Xrobb I-Għaġin revisited: recovery and discovery

Ruben P. Borg and Reuben Grima

The purpose of the exercise reported here was to establish whether and to what extent the remains of the megalithic building at Xrobb l-Ghagin survive today, as part of a wider discussion of vulnerability of the archaeological resource in coastal environments. This goal has been achieved, through an examination of the archival record created a century ago, and observations of the remains that are visible on the surface of the site today. In addition, an unexpected discovery was made, which promises to shed new light on attitudes to monumentality and its landscape setting in Late Neolithic Malta.

Any discussion of the megalithic remains at Xrobb l-Ghagin must begin with a firm health and safety warning. The site is extremely dangerous to approach, as it lies at the very edge of a deeply undercut clifftop. This was already the case when the site was discovered and excavated a century ago. In the first printed description of the site, it was noted that 'It is clear that a portion of the monument, perhaps the greater portion, was carried away along with the rock on which it was built during the comparatively rapid decay of the cliffs' (Zammit 1915, 2). A more detailed report published shortly after added that '[...] the collapse of the rest [of the megalithic building] may not be very far distant, as it is deeply undermined' (Ashby 1915, 209), an opinion echoed half a century later by Evans (1971, 26). More recently, the site has generally been presumed to have been largely, if not entirely, lost to coastal erosion, even being referred to as a 'destroyed site' (Trump 2002, 189).

History of discovery

The discovery and excavation of the megalithic building at Xrobb l-Ghaġin took place exactly a century ago, during the halcyon days of archaeological exploration of Neolithic Malta. At the turn of the twentieth century, a wave of interest in Malta's prehistory was fuelled first by the realization that Malta's megalithic remains had been created by a prehistoric culture, then by the discovery of the Hal Saflieni Hypogeum. A series of other discoveries and excavations followed. Against this backdrop, the remote headland of Xrobb l-Ghagin witnessed a remarkable gathering of individuals who briefly converged there to collaborate in the exploration of a megalithic structure. The remains were first noted by Mr Carmelo Rizzo, then an architect in the Department of Public Works. On 10 April 1913, he accompanied Themistocles Zammit, then Curator of the Valletta Museum, to the location (Zammit n.d., 45). Zammit's note book entry shows that the layout of a part of the complex could be made out even before the excavation commenced: "[...] the ruins consist of a number of large stones forming probably a circle. At the very edge of the cliff two uprights are still seen broken at the level of the surface. These upright slabs have parallel faces and must have formed an entrance [...]' (Zammit n.d., 45). In December 1914, a brief excavation campaign was undertaken with the assistance of Dr A.V. Laferla, a Captain in the King's Own Malta Regiment (Ashby 1915, 210) and later Director of Education, '[...] who was for a time encamped in the vicinity' (Zammit 1915, 2). This excavation campaign, which extended into January 1915, revealed the core of the megalithic complex, including the monumental paving and

Xrobb l-Ghagin revisited: recovery and discovery

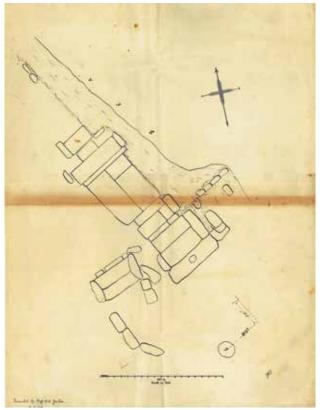


Figure 1. Plan of first phase of excavation of Xrobb I-Għaġin megalithic remains, held in the archives of the National Museum of Archaeology, Heritage Malta.

'dolmenic niche' on the principal axis of the building (Zammit n.d., 104-105; Zammit 1915, 2). The carefully finished and decorated megalithic slab that roofed the 'niche' is today displayed in the National Museum of Archaeology. The archives of the same Museum hold an undated plan of the site which bears a note saying 'Presented by Prof. R.V. Galea. 12.2.49' (Fig. 1). Galea was a young architect at the time of the excavation, who was later to serve as Rector of the University of Malta, helming it through the difficult period of the Second World War. The plan in question appears to be a measured drawing, first drawn in pencil, perhaps on site, and then redrawn in ink. While it is unclear if it was drawn by Galea himself, here it will be referred to as the Galea plan. The plan was probably drawn during this first campaign, as the extent of the megalithic remains shown closely matches the extent of excavation in the written record and in the photographs dated January 1915, held in the archives of the National Museum of Archaeology.

A second excavation campaign was undertaken over ten days in May 1915, under the supervision of Thomas Ashby, then Director of the British School at Rome (Ashby 1915, 210). The knowledge of the site

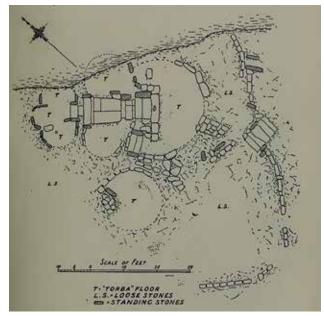


Figure 2. 'Plan of Neolithic Remains at Xrobb I-Ghagin on the East Coast of Malta, surveyed in May 1915' (Ashby 1915, 209).

that has come down to us in the published record is entirely the result of these two brief campaigns. The results of the second campaign were published in a brief but informative report (Ashby 1915), which included a plan of the extent of the megalithic remains revealed by the end of that campaign (Fig. 2). A curious detail is that while the report repeatedly refers to 'chamber A' and 'chamber D', neither label appears on the plan in the same report. A sketch-plan in Ashby's notebooks, held at the British School at Rome clarifies matters, as it refers to the semi-circular enclosure as 'A', and to the southernmost chamber of the apsidal building as 'D'.

The description provided by Evans (1971, 26-27) is clearly a summary based on this report and that in the Museum Annual Report. The plan provided by Evans is also redrawn from that in the Ashby 1915 report, with some simplification. Practically all subsequent publications that have included a plan of the site have redrawn or copied Evans's version of the plan, with some loss of detail. Likewise, most discussions of the site subsequent to Evans's (1971) have been based on his description. One important characteristic of the megalithic building is that it is located on steeply sloping terrain. As noted in Ashby's report, '[...] owing to its situation it does not altogether conform to the normal plan' (1915, 210). Descriptions of the site from Evans onwards have noted that the semicircular enclosure at the heart of the complex, and the more linear wall along its SE end, and the traces of an

external wall beyond it, do not conform to the typical plan known from other complexes, without however making any reference to the topography. This point will be returned to below.

Relocating the site

The first difficulty faced by anyone trying to reconcile the record of the site with the remains that may survive there today is that the plans created in 1915 do not include any external reference point apart from the position of the cliff-edge itself, which of course could not be treated as a stable reference point. The position of a well is plotted onto the Galea plan, and is also mentioned at the end of the Ashby report (1915, 213), however no trace of it could be found. Further confusion around the location of the site was created by the fact that on the 1:2,500 Survey Sheet published in 1972, the label 'Megalithic Remains' appears about 80 m north-west of the actual location of the building. The problem is compounded by the fact that in the early 1970s, many of the field-walls and other features that could have served as a reference point were cleared away to prepare the site to accommodate the Deutsche Welle radio relay station, which was in use for over two decades, from the mid-70s to the mid-90s. The site fell within the precincts of the station, and was therefore difficult to access for health and safety reasons. Notwithstanding the above, most archaeological publications that discuss the site refer to the correct general location, but stop short of identifying any specific features corresponding to the original plan.

In 2011, a Nature Park and Sustainable Development Centre was inaugurated in the area previously used by the relay station, providing a more suitable context for the preservation of the archaeological remains and their setting, and providing the opportunity for the exercise reported here to be conducted.

Assessing extent of cliff-top erosion over the past century

In view of the uncertainty surrounding the precise position of the site, its orientation, and the extent to which it had been lost to the elements, it was decided to start from first principles. In order to gain a better understanding of the changes the coastline had undergone over the past century, all survey sheets and aerial photographs produced since 1910 were systematically compared using two procedures.



Figure 3. Ashby's plan superimposed on a 2012 orthophoto of the site. The position of the floor of the gully is indicated with a dotted line (Orthophoto source: MEPA).

The first was to digitise and superimpose key features that appeared on these documents, including the edge of the cliff. While the result showed no major changes to the coastline, the accuracy of the procedure was limited by the different methods that had been used to produce the different documents, particularly when trying to compare aerial photographs to the 1910 survey sheet.

The second procedure that was used was to plot reference lines between known and suitably located fixed points that appeared on successive survey sheets and aerial photographs, in order to compare the position of the cliff edge to these reference lines. This proved to be a more practical tool to allow comparison between successive aerial photographs. Within the limitations of the procedure, no significant change to the cliff edge during the last 100 years could be detected.

Defining the position of the megalithic remains

Following this encouraging result, the area believed to be the site of the megalithic remains was closely inspected, and the main surviving visible megaliths were measured and plotted with a total station. Through an iterative process of repeat visits in different seasonal conditions, and reconciliation with the archival record, the position of the remains recorded in 1915 was identified (Fig. 3). A number of megaliths visible on site could be identified with specific megaliths recorded in 1915. A mound that was observed on site appears to correspond to the mound that is visible in the 1915 photographic record, immediately north-west of the megalithic building. When allowance was made for the systematic error

Xrobb l-Ghagin revisited: recovery and discovery



Figure 4. View from the south, showing position of megalithic remains excavated in 1915 (A), and of the gully where a megalithic structure was discovered in 2015 (B). Note the cave being formed by water action, immediately below the gully.

that may be introduced when taking measurements on a steep slope, the distances between visible megaliths corresponded with the plan published by Ashby in 1915. Some additional possible megaliths were noted a short distance to the south-east, which were not included in the 1915 plan.

One of the striking characteristics of the site that emerge from the excavation record is the sharp changes in level between different sections of the megalithic complex, because the main axis of the building runs NW-SE, along the line of steepest slope. A very distinct break of slope and change in level was observed along what is believed to be the edge of the semi-circular enclosure, providing further corroboration of the location of the complex. The steps connecting different levels reported by Ashby are a distinctive feature of this megalithic building on a slope.

The orientation of the plans from the 1915 excavation was also not entirely clear. A discrepancy was noted between the orientation of the North pointer on the Galea plan, and that published by Ashby in 1915 (Evans, and consequently all other subsequent authors, follow the latter orientation). The



Figure 5. View from south edge of gully, looking north-west. A cluster of *in situ* megaliths (also shown in Fig. 6) is visible at the inner end of the gully, to the left (A). Megaliths at two different levels are visible to the right (B).

most plausible explanation for this discrepancy is that the Galea plan shows uncorrected magnetic north, probably taken directly off a compass reading while on site. The plan published by Ashby, on the other hand, appears to have been corrected to grid north, and was found to correspond quite closely to the orientation of the remains observed on the ground in 2015.

A new discovery of a megalithic structure

Even as the exercise to define what survives of the remains recorded in 1915 was being concluded, a new discovery was made. On 7 February 2015, one of the present authors (RPB), while making a further attempt to relocate the 'well' recorded by Galea, examined a gully that runs perpendicular to the cliff edge, a short distance to the south-east of the megalithic structure (Fig. 4). The sides of the gully drop steeply to its floor, which slopes gently to the edge of the cliff. A number of megaliths were observed protruding from the sides of the gully, several of which are evidently *in situ*, forming part of a previously unrecorded megalithic structure.

The fact that the remains within the gully have gone unnoticed until now is due in large part to the fact that it is densely overgrown and relatively inaccessible from land, and perched high above the shoreline. Erosion over the past century may also have contributed to make them more visible today. A passing reference at the end of Ashby's report to 'uncertain traces of walls further down the slope of which nothing certain could be made' (1915, 213) does not appear to be related to the gully.

In spite of the dense undergrowth, at least 15 megaliths could be made out around the inner end of the gully. Several of them are clearly still in situ, and appear to be lining and buttressing the earth fill around the edges of the gully (Fig. 5), while others appear to

Ruben P. Borg and Reuben Grima

have buckled or collapsed from their original position. The most typical dimensions fall in the range between 0.5 m and 1 m in height and width, and between 0.2 m and 0.3 m in thickness. Several of the megaliths are laid flat against the edges of the gully. There is at least one instance of a megalith laid in this way being flanked by another orthogonal megalith laid perpendicular to the first, protruding from the wall (Fig. 6), probably as a tie-slab to stiffen the structure, evoking the "header and stretcher" technique familiar from other megalithic sites. Megaliths were observed at different heights around the edges of the gully (Fig. 5), forming steps or terraces and holding back the earth fill behind them, suggesting that the boundaries of the gully may have originally been completely lined with retaining walls in an imposing monumental composition. The seaward edge of the gully is abruptly truncated by the cliff-edge, and may have been considerably modified by erosion since prehistory.

Discussion

The first significant result of the exercise reported here is the confirmation that the megalithic remains discovered and recorded in 1915 have not yet been claimed by coastal erosion, and may still be better preserved than has been generally supposed. The vulnerability of the site, however, is more evident than ever, as it is severely undercut, and poses some pressing challenges and dilemmas in terms of how best to safeguard and manage such a precious archaeological resource in the face of the inexorable erosion of the underlying cliff.

The second interesting observation is that the distinctive layout of the complex is closely tied to the topographic setting. Due to the steep gradient of the ground, the creation of a level, semi-circular space in front of the apsidal structure necessitated the creation of an artificial terrace. A significant break of slope and abrupt drop may still be observed along the SE edge of the terrace. The megalithic features along the south-east end of the complex, which have often been referred to as atypical, may therefore be understood in a new light, as part of the solution to create and retain the terrace forming the semi-circular platform. If this explanation is correct, the layout of Xrobb l-Ghagin may be less atypical than previously thought, as the importance attached to a level forecourt is also



Figure 6. Detail of megaliths at the inner end of the gully.

evident at Ġgantija, Mnajdra, and Skorba, albeit at an altogether different scale.

A corollary to this second observation is that the 'dolmenic niche' on the main axis of the apsidal building is also closely tied to another sharp change in level, this time between the semi-circular forecourt and the apsidal building itself. It does raise the question whether the decorated slab roofing the 'niche', today housed in the museum, was in fact the entrance threshold at the entrance into the building, perhaps approached by steps that have not been preserved, comparable to the monumental steps leading up to the main entrance of Ta' Haġrat, or the steps inside the main building at Haġar Qim beneath which a group of stone statues was discovered in 1949.

The third and probably most significant result is the discovery in February 2015 of what appears to be the monumental elaboration of the gully to the southeast of the megalithic building, which appears to have been undertaken on a scale as monumental as the building itself. It would be premature to date the newlydiscovered feature on the basis of visual inspection alone. One possibility is that megaliths from the known building were reused to build the retaining structure in the gully during some later period as part of the management of the terrain, possibly for agricultural purposes. If this were to be prove to be the case, it may still yield important boons for archaeology, because of the deep stratigraphy that may be preserved behind the terracing. It is worth recalling that Carmelo Rizzo first discovered the temple at Xrobb il-Għaġin after he was intrigued by the considerable depth of red soil in its vicinity, which stood out from the surrounding rock (Ashby 1915, 209-210).

The use of the header and stretcher technique, however, strongly suggests that this may indeed be a prehistoric structure. If this were to be confirmed, the implications for our understanding of the site and its relationship to the landscape setting will be considerable. To date, the management and monumental elaboration of the topography around Malta's Neolithic monuments has been attested by the creation of monumental forecourts known from a number of sites. The management and megalithic elaboration of the gully at Xrobb l-Ghaġin may be the most remarkable example known to date of the extension of this monumentalisation into the wider landscape, which may yield fresh insight into Neolithic attitudes to landscape and cosmology. It has been argued elsewhere that both water (Grima in press) and the sea (Grima 2001) were significant to the Neolithic islanders on a symbolic as well as practical level. The attention that appears to have been devoted to the gully may equally be tied to the management of the water runoff that flows through it, and to the sea below.

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