Location and landscape

San Pawl Milqi is found in the North-Eastern part of the island of Malta (Figure 1). The church dedicated to San Pawl Milqi (Saint Paul “welcomed”) and the archaeological remains all around it stand about half way up the slope of Gebel Ghawzara, a 116 m high hill which represents the oriental offshoot of Wardija Ridge. The site overlooks Burmarrad valley, today an agricultural plain, near to the Bugibba promontory and Qawra point to the NW, to Tal-Qadi and Ghallis Point to the NE, and opened to the N-NE on the narrow inlet of Salina, where 16th century saltpans are still operational.

The area presents the classic geological sequence of the Maltese Islands (Pedley et al., 2002): the Upper Coralline Limestone cap on top of Gebel Ghawzara covers a layer of Globigerina Limestone: along the contact line between the two different kinds of limestone, vegetation (bushes, carob trees and a few olive trees) marks the spring line due to the presence of a layer of Blue Clay and reveals the presence of cavities: along the hill, reeds indicate water circulation and catchment points.

On the lower part, the sides of the hill are cultivated in wide terraces. All the area is very fertile and the soil is enriched with phosphorite coming from the Globigerina layer. In addition, all the area is rich in water, and it is likely to have been one of the most productive areas of the island even in antiquity.

Burmarrad plain is at the confluence of different valleys coming from the central part of the Great Fault (Wied il-Ghasel) and from the south-oriental part of Wardija Ridge (Ghajn Rihana, Wied ta’l-Arkata, Wied Qanotta). In effect, the plain is one of the main water catchment areas in Malta, and is the most important one together with the Marsa area. Diachronic analysis of the area shows the picture of a changing landscape, modified by natural and human activities. Within the evolutionary framework, water is to be considered a substantial morphogenetic issue, as an agent for chemical and physical erosion, and for the transport and deposition of sediment. As a result of alluvium, the original coastline has radically changed: Salina Bay is supposed to have been a deep inlet coming almost to the base of Gebel Ghawzara\(^1\). The plain, once a harbour, is now silted as a result of sedimentation, due to continuous soil movement or sudden events such as flash floods.

In addition, agricultural terraces built up over centuries all over the slopes of the valleys had a deep impact on the appearance of the surroundings of San Pawl Milqi, and even today the building expansion of the urban centre of Burmarrad is encroaching on the hill.

In such a landscape, San Pawl Milqi is to be found in a position of control, situated on a wide natural terrace that breaks the North-Eastern slope of Gebel Ghawzara. The Baroque church that dominates the archaeological site (Figure 2) stands as a real landmark, visible from all over the area - from the North, South, East and West, and above all for all who approached the coast from North to East. In this dominating position, the archaeological area is exposed to often strong winds from the North East and from the North West which often batter the church and the archaeological remains.

Recent archaeological studies have confirmed that the site was originally situated on an important harbour that is now silted, and was surrounded by agricultural land\(^2\). The whole area is rich in archaeological remains belonging to different periods. Settlement continuity in the area shows that fertility and hydrogeological conditions (the presence of springs and water, and the possibility of commanding a natural harbour) must have been considered very favourable for settlement from the Neolithic period onwards. The same area, in its

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1 BRUNO 2004, 32; T. Gambin (PhD Bristol University), personal communication.
2 T. Gambin, personal communication.
The multi-cultural site

The most prominent feature of this impressive and important site is the small 17th century church dedicated to San Pawl Milqi. In the area surrounding this church, archaeological excavations brought to light evidence of prehistoric settlement (from 6000 to 3500 years BC), followed by the structures of a little Punic farmhouse (from 4th to 3rd century BC) that had evolved into a rural Villa by the end of the 2nd century B.C., when Malta was already under the Roman rule. The Villa was still in use at least to the 4th century AD, with residential quarters and adjoining structures aimed at the production of olive oil. This important complex kept developing different forms at least up to the Byzantine and Arab period (6th-9th century AD). After the Medieval period, there is evidence that at least one church was constructed on site: the one that exists to the present day was built in the first half of the 17th century (Missione 1963-1964).

Besides this 17th century church, the most impressive features of the site are the archaeological remains of the Roman Villa, which extends over a surface area of 2500 m² on different levels, all around and even under the Baroque building (Figure 3). Limestone walls (in Globigerina as well as Coralline Limestone), preserved up to a height of two meters, delineate regular rooms paved with cocciopesto (a lime-based durable flooring material) or stone floors. The walls are decorated with frescoes that are partially preserved. Olive presses and oil vats are still there to show the rural and economic activity of the settlement.

During the 1960s, a boundary wall was built which incorporates an area of approximately 4000 m² (Figure 4). Unfortunately the boundary wall does not include all the archaeological structures: some of these are found behind the church, on the other side of a small country-road that deeply cuts the rock in the North-West part of the archaeological area, exposing the soft yellowish layers of Globigerina Limestone and even cutting through some of the archaeological features.

Potential and value of the site

Research carried out to date on the site shows its huge potential, from scientific, archaeological, historical and educational points of view. The value of San Pawl Milqi in the Maltese and Mediterranean context is great. This is one of the many Roman Villas that are known from surveys carried out all around the Maltese territory, and the only one where research has been carried out in depth. Further excavations will enhance knowledge of economic, cultural, and social issues affecting the Maltese Islands from the Punic to the Arab period. Were a museographic project to be carried out on the site, this will put scholars and the general public in a better position towards gaining a more comprehensive idea of all the historic periods of the island. The monument as a whole, with the archaeological features and the little church dedicated to Saint Paul, would form an important part of the cultural heritage of the Maltese Islands, and serve as a primary educational resource for the future generations.

Besides, popular tradition states that the residence of Publius, the then Roman Governor of the island, who welcomed the Apostle to Malta in 60 A.D., was situated here. This connection, even if not confirmed by archaeological evidence, makes San Pawl Milqi an important focus within the religious landscape of the Maltese Islands, as a place of pilgrimage for the Maltese and for foreigners.

Most importantly, the area is a very good example of an ever-changing cultural landscape. The site has unfortunately always been out of the usual visitor itinerary. Previous attempts to open the area to the general public have proved unsuccessful, in spite of the obvious potential of the monument. The importance of the site necessitates a new project that will lead to its proper presentation, a fact which will also help put it on the cultural map of Malta, a place which it lacks but which it richly deserves. Protection, conservation and use of cultural heritage are also major economic issues, since they drive the sustainable growth of tourism. This is even more valid today as there is a healthy demand for cultural tourism.

A project for San Pawl Milqi is thus deemed necessary so as to give the site its proper value and to have a say in how the landscape will change in the future. A museographic project, together with a conservation project, are urgently required to protect and preserve the site and most importantly to correctly enhance the didactic value of the site by presenting it to the public in an appropriate and informative manner.

As part of this new project, the site can be promoted as
Background to the current project

As already explained, San Pawl Milqi is a multi-stratified deposit; it also has a long and complex modern history (Locatelli 2000). The site was archaeologically investigated from 1963 to 1968: excavations were then carried out by the Missione Archeologica Italiana, Universita’ Cattolica del Sacro Cuore, Milan, Italy, in agreement with the Museums Department of Malta (Missione 1963-1968).

For the following thirty years, as funds were no longer available, all research on site was suspended. Archaeological investigations had a new start in 2000, with a new project entitled “San Pawl Milqi 2000” being prepared by the Missione Archeologica Italiana in partnership with the University of Malta and the local heritage authorities (Ref. 3).

The basis of this new project is a new archaeological mission, aimed at the conclusion of the site investigations and the dissemination of the results of the excavations (Locatelli, 2002). In addition, a start has been made concerning the study of the environmental conditions surrounding the exposed archaeological remains together with those of the ruins situated beneath the existing structure of the church. Given the porous nature of the local Globigerina Limestone (Cassar, 2002), together with the actions of salt, wind and fluctuating humidity, the site has undergone fast deterioration over the past thirty years. A conservation plan for the site is thus also being set up, in conjunction with the presentation of the site to the public by means of a museographic project.

The current project

1 Preliminary studies: Archaeological remains

A complete archaeological survey of the area, which is currently lacking, must be carried out. This is important primarily to identify all the features of archaeological interest that exist within the area of San Pawl Milqi and hence determine a definite and complete footprint for a new boundary wall which will replace the old one.

One issue that must be tackled both from a scientific and visual point of view is the decision of what type of fencing should be put on site so as to help protect it. And this, not only from a preservation point of view, but also not to create visual pollution.

The end of the excavations and the archaeological survey will also lead to stratigraphic analysis in different areas. This will allow a better understanding of the different levels of the archaeological structures and a collection of chronological data. The study of artefacts will give indications regarding the type of economy, the different products that were produced, life and culture of the site in its different stages of its existence. All the technical information will be collected and edited so to make the information accessible to visitors. This will then form part of the vast amount of information to be made available to the visitor. How this will in fact be presented is explained further on.

2 The site and its environment

In June 2000, a thorough cleaning of the site was carried out, in conjunction with the Istituto Centrale per il Restauro, of Rome, Italy. A number of proposals were drafted for specific interventions to be carried out on the limestone blocks, plaster remains and the paving (Bergamaschi & Rossi, 2000-2001). Works carried out in 2001 initially focused on a number of severely deteriorated Globigerina Limestone blocks forming part of the Roman Villa (Figure 3). The highly porous and soft limestone was showing severe signs of weathering, including fracturing, structural instability, and alveolar weathering (honeycombing). This work was later followed by the backfilling of a number of trenches which had been excavated in the 1960s.

One year later, discussions between the Missione Archeologica and the International Institute of Baroque Studies of the University of Malta led to a renewed interest in the conservation of the site. A number of site visits which then took place by the authors of this paper showed that, although much of the site, which is exposed to harsh environmental conditions, is in a bad state of conservation, one particular area of interest seemed to have survived better. The area in question was the part of the Villa that lies beneath the church. One does in fact expect a sheltered area to deteriorate at a slower rate than one that is not sheltered, due to the fact that the environmental conditions in a protected area are more stable. However, no data was at that point available. It was therefore decided to analyse this phenomenon by examining both the external and internal situations.

The studies carried out included mapping and
Environmental monitoring. A detailed mapping exercise of deterioration forms, and their extent, was carried out on two sample walls (Magri, 2003 and Agius, 2004). This was supplemented by a continuous air monitoring campaign which took place over a period of many months.

3 Mapping

The mapping of weathering forms permits one to obtain a clear and detailed idea of the weathering state of each particular stone on a building or archaeological site. For the mapping at San Pawl Milqi, two short stretches of walls, one exposed and one underneath the church, were chosen. Most of the blocks in both cases consisted of Globigerina Limestone, although there were also a few stones made of Coralline Limestone (Pedley et al., 2002).

The results of the mappings clearly showed that the external wall was in a much worse state of conservation than the internal wall. Besides helping to provide an evaluation of the type and extent of deterioration in the two walls, this mapping exercise also allowed for the documentation of previous interventions, never before recorded. Thus, it was seen that the external wall, besides being much more seriously deteriorated, had, unlike the internal one, already undergone a number of interventions in an attempt to preserve it.

4 Environmental monitoring

Identifying the risks facing an archaeological site is the primary stage in a preventive conservation programme which can provide, long term, for its conservation and preservation. Fluctuating environmental conditions are known to be potential damaging factors for porous building materials (Cassar, 2002). It was therefore decided to continuously monitor the internal and external air temperature and relative humidity at different points in the site from December 2002 to April 2004. This was carried out in three different locations: in the church, beneath the church just above the mapped wall, and outside adjacent to the second mapped wall. These areas were chosen to enable comparison of three different environments.

An overview of the months of monitoring indicated that the fluctuations in both temperature and relative humidity underground and in the church were less than outside. The reason for this is the buffering effect which the thick stone walls and foundations of the church provide for these areas. The walls within the church vary from 1.9m to 0.83m in thickness. In addition, a wooden floor constructed after the excavation of the underground area also provides thermal lag and lessens the humidity fluctuations.

These results have been evaluated in the light of the presence of high concentrations of soluble salts in a site which still remains close to the sea and which was once completely buried underneath layers of soil. Since the results have shown that fluctuations are greatest outside, one can conclude that the external environment is not a suitable one for the remaining stone fabric of the Roman Villa. The underground situation provides a more stable environment allowing a slower rate of deterioration to take its course. This is important information which needs to be taken into consideration when elaborating a conservation plan for the site, including both the church and the Roman Villa.

Conservation of the site

The results of the monitoring, which is planned to be extended by means of a weather station placed close to the site, will lead to a final decision to be taken concerning the interpretation and presentation of the site. Possible options are: reburial of the site; covering of the site by a roof or shelter; building an enclosure (designed to accommodate the monumental features of the archaeological complex); leaving the area uncovered and carrying out specific, and possibly regular, conservation treatments. If it is decided to build a structure over the archaeological site, whether as a shelter or enclosure, studies must be carried out to determine the morphology of the land. This will help avoid runoff water flowing through the site. Another point to be carefully investigated is the number and location of supports that will impinge directly on the archaeological area. It must also be decided whether windbreakers are required all around the site, in one particular area or perhaps not at all.

It is also important to have a clear idea as to the type of microclimate that will be created within such a structure. Covering the archaeological site may also change the environmental conditions underneath the church as presently a cistern is linked directly from outside to the archaeological remains underneath the church. Materials to be used, orientation and ventilation need to be carefully studied. The problems created by the wind and the environment in general must be studied in detail. An indication as to the type of environment suitable for this site can be extrapolated from the data gathered during the study of the environment under the church. Here, as also the mapping exercise has shown, the archaeological remains have been well preserved when compared with the external environment where the archaeological remains have suffered serious and pronounced deterioration.

A long-term conservation plan for the site is therefore to be set up and implemented. This cannot be designed prior to further environmental monitoring and analysis. It might also require and include emergency conservation works at a
number of critical points. The issues tackled in the conservation project will form the basis for guidelines for a maintenance plan of the archaeological area together with the final decision about its protection and display.

1 Museographic display of site

The archaeological site, together with the church, greatly lend themselves to a museographic display. The main objective of the current project is thus to design a didactic presentation of the site to the public, to allow access to the site and to explain the multi-faceted aspects of the area, whilst also respecting conservation issues.

The focus of the didactic presentation will be a visitors’ centre which will manage and orientate visitors entering the site. The location of this centre will have to be studied very carefully so as not to disturb the skyline or the landscape. Other important aspects, which could also have a dramatic impact on the landscape, will be the presentation and conservation of the archaeological remains. It was recognised at an early stage that these aspects in particular require focused studies to be carried out to understand how and why the archaeological site is deteriorating, and if and how this deterioration can be controlled, possibly through the museographic methodology adopted. The least problematic intervention vis-à-vis the cultural landscape is considered to be the refurbishment of the church which is already an important and accepted feature of the surrounding area.

2 Visitors’ centre

The visitors’ centre will house all the basic amenities that visitors require. It will have a small orientation space to explain and prepare the visitor for the wealth of information the site has to offer. More information about the site and its history can be given in other areas, as is discussed later on, possibly within the existing 17th century church as well as the archaeological site itself. The location of the visitors’ centre is crucial as it is the first impact the visitors will have as they approach the site.

The ideal site for this centre is to the North East of the church, underneath the plateau, an area which is not currently within the boundary wall. This will allow the building to be close to the archaeological site, yet it will not create a negative visual impact as it does not puncture the skyline. It will also allow the site to unfold to the visitor as he/she walks up to the archaeological site itself.

Situated on the plateau, above the location just mentioned for the visitors’ center, there exist rooms built during the 1960s as store rooms (Figure 6). These rooms are not in a good state of repair and hence it would be ideal to demolish them so as to eliminate the negative impact on the skyline due to their proximity to the archaeological site and the church. The concrete flooring of these rooms, which would create a scar on the landscape were it removed, could be retained and refurbished to house information panels explaining the archaeological site.

More information panels can also be designed and incorporated into the itinerary around the archaeological site - care always being taken not to impinge directly on the archaeological remains. These would help explain and highlight salient aspects of the remains.

3 The church

It is thought that prior to the 17th century church that currently exists on site, at least another church existed in the same location with its foundations partially resting on the older Roman walls (Ref. 4).

The first known church was built on the same site and was erected by the Desguanche and Bordini families in honour of St. Paul. It is not known when this church was erected, but in 1616 reference is made to this church during a pastoral visit by Bishop Cagliareas (Sultana, 2001). It states that the building was old and in a bad state of repair.

The church that can be seen today was built and sponsored by Grand Master Alof De Wignacourt who died in 1622. Thus it may be deduced that the existing church was built between 1616 and 1622. During the period 1936-1938 a parvis was added in the front part of the church, facing North East. This parvis was removed during the excavations carried out in the 1960s, unfortunately once again impinging directly on the existing landscape. Hence the main door of the church is currently approximately three metres above the exterior ground level.

The internal space of the church, measuring 8m by 3.5m, is simple and consists of a tunnel vault divided into five bays by means of ribs. Externally the architecture is also very simple with a buttress along the South and the West facing walls. The front elevation is symmetrical. The central door is surrounded by a fascia with mouldings which are typical of the period. The doorway is crowned by a circular window which has an intricate lattice design in stonework. Two symmetrical niches are located on the upper half of the elevation.

During the extensive archaeological excavations that took place underneath the church during the 1960s, the original

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4 The new project is funded by the Italian government (Ministero per gli Affari Esteri), under the Patronage of the Italian Embassy and the Istituto Italiano di Cultura in Malta.
Section III: Evolving townscape and landscapes within their setting: managing dynamic change

The flooring of the church was removed. After the excavations were concluded, wooden planks and iron beams replaced the original flooring. A trap door within the wooden flooring in the church allows access to the archaeological finds beneath (Figure 7).

Abutting to the North wall one finds the sacristy that was built ca.1930 and once more changed the impact of the lonely church sitting in this marvellous site along a hillside. The sacristy boasts of a loggia overlooking the East side that originally led to the parvis.

As part of the museographic project, the church is considered important because it allows more exhibition space without the need to impinge on the landscape. Refurbishment works will need to take into consideration the fact that the church is used for religious functions once a year on the feast of St. Paul. However, it can also serve as an exhibition space for the site where the history of the church can be explained and its possible connection with St. Paul elaborated.

The works required would consist mainly of upgrading the church complex to provide basic services for visitors and creating a welcoming environment. Besides the refurbishment of the interior of the church, a conservation project for the façade of the church will also be prepared. This will mainly be a maintenance project since the external walls are relatively in a good condition.

Conclusion

The landscape around the archaeological site of San Pawl Milqi has constantly been changing over the centuries. From a settlement in close proximity to a harbour and as the focus of an agricultural estate, it is now on the suburb of an ever-growing village, Burmarrad. A conservation project to protect and present the site is now deemed urgent, not only to give the site national importance and place it on the cultural map of Malta, but also to preserve it from further encroachment and possibly being entirely enclosed by modern development.

The decision of how the archaeological area is to be protected, and the location of a visitors’ centre, are crucial so as not to impinge on the landscape but to help enhance it. Due to its position, San Pawl Milqi is greatly exposed and can be seen from many places on the island for an appreciable distance. It also creates a visual landmark due to the presence of the church. Thus, if it is decided to create an enclosure or shelter for the archaeological site, not only will the cultural landscape change dramatically, but one may also impinge directly on the skyline.

Though some localised monitoring has been carried out on site, not enough information is currently available to make a final decision possible. This monitoring needs to be extended and prolonged, and the data needs to be carefully evaluated by a multi-disciplinary team which must necessarily be involved in the decisions pertaining to the future of this multi-cultural site.

Major decisions need to be taken on the basis of further scientific research i.e. whether the archaeological site can be left exposed, covered with a structure, or whether for the sake of its protection it should be re-buried. In the latter case there will be no effect on the skyline or the cultural landscape. It would imply though that visitors will not be able to view the site directly except perhaps via virtual reality. This may however be the price one must pay to preserve the site for future generations.
Abstract

San Pawl Milqi is found in the north-eastern part of the island of Malta next to Salina bay and overlooking Burmarrad valley. The site was originally situated on an important harbour that is now silted, and was surrounded by agricultural land. The area is rich in archaeological remains belonging to different periods. The boundary wall of the multi-cultural site incorporates an area of approximately 4000 m². Within this area there is evidence of prehistoric settlement, punic farmhouse, a rural villa belonging to the end of the 2nd century B.C. and evidence of a later period from the 1st to the 11th century A.D. There is evidence that at least two churches were constructed on site. The potential and value of San Pawl Milqi is historical and archaeological, scientific, didactic, social and religious and most importantly a very good example of an ever changing cultural landscape. Recently there have been attempts in studying the environment of the archaeological remains that are exposed together with the environment of the archaeological remains that are underneath the existing structure of the church. A conservation plan for the site was also being set up that was intended to lead to the presentation of the site to be public due to a museographical project.

References

SAN PAWL MILQI, BURMARRAD, MALTA – PRESENTATION OF A MULTI-CULTURAL SITE IN A CHANGING LANDSCAPE

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Figure 1 Map of Malta showing location of the site of San Pawl Milqi.

Figure 2 View of the Baroque church and its relationship to the archaeological site.
Section III: Evolving townscape and landscapes within their settings: managing dynamic change

Section III: Gérer le changement – les villes et les paysages dans leur milieu

Figure 3 Plan of the multi-cultural site showing also the superimposition of the church on the archaeological remains.

Figure 4 View of part of the site showing the boundary wall which surrounds only part of the remaining archaeological structures.

Figure 5 Measures being taken to protect one of the friable oil vat found on site.
Figure 6 Store rooms built during the 1960s and the encroaching village of Burmarrad.

Figure 7 Section through church and sacristy showing the archaeological remains located underneath.