaller and were composed of a mud brick superstructure on stone footings and had clay and torba floors. (Trump: 1966: 10-16).

⁸ The bow and arrow were invented in the Upper Palaeolithic or the Mesolithic, as indicated by the cave painting, showing archers in combat, at Morela la Vella in Spain, and actual remains from a bog of Holmegaard, in Denmark. (Bordaz 1971: 92; Clarke 1967:93; Hawkes 1963: 145).

(Evans 1971: 147, plate 68.3; Bonello & Caruana Galizia 1996: 67, plate 4). The tang was inserted into a slot in the tip of the arrow-shaft, possibly glued with resin and fastened with a leather or grass cord. Arrowheads from Kordin I, Ggantija and Hagar Qim, which Evans refers to as 'hollow based' may be misleading, since they imply the socketed type. Drilling a socket at the end of a flint or obsidian microlith would have been impossible. Actually, these are barbed heads without a tang. They were probably inserted in a slot of an arrow-shaft and glued, without being fastened. They measure approximately 2cm in length and 1.5cm in width. The two projections at the butt of arrowheads, called barbs, were essential to hold the arrowhead in the wound.

We also lack evidence on the local use of spears and javelins. These thin and symmetrical tools make ideal perforation weapons to penetrate animal hides or human skin. Of the few assumed lithic arrowheads or knives found in local contexts, the larger ones may have been actually spear points and used as thrusting weapons. Fire-hardened or sharpened wood tips and lithic points were used as lightweight javelins which were thrown on the run. The flint lanceolate from Hagar Qim, measuring 5cm by 2cm (Evans 1971: 93), and another from Hamrun (Bonello & Caruana Galizia 1996: 70, plate 9) may be such examples.

Evidence from the continent shows that Neolithic man fought with axe, spear and knife. Both the axe and knife were domestic implements, whilst the sword was a Bronze-Age innovation (Oakeshott 1960: 24). The knife became a spear simply by mounting it on a long shaft, and a slashing weapon by fixing it axe-like on a short shaft (Oakeshott 1960: 25). This presents us with the difficulty of distinguishing between weapons and tools. The Red Skorba shrine yielded a number of chert blades up to 15cm in length, which Trump (1963: 380) referred to as 'daggers', probably because knives and spear points usually measure about 8cm in length.

Unclear is the actual nature of the so-called Neolithic lemon-shaped sling-stones carved out of globigerina stone, and other

related objects of the same size and weight, which may have been used for totally different purposes. Several were found within Grey Skorba deposits outside Skorba Temples and Ghar Dalam. Their length varies from 5 to 7.5cm, with an average weight of 65 gm (Trump 1966: 30, fig. 40a, plate xxiii). Slingstones were also found in great numbers at the Hypogeum⁹ and others were reported from several temple sites. Five were pierced by a biconical perforation at one end, perhaps to admit a chord.

The actual use of these objects may be derived from observation of wear on their surfaces. Their type is similar to the typical slingstones used even at later periods. Slings and bolas are typically used by herders and hunters of small game. Slings were made of sinew, skin, or vegetable fibres—all these materials are difficult to survive in local conditions. The depiction of a goat on one of the slingstones may infer their use by a herder. The use of the sling originated in south-west Asia and diffused westward and was one of the significant innovations made during the Neolithic (Hawkes 1963: 322). The sling used to launch missiles through a centrifugal force - a method which O'Connell (1989: 22) remarks was not derived by imitating nature and were truly the first artificial weapons. Commenting about the Balearics, who were expert slingers, Garcia Pericot (1972: 104) concluded that it would be natural for a people who were constantly handling stone and skilful in adapting it to their purposes to become also accustomed to hurling slingstones. The same may be said about the Temple folk. The perforated stones from the Hypogeum might have been tied together like a bolas and hurled at the adversary to entangle its/his feet. Stone balls could also have been attached to a cord and used as conkers, which were meant to crush skulls, such as the ones used in mediaeval tournaments.

⁹ The Hypogeum hoard numbered fifty-six, and were of various sizes weighing 35gm to 652gm. One had a rough relief of what seemed to be a goat. Strangely enough, they were arranged in rows and covered by a thin layer of *torba*. (Evans 1971: 46, 66, plate 66.9).

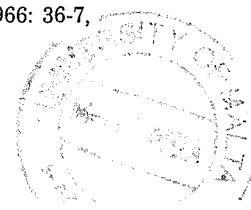
Axes

Of the very few stone axes found in Malta two were retrieved from Red Skorba contexts due north of the West Temple at Skorba.¹⁰ Another was found at the Hypogeum and was also of igneous stone though it had a pointed butt (Evans 1971: 66, plate 69. 9). The use of these axes could have been for chopping wood but they may also have served as percussion weapons. This type of axe head was hafted into split or grooved handles of wood, antler, or bone and held there with tree resin (Bordaz 1971: 65), and was probably also secured with leather thongs. The mortised haft had the disadvantage of splitting owing to the shocks of use. One means of preventing the handle from splitting consisted of using an antler socket as a shock absorbing intermediate piece (Bordaz 1971: 101), but no evidence can ascertain the use of this measure locally. Boring of the axe head for insertion of a handle was rarely used during the Neolithic, probably because of the effort required to drill through, and eventually the shaft weakened the implement excessively (Bordaz, 1971: 99, 101). However, there was an increase of polished bored axes of flint and stone in mainland Europe during the Middle Neolithic, corresponding to a contemporary increase in warfare, probably caused by the increased competition among communities over resources (Milisauskas 1978: 179). This scenario was the prelude to the bellicose Bronze-Age period which lay ahead.

Clubs and maces

The most rudimentary percussion weapons were clubs and maces. They were used to break bones and skulls of game, or else to beat their opponents to death in warfare. Wooden clubs, as well as long bones, were readily available as easily replaceable weapons. Ambiguous is the interpretation of a few objects which have been labelled as mace heads. These were usually made of ground stone of various shapes with a central perforation for the wooden haft. One, found at Kordin

¹⁰ The stone is igneous or metamorphic and is foreign in origin. One measured 7.9cm long and 4.9cm broad, the other was damaged, but measured 14cm by 8cm. These axes were brought to their final form by grinding and polishing (Trump 1966: 36-7, Fig. 35, plate xxixb).



III,¹¹ was inadequately hafted, as was another from Tarxien temples;¹² other presumed maceheads at Tarxien temples were also found.¹³ Their descriptions match somewhat the examples found in Europe, but particularly those in the Levant, where they occur commonly in Chalcolithic and early Bronze Age periods (Philip 1986: 173). Their rarity, ambiguity and presence within temples render them enigmatic. Interesting is the fact that these 'maceheads' are made of foreign hard stone. If they arrived here already worked, this may indicate the common use of maces in the areas whence they were brought.

Archaeological and documentary evidence found in other parts of the world indicate that fire was widely used to deter unwanted visitors, be it animal or man, and in aggressive activities between rival groups. If the Temple culture ended in the wake of aggression, evidence of this may have been detected at Tarxien and Skorba. Both these sites seem to have suffered destruction by fire to some extent, and were abandoned thereafter until squatted into by the earliest Bronze-Age people some two hundred years later (Trump 1990: 23).

Art

If Neolithic man in Malta had little affinity towards weapons, nonetheless he was highly moved by representation of weapons in artistic forms, such as the greenstone axe pendants commonly found in burials and temple sites. There was at this time a widespread axe-cult in the Mediterranean, represented by the 'polished axe' pendants (Hawkes 1963: 325). Miniature axes of exotic materials were traded extensively, and were usually found in male burials. The local greenstone pendants from Calabria imitate actual axes similar to the ones

from Skorba. All are pierced by drilling at the narrow end, in order to facilitate suspension from the neck. They may have been used as some sort of talisman to ward off evil in life and death.

The Bronze Age Period in Malta

The Mediterranean Scenario

"The hall-mark of the times is movement".
(Sandars 1978: 198).

The Bronze Age was a prosperous period characterised by widespread trade, technical innovations and socio-economic refinement. It was also a period of turmoil aggravated with migrations and warfare. Settlement organisation and architecture, together with the development of weapons and defences in central Europe and the Mediterranean reflect an increase in socio-political organisation and intensification of warfare. This was probably caused by the increased competition among communities over territory and resources.

The end of the 13th century BC was the most agitated period. There was extensive disturbance in the eastern Mediterranean and a movement towards the West. Troy and the Aegean power centres collapsed. The aggressors were armed and originated from various mother lands, either as refugees displaced by other aggressors, or else as colonisers intent on founding new independent colonies. Egypt too was threatened with collapse as it was repeatedly assailed by hostile immigrants. Turmoil also had an impact on the central Mediterranean, particularly on Sicily, which caught a "*whiplash of destruction from Italy*" (Finley 1979: 12). There is evidence of destruction and abandonment of the Aeolian islands. Life went on only at Lipari, although culturally this island was influenced by Italy, particularly in the pottery, which matches that of Apulia; this was the region whence originated the first migrants who came to Malta a millennium earlier. Widespread was the phenomenon, during this time, of naturally defended settlements, augmented by man-made fortifications, and the increase in bronze weapons.

¹¹ It was pear-shaped, probably of white marble, 4.4cm long, flattened on one side and with a narrow perforation at the smaller end (Evans 1971: 74, 80).

¹² This was flat, roughly oval stone about 13.6cm long, 10cm broad and 4.7cm thick, with one end more pointed, showing signs of breakage at this end. Its centre was conically perforated with a large hole (Evans 1971: 146).

¹³ Each had a biconical perforation and were of a greyish stone, which is foreign to Malta. (Evans 1971: 147).

Some protagonists of this scenario were often explorers in search of new land, resources, or adventure. They were presumably merchants, gradually merging into pirates, seeking sea-lanes to spy the land, especially for metals. Such were the later archaic Greeks and the Phoenicians (Finley 1979: 18). Casson (1959: 44) attests from the Homeric accounts that the followers of Odysseus (13-11th century BC) behaved as raiders, and used to plunder the countryside, killing the men and carrying their women and children to be sold into slavery. Casson describes it as "*piracy in the earliest days of its history*". Homer's *Iliad* depicts the arrogance of the Aegean pirate, who is called the 'sacker of cities'. The whole purpose of the pirate's activity is to spoil expeditions, especially for metals, livestock, and, above all treasure, women (Sandars 1978: 186). How do the Maltese Islands feature in this hostile scenario?

Migrations to Malta

During the Bronze Age the Maltese Islands experienced a series of colonisations. So far, the archaeological evidence indicates that the islands were still uninhabited when the first Bronze Age people reached the islands; this merits further investigation. The origins of the newcomers is yet unidentified, but comparative analysis of pottery show similarities with others at Sicily, Lipari, southern Italy and western Greece. These people also introduced new cultural traits such as cremation burial and the use of metal, especially for weapons (Trump 1990: 22); no study has as yet been undertaken on this topic. Their typology and metallurgical composition are not discussed here, but these would surely give us more information about their origins and about the people who possessed them.

Evans (1959: 168) identifies the first immigrants, the Tarxien Cemetery people, as the *destroyers* and speculates that the peaceful temple-folk might have been "*ruthlessly exterminated by the copper daggers and axes and obsidian-tipped arrows of the fierce invaders*". Lilliu (1988: 274) describes how a catastrophe hit the Maltese Islands during the Early

Bronze Age, when ferocious invaders appeared from the sea and exterminated the peaceful temple-folk. Owing to the lack of sufficient evidence of such a fierce interaction between these two peoples, these sensational assumptions stand no ground. However, the local scenario demonstrates that the prosperity of the temple folk was constantly threatened by marauders from across the sea. This theme was a constant source of interest to Trump (1961: 260) and Evans (1979: 24). They also suggested that territorial rivalry between local groups might also have existed. This was more likely to have been the case if the marauders were arriving periodically from different sources, for this situation would soon have led to competition for the available cultivable land and water supplies, this eventually leading to frequent outbreaks of clashes between the villages. Trump (1961: 260) remarked that the material culture of most of the Maltese prehistoric settlements differed slightly from village to village, and that this might indicate cultural divergences, and possibly political ones as well.

The presence of Early Bronze Age weapons and Late Bronze Age fortifications surely indicate a period of unease and group rivalry. The actual use of these weapons and defences cannot be ascertained, for they might have only served as deterrents. The Early Bronze Age has yielded the earliest weapons proper, but fortifications are completely absent during this period, or possibly are as yet unidentified. On the other hand, fortified sites are common in the late Bronze Age, whilst weapons are almost completely lacking, a disparity which so far has been unaccounted for. Although Evans (1979: 24) has suggested that any bronze weapons would have been melted down and recast for other purposes, some metal pieces must have survived this process and appeared in the archaeological record.

Early Bronze Age and Weapons

On the basis of the ceramic repertoire the ancestry of the Tarxien Cemetery people can be traced back to the Aegeo-Anatolian region. They reached the Maltese Islands from south-eastern Italy, whence other

cultures stemmed, such as those of Capo Graziano in Lipari and Ognina in southern Sicily, with whom the Tarxien Cemetery pottery bears close affinities. (Brea 1957: 10; Evans 1959: 178-9, 1979: 22). Furthermore, the local early Bronze Age dolmens show a similarity to the dolmenic structures at Otranto, in south-eastern Italy, whilst the Tarxien Cemetery custom of cremation is Indo-European in nature (Lilliu 1988: 274).

The most interesting aspect of the Tarxien Cemetery culture concerning our subject is the presence of copper weapons in burials; these represent the first instance of the use of metal and proper combat weapons in Malta. The nearest available copper sources were in Cyprus, Sardinia and the Iberian peninsula, but the metal of the weapons found locally has never been analysed.

At Tarxien Cemetery, cremated burials were found accompanied by a funerary kit, some of which contained triangular copper daggers varying in length from 9cm to 13.2cm, and from 4.5cm to 5.5cm in width. The hilts had two to four rivet holes for the attachment of a handle of wood or bone. A bone hilt pommel was actually found there (Evans 1971: 163-4). These daggers resemble others which were then prominent in the East, and they were the only available thrusting weapons at the time. They were later replaced by the slash and thrust sword which was a Late Bronze Age innovation primarily used by skirmishers (Oakeshott 1960: 24); none of the latter examples have ever been recorded in Malta.

Some of the axes found in Tarxien Cemetery burials may actually have been chisels, especially the smaller versions. The axes are flat and others are slightly flanged, have long, slim blades with a narrow cutting edge ranging from 8.8cm to 12.4cm in length, 3.7cm to 5.8cm in width and 0.7cm to 1.6cm in thickness (Evans 1971: 163). The long axis of the blade lies perpendicular to the handle, which fitted into an ovoid, socketed wooden haft. In combat, they would have been availed of as percussion weapons to slash skulls and chop limbs. Their light weight indicate that the enemy used no armour, since this would have required

heavier axes made of bronze.

The use of the bow and arrow during this phase is weakly represented by a solitary heavily barbed obsidian arrow-head which may have been displaced from an earlier context. Arrow heads are consumables and metal ones were expensive to produce. They were probably cast in batches by a central source such as the palace arsenal. The lack of arrowheads in burials world-wide is due to the fact that these were not personally owned (Philip 1986: 145-6).

The use of copper for weapons in this early period may be due to the fact that bronze was not yet actually in use by these people; tin sources lay too far away. Another possibility is that the artefacts were symbolic representations of original bronze weapons, especially because they were too thin and fragile. Bonanno (1993: 43) highlighted the problem about the lack of evidence of social structure in the Tarxien Cemetery people. However, weapons in burials may indicate the presence of the warrior class discussed earlier. On the other hand, Dark explains that a comparison of skeletal evidence with the weapons usually found in graves suggests that the latter were not always buried with the warriors, and therefore must have had a symbolic or a ceremonial role: "*men of wealth and power were often buried with weapons*" (Dark 1995: 107).

The Late Bronze Age and weapons

During the Middle Bronze Age the threat from the Italian mainland was being felt in Sicily, as defence systems were augmented due to the incursions of new peoples arriving from the sea (Brea 1957: 120, 136). This was the time of the Borg in-Nadur refugee's influx into Malta from Sicily (Evans 1959: 185-6). Later, at about the middle of the 13th century BC, the state of peaceful relationships and commercial exchange which had existed between the various Mediterranean peoples was now interrupted, and a time of war and tension made its appearance. Coastal settlements in Sicily, southern Italy, Sardinia, Cyprus and the Aegean were abandoned and the inhabitants took refuge in strongholds in the hill country. This was due to increase of piracy and

raiding soon after Merneptah's Libyan war, at around 1220BC, and the raids on Ramesses III in 1186BC (Brea 1957: 149; Sandars 1978: 200). Some may even have sought refuge in Malta, and therefore arrived there already accustomed to seek and construct defended settlements. The interaction between the earlier occupants of the islands and the Borg in-Nadur people has not yet been accounted for, but there seems to be a cultural break (Bonanno 1993: 41).

The ceramic evidence shows that the Borg in-Nadur phase was peaceful and undisturbed, and it implies no interruption of life on the islands. However, pottery analysis alone cannot detect threats of aggression and any eventual combat. The defenders may have repulsed any attacks made upon them, and henceforth carried on with their normal life style. Evans rightly maintained that the defended settlements demonstrate that "*life in the Maltese islands during the last two phases of the Bronze Age was none too secure and that there was evidently the need to guard against a fairly constant danger, which may well have been that of pirate raids, well known in Malta during many later periods*" (Evans 1971: 200).

Commenting on the increased evidence of aggression during this phase, Trump pointed out that nearly all sites are on "*incommodious but secure cliff-grit hill tops and where the natural defences were inadequate, massive built walls were added*" (Trump 1990: 22). The best surviving representative is the type site of Borg in-Nadur.¹⁴ Its siting and architecture is identical to a few early Bronze Age sites¹⁵ and several other late Bronze Age Mediterranean citadels¹⁶ namely the defences at Timpa Dieri in Sicily, dated to c. 1800-1425 BC, and

others with six D-shaped bastions at Chalandriani, on Syros island in Greece (Trump 1980: 126; Tusa 1983: 301).

Borg in-Nadur is the only site in Malta which is very close to the coast and in this respect is similar to contemporary Near Eastern settlements. This preferred location provided a vantage point for spotting hostile ships long before they reached the shore. The major hazard during the late Bronze Age was probably piracy, and the slave trade was its chief motive. The shock of a raid is best explained by Casson (1959: 45): "*A stealthy entry into a harbour at night with muffled oars, a few careful professional scouting, a sudden attack at dawn, a rush back aboard, a few hours of gruelling work at the rowers' benches - and every surviving member of the crew found himself richer than he was twenty-four hours earlier*".

Fortifications need to be defined, for not all structures that look like defence systems are actually so. Apart from their defensive role, fortifications also act as symbols of power, expressing the status and authority of the bearers. They are used to impress and intimidate, thus inducing compliance (Renfrew & Bahn 1991: 258). Mercer (1989: 16) defines fortified places as designed to prevent direct access, allowing the attacker little opportunity for concealment; a complex barrier designed to distance off the attacker and to concentrate the attackers into 'killing zones', such as at the gate areas.

Borg in-Nadur satisfies these criteria, as it is perched on a steep spur, and its walls dominate over the surrounding landscape. The site also has a number of significant architectural defensive features. The so-called bastion projects in order to provide flanking fire against the enemy at the foot of the walls, whilst a postern gate is located in such a way as to expose the right flank, i.e. the unshielded side of a besieging hoard. Robust high walls prevent scaling and ramming, whilst a battlement allowed the defenders to shower all sorts of missiles at the besiegers. However, no evidence of any ditch, palisade, pits, or bridge exists, either because there were none, or else

¹⁴ 'Borg' toponyms may infer prehistoric defended sites.

¹⁵ At Los Millares in Spain a village of circular and rectangular huts on a spur between two rivers is defended by a stone wall with projecting semi-circular bastions. (Trump 1980: 99-100). Capo Graziano, an Early Bronze Age settlement in the Aeolian Islands, is typically set on a steep precipitous location (Brea 1957: 104).

¹⁶ Bogazköy, Myceanae, Tiryns, Troy, Sardinian Nuraghi, Motilla, El Agar and El Oficio; the latter three in southern Spain.

they still await identification. Essentially, the fortifications defended huts, silos, animal pens and industries (weaving, pottery or smiths), apart from possible cultic buildings and spaces.

The Borg in-Nadur bastion is built of large rough blocks, some squared and symmetrically arranged in very rough courses (Murray 1923, I: 21), the spaces between them "*being packed with small stones dressed to fit. In some parts a few large blocks only were used, set as uprights or transversally to tie the inner and outer faces together*" (Evans 1959: 185). Defensive systems using towers and bastions originated in early Bronze Age Palestine and were designed to be defended by archers¹⁷ (Millar et al 1986: 182 quoted by Philip 1986: 145-6). As yet there is no evidence as to whether the Borg in-Nadur walls were defended in such a manner.

A further wall at Borg in-Nadur was recorded by Murray (1929: 8, 9, plate V.I) on the south-west of "chapels" A and B, to the south-east of the megalithic temple. In May 1998 a fortification wall facing the bay was discovered during illegal engineering works (57075E, 65505N), and this was immediately excavated and recorded by the Museums Department. The existence of this wall has invalidated the previous concept that this side of the settlement was naturally protected, whereas it was actually also strengthened by man-made defences. A 1m thick burnt Tarxien Cemetery deposit overlain by Borg in-Nadur deposit was noted behind this wall, the nature of which is yet to be interpreted. In addition the author noted three previously unrecorded silo pits within the confines of the fortified settlement (57460E, 65575N), the only ones known so far indicating that this settlement was truly prepared to sustain a siege.

And speaking of sieges one may recall the fears of Ugarit before its destruction around 1179 BC. Letters by the king of

Ugarit to the King of Alashia mention seven ships that appeared with little warning (Drews 1993: 14, 91). Evidence of a similar disaster was recently discovered at the citadel of Koukounaries on Paros. Huddled skeletons indicate that the inhabitants had little warning and no chance to escape the ravages of the marauders, despite the natural steep landscape and the fortifications (Drews 1993:222).

As the end of the Bronze Age drew to a close, further bands of immigrants arrived in Malta, such as the people of the Bahrija culture, whose pottery resemble that of the Ausonian culture of Lipari (Evans 1959: 187). These people also chose to settle on an inaccessible spur, but neither defences nor weapons pertaining to this phase have been identified as yet.

Insufficient is the available evidence of Borg in-Nadur weapons, the only recorded ones were found within a cave dwelling at Għar Mirdum at Dingli (M.A.R. 1965:4, plate II fig. 1 & 4). These consisted of a 7cm long finely-carved dagger handle made from the metacarpal of a cow, and a bronze dagger blade, 18cm long by 4cm at its widest. These remnants also happen to be the only Bronze Age weapons from a domestic context.

Threat or antagonist?

What were the threats that called for the need of weapons and, particularly, fortifications during the late Bronze Age? After all, could the Maltese Islands have served as the haven of antagonists?

Amongst the protagonists of the cataclysmic scenario observed in the Mediterranean during the late Bronze Age were the Sea Peoples. These brought serious unrest and waves of emigration during the time of Ramesses II, at around 1279 BC, and also during the reigns of Merneptah in 1208 BC and Ramesses III at around 1179 BC. The Maltese islands were within the range of these belligerent peoples and might have attracted some of their attention for a multitude of reasons. The local terrain would not have impeded them from attacking any of the fortified settlements, since they were adapted to fight on foot and to besiege.

¹⁷ Dense scatters of leaf-shaped arrowheads of flint have been found around the ramparts, with a particular concentration at the gateways (Watkins in Hackett 1989: 18). This is the ideal location to excavate.

The Sea Peoples were experienced skirmishers; this type of soldier emerged during the Late Bronze Age.¹⁸ They were mercenaries, but at times waged war on their own account. Sandars (1978: 101) does not exclude that they might also have indulged in piracy and looting expeditions. The most outstanding were the Shardana/u/aw, the Shekelesh / Sikels / Siculi, and the Tursha, respectively associated with Sardinia, Sicily and Tyrrhenia (southern Italy). The Medinet Habu reliefs describe how the Shardana had come "*in their warships from the midst of the sea, and none were able to stand before them.*"¹⁹ Drews (1993:216) argues that the appeal for mercenaries had fertile ground in barbarous lands such as Sardinia, Sicily, and southern Italy. All these lands were in contact with civilised kingdoms of the eastern Mediterranean, but they were not themselves civilised. Opportunities for better things in life were severely limited and it is hardly surprising that these people tried their hands at piracy.

Scholars are still disputing whether the Sea peoples originated from, or settled in, the areas which are today associated with their names. There are four main types of hypotheses:

1. Some of the Sea Peoples originated in the Levant or other lands, and after their unsuccessful raids on Egypt in the early twelfth century BC, they settled in the lands of the central Mediterranean such as Sicily, Sardinia, and Tyrrhenia, and on the southern and western coasts of Italy, which regions adopted their name and are still known thus today.²⁰

¹⁸ The skirmisher confronted his opponent in hand-to-hand combat, using a long sword and a round shield; he was the only infantrymen who participated in battle and ran among the chariots of the eastern Mediterranean kingdoms. During this period, warfare was a contest between opposing chariot forces (Drews 1993:164, 244).

¹⁹ They were eventually impressed into Ramesses' II service and were a conspicuous part of the army he took to Kadesh in 1275 BC (Drews 1993:153).

²⁰ Brea (1957: 148), Guido (1963: 111, 187-8), Sandars (1978: 198), Finley (1979: 13). Gaston Maspero, who was writing in the 19th century, was quoted and contested by Drews (1993: 66) on the lack of available archaeological evidence.

2. Some of the Sea Peoples originally hailed from the central Mediterranean region, from which lands they acquired their name, or vice versa, and after their defeat by Egypt settled in the Levant.²¹
3. Other scholars believe that the central Mediterranean lands were named after some of the Sea Peoples because of the latter's contact and influence through trade.²²
4. Others simply comment that it is from the name of some of the Sea Peoples that the names of the central Mediterranean lands were derived, but do not specify whether the land in question was their home land or final refuge.²³

Whichever of these four propositions is correct, it is apparent that some of the Sea Peoples, or others not identified, but all raiders by nature, were sailing in a region in which the Maltese Islands were within their main route, or at least on its fringe. In some way the islands were probably involved; they were either assailed by these raiders, or else served as actual colonies or mere havens for replenishment of supplies.

Conclusion

The exploration of this subject has demonstrated that culture is manifested not merely through its architecture and artistic representations, but also by its

²¹ Drews (1993: 49-50, 54, 91, 153, 216, 224) is the strongest advocate of this and he insists that the names *Shardana*, *Shekelesh* and *Tursha* mean "people from Sardinia, Sicily and Italy". Trump (1980: 202, 219) also draws similarities between the statue-menhirs of Filitosa in Corsica and the Shardana warriors depicted in the Medinet Habu reliefs.

²² Guido (1963: 111) speculates that by c. 1200 BC the inhabitants of the archaic *nuraghi* were receiving copper ingots from traders coming from the eastern Mediterranean, and that there is a possibility that they were the Shardana who may have given their name to Sardinia.

²³ Mazar (1992: 303) attests that the name "Sicily" is derived from the Shekelesh mentioned in the Medinet Habu inscriptions. Peroni (1994: 33) says the same about the Siculi who are believed to have lived in Sicily and in southern Italy. Sandars (1978: 157, 199) refers to ancient Greek literature which attributes a connection between the Sikels of Sicily and southern Italy.

attitude towards aggression. Through this theme, it is also possible to investigate the cognitive aspects of the people under examination. The Neolithic and temple folk may have been peaceful in nature, but the Bronze Age peoples were definitely accustomed to conflict. The Maltese prehistoric cultures were also brought into the perspective of the scenario of hostilities within the Mediterranean at the time, which to a certain extent corroborated the present belief that whilst the Temple culture was isolated, the Bronze Age peoples were influenced by and had contact with other regions in the Mediterranean. However, no indications of the interface between the cultures has been traced so far, and this allows room for further inquiry. The evidence available for warfare in prehistoric Malta has been presented in order to afford an opportunity for subsequent studies on the subject.

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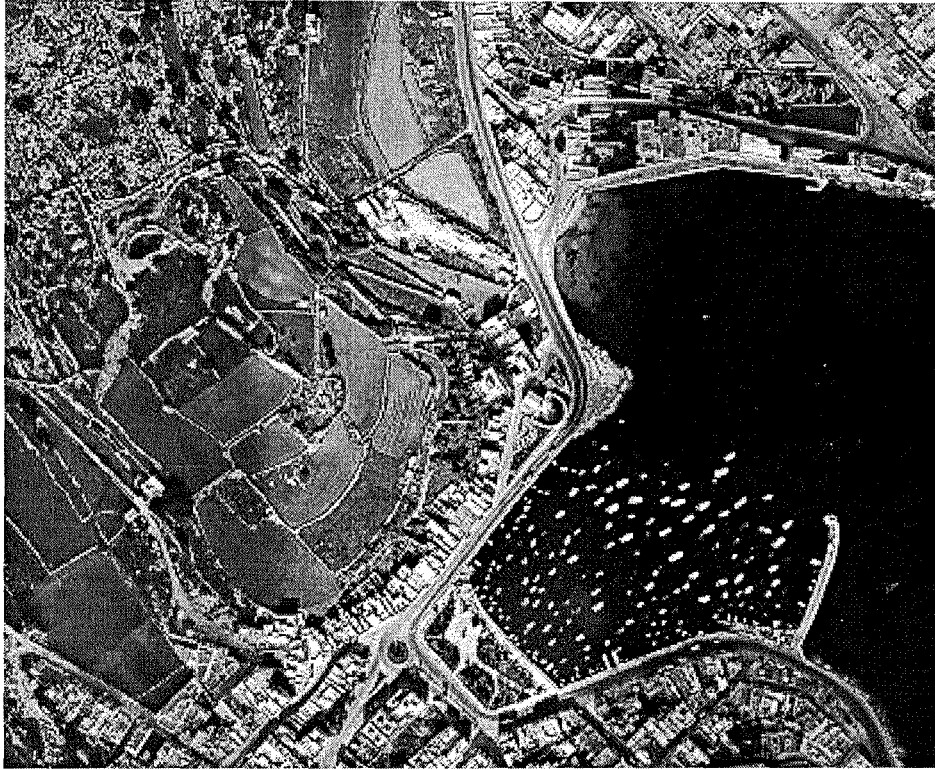
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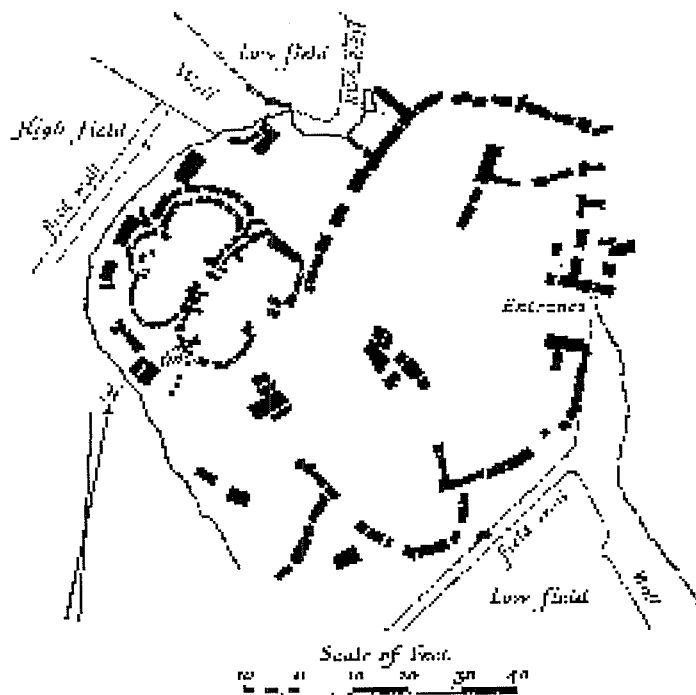
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Borg in-Nadur: aerial photograph

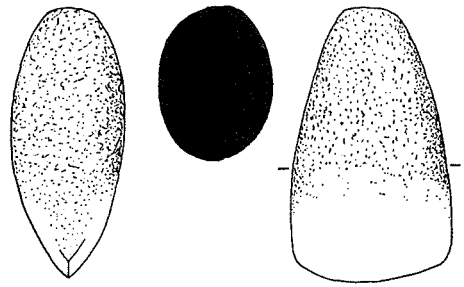


Plan of Borg in-Nadur

BORG IN-NADUR



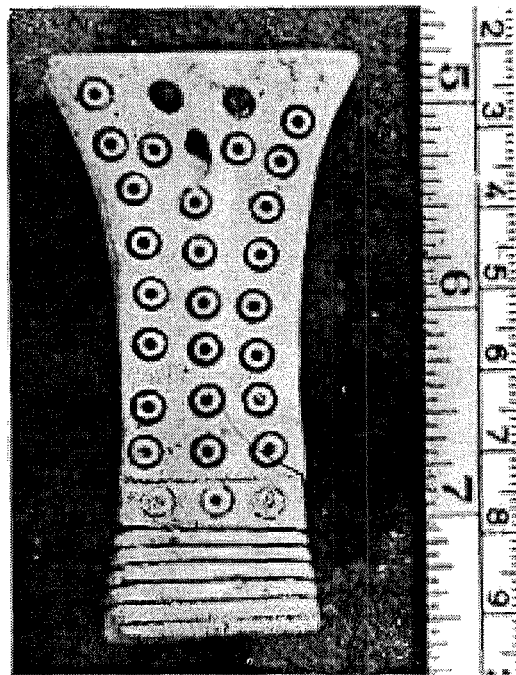
Slingstones from Skorba



Stone axe from Skorba

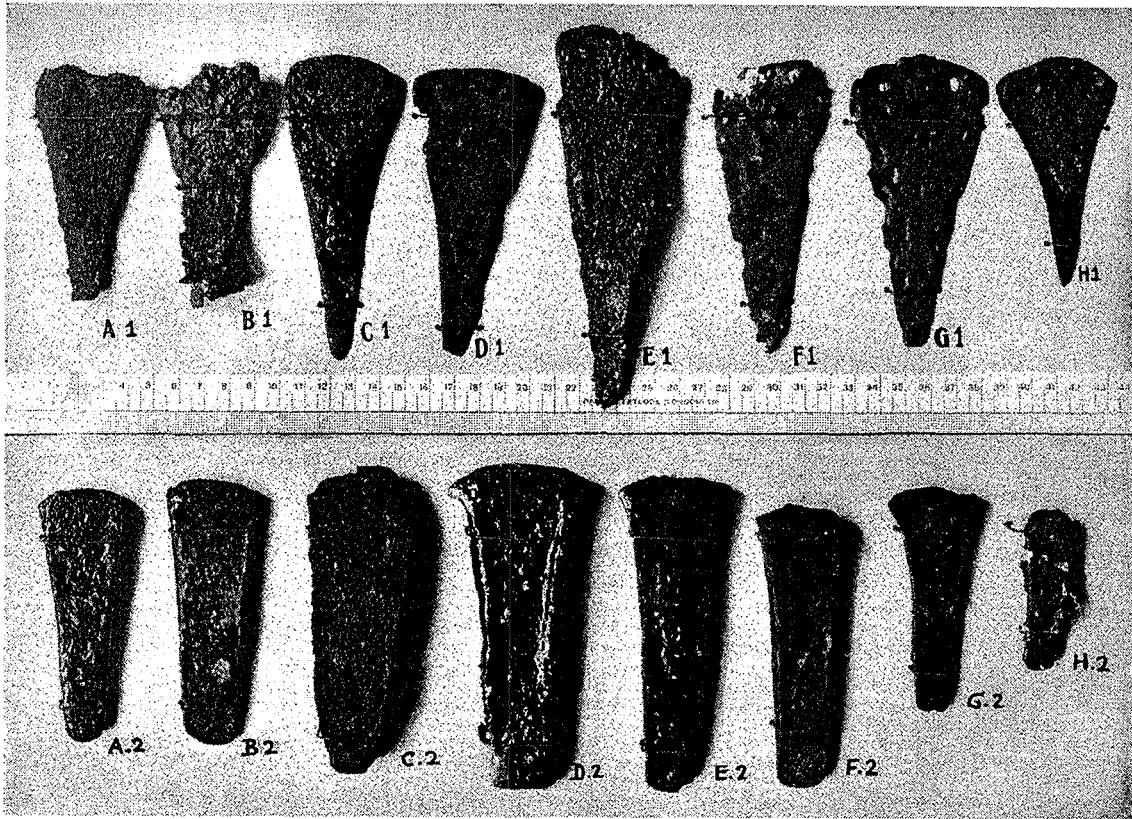


Chert and obsidian arrowheads, respectively from Tarxien and Tarxien cemetery

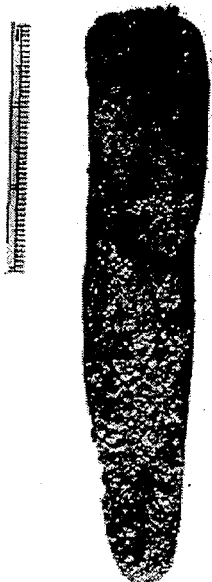


Bone dagger hilt from Ghar Mirdum, length 7 cm, breadth 2.5 cm

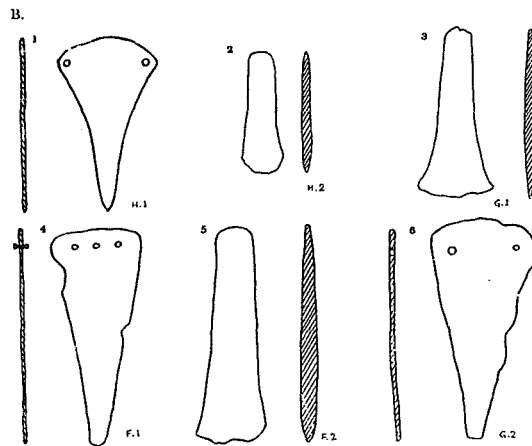
BONE, STONE, CHERT AND OBSIDIAN WEAPONS



Metal implements / weapons from Tarxien Cemetery (Murray 1934: plate v)



*Copper dagger
from
Ghar Mirdum*



*Copper implements / weapons from
Tarxien Cemetery*

COPPER AXES AND DAGGERS