THE LITHIC ASSEMBLAGE OF THE PROMONTORY SITE AT RAS IL-PELLEGRIN

AUTHOR

Clive Vella

CATEGORY

Article

LANGUAGE

English

ABSTRACT

The promontory of Ras il-Pellegrin, located in the northwestern part of Malta, is nowadays an isolated,yet archaeologically rich site. The few archaeological studies on this promontory and in the surrounding area indicate an interesting prehistoric use for two principal activities: procurement of chert from the exposed Middle Globigerina levels and bay access. Through the analysis of the lithic assemblage from the site, this study attempts to provide a glimpse on the movement of raw materials and the exploitation of the local chert through a site-landscape relation.

INTRODUCTION

Aside from a publication by Murray in 1923 (Murray 1923), lithics have been rarely featured in Maltese archaeological studies. This somewhat changed during the 1960s when comprehensive cataloguing by Evans (Evans 1971) and the excavations of Trump (Trump 1966) led to the typological separation of artifacts, mainly ceramics with a selective inclusion of lithics.

This lack of appropriate assessment of lithics is nowadays being patched up. This can be seen in the publication of the Zebbug phase lithic assemblage from the Xaghra Stone Circle, the Late Neolithic lithics also from Xaghra (Malone et alii, 1995, Malone et alii 2009: 242-253) and the re-examination of the prehistoric material excavated during the 1960s by the Missione Archeologica Italiana a Malta (Cazzella and Moscoloni 2005). However, there is still a tendency to separate the lithic assemblage from the archaeological site, and furthermore, from the surrounding landscape as if their relationship was independent or almost non-existent.

In this study lithic tools will be examined from two sides, that is typological, as well as the relationship between the observed archaeological record and the site location. Additionally, location is mainly examined in view of human movement across space and raw material resource exploitation. Ras il-Pellegrin, a particularly good example, is located on the promontory of Fomm ir-Rih. This archaeological site is in close proximity to several other Late Neolithic sites and clearly forms part of

a ‘connected’ landscape. This relationship will be explained in the following section, followed by a thorough analysis of the lithic assemblage. Finally, the author will attempt to highlight the relation between lithic assemblage and their context in terms of site location.

THE SITE AND THE LOCATION

The late Neolithic period in the Maltese Islands is characterized by a cultural divergence (Trump 2002: 69) from agricultural communities living in open settlements - Skorba (Trump 1966) or cave sites - Ghar Dalam (Trump 2002: 56-57) with apparently simple rank societies to a structured community that built large megalithic structures probably meant for ritual purposes (Trump 2002). These so-called temples are distributed across the Maltese Islands in at least thirty-three sites (Evans 1959: 84). The majority of the ‘temple’ sites are made up of monumental megalithic structures that vary little in form, with a few exceptions such as Tal-Qadi and Borg in-Nadur (Trump 2002: 89).

The distribution of these late Neolithic sites, appears to be best explained in the way groups of ‘temples’ appear to cluster in certain geographical locations (Trump 2002: 90). In the 1970s, Renfrew had already commented on the evident grouping of late Neolithic sites (Renfrew 1973: 153), such as in the Grand Harbour, Marsaxlokk-Birzebbuga or even in the Mgarr area. Through recent studies, a theoretical shift has been proposed (Grima 2001, Grima 2008, Grima 2009). By highlighting the landscape importance and influence on the archaeological record, Late Neolithic monuments can be contextually understood as part of a wider culturally constructed inter-relationship of sites

As suggested by Grima ‘… the Maltese landscape and ease of movement across it varies dramatically …’ (Grima 2008: 37). The theoretical movement of phenomenological approach to landscape (Tilley 1994) has led the present author to attempt shifting this study from a simple analysis of lithic tools to a more detailed and macro-landscape consideration of what the assemblage truly means in a wider context. Furthermore, the natural resources that are sporadically distributed across Malta influenced the abovementioned clusters, and therefore, are relevant to the present excercise. Grima proposes that agricultural suitability, fresh water, access to the shoreline and areas of low slope act as site attractors during the Late Neolithic (Grima 2008: 37-38). Furthermore, these site attractors appear to have led prehistoric communities to cross the landscape in specific routes.

In the recent publication of the Xaghra Circle excavations, Grima et alii make mention of processional ways possibly used during the ritual moving of the dead between foci of ritual sites and funerary monuments (Grima et alii. 2009: 60). In their own words, this processional way would have been ‘… a structured passage between Ggantija and the [Xaghra] Circle …’ (ibid.). Furthermore, these megalithic monuments were placed to maximize access to the sea and close to boundaries of major agricultural plains. The present author agrees with much of the above, but would also like to raise a few other observations made from the Ras il-Pellegrin-Mgarr area. It would appear that Late Neolithic communities favoured the placing of their vital monuments in areas of prominence, possibly also meant as a connection to the world beyond (Grima 2008: 38). However, it would appear simplistic to not observe the possible differential function of these seemingly similar monuments. Surely, the manner of construction, ceramic repertoire and material culture appear similar, but inter-variability is observed in lithic assemblages (Vella 2008, Vella 2009). Therefore, if even at the material culture level a difference in relative ‘richness’ and function is observed, then it should seriously be considered that there is the possibility that not all monuments were meant for the same rituals or purposes. It could also be suggested that shoreline sites, such as Ras il-Pellegrin, are not only a connection to the world beyond but in practice also acted as guardian sites. As such, a guardian site requires different rituals (thanksgiving by arriving mariners) and also a varying influx of exotic materials, especially

when compared to inland sites located above the plains (Ta' Hagrat and Skorba). The connection between megalithic sites, as indicated below, was maintained by inter-visibility (or also lack of) and the use of preferential routes dictated by the particular terrestrial conditions, as in the Mgarr area.

As observed by Grima '… northwest Malta is dominated by a series of steep, exposed and rocky ridges, [that are] separated by sheltered and fertile valley bottoms …' (Grima 2008: 38). The known cluster of megalithic sites within a five kilometre radius from Ras il-Pellegrin consists of Ta' Hagrat, Skorba and Kuncizzjoni (Fig. 1). All of the sites appear to have been constructed in the Late Neolithic from the Ggantija until the Tarxien phase, whilst Skorba had been inhabited since the Early Neolithic phase of Ghar Dalam. Ta' Hagrat and Skorba are located in the border of the village of Mgarr and less than a kilometre separates them. The former is nestled in the lower part of the Mgarr area overlooking the fertile area of Ir-Ramlija. Standing in the main entrance of the monument, to the immediate south, is the higher Bingemma ridge that leads to the town of Bahrija. Skorba is located on higher grounds then the former and would have had clear visibility of Ta' Hagrat. The descent to the Pwales plain, another fertile area probably utilized by communities in the area, begins to the immediate north of Skorba. Somewhat detached from Ta' Hagrat and Skorba, yet located close enough, the Kuncizzjoni site is little more than a ruin nowadays. The site was discovered and excavated in 1938 (Trump 2002: 166). Despite the little information known regarding this site, its landscape context is rather interesting. Situated on higher elevation, this site has views of the lower Mgarr plain as well as the sea. A considerable quantity of pottery was recovered (ibid.) and dated to the Tarxien phase.

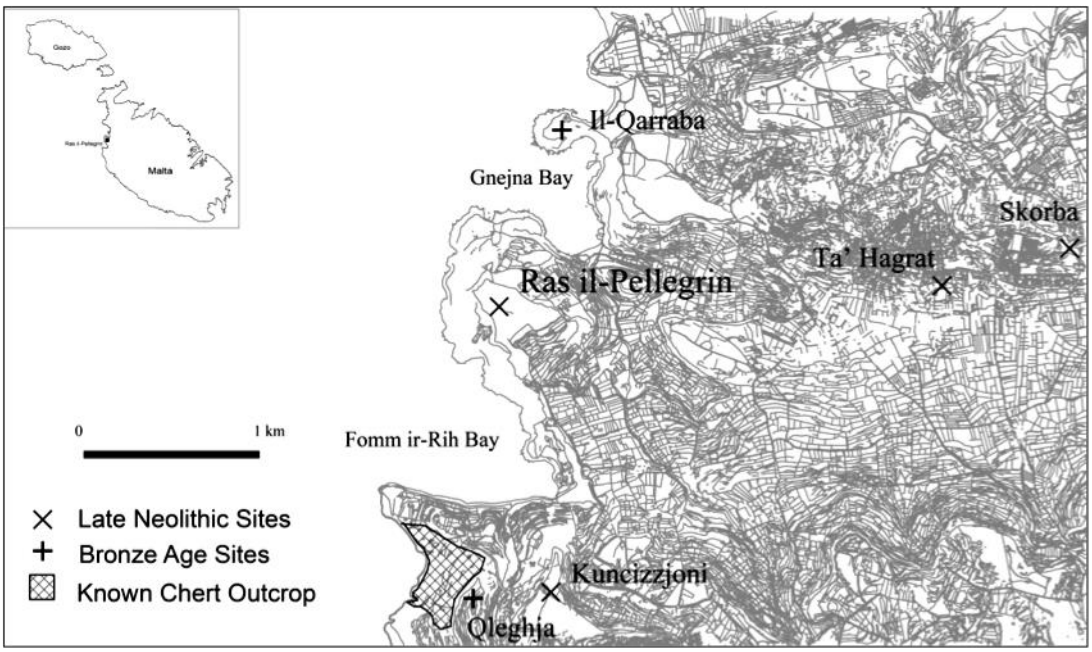

Fig. 1 - Map indicating the location of Late Neolithic and Bronze Age sites in the area of Ras il-Pellegrin. Also indicated is the known chert outcrops identified by the present author.

Ras il-Pellegrin is situated on a promontory that overlooks two bays; Fomm ir-Rih bay and Gnejn Bay. The promontory is topped with Upper Coralline limestone and seeping Blue Clay has now slipped to the shore exposing some Globigerina limestone (Cooke 1853: 158-159). Despite that little is known about the discoveries made during the 1970s, it appears that large blocks were uncovered along with significant amounts of Late Neolithic ceramics during excavations (personal

communication by Prof A. Bonanno). In view of the little known facts regarding the archaeological excavations, attention has to be shifted to the location of the site. Located overlooking one of the few anchorage bays in northwest Malta (Gnejna bay), the site appears to have been placed according to this physical factor.

Referring to Fig. 2, a schematic representation of the abovementioned sites and Ras il-Pellegrin clearly indicates the locational importance of the site. Even though archaeologists still debate whether control of territory was by cluster of sites or a community per site, it seems logical to suggest that preferential routes where as influenced by topographical situations as by the need for anchorage bay access. Surely, placing a site overlooking two bays is no mere coincidence and must have some effect on the archaeological record (refer to overview section). This argument is supplemented by discussing the chert outcrops observed in the area.

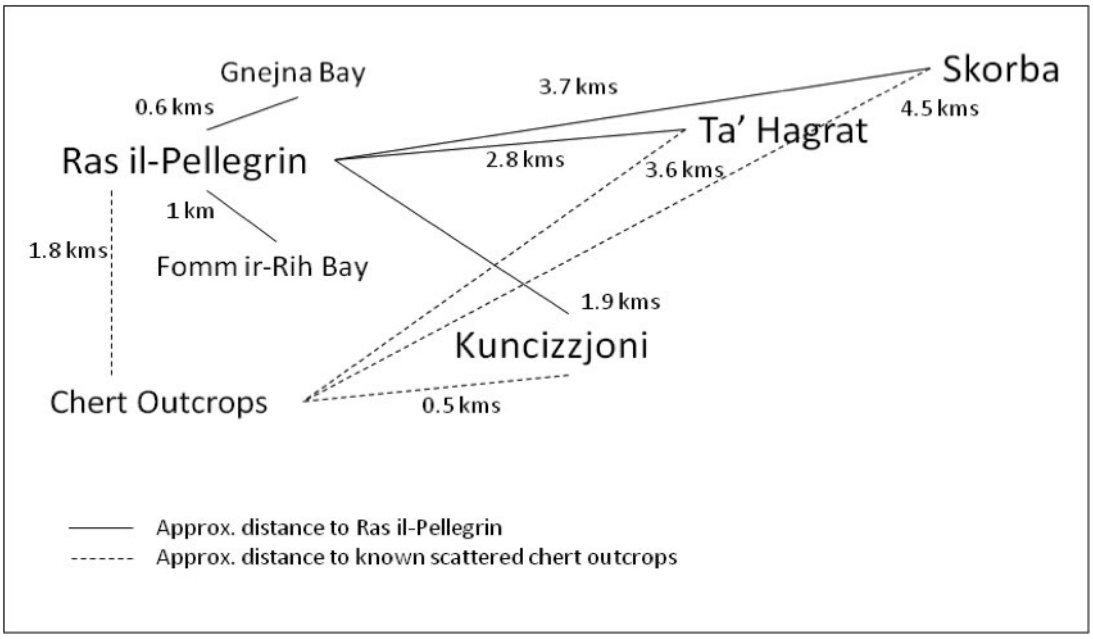

Fig. 2 - Schematic diagram indicating the approximate distance of Late Neolithic sites and chert outcrops as regards to Ras il-Pellegrin (distance is measured as the crow flies).

According to Vella 2009, the northwest region of Malta is so far the only confirmed region of chert outcrops. Despite that other regions of the Maltese Islands should have other chert seams (as yet unconfirmed), the chert outcrops located below the Qleghja hill are the best known (personal communication with Dr D. Trump). Personal surveying of this outcrop notes that the chert seams are scattered throughout the area indicated in Fig. 1 and Fig. 2. Frequently noted as nodules still located within Middle Globigerina deposits, the chert is rarely thicker than 15-20 cm and is more commonly observed in tabular form. In this area and below Ras il-Pellegrin-Fomm ir-Rih Bay, common dislodged fragments are found though their use was surely limited. Through the fleeting mention by Zammit, it also appears possible that other exposed Middle Globigerina deposits in the Gnejna Bay region might also contain chert (Zammit 1929: 16). However, this remains unconfirmed and awaits further field investigation.

Access to these chert outcrops requires hiking over steep surfaces above cliffs. From Ras il-Pellegrin, the route would require descending into the lower Fomm ir-Rih bay and then ascending on the Ras ir-Raheb promontory following the shoreline. The approximate distance of 1.8 km from the Late

Neolithic site to the chert outcrops is misleading considering the difficult terrain and obligation to hug the shoreline to arrive to the destination. Similarly, the trip from Kuncizzjoni to a regional chert outcrop requires the descent from higher grounds into the Bahrija region and then a steep descent below the Qleghja hill. Ta' Hagrat and Skorba require a trip of about 3.6 to 4.5 km. This route would have probably been through the Mgarr plain, down into the Gnjena bay descent, then ascend to Ras il-Pellegrin, and finally following the already mentioned route. It would appear that unless some prior site planning and inter-site cooperation existed, then procurement of local chert would have been a significant task. Thus, considering the terrestrial physical layout, the location of the Ras il-Pellegrin site could have been meant to facilitate chert procurement and withhold control of the anchorage bay.

THE LITHIC ASSEMBLAGE

The 1970s excavation at the site of Ras il-Pellegrin yielded a limited lithic assemblage [1]. From the seventy-two lithics analyzed, the majority of lithics were made from imported flint at 74% (n=53), followed by local chert at 26% (n=19) (Fig. 3). From the lithics collected from Ras il-Pellegrin, no obsidian fragments were encountered during the analysis. However, this lack of obsidian is compensated by a wide array of flint types of varying colours and grains. Despite that colour does not necessarily imply a different source when it comes to sedimentary or metamorphic rock types, the array of flint specimens collected from Ras il-Pellegrin is unique and unparalleled at the nearby sites of Ta' Hagrat and Skorba. From the collected assemblage, the imported flint lithics are generally of a finer grain and lack visible impurities. The local chert assemblage is limited and typically of a rough grain, as is the chert in the nearby area of Ras ir-Raheb and Il-Qleghja.

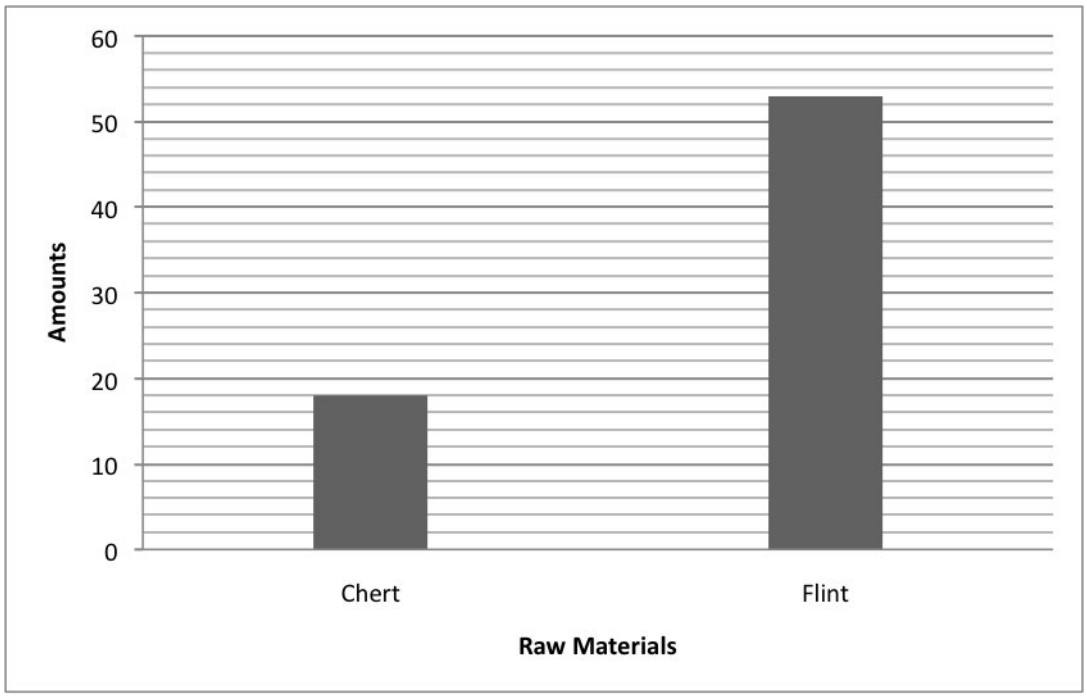

Fig. 3 - Chart indicating the amount of chert and flint lithics observed.

Attempting to move clear from strict typological set-ups in lithic studies is difficult, and the Mediterranean has its fair share of such 'traditional' studies. Italian literature, outlined by Laplace, is

to this day geared towards the method of analysis and attempts to categorise all lithics according to numerous types and sub-types (Laplace 1968). Attempting to present another alternative classification, the present author has taken up a bilateral manner of classification based on morphology and inferred function (Andrefsky 1998; Odell 2004). Interestingly, this type of classification is similar to the work proposed by François Bordes (Bordes 1981: 11-12).

Tool Types	Chert		Flint	
	n	%	n	%
Flake Shatter	10	14	13	18
Proximal Flake	0	0	0	0
Bulky Shatter	0	0	0	0
Unimarginal Flake	8	12	38	35
Bimarginal Flake	0	0	18	13

Table 1 - Morphological tool Types.

Morphological study classifies lithics according to generic shape types, which can be found in any lithic assemblage. Inspired by the work of Andrefsky, this system is sub-divided as tools and non-tools. The sub-categories of tools are unimarginal and bimarginal tools, referring to the presence of intentional edge retouching on a singular edge for the former and multiple edge retouching for the latter. The non-tools are sub-categorised as flake shatter (no striking platform), proximal flake (striking platform is present) and bulky shatter (large pieces). This particular mode of classification allows for an adequate overview of not only the tools but also the non-tools, also referred to as débitage.

The morphological division of the current lithic assemblage reveals some anomalies, particularly in light of the lithic assemblages already analysed in nearby Ta' Hagrat and Skorba. The non-tools are almost non-existent. As indicated in Fig. 4, no proximal or bulky shatter lithics were observed within the assemblage. On the other hand, flake shatter is in lesser quantities than the unimarginal and just higher than the bimarginal flake tools. These flake shatter pieces amounting to 32% of the assemblage are predominantly made from imported flint (n=13), followed by chert (n=10). In comparison the Late Neolithic site of Ta' Hagrat, the flake shatter pieces took up 48% of the whole assemblage (Vella 2009b). At Ras il-Pellegrin the lack of débitage within an area might indicate the manufacture of lithics occurred outside the ritual zone. However, even if such an activity was being conducted outside of the structure, one would naturally expect at least a minimal presence of proximal flakes and bulky shatter. In fact, this was observed in both the Eastern and Western megalithic structures at Skorba, where flake shatter was higher whilst proximal flakes and bulky shatter was present in both structures (Vella 2009a). Therefore, it becomes natural to suspect a possible selection of the lithic material by the excavators.

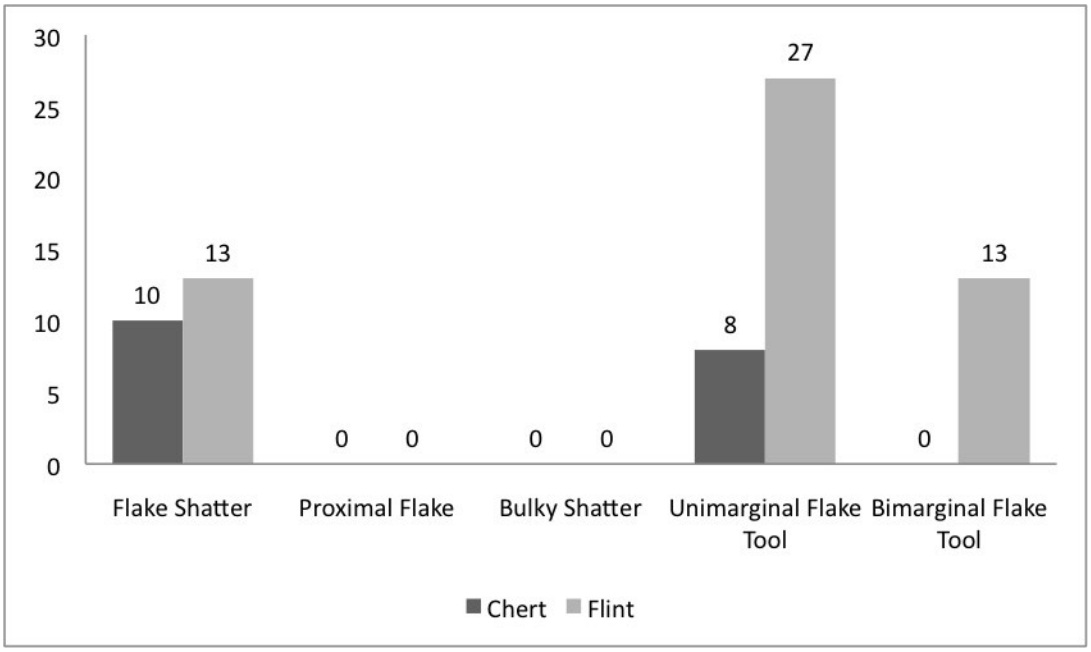

Fig. 4 - Chart showing the morphological tool types at Ras il-Pellegrin.

The lithic tools at Ras il-Pellegrin are mostly unifacial, thus all retouch is located on a single surface (typically on the dorsal side) and is also mostly unimarginal. Unimarginal tools are observed at 49% of the entire assemblage, with flint being more present (n=27) than chert (n=8) (Fig. 5). The majority of the lithic tools exhibit intentional edge retouching (75%). As shall be examined later in the text, there is a correlation between the presence of retouch and the type of activity the lithic tool was used for. The retouch appears to have been applied in the areas meant for contact to the tool's edge as indicated by the fact that no retouched unimarginal lithic is below 40% of retouching per used side and not above 75% (51% average). At Ras il-Pellegrin, retouching appears to been applied more on the local chert than the imported flint unlike at Ta' Hagrat and Skorba which exhibited the opposite trend during analysis by the present author (Vella 2009a and 2009b). Considering the immediate vicinity of chert nodules to the site at Ras il-Pellegrin, it appears plausible to infer that whatever chert entered the site had already been selected and prepared outside the excavated area. In the case of unimarginal flint tools, the predominant retouch appears to have been irregular (55%). Irregular retouching is characterized by a lack of pattern and is mainly applied in limited areas of the lithic tool. Chert tools, on the other hand, have an equal presence of irregular (37%) and invasive (37%) retouching.

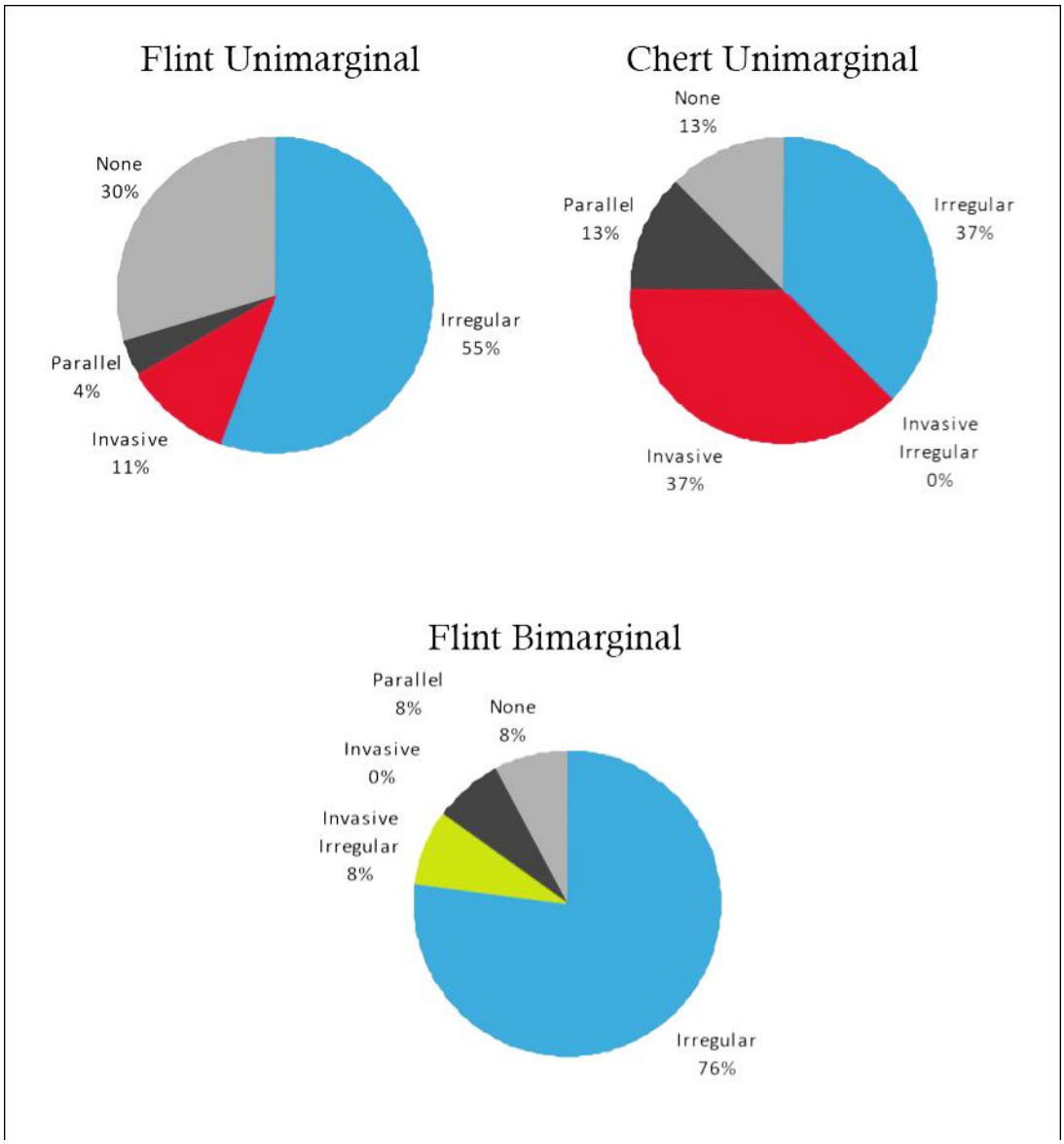

Fig. 5 - Chart indicated the retouch (or lack of) observed in lithic tools according the raw material.

Bimarginal tools were observed at a lower amount (n=13) than the unimarginal counterparts and were only made from flint. The lack of chert bimarginal tools is an interesting omission that will need to be compared to other sites in near future studies. Bimarginal tools are usually associated to specific tasks and tend to be formally-made than any other implements. This observation is justified through the rate of intact distal ends for bimarginal tools (11 out of 13), whereas unimarginal tools have a higher incidence of broken terminations indicating a 'rougher' knapping process or a heavier use. As indicated in Fig. 5, the retouching observed is mainly irregular (76%). Unlike the unimarginal retouched tools, retouch on bimarginal tools tends to cover a longer area of the margins. Considering the excess energy put into manufacturing these lithics, it is not surprising to frequently observe signs of edge rejuventation and exhausted edges.

Since microwear edge studies have not yet been applied to Maltese lithics, we are still dependent on functional analysis being carried out macroscopically. Lithic functional analysis tends to be assessed from a typological point of view. Works influenced by the New Archaeology theoretical premise,

particularly during the 1960s and 1970s, were geared towards typological studies. By categorising typical attributes in artefacts and sub-dividing them accordingly, lithic tool types known to us today were inferred through ethnographic parallels and replication. This system was particularly enhanced in the Mediterranean region by the seminal work of Laplace in 1968. His influences can be seen through his suggested grid-system of classifying lithics in later reports by other archaeologists who took up his system mainly in Paleolithic excavations. However, this manner of classifying lithics suffers greatly in the Maltese scenario (and I suggest any island system). Primarily due to the limited avalability of raw materials and the general decreased tool variability as from the Neolithic period, Laplace's system is unfavourable and would discrimante against a less formal toolkit, such as the case in Malta. As suggested during an MA undertaken at the University of Malta by the present author, it would be more productive if we focus on categorising lithic tools according to their inferred edge motion. Further revised in a recent article on the toolkit of Ta' Hagrat, these edge motions have now been simplified (Tab. 2).

Scraping	Cutting	Serration	Perforating	Variable
Scraper	Blade	Backed Blade	Awl	Unretouched Flake
All round scraper		Knife	Burin	Cleaver
End-scraper		Dagger	Drill	Unidirectional Core
Transverse end-scraper			Projectile Point	Multidirectional Core
Side scraper				

Table 2 - Simplified functional tool types classified according to edge motion.

These sub-divisions have been carried out according to tool types observed in the Maltese lithics analyzed so far. It is fully expected that a reshaping and further revision of this system will be necessary, particularly in the examination of other island systems. Hopefully in future re-evaluation of this system, lithic tools will be analysed on a microwear level so as to ensure validity of the results. This is particularly important in view of the results that are now being achieved beyond Maltese shores by microwear analysis.

At Ras il-Pellegrin, tools made from chert amount to 17% (n=8) of the whole assemblage, whereas flint makes up 83% (n=39). Perforating implements are a minority of the entire assemblage. At 10.5%, the perforating implements are 8.5% awl/burin (Fig. 8 n. 5) (chert=2.5% and flint=6%) and 2% is taken up by a flint drill (Fig. 8, n. 1). These implements, particularly the flint examples, are heavily retouched and show signs of edge exhaustion as a primary cause for discard. Three out of the five perforating implements have a prominent beak, which should definetly be earmarked for microwear analysis. From a functional point of view, it would be assumed that such beaks were utilised to crack or open material, such as shell. All of these lithics are relatively small, not longer than 4.0 cm and not wider than 2.5c m. The only drill observed in the assemblage measures 3.6 cm by 1.3 cm and are made from flint. These tools are evidently well-used as indicated by the grooving evident on both margins due to a probable drilling motion.

Implements falling under the category of scraping are sub-divided according to their morphological layout as all round scraper, end scraper, side scraper, scraper, transverse scraper or thumb scraper (Fig. 6). In total, the scraper implements at Ras il-Pellegrin account for 53% of the entire assemblage (chert=4, flint=21). All round scrapers, being bimarginally retouched implements, are examples of well-made lithic tools and were all made from imported flint (n=5) (Fig. 8, n. 3). The all round

scrapers average at 3.7 by 2.8 cm and are semi-circular with extensive retouching. Despite that all of the retouching observed (except in one case) is irregular, their layout appears relative to the intended tool use. The retouching is applied unifacially on the dorsal surface and tends to be deeper than any other tool present at the site. Considering that the presence of cortical skin on all round scrapers is relatively common, even in other Maltese sites, it would appear that these lithics were being produced from a reductive sequence. This means that a certain amount of cortical skin was still present on imported flint when they arrived at Ras il-Pellegrin. This is crucial considering that space on boats was limited and any excess weight should logically have been shed a priori.

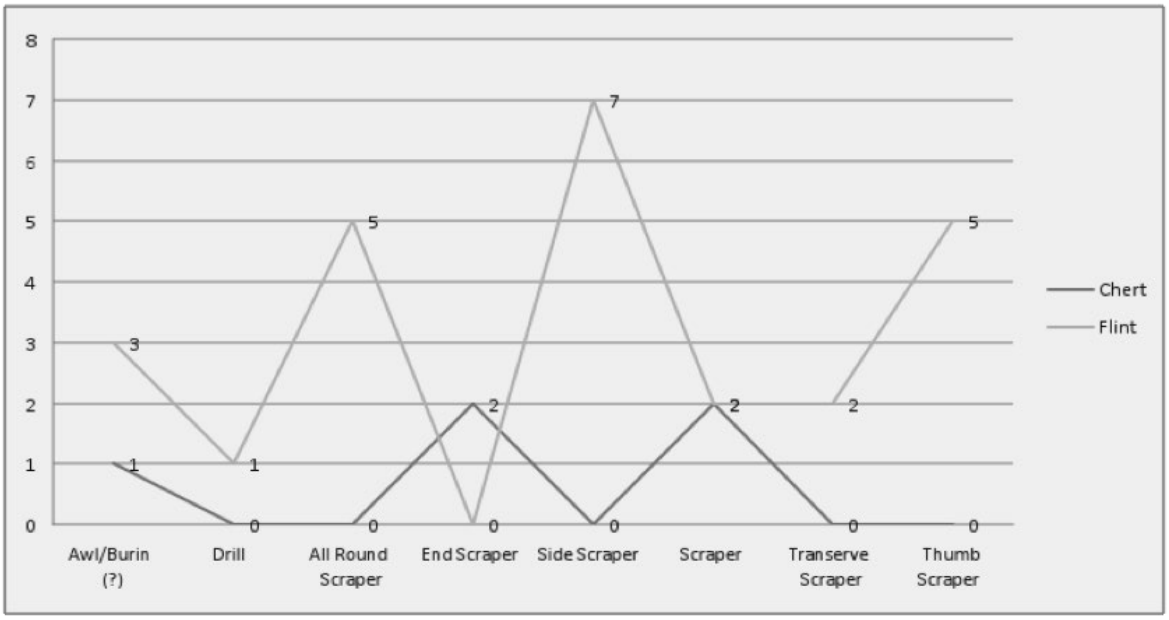

Fig. 6- Chart showing the retouched tool types observed.

The condition of these lithics varied. In two instances, the edge retouching was tentatively rejuvenated. However, due to the steep edge angle, only a partial rejuvanation of the retouching was possible and further retouching was abandoned. One of these lithics requires further description. This all round scraper, measuring at 5.1 cm by 3.8 cm, is made of a fine grain medium brown flint. At the proximal end, the lithic appears damaged through a prolonged hafting on to a composite tool.

End scrapers amount to only two chert pieces, making up 4% of the entire assemblage. An end scraper is an elongated type of implement with retouch applied to the tip of the tool. These tools appear to have been hand held and used for scraping hardier material than most other scraping types. The examples found at Ras il-Pellegrin are 3.3 by 3.2 cm and 2.3 by 2.5 cm and made from a granular strain of chert. Their retouch is irregular, unifacial and not rejuvenated. None of these tools show any signs of hafting.

The observed side scrapers on the other hand are all made of flint (n=7) and make up 15% of the lithic tools. Averaging at about 3.0 by 2.3 cm, these lithics are predominantly broken at their distal end as a consequence of use. The side scrapers from the Maltese Islands, including the examples at Ras il-Pellegrin, tend to be big enough to be hand held and rarely show any signs of hafting. Intentionally retouched on a singular margin, these tools appear to have been used in scraping motions (Fig.8, n. 2). Their retouch is mostly irregular (n=5) with one case of parallel and invasive retouch each. The retouch would seem to have been dictated by the steepness of the edge. In some cases, edge

rejuvenations was undertaken as far as the steep edge would allow or as long as the tool did not fracture through use.

As a means to differentiate between the several morphologies of scrapers present in the Maltese Islands, a generic scraper type is attributed to pieces that have no predominant morphology but were still used for scraping activities. Taking up 8% of the lithics tools at Ras il-Pellegrin, this category is made up of two chert and two flint scrapers. The 2 chert examples are unimarginal with irregularly applied retouch. These tools average at about 2.7 by 2.9 cm and are made of a finer grained chert. Their method of knapping appears expedient and entirely coincidental. The flint appear more complex, such as lithic number 4 which is a unimarginal scraper made from an irregularly shaped piece with unifacial irregular retouch. This tool appears too bulky to have been hand held. However, no identifiable signs of hafting were noted during analysis. The final flint scraper has no parallels in other Maltese assemblages analysed so far by the present author. Peculiarly triangular in shape, this lithic appears heavely used as indicated by the blunt edged. The lithic must have beeen used on a hard material, that would be best indicated by a microwear analysis in the future. The lithic measusers 4.7 by 5.2 cm and 1.9 cm in maximum thickness.

Transverse scrapers are made from flakes that are wider than long and appear and have usually appeared in small numbers in other sites, such as Ta' Hagrat and Skorba. Amounting to two flint pieces (4%) the examples from Ras il-Pellegrin average at 2.5 by 3.3 cm. These lithics are rather simple and lack any particular attributes.

On the other hand, thumbscrapers are a consistenly present scraper type in Maltese lithic assemblage. Made from flint (n=11) and amount to 11% of the tool total, these lithics are an interesting facet of the local prehistoric toolkit. These scrapers are referred to as 'thumb scrapers' due to the inference that these lithics can be held simply with a thumb and are of small dimensions. Averaging at 2.4 by 1.8 cm this scraper type is evidently smaller than all of the other scrapers mentioned above. The thickness of these lithics is also below the other types and does not range above 0.6 cm. Retouched irregularly, these lithics appear to have been discarded after use, and the edges were not exhausted. Indeed, in almost all cases the proximal and distal end still survived. Three out of the five examples observed were retouched bimarginally on a unifacial plane. Evidently, these lithic tools could not have been used on hard materials and appear to have not been used over a prolonged period of time.

Tools based on blade technology make up 36.5% of the tool total at Ras il-Pellegrin (Fig. 7). In this work, blades are separated into four sub-divisions: backed blade, blade, denticulate flake and unretouched flake. Backed blades are distinguished by the retouching applied to a singular margin. Usually, the unretouched margin remains purposely blunt to allow for the tool to be hand-held. The backed blades from Ras il-Pellegrin amount to eight, of which flint (n=6) is more present than chert (n=2). As observed in other archaeological sites, backed blades tend to be manufactured from flakes broken through knapping without any previous planning of the end result. This is observed through the presence of cortex for the flint examples (4 out of 6). Their retouching is irregular and only applied on the areas meant for contact (Fig.8, n. 8). These lithics would seem to have been used for cutting motions on medium to hard materials, unlike the blade types which appear meant for cutting of soft to medium materials. Averaging at about 3.3 by 2.1 cm these backed blades are frequently broken in the distal end. The blades observed in this assemblage only make up 4% of the entire tools, a trend lower than any other archaeological site analyzed so far. Blades are distinguished by their lack of edge retouching. However, the two flint lithics observed are smaller and averaging at 3.0 by 1.8 cm and without any retouching (Fig.8, n. 4).

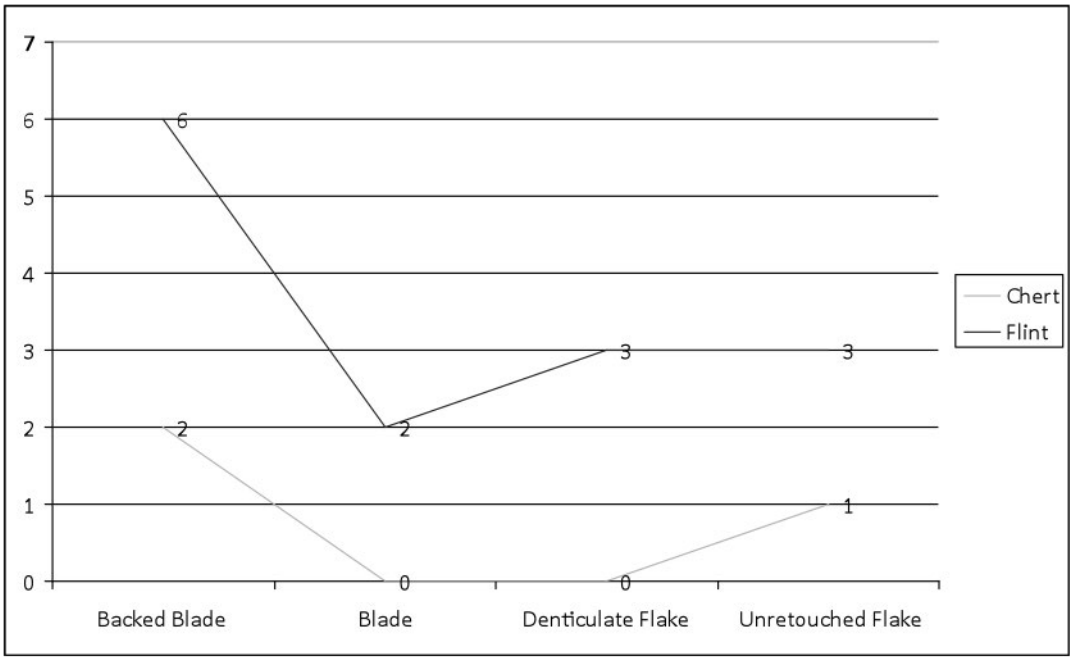

Fig. 7 - Chart showing the unretouched flake based tools observed.

At 6% the denticulate flakes are expediently made tools exhibiting apparent notch/es presumably through repetitive use of a localized part of the margin. All made from flint, these tools have had their notchings initiated by the knapper purposely. Averaging at 3.1 by 2.2 cm, the unimarginal denticulate flakes appear to have been hand held and show no signs of hafting. Despite some evidence of gloss these lithics are mostly intact and appear to have been utilized on a soft material, presumably plant.

Unretouched flakes are distinguished from flake shatter (débitage) on the principle of a possible used edge. These lithics are not entirely considered as tools but could have very well served a purpose, although a probable short one. Surprisingly at Ras il-Pellegrin, unretouched flakes are at a low count. Flint is more present in three examples, whilst chert was observed only in one instance. These examples present the typical aspects of unretouched flakes, lacking any geometric style and no edge retouching whatsoever.

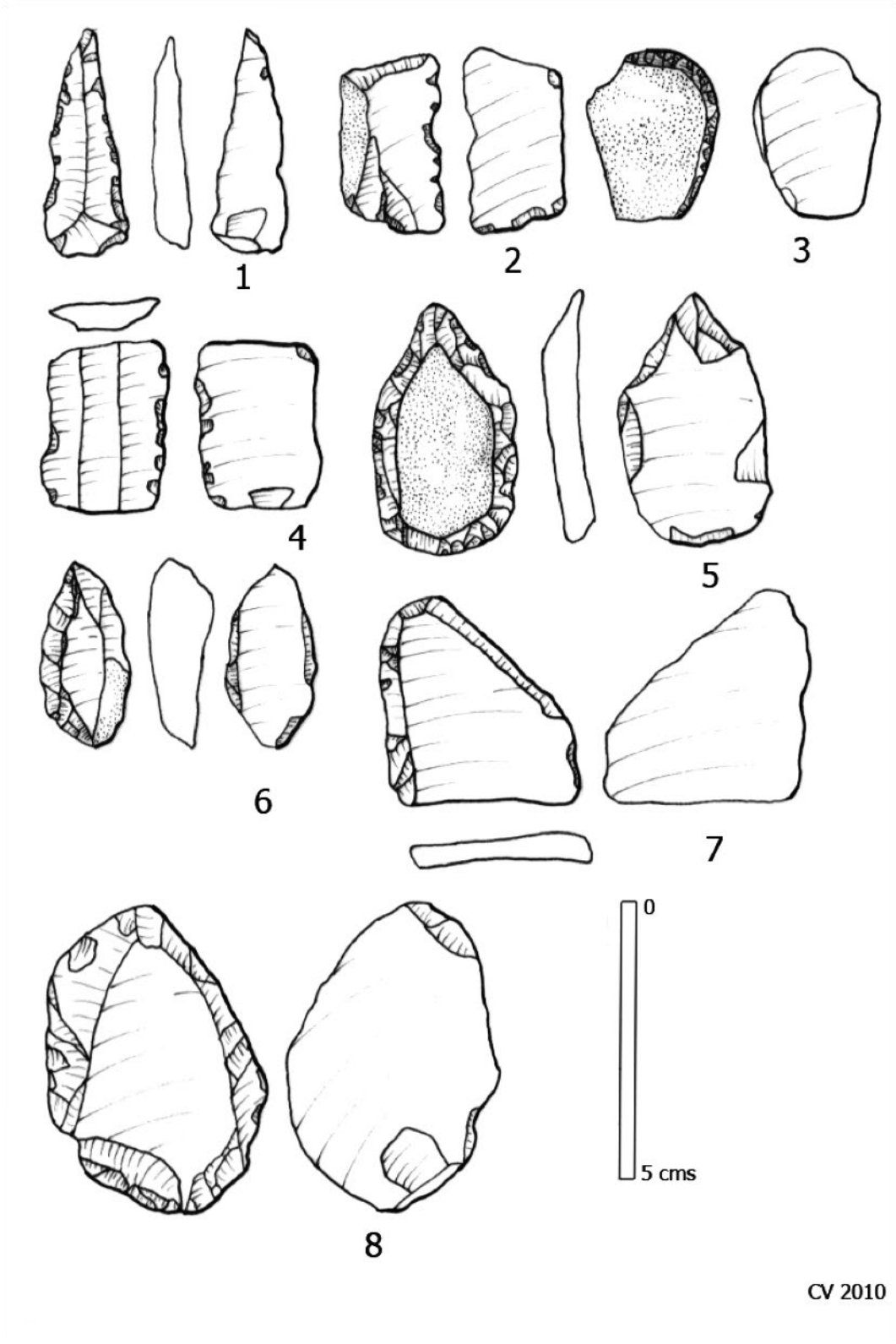

Fig. 8 - A selection of lithic tools observed during the analysis.

Tool Types	Chert		Flint		Total	
	n	%	n	%	n	%
Awl	1	2	3	6	4	8
Drill	0	0	1	2	1	2
All Round Scraper	0	0	6	13	6	13
End-scraper	2	4	0	0	2	4
Side Scraper	0	0	7	15	7	15
Scraper	2	4	2	4	4	8
Transverse Scraper	0	0	2	4	2	4
Thumb Scraper	0	0	5	11	5	11
Backed Blade	2	4	6	13	8	17
Blade	0	0	2	4	2	4
Denticulate Flake	0	0	3	6	3	6
Flake Tool	1	2	3	6	4	8

Table 3 - Functional tool types.

		CORTEX		Total	
Raw Material	Absent	Dorsal +50%	Dorsal -50%	n	(%)
Flint	28	13	13	54	75
Chert	15	1	2	18	25

Table 4 - Percentage of cortical skin observed.

OVERVIEW OF THE RAS-IL-PELLEGRIN ASSEMBLAGE

The assemblage analyzed from the archaeological site of Ras il-Pellegrin raises two issues. First, the apparent absence of certain tool types, and especially knapping waste, indicates a possible selection of the lithic assemblage by the excavators. Also, we lack the contextual discovery of these artifacts in relation to the site. The assemblage, however, does give a few surprises in comparison to nearby Ta' Hagrat and Skorba, particularly in light of Late Neolithic raw material availability and movement.

Maintaining a trend seen in other sites, the recovered quantity of flint in Ras il-Pellegrin completely overshadows the local chert. In the case of Ras il-Pellegrin this trend can be seen as an 'anomaly' particularly in view of the close proximity of chert outcrops (Andrefsky 1994) in the Fomm ir-Rih bay area and il-Qleghja promontory. This trend can be explained through two observations. First, it appears reasonable that such a low incidence of chert in this site might have been impacted negatively by a selection of lithic artefacts. However, another explanation might be entirely dependent on human-based factors and decisions. The close proximity to one of the few anchorage bays on the northwestern coast of Malta might suggest that a higher influx of imported raw materials was passing through the archaeological site of Ras il-Pellegrin [2]. Such a presence might also shed some light on the site function itself. Clearly, Late Neolithic sites in the Maltese Islands can be distinguished on grounds of their physical location. Sites such as Ta' Hagrat and Skorba where placed in prominent areas overlooking areas of agricultural worth. On the other hand, sites such as Ras il-Pellegrin, Tas-Silg and Xrobb l-Ghagin overlook some of the best anchorage bays found in Malta. It could be suggested, obviously at a preliminary stage, that sites such as Ras il-Pellegrin served a dual purpose.

Mainly, the scope of these sites appears to have been ritualistic. However these sites could have also been placed intentionally as a way of controlling or 'guarding' entry into the surrounding area or the 'island hinterland'. One cannot resist but make an analogy between these prehistoric coastal sites and early modern seaside chapels found in Malta. In the early modern age chapels benefited from the donations and patronage of sailors who gave their thanks for their successful return in these chapels after sea voyages. Even though we cannot go as far as claiming raw material to have been a thanksgiving, it does appear interesting to note the comparisons between their familiar physical contexts.

Another important question is how flint was being transported from Sicily. Through the presence of cortex on the dorsal surface of lithics, archaeologists can debate the arrival state of raw materials into the site. According to the percentage of cortical skin still covering the dorsal surface, the lithics were sub-divided as absent (tertiary flake), dorsal -50% (primary flake) and dorsal +50% (secondary flake). At Ras il-Pellegrin the tertiary flakes makeup the majority observed during analysis (Fig. 9). Primary and secondary flakes are observed both at thirteen implements in the case of flint. In other sites, such Ta' Hagrat, there is a gradual fall from tertiary to secondary flakes and finally down to primary (Vella 2009b). Such a gradual pattern indicates that flint was either being introduced into the structure prepared and finalized (with knapping being carried outside) or else flint was being introduced into the site already prepared prior to the sea voyage from Sicily. The analysis of Ras il-Pellegrin beckons a third suggestion. If the lithic assemblage was not selected, and the assemblage is indeed representative of the archaeological activity carried out, then the imported flint was arriving as unprepared cores. This can be explained as a result of the close proximity of the site to an ideal anchorage bay. Therefore, it would be logical to argue that the eventual archaeological record is a direct consequence of the site location.

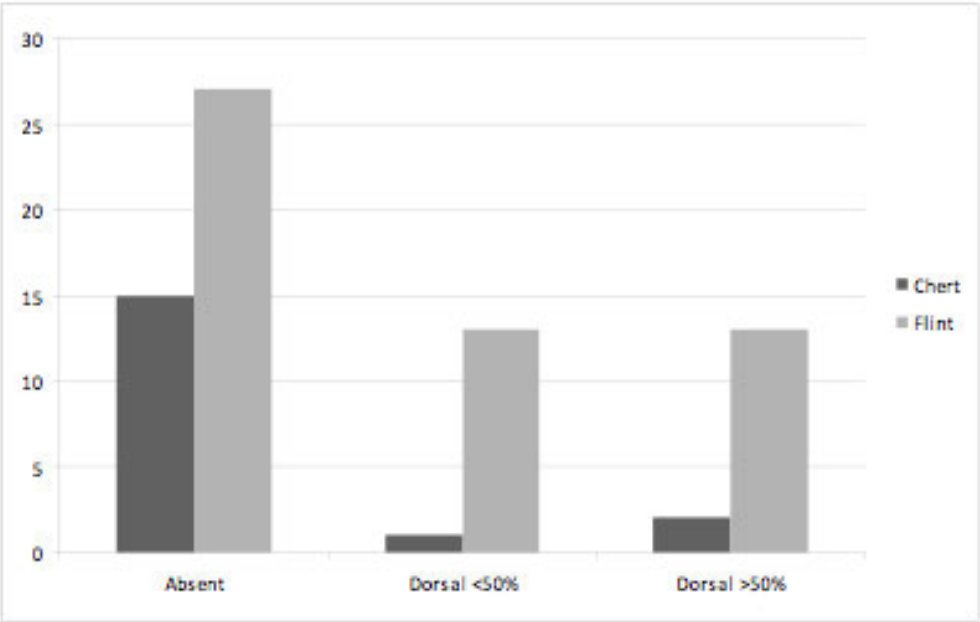

Figure 9 - Percentage of cortical skin.

The promontory of Fomm ir-Rih, on which Ras il-Pellegrin stands, overlooks the bays of Fomm ir-Rih and Gnejna. The former, despite being a bay, has a limited access to the island interior areas of Mgarr or Bahrija and requires much more energy to be expended for movement rather than at Gnejna Bay. In 1929, T.Zammit claimed that '…chert is to be found native in the lower slopes of the Jneina

Hill and therefore easily obtained by the workmen …' (Zammit 1929: 16) tentatively linking this area to the sites of Ta' Hagrat and Skorba in the Mgarr area. It could be suggested that the first point of disembarkment from sea vessels on the western shores of Malta occurred at the bay of Gnejna. The higher occurrence of cortex on imported flint and the nearby location of exposed chert outcrops in Middle Globigerina limestone would have meant that:

- flint was first arriving at Ras il-Pellegrin rather than the inland sites of Ta' Hagrat and Skorba;

- this was followed by either a redistribution of the procured raw materials amongst communities or else transported to the nearby sites of Ta' Hagrat and Skorba;

- the lack of chert lithics at the site could indicate that the site was visited for ritual reasons, probably related to sea travel, and the procurement of chert was meant to supply the nearby sites located in the Mgarr plain.

These interpretations would place the Ras il-Pellegrin as a 'transitional' site located between the coastal zones and providing access to the populated island interior. Despite this interpretation being tentative, this would mean that the Late Neolithic landscape in Malta was made up of coastal sites overlooking anchorage bays, through which imported artifacts arrived after the successful conclusion of voyages between Malta and the outside. Possibly, these coastal sites could not only have acted as landmarks from the sea but also as hosts to rituals related to the conclusion of a voyage from the outside. Artefacts and the people involved in the voyage could then resume their arrival into their actual homes located in Malta's island interior. This model obviously requires further revision and verification. However, the link between sites and the landscape that they occupied was evidently active and conscious, resulting in routes that connected these sites together.

CONCLUDING REMARKS

The analysis of the lithic assemblage at Ras il-Pellegrin opens our eyes to the interpretational possibilities which artefact analysis can yield. As an assemblage evidently linked to site use, we can deduce that the location of Ras il-Pellegrin helped into yielding a higher occurrence of imported flint at the site. This trend is evidently higher than other sites studied so far, which were located in the Maltese Islands. The lack of obsidian in a site dated as Late Neolithic once more seems to indicate that the importation of obsidian into Malta was over and possibly done with by the Late Neolithic. However, considering the ongoing progress of this island-wide exercise, it could also be that obsidian is lacking at Ras il-Pellegrin quite by chance. Regrettably, only further analysis will tell. Clearly, the question of identifying local chert and imported flint also remains a crucial question that requires further testing. Despite the identifiable distinction between the two raw materials, an absolute sourcing is required and will hopefully be tackled in the near future.

Furthermore, the associative use of landscape and artefacts indicates a need for further contextualization of assemblages not only on a site level but also on a wider regional level. After all, if any site is a reflection of the relation between humans and landscape, then artefacts are a consequence of all.

NOTES

[1] Unfortunately, the archaeological excavations were never published and the diaries related to this site are as yet untraceable and unavailable.

[2] A trend possibly replicated by the site of Tas-Silg in the Marsaxlokk bay area.

AKNOWLEDGEMENTS

Access to the lithic assemblage was provided by the Department of Archaeology and Classics at the University of Malta. In particular, I would like to thank Prof A. Bonanno who was graceful enough to suggest this assemblage and kindly answered some of my early questions regarding the excavations. I am also thankful for the help provided by Raquel Ozanich-Vella who reads my various drafts and provides vital corrections. My sincere gratitude goes to Prof A.Cazzella, Dott.sa G.Recchia and Dott M.Moscoloni who supervised my research tenure at the Universite degli Studi di Roma 'La Sapienza'. Finally, my deepest gratitude goes out to Dott M.Moscoloni and Dott.sa G.Recchia who gracefully went over the draft and gave vital pointers. This research was partially written during a tenure of a research grant kindly provided by the Ministero degli Affari Esteri at the abovementioned institution.

REFERENCES

Andrefsky, W. Jr. (1994) Raw Material availability and technology. American Antiquity, 59, 21-34.

Andrefsky, W. Jr. (1998) Lithics: macroscopic approaches to analysis. Cambridge: Cambridge University.

Bordes, F. (1981) Typologie du Paléolithique ancien et moyen. Paris: Editions du centre national de la recherche scientifique.

Cazzella, A. and Moscoloni, M. (2005) Gli sviluppi culturali del III e II millennio a.C. a Tas-Silg. Scienze dell'Antichità, 12, 15-32.

Cooke, J. H. (1893) On the occurrence of concretionary masses of flint and chert in the maltese limestones. Geological Magazine, 346, 157- 160.

Evans, J.D. (1959) Malta. New York: Praeger.

Evans, J.D. (1971) Prehistoric antiquities of the Maltese Islands. London: The Athlone Press

Grima, R. (2001) An iconography of insularity: A cosmological interpretation of some images and spaces in the Late Neolithic Temples of Malta. Papers from the Institute of Archaeology, 12, 48-65.

Grima, R. (2008) Landscape, territories and the life-histories of monuments in temple period Malta. Journal of Mediterranean Archaeology, 21, 1, 35-56.

Grima, R., Malone, C. and Stoddart, S. (2009) The ritual environment: the context of the Circle. In: Malone, C., Stoddart, S., Bonanno, A. and Trump, D. (eds.) Mortuary customs in prehistoric Malta:

excavations at the Brochtorff Circle at Xaghra (1987-94). Cambridge: McDonald Institute for Archaeological Research.

Laplace, G. (1968) Essai de typologie systematique. Ferrara: Annali dell' Università di Ferrara.

Malone, C., Stoddart, S., Bonanno, A., Gouder, T. and Trump, D. (1995) Mortuary ritual of fourth millennium BC Malta: the Zebbug tomb from the Brochtorff Circle (Gozo). Proceedings of the Prehistoric Society, 61, 303-345.

Malone, C., Trump, D., Leighton, R., Dixon, J and Bonanno, A. (2009) The lithic assemblage. In: Malone, C., Stoddart, S., Bonanno, A. and Trump, D. (eds.), Mortuary customs in prehistoric Malta: excavations at the Brochtorff Circle at Xaghra (1987-94). Cambridge: McDonald Institute for Archaeological Research.

Murray, M. (1923) Stone implements from Borg en Nadur. Man, 23, 65-67.

Odell, G.H. (2004) Lithic analysis. New York: Kluwer Academic.

Renfrew, C. (1973) Before civilization: The radiocarbon revolution and prehistoric Europe. Britain: Jonathan Cape.

Tilley, C.Y. (1994) A phenomenology of landscape: places, paths and monuments. Oxford: Berg Publishers.

Trump, D.H. (1966) Skorba. London: Oxford University Press.

Trump, D.H. (2002) Malta: prehistory and temples. Malta: Midsea Books Ltd.

Vella, C. (2009)a An analysis of the prehistoric collections of Tas-Silg (South) and Skorba. M.A Archaeology: University of Malta.

Vella, C. (2009)b The lithic toolkit of Late Neolithic Ta' Hagrat, Malta. Origini, 31, 85-103.

Zammit, T. (1929) Ta' Hagrat megalithic ruins at Mgarr, Malta. Museum Annual Reports, 5-12.