Rapid Communication

Robert Brown*, David Cardona, Benedict Lowe, Davide Tanasi, Andrew Wilkinson

The Melite Civitas Romana Project: The Case for a Modern Exploration of the Roman Domus, Malta

<https://doi.org/10.1515/opar-2020-0210>

received February 4, 2021; accepted October 6, 2021

Abstract: The Roman Domus in Mdina, Malta, has become an idealised example of the Roman presence in the Maltese Islands; the partial remains of a lavishly decorated domus that would have in its time been situated within the walls of the urbanised Roman city of Melite. The site, last excavated more than 100 years ago, is also home to the only museum in the Maltese Islands, which is solely dedicated to house and showcase a collection of artefacts that date from the Roman period in Maltese history. This site alone provides a unique perspective on Roman Malta, being our only substantial remnant from the Roman Maltese capital, and needs a refocused and renewed exploration. For a long time, the archaeology of Roman sites in Malta has suffered a distinct lack of priority, and it has only been in the last two decades that considerably more focus has been placed on understanding the Roman period. Most of the archaeological focus, in this respect, has centred on agricultural villas, and though this study has illuminated a better understanding of the Roman period, very little has been undertaken in the last century in piecing together the importance of urban Melite to the broader nature of life in the islands, as well as their place in the larger context of the central Roman Mediterranean. The Melite Civitas Romana Project offers the potential of new understanding of the domus and the surrounding archaeological environment through a modern exploration of the site and the promise of the first available assemblage of Roman material from an urban Roman context.

Keywords: Domus Romana, Roman Domus, Melite, Roman urbanism, Roman archaeology, Roman Malta, Melite Civitas Romana

1 Introduction

Nestled quietly in the central Mediterranean, approximately 300 km from the coast of North Africa and 93 km south of the island of Sicily, the Maltese Islands are referred to by both locals and intrepid travellers

Article note: This article is a part of the Special Issue on At the Crossroads of the Mediterranean: Malta and the Central Mediterranean During the Roman Period, edited by Davide Tanasi, David Cardona, & Robert Brown.

* **Corresponding author: Robert Brown**, Department of Archaeology, Australian National University/Intercontinental Archaeology, Banks Building, 44 Linnaeus Way, Acton, ACT 2601, Australia, e-mail: robert.brown@anu.edu.au

David Cardona: Phoenician, Roman and Medieval Sites, Heritage Malta, Rabat, Malta, e-mail: david.cardona@gov.mt

Benedict Lowe: Department of History, University of North Alabama/Intercontinental Archaeology, Florence (AL), USA, e-mail: blowe1@una.edu

Davide Tanasi: Department of History, University of South Florida, Tampa (FL), USA, e-mail: dtanasi@usf.edu

Andrew Wilkinson: Flinders University/Intercontinental Archaeology, Adelaide, Australia, e-mail: andrew.wilkinson@flinders.edu.au

as “the heart of the Mediterranean.” The significance of location has indeed allowed these islands to play an important role in the history of the region for millennia. The islands’ strategic location both in terms of maritime trade and military staging has been exploited since the Phoenician period as their greatest asset, and although small they possess a visually breathtaking landscape that has provided a wealth of resources.¹ Despite this, the scholarship of the Roman period in Maltese history has waned in the shadow of the exploration of the prehistoric period whereby magnificent temple complexes can be more than just imagined. The Roman Maltese world had been buried under or re-purposed by successive periods of history. This is not to say that this period of Maltese history has not been high on the agenda of both local and foreign researchers.

The remains of the *Roman Domus*² in Mdina (Figure 1) are a case in point. Although the importance of the site was immediately recognised on its discovery, the level of attention and documentation offered to the site was not of the same standard and consistency offered to other sites, such as the prehistoric temples on the islands. A clear example can be observed in the study of the eminent Maltese archaeologist Sir Themistocles (Temi) Zammit. His excavations carried out at the prehistoric Tarxien Temple complex are well published and documented. However, there is far less in terms of publication and reports to attest for his work at the Roman Domus at Mdina.³ Indeed, scholars generally argue that the legacy Temi Zammit left to Maltese archaeology is best observed in his study and publication of Tarxien (Heritage Malta). It can be argued that Zammit’s work in relation to the domus was poorly documented, with only the best artefacts kept for posterity and no record of stratigraphy. Indeed, this has led to an incomplete interpretation of the site and the near impossibility for current archaeologists to challenge or confirm interpretations made almost 100 years ago.

The domus (once incorrectly labelled as the Roman Villa) has become an idealised example of the Roman presence in the Maltese Islands; the partial remains of a lavishly decorated mansion that would have, in its time, been situated within the walls of the urbanised Roman city of *Melite*.⁴ Reminiscent of the exquisite townhouses uncovered in Pompeii, it was discovered in the late nineteenth century with similar features: intricate Hellenistic mosaic flooring, Julio-Claudian imperial statuary, and the remains of fine painted wall plaster that can be situated within the framework of accepted Pompeian styles (Caruana, 1882, p. 91).

The site itself was quickly transformed into a purpose-built museum to house and showcase the Roman presence on the islands.⁵ Conservation of what remained of the ancient structure as well as the mosaic

¹ Malta’s location has shown its significance in the historical narrative of the central Mediterranean for millennia. In the general scholarship of Maltese history, this fact goes seemingly unchallenged. Our experiences of twentieth-century conflict during WWII further consolidated this fact. Despite assertions that Malta “had no history” during the Roman period (Ashby, 1915), he described Malta’s history as “stirring” and its location as “commanding the highway of sea-borne traffic.” Despite unintentionally forging a pathway that has led to somewhat of a “shackling” of scholarship focussing on Roman Malta, it is evident that Ashby truly understood the importance of the islands to the historical narrative of the region. This conclusion has been echoed particularly in recent research by various archaeologists and historians. In particular, it is a sound conclusion that the Maltese Islands held a significant maritime importance for trade and shipping in the region during the Roman and other periods (Gambin, 2012).

² The *Roman Domus* is the title given to the Roman structure found between Rabat and Mdina in Malta. The museum built over the remains of the domus is given the title *Domus Romana* by Heritage Malta. For clarity and consistency within the sphere of scholarship and understanding, these terms will be used as the means of describing and applying discussion to this particular site.

³ See <http://www.worldcat.org/identities/lccn-n87806139/> for an overview of Zammit’s publications catalogue. Note in particular that Zammit’s publication of prehistoric sites in Malta is prolific numbering more than 100 studies, whereas his publication on the Roman Domus or indeed his mentioning of Roman sites in his work tallies to less than a dozen.

⁴ The current city Mdina is situated on the remains of an ancient site that has been built upon throughout history beginning in the Phoenician period although there is evidence of earlier prehistoric use. The city was given the Roman name *Melite* and was also called at various times *Città Vecchia* or *Città Notabile* and served as the ancient capital.

⁵ The discovery of the Domus Romana site in 1881 and its subsequent excavation by Caruana led to the museum being built on site and opened in February 1882. It is important to mention that as of the writing of this article, the National Museum of Archaeology in Valletta still has yet to provide a comprehensive and permanent Roman exhibition space to its display collections. This is no simple oversight and speaks volumes to the overlooking of the Roman period of Maltese history and the lack of

Figure 1: Roman Domus Mdina, image courtesy of Davide Tanasi.

flooring was given priority, with the museum structure an addition and originally called “The Museum of Roman Antiquities.” Within it were housed the artefacts uncovered on site as well as materials discovered within the walls of Mdina. In a short period, a larger collection of Roman materials that had been uncovered in various areas of the islands were also transferred to the museum.⁶

From that point in time, the development of research into the Roman period fell off considerably. Much of this failure to move forward in the research of the period has been blamed on Ashby’s assertions that the Roman period in Malta (like so many areas of the Roman world) lacked history (Ashby, 1915, p. 25). In essence, the small amount of ancient literature devoted to discussion of Malta by Roman writers supposedly amounted to a lack of tangible evidence of the society during the period that could be articulated in the archaeological context. This has, therefore, led to a decided lack of research after the excavations of the Roman Domus by Zammit. Although it could certainly be argued that even before Ashby put his views on the page, Caruana himself was already concerned at the “neglect” and lack of attention being paid to Roman (and Phoenician) sites and artefacts (Caruana, 1882, p. iii). Beyond Ashby’s published catalogue and discussion of Roman sites on the islands in 1915, it seems that the study of Roman Malta has been in an arm wrestle with trends that push away from the areas of classical studies of the past and focus intently on the appearance of mankind’s first visual statements of civilisation on the world stage. Certainly, very little academic rigour was applied to the exploration of Roman sites until the later part of the twentieth century, with scholars having been content not to venture beyond Ashby’s model (Pace, A, in Bruno, 2009, p. ix). However, important investigations and publications have continued at an ever-increasing rate in the last two decades.⁷

In 2017, after site visits and discussion among Heritage Malta,⁸ archaeologists from the collaborative research group, Intercontinental Archaeology,⁹ and the University of South Florida (USF),¹⁰ a decision to

priority assigned to it in the past. Given the current resurgence in excavation, research, and publication, it is hoped that this situation will be remedied.

6 <https://heritagemalta.org/domvs-romana/>. Details of the site, the Domus Romana, and its history are documented by Heritage Malta on the information webpage accessed by the author on 13 July 2020.

7 It should be noted that Pace’s comments do not entirely represent the full gambit of scholarship on Maltese Roman sites. Bonanno, in particular, has published prolifically on Roman Malta but has largely been the exception to the course of action instigated by Ashby’s assertions.

8 Heritage Malta’s involvement in the partnership is led by David Cardona (Heritage Malta Senior Curator of Roman, Medieval, and Byzantine sites and head of the HM archaeological unit, PhD Candidate University of Leicester), who is also the principal director liaising with the governing body of Heritage Malta as well as that of the Maltese Superintendency.

9 Intercontinental Archaeology is an entity formed in Australia as a means of jointly accommodating the research interests of Robert Brown (PhD candidate, Australian National University), Dr Benedict Lowe (professor of History at the University of North Alabama), and Andrew Wilkinson (consultant archaeologist and MA Flinders University).

10 The research interests of the University of South Florida are headed by professor of History and Director of the Institute for Digital Exploration (IDEx) Dr Davide Tanasi.

once again centre research on the Roman Domus was made. This important site is the only one on the island that can potentially provide information on the urban context¹¹ of “Romanised”¹² Malta, allow for a more homogenous understanding of life on the islands during the Roman period and in effect help suggest the place of the Maltese Islands in the wider Roman world. More importantly, there is much still to discover about the site itself that can be accomplished within the realm of a modern excavation and research project. *The Melite Civitas Romana Project* (MCRP) was born from these discussions. This article serves as an introduction to the project and its importance as the first exploration of the site using the twenty-first-century technology and modern methodologies.

2 Site History: Previous Excavation of the Roman Domus

For off the south of Sicily three islands lie out in the sea, and each of them possesses a city and harbours which can offer safety to ships which are in stress of weather. The first one is that called Melitê, which lies about eight hundred stades from Syracuse, and it possesses many harbours which offer exceptional advantages, and its inhabitants are blest in their possessions; for it has artisans skilled in every manner of craft, the most important being those who weave linen, which is remarkably sheer and soft, and the dwellings on the island are worthy of note, being ambitiously constructed with cornices and finished in stucco with unusual workmanship (Diodorus, V.12.1-4).¹³

Diodorus’ description of the Maltese Islands and their inhabitants is a telling one but one that was largely unrealised in the understanding of the Roman period in Maltese history until the discovery of the Roman Domus in 1881. The discovery and excavation of the domus provided the first evidence that went some way to supporting the descriptions of opulent dwellings made by Diodorus.¹⁴

Located at the southwestern periphery of Rabat overlooking Mtarfa to the west, the site was discovered on 3 February 1881, when the planting of trees along the esplanade outside of the gated fortification wall of *Notabile* uncovered fragments of Roman mosaic flooring (Bugeja, 2004, p. 53). A. A. Caruana, librarian of the Public Library of Malta, was appointed to supervise the clearing of the site, and some of its artefacts were placed in the collections of the library. The subsequent excavations under his direction revealed a luxurious suburban mansion with elaborate mosaics of the best Pompeian style arranged around a peristyle, a triclinium, and a number of surrounding rooms (Caruana, 1882).

The importance of this discovery was recognised from the start, and an effort was quickly undertaken to construct a small building to protect its mosaics; a building that was, in effect, the only structure to be purposefully built to protect an underlying site, as well as serve as a museum. Caruana’s excavation was limited to the impressive rooms of the structure that contained the mosaic floor, which were reminiscent of those found across the Mediterranean in Pompeii.¹⁵ Indeed, it was these aspects of the structure that allowed it to be dated to the end of the second century or the early first century BC. Ceramic finds also demonstrated an occupation through both the Republican and Imperial periods (Bruno, 2009). Interpretation of the structure was later complicated by the statuary finds of Imperial portraiture, leading to the suggestion that domus was potentially the residence of a Roman public official or perhaps had changed

¹¹ There is much ongoing research and subsequent publication focused on Roman sites across the Maltese Islands. However, it must be noted that these sites are all agricultural villas or religious sanctuaries situated in the hinterland. Melite is the only historical urban site, and the products of the early excavation of the site are limited or lost. A new excavation will be the first to provide a recorded and accessible sample of material culture from this urban site.

¹² The term “Romanised” has become a term of much debate in historiography related to the Roman world. In recent times, the more acceptable approach is that of “globalization.” There is no reason to engage in prolonged debate in this article. For more on the nature of globalisation, see Pitt and Versluys (2014).

¹³ Diodorus Siculus V.12.1-2 as accessed at https://penelope.uchicago.edu/Thayer/E/Roman/Texts/Diodorus_Siculus/5A*.html. Last access 12.1.21.

¹⁴ See also Lowe (2021).

¹⁵ See also Caselli (2013) for an analysis of the mosaic flooring of the Domus Romana.

Figure 2: Rendering of the Roman Domus, Mdina (Caselli, 2013).

function at some point from a residence to having a public function (Bonanno, 1997; Bruno, 2009). The incomplete excavation of the structure also hampered accurate interpretation of the orientation of the structure with a number of entrances postulated though not really proven. Caselli (2013, pp. 36–37) suggests that the structure’s fauces was on the western side of the structure, which lies on a northwest axis from the peristyle (Figure 2) although a more complete understanding of the site may challenge this suggestion.

Furthermore, understanding of the domus was going to prove more difficult when in 1889 a road was dug a few metres to the northeast of the domus despite the obvious impact on the archaeological heritage. This road, which was to provide a faster route from Mdina to the newly built Museum train station, was dug through the deep stratigraphic layers and remaining structures to the north and east of the domus. A large part of the eastern range of the domus was obliterated. At the time, no observable archaeology and few discoveries were documented as the road cutting essentially destroyed any structural and material remains that lie in its path (Zammit, 1922, p. 131). It is evident that a considerable amount of Roman wall material was indeed visible in sections on both sides of the road and in need of investigation. Some of that wall material is still visible today in the cutting (Figure 3).

An extension to the Museum of Roman Antiquities was planned and began at the start of 1920. This provided an opportunity to further excavate the site and build on the knowledge gained from the initial discovery and excavation. Sir Temi Zammit was commissioned to carry out this further research and excavation around the domus, which he completed between 1920 and 1925. Indeed, it would be Zammit’s excavations that would provide the bulk of the knowledge we have today of the site.

Most of Zammit’s excavations were concentrated to the north of the domus (this can be designated as “behind” the domus/museum structure) where he uncovered what he described as “humbler houses built

Figure 3: Structural remains north train station road, image courtesy of Andrew Wilkinson (2019).

along a curving road.” This section of the site, adjacent to the domus, consisted of almost a whole insula of houses bounded by the road. He dated these “inferior” structures to the third century AD based on coinage and pottery finds and determined that they had been constructed of robbed materials from other structures (Bonanno, 2005).¹⁶ Zammit did not record the stratigraphic context of this region leaving accurate interpretation and dating of the structures challenging. Certainly, his dating places these structures some two centuries later than that of the domus itself. The excavated pottery assemblages as well as small finds have not survived¹⁷ into the present further limiting modern interpretation of the site or analysis of Zammit’s conclusions.

In also placing several trenches in front of the new museum’s façade (the east frontage of the domus), he further uncovered a number of saracenic graves. Around 100 graves had been placed upon the remains of the domus (Zammit, 1925, p. 2). It had already been concluded in the period between Caruana’s discovery and Zammit’s excavations that the “Arab burials” had caused much harm to the remains of the original structure (Ashby, 1915). Zammit also uncovered further structural remains in this area, including what was reported in his field notes as a mosaicked room. More complete details of this part of the structure were never published, and this was later backfilled along with the tombs (Figure 4). The human remains within the tombs were later reinterred in two pits that were dug somewhere on the site (MAR, 1921–1922). These pits are yet to be rediscovered.

Three trenches were also dug in the fields on the northern side of the train station road. The largest of these was located beneath the western end of the Howard Gardens, where Zammit reportedly discovered several rooms that related to a roman structure as well as a cistern (Zammit, 1920–1925, pp. 78–81). Further to the west, he excavated another trench, which contained the remains of a structure composed of very

¹⁶ See also Sagona (2015, p. 268).

¹⁷ Zammit (1923, p. 221) states that cart loads of pottery was examined and then discarded. Indeed, it is believed much was sold in order to fund further work.

Figure 4: Plan of Roman Domus site, courtesy of Heritage Malta (2019).

well-preserved walls and a peculiar feature of four column-like pillars set extremely close to each other (Figures 5 and 6) (Zammit, 1920–1925, p. 70).

Furthermore, Zammit's unpublished notebooks detail a rather complex system of water trenches and cisterns cut into the bedrock over much of his excavated areas (Zammit, 1920–1925, pp. 68–72). A rather large L-shaped cistern was also documented in this area (Zammit, 1922, p. 132). The challenge of providing consistent fresh water supply to the urban settlement during all periods in Maltese history is illustrated in the significant number of both purposefully cut trenches often leading from natural springs as well as cisterns that acted as storage for fresh water. Water supply has always posed a problem in Malta with an average of 90 precipitation days per year.¹⁸ The importance of ensuring a continued supply is illustrated not only on the Domus Romana site but through a significant number of man-made features scattered across the islands.¹⁹

Excavations were also conducted beyond the northwestern boundary wall of the domus site in an adjacent field to determine the continuity of structural remains there. Unpublished photographs taken on site at the time as well as Zammit's field notebooks seemingly show that the field to the northwest of the domus did indeed contain structures. Interestingly, even in the Roman period, these structures were located on a terrace, several metres below the level of the structures abutting the boundary wall in the main

¹⁸ Maltaweather.com, last accessed 15/9/21.

¹⁹ A detailed survey of water cisterns and trenches has been conducted Malta Cistern Mapping- LAIR, under the direction of archaeologists Dr C. Clark and Dr T. Gambin (<https://www.lair.hmc.edu/malta-cistern-mapping>).

Figure 5: Zammit excavation, image courtesy of National Museum of Archaeology archives, Heritage Malta (2020).

Figure 6: Zammit excavation, image courtesy of National Museum of Archaeology archives, Heritage Malta (2020).

Figure 7: 1960s Site plan courtesy of National Museum of Archaeology archives, Heritage Malta (2020).

site. Based on the information contained in Zammit's notebooks, it seems that the stratigraphy in these areas was untouched and notably went unrecorded. The greatest limitation of understanding the site through Zammit's excavations is the fact that his study was either poorly published or lacked publication altogether. His unpublished field notes and photographs contain the only information we have on much of his excavation in these areas.

All Zammit's trenches in these areas were also backfilled, and none of the remains he uncovered are visible today. The humbler structures at the northwest of the domus are in the only area of Zammit's excavation campaign that is still visible and accessible today, largely because it sits within the site boundaries. In the 1960s a more detailed plan was drawn of the archaeological structures (Figure 7) on the domus site and included those uncovered by Zammit at the rear of the site and the adjacent field. It is possible that those features may have still been visible enough to map in the 1960s.

The extent of the excavations carried out by both Caruana and Zammit (Figure 8) occurred over 100 years ago and are the only prolonged excavations of the site and the archaeological hinterland around it. In 1983/84, an archaeological team from University of California Los Angeles (UCLA) conducted a limited excavation in an area close to that which Zammit excavated in 1920 to the southeast of the museum complex (Sagona, 2015, p. 271). This exploration consisted of a small trial trench that was opened with the hope of further work to follow later. A sample of the pottery assemblage from the excavations has been documented as part of Maxine Anastasi's research.²⁰ Zammit's earlier discoveries indicating further rooms or structures that either were associated with the domus or belonged to another range of structures were corroborated with evidence of further rooms and dwellings including an ashlar wall along a Roman road that ran in front of the domus. This eastern complex consisted of a series of floor levels, the lowest of which could be attributed to the first century AD. Through datable pottery, and from other datable materials such as coins, the structures seemingly were abandoned around early- to mid-fourth-century (Anastasi, 2019, p. 12). Although some understanding of the site was gained through these excavations, the general lack of priority given to the Roman sites in Malta results in the Roman Domus and the remains of the Roman city of Melite still buried around it, an untapped repository of information.

²⁰ Anastasi (2019).

Figure 8: Google Earth overlay of Caruana and Zammit excavated areas, image courtesy of David Cardona.

3 The Call for a New, Twenty-First-Century Excavation of the Domus Romana Site and the Surrounding Hinterland

One hundred years on from the work of Zammit, as renewed interest into the Roman period of Maltese history has taken shape largely around excavation and study of the Roman villa sites that dot the islands, there is a need to more fully understand the Roman Domus at Mdina. That understanding must also come with a clearer indication of its place within the ancient city and broader still, the place of Melite in the Roman-controlled central Mediterranean. Indeed, a renewed study of the domus, the “flagship” sample of the Roman presence in the Maltese Islands, is the building block upon which a broader understanding of Roman Malta should be developed.

The MCRP is the latest research initiative focused on the Roman Domus.²¹ The project conducted a season of geophysics exploration, field walking, and a 3D documentation of the site and the museum artefacts in 2019 and had planned to begin exploratory excavation of areas of the site in 2020. However, the advent of the global COVID pandemic has forced the project to place its plans on hold until it can conduct excavations during a planned field season in the summer of 2022. Despite the pandemic-driven

²¹ The project is the coming together of three organisations: Heritage Malta, Intercontinental Archaeology, and the University of South Florida to research and excavate the domus site. Sponsorship of the project has also been provided by the University of North Alabama. These three organisations and their representatives (coauthors of this article) provide the first multinational study of the domus representing organisations and universities from Malta, Australia, and the United States.

Figure 9: Google Earth overlay of targeted excavation areas, image courtesy of David Cardona.

setbacks, the geophysical survey has provided interesting results worthy of discussion and interpretation given academic conclusions from the exploration of the site 100 years ago, and sadly, sparsely published.

Previous remote sensing carried out by Heritage Malta to the south of the Roman Domus had shown that remote sensing was effective in the geography and geological conditions prevalent in the area (Brown *et al.*, 2021, p. 612). The survey conducted in 2019 was specifically targeted to provide information on the areas of the site that may yield new information as to both the full extent of the domus and a clearer picture of the archaeological environment that surrounds it. Relatively little is truly known of the ancient city of Melite (previously Maleth), the Phoenician and Punic administrative centre in the Maltese Islands that came under the control of the Romans in 218 BC. What remains of the city of that period sits under modern day Mdina and Rabat, populated areas that were the product of the medieval rebuilding of the city, as well as under the fields and farmland that lie outside the medieval walls of Mdina. What is without doubt is that the Roman city was far larger than Mdina although only the sparse remains of buildings and walls have ever been excavated or, in some parts, conclusively located.

The new exploration of the domus site by the MCRP in 2019 established principal guidelines put in place to ensure that its research was not an isolated study, but a continuation of the work begun by Zammit and indeed Caruana before him. Hence, the areas that were targeted for survey in 2019 were areas that Zammit had explored, but little is known about. Certainly, Zammit's work must be fully understood before it can be either challenged or built upon. The exploration of these targeted areas A–F (Figure 9) benefits from technology and methodologies not available in the 1920s, as well as understanding gained from more recent excavations of Roman villa sites nearby. In short, the ground-penetrating radar analysis showed there to be anomalies likely associated with archaeological remains. The nature of these identified anomalies has been provisionally interpreted and will guide future excavation of these areas of the site as well as discussion here.

It was deemed essential that the project initially focuses on three areas that were previously excavated by Zammit in the fields located below Howard Gardens on the north side of the train station road (B) and in the field that lies essentially directly behind the excavated and cleared suburban area of the domus site (A). These areas held the most promise in locating additional structures. Furthermore, the area in the southeast

Figure 10: Zammit excavation, image courtesy of National Museum of Archaeology archives, Heritage Malta (2020).

of the domus particularly in the museum gardens would provide an indication of the extent of the domus out from the museum extension (E).

The fields below Howard Gardens (on the Northern side of the train station road) show promise in locating the structures pictured in Zammit's sketches and photographs (Figures 10 and 11). Aerial photographs taken in 1967 (Figure 12) seem to indicate that at least one of Zammit's trenches on the northern side of the train station road may have been visible more than 40 years after the excavations were concluded. Although there is nothing visible today to substantiate Zammit's photos and sketches, the geophysics in this area identified several anomalies that provided probable structures of archaeological interest. Anomalies that have showed evidence of alignment may be interpreted as walls and a deeper structure is likely the foundation of a tower. As well as the structural foundations, the presence of voids may be reliably interpreted as part of the cistern and water channels identified by Zammit. Identification and mapping of these structures and remains in future seasons would fulfill one of the aims of the project within the broader archaeological hinterland that the Roman Domus is a part of.

The field to the north of the domus (area A) holds particular interest for the project. It is in this area that Zammit's field notebooks refer to structures that were uncovered there. These structures were also present in the survey plan of the site done in the 1960s (Figure 7) although they are no longer visible today. The ground penetrating radar (GPR) results in this area indicate the presence of collapsed archaeological features as might be expected from Zammit's notes and the survey plan. Indeed, the results in this area confirm the continuance of structures from the main domus site on the other side of the boundary wall despite the apparent terracing of the area. It is, therefore, possible that the excavation in this area will potentially help in determining the extent of the suburban area of this part of the ancient city. GPR reflections seen in area B on the northern side of the train station road run on an axis that if continued to the southwest may intersect with features in area A. These features (Figure 13) were interpreted by the geophysicist as potential walls and a square structure (5 × 5 m) that may be the remnants of a tower (Brown et al., 2021, p. 619). Given the size and depth of the possible walls adjacent to it, this could indicate an area

Figure 11: Zammit excavation, image courtesy of National Museum of Archaeology archives, Heritage Malta (2020).

Figure 12: Aerial Photograph 1967, image courtesy of the Mapping Authority, Planning Unit Malta (accessed 2018).

Figure 13: Geophysics imagery (Brown et al., 2021).

alongside the original defensive walls of the Roman boundary of Melite, seemingly running perpendicular out from the visible wall of Mdina. Very little visible evidence remains of the Punic-Roman walls that surrounded the ancient city, which was potentially about three times the area of the current walled city of Mdina. It is possible that we have evidence here that is associated with a line of walls running along the escarpment. This line of walls connects with a section of ashlar blocks that are still visible in the cutting of the 1889 road to the railway station. In the fourth or fifth century AD, Mdina was fortified with a ditch (30 m wide and a wall 5.1 m thick) with towers (Teuma, 2005). Traces of the ditch are still visible on Saqqajja Street and Santa Rita Street (Sagona, 2015, p. 225). The GPR results in area B potentially speak to research questions that guide the project in determining the location of fortification walls and a reassessment of the proposed layout of the city.

One other feature that is of note in area A is a vaulted structure that contains a void. It is the belief of the project that this is, most probably, a part of a water cistern. Features applicable to the use and collection of water such as cisterns and channels are clearly visible in the area of the workshops/lower class housing north of Domus all of which featured in Zammit's notes (MAR, 1924–1925, pp. 3–4). Zammit described the prevalence of cisterns and water features at the Domus as elaborate and impressive (MAR, 1921–1922, p. 4). He established that structures were built over bedrock into which water cisterns had been cut (Sagona, 2015, p. 271). On the northern side of the station road in area B, void features identified in the GPR may be cisterns as well. Certainly, it was in trenches dug by Zammit in this area that he described the area of the platform of large stone blocks and an L-shaped water cistern, a roofed room supported by pillars on one side that spanned a natural fissure with spring water and channel leading down into the valley below (Sagona, 2015, p. 271; Zammit, 1922, pp. 132–133). The channel indicated also in the GPR seems to run in the direction of Ghajn Hammiem fountain where traces of a Roman bathhouse were also identified (Sagona, 2015, p. 271).

In a further attempt to determine the extent of the Roman Domus to the northeast and east, area E was targeted. The area outside of the property gate is strongly urbanised in the first metre of depth and paved. It contains man-made underground service features such as piping, and the only part of this area free of such hindrances is the garden. This area of the Domus precinct sits near to excavations carried out in the modern street by the UCLA project, which determined that a Roman road and structures were indeed present in front of the Domus. Zammit's excavations here uncovered a large number of Saracen tombs situated on top of the area occupied by room structures complete with mosaic tessera. In this area, several features identified by the geophysics, as expected because of their dimensions and shape, were interpreted as walls. The presence of a structure (6.5 × 5 m) partially filled with resulting material (stones, etc.) was also identified. This is quite possibly the mosaicked room commented on by Zammit in his notes and backfilled.

Figure 14: Zammit's Baulks, image courtesy of Robert Brown (2019).

The garden area of the domus and museum site is largely taken up by well-developed trees, and this in effect limited the surface area that was accessible to the GPR survey. However, a number of features based on depth and size strongly indicated the presence of tombs. This was to be expected. Shallow features 0.6–1.8 m deep and 0.8–1 × 1.8 m in size are Arabic tombs originally excavated by Zammit.²² There are no records as to the final fate of the surviving grave contents (human remains), which were removed during his excavations and reportedly reburied in a pit on site. They held little value and interest at the time and the possibility exists that they were re-interred in the field behind the Domus. However, to this point, no void large enough to be described as a pit for burials was detected by the GPR in area A.

Further work within the excavated area of the site is planned to continue once field work resumes in 2022. Zammit's excavations of the insula of structures located behind the domus may yet be able to tell us much of the urban dynamics of Melite and the relationship between these structures and the domus itself. The tidying up of the areas excavated in the northwest of the domus property is crucial to understanding the site. In the absence of recorded stratigraphy, the baulks remaining from the century-old excavations provide the potential of new data on the existing site; undisturbed stratigraphic layers still survive *in situ* (Figure 14). Even from a visual inspection of the baulks, it is clear that an excavation of them and a collection of the pottery still *in situ* may provide an assemblage that would be useful in helping to understand the nature of this urban site.

²² At least 100 burials were found consisting of pit or cist graves with the body laid out in a trench or in a grave constructed of small, squared stones reused from the domus. These saracenic tombs that had been laid over the top of the older Roman structure and parts of the site (some of these tombs remain in the excavated rear area of the domus site *in situ*). The tombs were identified as Saracen graves based on the position of internment, as well as inscriptions from the Koran. The date of the burials is largely uncertain although the eleventh century has been postulated based on the known history of the region during the period. As the excavation had for its object the study of the Roman Domus, the graves had to be removed, the bones being deposited and protected on site in a deep pit. About 50 skulls were preserved for anthropological investigation (Zammit, 1922, p. 219).

Figure 15: 3D representation of the site, image courtesy of Davide Tanasi.

Although there has been a recent move to better understand the pottery of the Roman period in Malta, particularly that from rural villa sites and sanctuaries, a lacuna still exists in terms of an urban assemblage (Anastasi, 2019, p. 1). Certainly, an assemblage from the domus site, combined with the small assemblage excavated by the UCLA team (analysed by Anastasi), would provide a more conclusive and fresh dataset in understanding aspects of trade and the importation of goods as it pertained to the Roman capital Melite and more specifically the activities taking place in the structures situated around the domus. These layers left from Zammit's excavated areas may also help in more accurately dating the structures contiguous to the main domus structure. There is still no published research on how these structures relate to the domus itself.

As well as the GPR field survey, a team from the Institute for Digital Exploration (IDEx) from the USF, carried out a digitisation campaign using terrestrial laser scanning and aerial digital photogrammetry to document the current state of the site to aid documentation and planning of future excavations (Tanasi et al., 2021). Justification for re-excavating the Roman Domus and the larger site surrounding it is based on the consideration that archaeological methods have vastly improved to provide more reliable data about the site. The need for a detailed plan of the site and the ability to place and reference new structures and archaeological features are crucial in the ongoing study of the site. To facilitate this, the use of a drone allowed for laser scanning and 3D photogrammetry (Figure 15). The IDEx team was able to create a 3D digitisation of the site, including the rooms of the domus and the elaborate mosaics. A multilayered computer-aided design (CAD) plan of the site was also compiled (Tanasi et al., 2021, p. 60). Furthermore, IDEx work for the project consisted of close-range scanning of the Roman and Muslim material culture relevant to the site. The purpose of this activity fulfils a number of aims that benefit the research being

conducted by the archaeological teams on site. The 3D scanning of objects allows for the digitisation of them within the museum so that they may be used as a “surrogate” for research. More than 100 3D photographs of objects within the museum collection were added to the dataset compiled by IDEx. This also created a focal talking point that may be enacted to enhance community outreach and discussion (Tanasi *et al.*, 2021, 63).

4 Conclusion

Overall, the survey season in 2019 provided the project with information to not only assist in the selection of areas to concentrate on in future excavation but started discussion that will answer some questions regarding the extent and layout of the domus, as well as the extent and nature of the archaeological environment in which it plays an important part. A modern approach to research of the Roman Domus and the archaeological environment surrounding it as well as the material culture from many of Malta’s Roman sites, placed in the museum, is crucial to a better understanding of not only the site but also the features that underpin the Roman period in Maltese history. The methodology used in this first season in the field for the MCRP is new to the site but consistent to recent research methodology used on other Maltese sites and indeed on sites in the broader Mediterranean region.

The lack of digital documentation of the entire site was of a concern. As a result, a digital CAD plan of the entire area as well as a full 3D model of the visible archaeological remains was commissioned and actioned by Davide Tanasi and IDEx on behalf of the project. These results have been used in a number of ways to enhance engagement with the site and the artefacts housed in the museum and will be used to map and identify the different walls and structures. Data from digitisation of artefacts will also consequently provide a state of preservation document for the site, as well as provide a platform for research and wider community involvement in discussion. The detailed remote sensing exercise carried out has, thus, brought exploration of the domus into the contemporary era with the benefits of new technology and methodologies.

The MCRP is making progress on a modern interpretation and understanding of the Roman Domus (and the Domus Romana Museum) at Mdina. The excavations of Zammit, in particular, have formed the basis for understanding the site for more than a century. GPR results from this survey carried out in 2019 are guiding the planning for excavation in a number of targeted areas due to commencement in the summer of 2022. The results themselves were not entirely unexpected. Interpretation, thus far, has been contained to several key contexts; water features, structures, and the positioning of walls and possible defensive fortifications though a fuller interpretation will be undertaken with further excavation and research.

Acknowledgements: The authors are grateful to David Cardona, Senior Curator of Phoenician, Roman and Medieval Sites with Heritage Malta for having facilitated our work at the Domus Romana in every way possible, always with patience and kindness, and to Sharon Sultana, Senior Curator at the National Museum of Archaeology of Valletta for access to archival photographs and images.

Funding information: Authors state no funding involved.

Author contributions: All authors have accepted responsibility for the entire content of this manuscript and approved its submission.

Conflict of interest: The authors state no conflict of interest. D.T. is a member of Open Archaeology’s Editorial Board. He was not, however, involved in the review process of this article. It was handled entirely by other editors of the journal.

Data availability statement: The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

References

- Ashby, T. (1915). Roman Malta. *Journal of Roman Studies*, 5, 23–80.
- Anastasi, M. (2019). *Pottery from Roman Malta, Malta archaeological review supplement 1*. Oxford, UK: Archaeopress Publishing Ltd.
- Bonanno, A. (1997). *The imperial portraits from Malta: Their contextual significance in Roman portraits artistic and literary; Acts of the third international conference on Roman portraits, Prague 25–29 September 1989* (pp. 62–64). Mainz: Verlag Philipp von Zabern.
- Bonanno, A. (2005). *Malta phoenician, punic and Roman*. Malta: Midsea Books.
- Brown, R., Cardona, D., De Giorgi, L., Leucci, G., Lowe, B. J., Persico, R., Tanasi, D., & Wilkinson, A. (2021). Ground-penetrating radar prospections at the Roman Domus of Mdina (Malta). *Exploration Geophysics*, 52(6), 612–623. doi: 10.1080/08123985.2020.1865108.
- Bruno, B. (2009). *Roman and Byzantine Malta, trade and economy*. Malta: Midsea Books.
- Bugeja, A. (2004). Ancient mosaic pavement discovered at Notabile: A historical appreciation. *Melita Historica*, 15(1), 53–66.
- Caruana, A. A. (1882). *Report on the Phoenician and Roman antiquities in the group of the Islands of Malta*. Valletta: Malta Government Printing Office.
- Caselli, A. (2013). Revisiting the Roman domus in Rabat, Malta, through a consideration of its mosaic flooring. *Malta Archaeological Review 2008–2009, 2013*(9), 32–39.
- Diodorus Siculus V.12.1–4 as accessed at https://penelope.uchicago.edu/Thayer/E/Roman/Texts/Diodorus_Siculus/5A*.html Last accessed 12.01.21
- Gambin, T. (2012). Central Mediterranean islands and satellite ports for ancient Rome. In S. Keay (Ed.), *Rome, Portus and the Mediterranean* (pp. 147–151). London: British School at Rome.
- Heritage Malta. Website, Curator's Tour-Temi Zammit's Legacy at the Tarxien Temples. <https://heritagemalta.org/curators-tour-temi-zammit-legacy-at-the-tarxien-temples/#:~:text=The%20legacy%20which%20Themistocles%20Zammit,climax%20of%20his%20archaeological%20career>. Last accessed 12.01.21.
- Lowe, B. (2021). A most notable dwelling: The Domus Romana and the urban topography of Roman Melite. *Open Archaeology*, 7(1), 37–50. doi: 10.1515/opar-2020-0121.
- Museums Annual Reports (MAR). (1921–1922). Reports on the working of Government departments. Available online: [https://culture.gov.mt/en/culturalheritage/Pages/Museums-Annual-Reports-\(MAR\).aspx](https://culture.gov.mt/en/culturalheritage/Pages/Museums-Annual-Reports-(MAR).aspx).
- Museums Annual Reports (MAR). (1924–1925). Reports on the working of Government departments. Available online: [https://culture.gov.mt/en/culturalheritage/Pages/Museums-Annual-Reports-\(MAR\).aspx](https://culture.gov.mt/en/culturalheritage/Pages/Museums-Annual-Reports-(MAR).aspx).
- Pitts, M., & Versluys, M. J. (2014). *Globalisation and the Roman world*. New York: Cambridge University Press.
- Sagona, C. (2015). *The archaeology of Malta from the Neolithic through the Roman period*. Cambridge & New York: Cambridge University Press.
- Tanasi, D., Hassam, S., Kingsland, K., Trapani, P., King, M., & Calì, D. (2021). Melite civitas Romana in 3D: Virtualization project of the archaeological park and museum of the Domus Romana of Rabat, Malta. *Open Archaeology*, 7(1), 51–83. doi: 10.1515/opar-2020-0126.
- Teuma, Fr. E. P. (2005). *Qanat, Saqqajja and Roman aqueduct system at Rabat, Malta. Proceedings of History Week 2003* (pp. 75–100). Malta: Malta Historical Society.
- Zammit, T. (April, 1922). Excavations in Malta. *The Antiquaries Journal*, 2(2), 131–134. The Society of Antiquaries of London.
- Zammit, T. (July, 1923). Excavations at Rabat, Malta. *The Antiquaries Journal*, 3(3), 219–225. The Society of Antiquaries of London.
- Zammit, T. (1925). Saracenic Remains in Malta. *Melita*, V(1925), 1–5. Valletta.
- Zammit, T. (1920–1925). *Unpublished field notebooks and photos, held by the National Archaeological Museum Archives, Valletta*.