McDONALD INSTITUTE MONOGRAPHS

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By Charles French, Chris O. Hunt, Reuben Grima, Rowan McLaughlin, Simon Stoddart & Caroline Malone

Volume 1 of Fragility and Sustainability – Studies on Early Malta, the ERC-funded *FRAGSUS Project*

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On the cover: *View towards Nadur lighthouse and Ghajnsielem church with the Gozo Channel to Malta beyond, from In-Nuffara (Caroline Malone).*

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Preface and dedication

Caroline Malone

The *FRAGSUS Project* emerged as the direct result of an invitation to undertake new archaeological fieldwork in Malta in 1985. Anthony Bonanno of the University of Malta organized a conference on 'The Mother Goddess of the Mediterranean' in which Colin Renfrew was a participant. The discussions that resulted prompted an invitation that made its way to David Trump (Tutor in Continuing Education, Cambridge University), Caroline Malone (then Curator of the Avebury Keiller Museum) and Simon Stoddart (then a post-graduate researcher in Cambridge). We eagerly took up the invitation to devise a new collaborative, scientifically based programme of research on prehistoric Malta.

What resulted was the original Cambridge Gozo Project (1987–94) and the excavations of the Xagħra Brochtorff Circle and the Għajnsielem Road Neolithic house. Both those sites had been found by local antiquarian, Joseph Attard-Tabone, a long-established figure in the island for his work on conservation and site identification.

As this and the two other volumes in this series report, the original Cambridge Gozo Project was the germ of a rich and fruitful academic collaboration that has had international impact, and has influenced successive generations of young archaeologists in Malta and beyond.

As the Principal Investigator of the *FRAGSUS Project*, on behalf of the very extensive *FRAGSUS* team I want to dedicate this the first volume of the series to the enlightened scholars who set up this now 35 year-long collaboration of prehistoric inquiry with our heartfelt thanks for their role in our studies.

We dedicate this volume to:

Joseph Attard Tabone
Professor Anthony Bonanno
Professor Lord Colin Renfrew

and offer our profound thanks for their continuing role in promoting the prehistory of Malta.

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For Chapter 2, we extend warm thanks to the staff of the ^{14}CHRONO centre at QUB, especially Stephen Hoper, Jim McDonald, Michelle Thompson and Ron Reimer, all of whom took a keen interest in the *FRAGSUS Project*. The success of the *FRAGSUS Project* in general and the radiocarbon dating exercise has depended on their work. We thank the Physical Geography Laboratory staff at the School of Geography, University College Dublin, for the use of their ITRAX XRF core scanner. In particular, we would like to thank Dr Steve McCarron, Department of Geography, National University of Ireland, Maynooth and Dr Jonathan Turner, Department of Geography, National University of Ireland, University College, Dublin. We thank Prof. Patrick Schembri for sourcing and collecting the *Acanthocardia* samples from the Natural Museum of Natural History. Sean Pyne O'Donnell thanks Dr Chris Hayward at the Tephrochronology Analytical Unit (TAU), University of Edinburgh, for help and advice during microprobe work. Dr Maxine Anastasi, Department of Classics and Archaeology, University of Malta, helped identify the pottery from the settlement cores. Dr Frank Carroll helped show us the way forward; but sadly is no longer with us. Chris Hunt, Rory Flood, Michell Farrell, Sean Pyne O'Donnell and Mevrick Spiteri were the coring team. They were helped by Vincent Van Walt, who provided technical assistance. Al Ruffell and John Meneely did geophysical evaluation and GRP location of the cores. During fieldwork, Tim Kinnaird and Charles French were assisted by Sean Taylor, Jeremy Bennett and Simon Stoddart. We are grateful to the Superintendence of Cultural Heritage, Malta and Heritage Malta for permission to undertake the analyses and much practical assistance.

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For Chapter 6, Reuben Grima wrote the first draft of this contribution, receiving comments and additions from the other authors.

For Chapter 7, Simon Stoddart wrote the first draft of this contribution, receiving comments and additions from the other authors.

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Environment and Planning Authority. A number of individuals were happy to share their recollections of shepherding practices in Malta and Gozo over the last sixty or seventy years; others facilitated the encounters. We are grateful to all of them: Charles Gauci, Grezzju Meilaq, Joseph Micallef, Louis Muscat, Ċettina and Anġlu Vella, Ernest Vella and Renata Zerafa.

Simon Stoddart would like to thank Prof. Martin Jones and Rachel Ballantyne for their advice in constructing Figure 11.4. The editors would like to thank Emma Hannah for compiling the index.

Firstly, the FRAGSUS Project is the result of a very generous research grant from the European Research Council (Advanced Grant no' 323727), without which this and its two partner volumes and the research undertaken could not have taken place. We heartily thank the ERC for its award and the many administrators in Brussels who monitored our use of the grant. The research team also wants to record our indebtedness to the administrators of the grant within our own institutions, since this work required detailed and dedicated attention. In particular we thank Rory Jordan in the Research Support Office, Stephen Hoper and Jim McDonald – CHRONO lab, and Martin Stroud (Queen's University Belfast), Laura Cousens (Cambridge University), Glen Farrugia and Cora Magri (University of Malta), the Curatorial, Finance and Designs & Exhibitions Departments in Heritage Malta and Stephen Borg at the Superintendence of Cultural Heritage. Finally, we thank Fr. Joe Inguanez (Emeritus Head of Department, Department of Sociology, University of Malta) for offering us the *leitmotif* of this volume while a visiting scholar in Magdalene College, Cambridge: '*Mingħajr art u ħamrija, m'hemmx sinjorija*' translating as 'without land and soil, there is no wealth'.

Foreword

Anthony Pace

Sustainability, as applied in archaeological research and heritage management, provides a useful perspective for understanding the past as well as the modern conditions of archaeological sites themselves. As often happens in archaeological thought, the idea of sustainability was borrowed from other areas of concern, particularly from the modern construct of development and its bearing on the environment and resource exploitation. The term sustainability entered common usage as a result of the unstoppable surge in resource exploitation, economic development, demographic growth and the human impacts on the environment that has gripped the World since 1500. Irrespective of scale and technology, most human activity of an economic nature has not spared resources from impacts, transformations or loss irrespective of historical and geographic contexts. Theories of sustainability may provide new narratives on the archaeology of Malta and Gozo, but they are equally important and of central relevance to contemporary issues of cultural heritage conservation and care. Though the archaeological resources of the Maltese islands can throw light on the past, one has to recognize that such resources are limited, finite and non-renewable. The sense of urgency with which these resources have to be identified, listed, studied, archived and valued is akin to that same urgency with which objects of value and all fragile forms of natural and cultural resources require constant stewardship and protection. The idea of sustainability therefore, follows a common thread across millennia.

It is all the more reason why cultural resource management requires particular attention through research, valorization and protection. The *FRAGSUS Project* (Fragility and sustainability in small island environments: adaptation, cultural change and collapse in prehistory) was intended to further explore and enhance existing knowledge on the prehistory of Malta and Gozo. The objective of the project as designed by the participating institutional partners and scholars, was to explore untapped field resources and archived archaeological material from a number of sites and their landscape to answer questions that could be approached with new techniques and methods. The results of the *FRAGSUS Project* will serve to advance our knowledge of certain areas of Maltese prehistory and to better contextualize the archipelago's importance as a model for understanding island archaeology in the central Mediterranean. The work that has been invested in *FRAGSUS* lays the foundation for future research.

Malta and Gozo are among the Mediterranean islands whose prehistoric archaeology has been intensely studied over a number of decades. This factor is important, yet more needs to be done in the field of Maltese archaeology and its valorization. Research is not the preserve of academic specialists. It serves to enhance not only what we know about the Maltese islands, but more importantly, why the archipelago's cultural landscape and its contents deserve care and protection especially at a time of extensive construction development. Strict rules and guidelines established by the Superintendence of Cultural Heritage have meant that during the last two decades more archaeological sites and deposits have been protected in situ or rescue-excavated through a statutory watching regime. This supervision has been applied successfully in a wide range of sites located in urban areas, rural locations and the landscape, as well as at the World Heritage Sites of Valletta, Ġgantija, Ħaġar Qim and Mnajdra and Tarxien. This activity has been instrumental in understanding ancient and historical land use, and the making of the Maltese historic centres and landscape.

Though the cumulative effect of archaeological research is being felt more strongly, new areas of interest still need to be addressed. Most pressing are those areas of landscape studies which often become

peripheral to the attention that is garnered by prominent megalithic monuments. *FRAGSUS* has once again confirmed that there is a great deal of value in studying field systems, terraces and geological settings which, after all, were the material media in which modern Malta and Gozo ultimately developed. There is, therefore, an interplay in the use of the term sustainability, an interplay between what we can learn from the way ancient communities tested and used the very same island landscape which we occupy today, and the manner in which this landscape is treated in contested economic realities. If we are to seek factors of sustainability in the past, we must first protect its relics and study them using the best available methods in our times. On the other hand, the study of the past using the materiality of ancient peoples requires strong research agendas and thoughtful stewardship. The *FRAGSUS Project* has shown us how even small fragile deposits, nursed through protective legislation and guardianship, can yield significant information which the methods of pioneering scholars of Maltese archaeology would not have enabled access to. As already outlined by the Superintendence of Cultural Heritage, a national research agenda for cultural heritage and the humanities is a desideratum. Such a framework, reflected in the institutional partnership of the *FRAGSUS Project*, will bear valuable results that will only advance Malta's interests especially in today's world of instant e-knowledge that was not available on such a global scale a mere two decades ago.

FRAGSUS also underlines the relevance of studying the achievements and predicaments of past societies to understand certain, though not all, aspects of present environmental challenges. The twentieth century saw unprecedented environmental changes as a result of modern political-economic constructs. Admittedly, twentieth century developments cannot be equated with those of antiquity in terms of demography, technology, food production and consumption or the use of natural resources including the uptake of land. However, there are certain aspects, such as climate change, changing sea levels, significant environmental degradation, soil erosion, the exploitation and abandonment of land resources, the building and maintenance of field terraces, the rate and scale of human demographic growth, movement of peoples, access to scarce resources, which to a certain extent reflect impacts that seem to recur in time, irrespectively of scale and historic context.

Anthony Pace
Superintendent of Cultural Heritage (2003–18).

Chapter 10

Settlement evolution in Malta from the Late Middle Ages to the early twentieth century and its impact on domestic space

George A. Said-Zammit

This study analyses settlement development in the Maltese Islands between the late Medieval period and the early twentieth century and the impact this had on the evolution of native houses. It examines the main causes which led to the rise, development or desertion of villages and hamlets through time and how different political, economic and social situations have influenced the way people (natives and foreigners) lived within their abodes and settlements. For the purposes of this study the houses referred to in this chapter range from simple rural dwellings, including cave-dwellings, to more elaborate *palazzi* which usually dominate the town or village centres.

10.1. The Medieval Period (AD 870–1530)

The earliest historical evidence that refers to local settlements is Al-Himyari's account, which narrates how the Arabs conquered and depopulated the Maltese Islands, razed a fortress to the ground and built a *madina* in the early eleventh century. Al-Himyari gives no further information about other settlements. That this Islamic *madina* is synonymous with the medieval town of Mdina is confirmed by its toponym (the Arabic term *madina* means a town) and by the archaeological evidence (Dalli 2006, 44).

A planimetric analysis of present-day Mdina suggests that this still retains some of its Islamic urban past, particularly its narrow and maze-like streets. This reminds us of the North African *madinas* like Mahdia and Sousse in Tunisia (Buhagiar 1991, 16). On the basis of other North African *madinas*, and considering Malta's typically hot and arid climate, especially in summer, it can be assumed that its streets were purposely planned to ensure favourable climatic conditions. They were probably also intended to prevent easy movement and ensure privacy (De Lucca 1995, 34ff).

Another common characteristic of these *madinas* is their defensive walls. Although no Muslim phase buildings have survived, Mdina's particular streetscape leads us to deduce that it probably resembled a typical Arab fortified citadel. A long winding spine road possibly led to the town's main public buildings, for example the Friday mosque.

Just outside the Mdina walls, Rabat developed into a thriving suburb occupied by a community of artisans, labourers and peasants. Apparently Rabat emulated Mdina's streetscape, since its centre also consists of a network of narrow, winding streets and *culs-de-sac*.

Another urban settlement developed in central Gozo where the medieval Castello stands today. The Citadel's streetscape resembles that of Mdina, implying that this possibly followed similar Islamic town planning concepts. Its strategically central position, like Mdina, made it an ideal place from where any potential enemy incursion could be detected. Outside its walls a small suburb, also known as Rabat, soon developed (Dalli 2006, 310).

In the heart of the Grand Harbour a maritime settlement, Birgu, developed close to the thirteenth century *Castrum Maris*. There is no historical evidence when this castle, which was the only defensive system in this harbour at the time and served as a shelter for the nearby Birgu, was built, however indications show that it could have already existed since the twelfth century.

Outside the urban and suburban settlements, the rest of the native community settled in rural hamlets to cultivate the land and rear their animals. The earliest documented references to open settlements date back to the late fourteenth century, although there are archaeological indications that certain rural areas could have already been settled even before (Wettinger 1975). However, the available archaeological and historical data are certainly not enough to determine the possible type, layout and extent of any rural settlements that could have existed locally in early Medieval Malta. Apart from the open villages, there were also cave-dwellings spread in different areas.

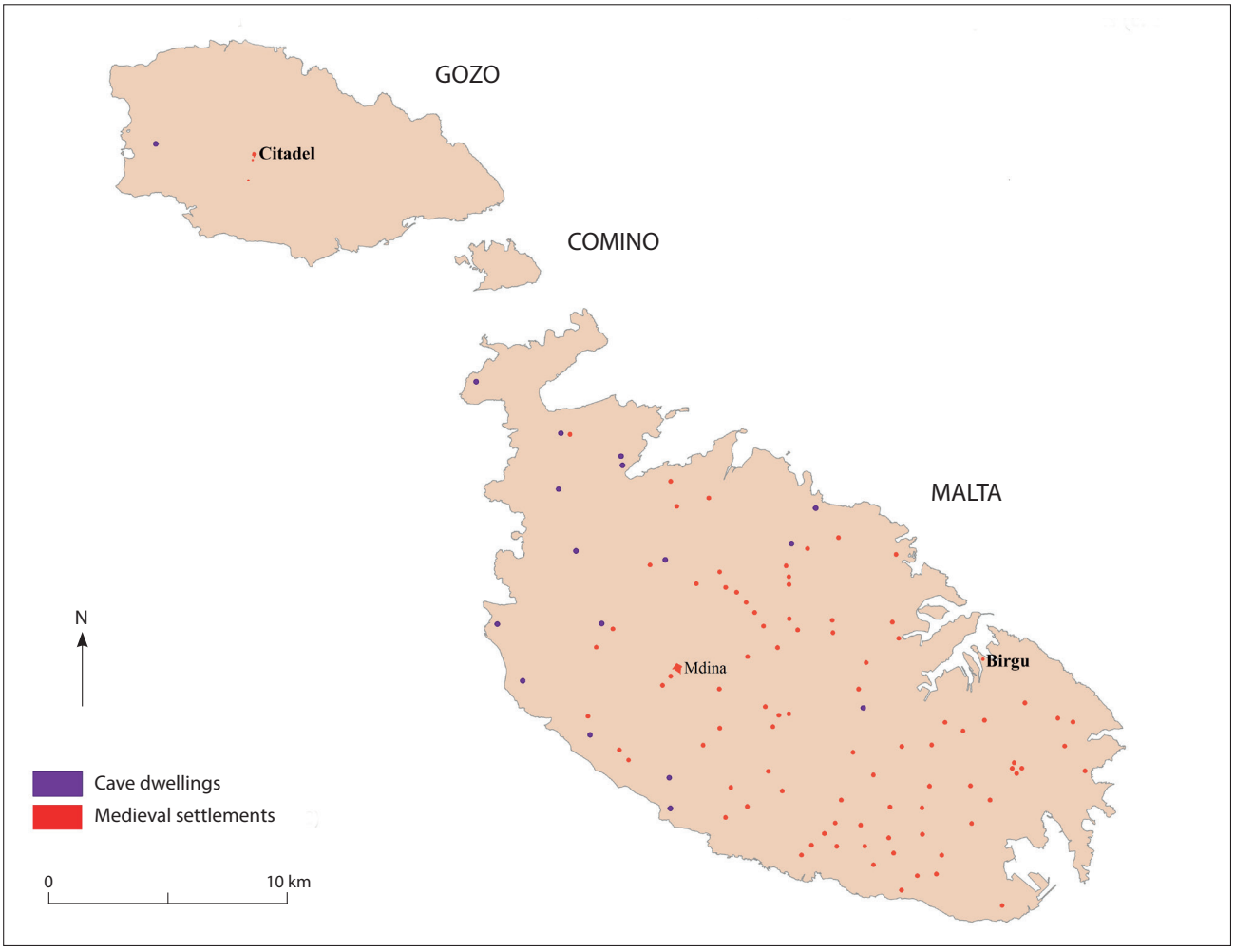

Figure 10.1. *The likely distribution of built-up and cave-dwellings in the second half of the fourteenth century (G.A. Said-Zammit).*

Figure 10.1 shows the likely distribution of built-up and cave-dwellings in the second half of the fourteenth century; the list is much longer, but several of these settlements could not be located on this map since the available records do not provide any clear indication regarding their location. Here one can observe a centrally located urban centre in Malta, another one in Gozo, with the rural settlements scattered in different areas. Birgu was the only maritime urban centre, hence Malta's only point of contact with the outside world. For many centuries Gozo's population remained concentrated in the Castello and its suburb, because this island was often exposed to sudden enemy attacks. This possibly also meant that, as happened in Malta, many of Gozo's urban peasants cultivated their lands or reared their animals close to these settlements, where they had the shortest distance possible (based on a normal walking distance of 5 km per hour) (see Chapter 9). Those who had to walk over longer distances to reach their fields possibly constituted a smaller group as this was seemingly less practical. In Malta the situation appears to have been different since there was a dispersion of settlements, which meant that the peasants probably tried to establish their settlements where the land was suitable for farming and grazing and where they could reach their lands in the shortest time possible (Fiorini 1993, 143).

A number of settlements had disappeared by AD 1419, particularly those located close to the coast or the harbours (Wettinger 1975, 192). Blouet (1978, 374) contends that, apart from the perennial problem of sudden enemy attacks on the island, another reason which led to settlement desertion was the shift from a subsistence based economy to one dominated by the cultivation of cash crops. This phenomenon became

more evident by the first half of the fifteenth century when there seems to have been an attempt for less settlement dispersion, as Figure 10.2 demonstrates. For example, by AD 1420 no record of open villages is registered in northern Malta, while those located in the Grand Harbour area, except for Birgu, had likewise disappeared. Western and southeastern Malta experienced a similar situation, although it was comparatively more evident in the latter. There could have been three main reasons why fewer settlements were abandoned in western Malta:

a) the land is suitable for agriculture and there are many springs of perennial water;
b) its southern shoreline is marked by cliff systems that hinders easy access to the enemy;
c) Mdina was within easy walking distance from all parts of this district.

Southeastern Malta, with its flat plain and sheltered harbours and inlets, was potentially more prone to enemy attacks. Hence, this could have been one of the reasons why here several hamlets were also deserted. In Gozo, the population remained concentrated only in the Citadel and its suburb.

The historical evidence shows that while certain hamlets were abandoned, others became more populated and eventually achieved parish status. This meant that by the first half of the fifteenth century there was already a certain degree of hierarchical organization of settlements, at least on a parochial basis, since parishes usually had a number of minor hamlets under their care (Blouet 1993, 42).

Figure 10.3 shows the distribution of settlements just before AD 1530. Here we observe a further shift towards more nucleation. While between AD 1420 and 1530 more villages and hamlets continued to

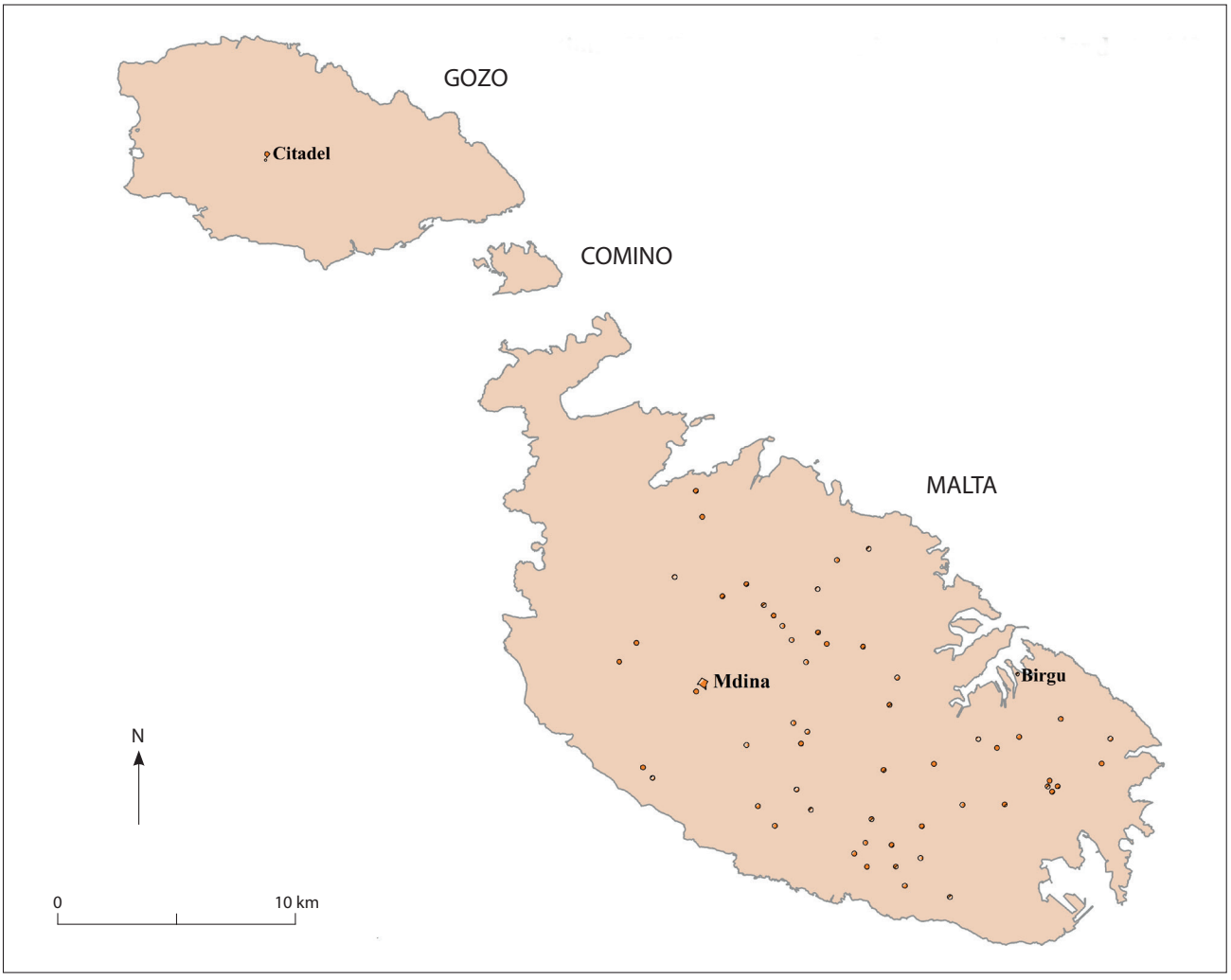

Figure 10.2. *The lower frequency of settlement distribution by* c. AD *1420 (G.A. Said-Zammit).*

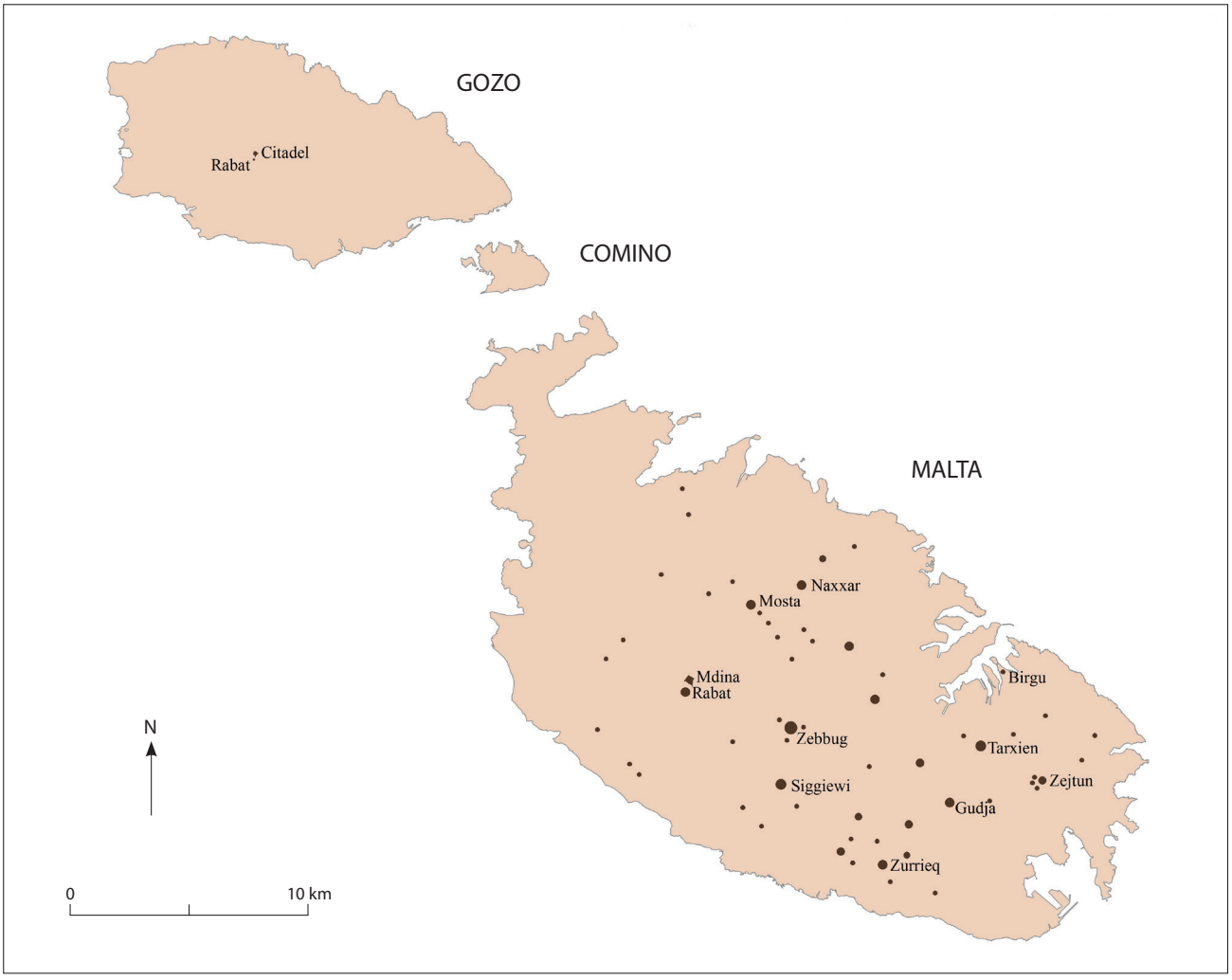

Figure 10.3. *The distribution of settlements just before* AD *1530 (G.A. Said-Zammit).*

be deserted, particularly those in coastal or harbour areas, others situated more inland increased in terms of population size. This map also indicates that some of the major settlements that prospered during the fifteenth and early sixteenth centuries developed to an extent that some of the hamlets nearby eventually were incorporated into the territorial limits of the major villages to form a single settlement. Mdina and the *Castrum Maris* and the shelter they provided may have been one of the reasons that permitted the inland settlements to flourish. In Gozo the Citadel and its suburb remained the only built-up settlement on that island.

The desertion of a number of hamlets and the concomitant expansion of inland settlements, with their development into proto-industrial centres, coincided with the general rise in population that these islands experienced from the early fifteenth century onwards. Apart from episodes of enemy attacks, this pattern also seems to suggest the gradual transmigration of the peasant population from the hamlets to the proto-industrial inland settlements, similar to what occurred in contemporary Europe (Epstein 2002).

10.1.1. Medieval houses

The economic development that occurred locally during this period, together with the external political influences from different parts of Europe, namely the Arabs, the Normans and the Spanish, led to the rise of a rigidly segmented medieval society ranging from the nobility and the Church at the top to the peasantry, the destitute and the slaves at the bottom. This affected not only where the local inhabitants lived, but also the kind of dwellings they possessed (Said-Zammit 2016, 22ff).

The earliest historical records, datable to the second half of the fifteenth century, consistently refer

to houses with a central courtyard, giving the impression that this was the most common house layout in the urban and rural settlements (Said-Zammit 2016). Notarial contracts refer to single-floor and two-storey urban and rural houses. The fact that in these records the former occur more frequently than the latter suggests that single-storey dwellings were more common and two-storey ones were possibly a later development. This observation concurs with Aalen's (1984) model for Greece, and that, in Malta, two-storey houses presumably evolved from single-storey dwellings. This is further proved by the presence of certain late medieval *palazzi*; Falson Palace in Mdina and Stagno Palace in Qormi, for instance, both show that originally these were single-storey houses with their upper floors as a later addition (Fig. 10.4).

Elite urban houses are referred to as *hospicium domorum* (a townhouse), while rural or urban poor dwellings are generally described as *domus* (a house) or *casalinum* (a small house) (Said-Zammit 2016). Certain records also refer to the *cortile domorum*, a house which formed part of a group of tenements with a shared central courtyard and a common entrance. The notarial records sometimes also refer to particular rooms of the house, for example the kitchen or the millroom. The cistern, usually located in the courtyard, seems to have been a staple feature in townhouses, farmhouses as well as in lower class urban and rural dwellings. Access to these houses from the outside was reached either through a door or an arched passageway (*siqifa*) which led to the central courtyard. It was also noted that these records do not refer to the specific use of the upper floor rooms, indicating that these could have been multi-functional spaces.

The façades of these houses, except for the Mdina *palazzi*, generally lacked any architectural decoration, while apertures were kept to a minimum (Said-Zammit 2016). The perimeter walls of the central courtyard were usually high for security reasons and to ensure privacy. Thus, the façades were usually simple, austere and asymmetical.

10.1.2. Giren and hovels

Although the courtyard house is mentioned in a number of records and its layout occurred in the urban and rural context, Quintin (1536, B2) refers to another type

Figure 10.4. *The late medieval Falson Palace in Mdina (G.A. Said-Zammit).*

of rural dwelling, which was probably smaller in size and simpler in form. He describes these dwellings as '*Africana magalia*' (African hovels). The author provides no further details and such an ambiguous description can lead to various interpretations. For instance, it is possible that this is simply a generic statement, intended as a broad reference to the rural farmhouses he noted in different hamlets, which were more or less of the same kind. However, this description could indicate that Quintin (1536) saw something far less elaborate than the mature farmhouse (*razzett*). For example, he could have been referring to the native *girna* (corbelled stone hut), which commonly occurs in northwestern and western Malta.

The *giren* have a roughly circular plan, with their diameter and height varying from one structure to the other. The *girna* generally has a single entrance and a small window to permit light and air circulation. *Giren* occur as single units or in clusters and often include features like tie-loops, sheds, mangers and recesses. Clusters of *giren* were usually surrounded by a dry wall precinct (Fig. 10.5).

These native corbelled hovels are usually associated with the storage of crops or with the sheltering of animals. However, it is possible that these could have also been places of human habitation. Such hypothesis is based on the following evidence:

a) a number of *giren* are substantially high so that a person can easily stand in an upright position;
b) lamp-holes are another indication that certain *giren* were used for human habitation when it was dark;
c) some *giren* are characterized by recesses which were probably utilized for the storage of personal items;
d) certain *giren* were complemented by a rock-cut water cistern;
e) there is historical evidence that until the twentieth century some *giren* still served as a place of permanent human habitation (Fsadni 1992).

Figure 10.5. *A* girna *integral with and surrounded by dry stone walling (G.A. Said-Zammit).*

Figure 10.6. *A hovel dwelling with a flight of rock-cut steps (G.A. Said-Zammit).*

The fact that *giren* clusters are characterized by features which are typically found in the farmhouse and associated with human or animal habitation, has led scholars to believe that these could have been dwellings where animals and humans lived within the same complex (Buhagiar 1991; Vella 2010). Scholars also contend that these could have possibly been the most primitive exemplars of the proto-*razzett* which eventually, presumably in late medieval times, paved the way for the evolution of the single-storey farmhouse (Jaccarini 2002, 6). However, our evidence does not exclude the possibility that during this period these *giren* and the earliest single-storey farmhouses could have existed concomitantly.

None of the native *giren* were ever discovered within an archaeological context, therefore it is difficult to determine their precise age. Although there seems to have been a strong tradition of *giren* building during the nineteenth century (Vella 2010), the evidence suggests that this could have been a much more primitive structure, possibly dating back to late medieval times. A sixteenth century notarial contract refers to a certain tenement called Corna hiren, in the limits of Għarb, Gozo (*Acts* Ferdinando Ciappara 9-vi-1578, R185/4 f. 577v). An etymological analysis of this place-name led Zammit to suggest that this could have been a corruption of the toponym *il-girna ta' Ħerrin* (literally meaning the *girna* of Herrin) (M. Zammit, pers. comm.). This hypothesis casts new light on the corbelled stone hut:

a) *giren* were already in existence in the sixteenth century, which suggests that these could have possibly been late medieval structures, and
b) they were also present in certain parts of Gozo.

Therefore, on the basis of this hypothesis, it is possible that the *giren* could have been synonymous with the 'African' huts mentioned by Quintin (1536).

That simple hovels existed in late medieval times is confirmed by several toponyms which include the words *gorboġ*, *għarix* and *newwiela*, all of which mean a hut or a hovel (Vella 2010, 214ff). These names could have been an alternative to the term *girna* or they could have simply referred to a different type of structure. For instance, these place-names and/or Quintin's description could have been a reference to a particular type of

rectangular dry rubble huts, examples of which have survived in certain localities like Baħrija and Mellieħa. The layout and building techniques of these structures suggest a late medieval date. The Baħrija example, characterized by a masonry exterior and a rock-cut interior, consists of two contiguous spaces, one of which was possibly the animals' quarters and the other served for human habitation, the latter being evidenced by the presence of certain features like lampholes and rock-cut recesses. Access to this particular dwelling was through a flight of rock-cut steps (Fig. 10.6).

10.1.3. Cave-dwellings

Cave-dwellings were also common, particularly in northern and western Malta (Buhagiar 2002, 2012). Elaborate cave-dwellings were usually divided into a number of compartments, usually separated by dry stone walls. Occasionally they were also preceded by an open-air terrace which, apart from serving as a common space, provided access to the different compartments of the complex (Saliba *et al*. 2002).

10.1.4. Architectural development

The present evidence allows us to formulate a hypothetical reconstruction of the main phases of architectural development in late medieval Malta. From our investigations the following observations have emerged:

a) troglodytism was a common phenomenon;
b) in the open villages the central courtyard farmhouse seems to have been the most elaborate type of rural dwelling. Farmhouses were single- or two-storey buildings. Single-storey dwellings were seemingly less complex than two-storey houses. There were also *giren* and hovels, the latter being masonry built or hybrid (partly rock-cut and partly built);
c) in the urban settlements, the central courtyard house layout is documented since the late thirteenth century. Some of them consisted of a single storey, while others were two-storey. The evidence shows that the latter were presumably chronologically later than the former. Poorer dwellings, also with a central courtyard, were usually small, consisted of a single floor and generally characterized by poor quality masonry.

The evidence presented above suggests that, while in the medieval urban settlements the courtyard house was the basic house type, in the countryside the peasants lived in three categories of dwellings: the central courtyard farmhouse, cave-dwellings or hovels. On the basis of the present data it is not possible to ascertain whether these types of houses existed concomitantly or in a chronological sequence, as certain scholars suggest (Jaccarini 2002). However, indications show that, at some point in time, these three types of dwellings existed concurrently, with the *giren*, hovels and farmhouses, therefore being the earliest examples of dwellings in the open settlements.

When there was in Malta a shift from dispersion to nucleation of settlements from the fifteenth century onwards, many hamlets were abandoned. Their inhabitants settled in inland villages, which eventually grew in population. At the same time the amount of hovels and troglodyte dwellings apparently dwindled, while the number of central courtyard *rziezet* or village houses increased, as the late medieval notarial records tend to suggest.

On the basis of Aalen's hypothesis, one can assume that the native two-storey farmhouses evolved from the simpler one-storey *razzett* and were an emulation of late medieval urban dwellings. If the native two-storey *razzett* is an emulation of the late medieval *palazzi*, this major step forward in the architectural development of the farmhouse could possibly have occurred during the late fifteenth or early sixteenth centuries. The historical evidence suggesting such date for the development of this rural dwelling stems from the fact that a number of late medieval houses in Mdina had their second floor added in the fifteenth century. It was also from the late fifteenth/early sixteenth centuries onwards that two-storey farmhouses start featuring more in the local notarial records.

Incidentally, this development occurred at a time when these islands still experienced the effects of defeudalization, which brought about the liberalization of the land market and more peasants, at least the wealthier ones, had more access for land possession (Said-Zammit 2016, 27ff). It was also a time when there was a shift in the local economy from subsistence to one based more on cash-cropping. Therefore, this demonstrates that the social and economic changes of this period had an indelible effect on the type of houses that developed in Malta's rural areas, which possibly suggests that by the late medieval period the local peasants were living in houses which reflected their social and economic background, as happened in other parts of medieval Europe (Catling 2013). Those living in the cave houses, *giren* and hovels were possibly the poorer un-landed peasants, while those dwelling in the farmhouses enjoyed a better standard of living (these were possibly the free landed peasants). Those living in two-storey *rziezet* could have been the wealthiest and represented a community of late medieval rural elite.

In the urban centres, the inhabitants lived in central courtyard houses. The poorest inhabitants generally lived in small dwellings or occupied tenements

with a common central courtyard. Even the elite who lived in *palazzi* or sumptuous dwellings had buildings with a central courtyard. Therefore, the central courtyard appears to have been one of the most basic features of the local late medieval urban houses. The addition of a second floor to a number of urban houses from the fifteenth century onwards suggests a shift towards more comfortable and spacious dwellings.

Despite the limited archaeological evidence, coupled with incomplete population and parish records for medieval Malta, the surviving structures of this period still reflect the different social classes, from the elite at the top who generally lived in the town centres, to the lower urban classes that lived in smaller dwellings in the periphery of the towns, and then to the peasantry who lived in the villages and hamlets in farmhouses, hovels or cave-dwellings.

10.2. The Knights' Period (AD 1530–1798)

This period comprises two main phases of settlement evolution: the phase between AD 1530 and 1565 (characterized by the reluctance of the Knights of St. John to occupy these islands permanently) and the phase between AD 1566 and 1798 (a time of political and economic stability, with Malta becoming the Order's permanent seat).

10.2.1. The phase AD 1530–1565

Although Charles V of Spain donated the Maltese Islands to the Order of St. John in perpetuity, the Knights still considered the possibility of reconquering Rhodes, which they had lost in AD 1523. Their main concern about Malta and Gozo was the poor state of their fortifications. If these islands were perhaps to become their permanent home, the existing defensive systems had to be heavily restored, while new ones had to be built.

During this period there was also a shift of political power from Mdina to Birgu. The former was located away from the harbour, and therefore could not meet the Order's naval and administrative needs. The establishment of the Order in Birgu, sheltered as it was by the *Castrum Maris*, led this urban settlement to experience a change in its townscape and a sudden rise in population, to become the most important administrative and commercial centre on the island.

The fortifications that the Knights built during this phase because of the increasing threat of an Ottoman invasion had considerable influence on local settlement development. For instance, the Order's decision to settle in Birgu in AD 1530 generated more employment opportunities, a sense of security and more building activity. In addition, behind the walls of Fort St. Michael a new settlement, Senglea, was established after AD 1541. This was the first settlement built by the Knights and which did not follow the traditional streetscape and morphology of the existing local settlements. It was instead characterized by a rectilinear street plan imitating that of other contemporary military European towns (Hughes 1993).

Mdina continued to dominate the villages of western Malta and offer shelter to their inhabitants in times of peril. The northern district remained largely uninhabited. At a time when an Ottoman invasion on the islands seemed imminent, especially in AD 1564 and 1565, Malta experienced the gradual abandonment of several villages.

The Gozo Castello remained the only fortified settlement on that island. Gozo was almost completely depopulated in AD 1551, after it had been raided by a Turkish armada (Blouet 1993, 52).

Thus the pattern that emerges during this phase is characterized by the increasing importance of Birgu and by the decline of Mdina's political control. Birgu's importance was reinforced by the establishment of Senglea. The years close to the Great Siege were marked by the further abandonment of several rural settlements, whose inhabitants sought protection in or immediately near the fortified towns.

10.2.2. The phase AD 1565–1798

This phase witnessed the consolidation of the Knights' occupation of these islands. During this time, when enemy attacks became more sporadic, Malta and Gozo prospered both demographically and economically (Blouet 1993, 102ff). Moreover, the Order financed the building of new defensive systems in different parts of these islands.

In AD 1566 the Order embarked on the building of a new fortified city, Valletta. It was built on Sciberras peninsula between the Grand Harbour and Marsamxett Harbour. By the late sixteenth and early seventeenth centuries Valletta came to symbolize the Order's seat of power and the grandeur of local Baroque architecture (Hughes 1986).

Valletta was built on a strictly rectilinear street plan modelled on other contemporary Renaissance military European towns (Pollak 1991). Its roads are characterized by an uninterrupted straight line of vision, with the buildings and houses being spread across different *insulae*. Although building regulations were strict, as happened elsewhere in contemporary European cities (Polak 1991, 18–25), the sharp rise in population, particularly during this phase, led to a higher demand in accommodation. The area originally earmarked for the galley port and arsenal, a project eventually abandoned, soon developed into

the Manderaggio, a slum area occupied by the poorest inhabitants (Borg 2003, 31ff). Other slum areas developed along the outskirts of Valletta, however these did not affect the original streetscape of its central quarters.

When the demographic situation in Valletta and the Three Cities was no longer sustainable the Order tried to mitigate the situation by encouraging lower class families to settle in other areas of these islands, including Gozo after this remained largely depopulated after AD 1551.

In terms of settlement evolution, the building of Valletta certainly left an indelible mark which affected the Grand Harbour area until the first half of the twentieth century. Valletta and the various employment opportunities it generated led to an intensive urbanization process in the Harbour district, particularly in the areas close to Valletta and Birgu.

During this phase the major rural medieval settlements in Malta, some of which were temporarily depopulated just before the Great Siege, were repopulated and gradually prospered again, albeit all at their own pace. From the late sixteenth century, and particularly during the seventeenth century, thirteen settlements became parishes, indicating that they had a sizeable population and some kind of organizational control over the minor settlements nearby (Blouet 1993, 74ff). These villages are dominated by massive Baroque parish churches, which emulated their urban counterparts. The village parish church was usually situated in an open square (*pjazza*) almost in the centre of the village. Nonetheless the network of labyrinthine roads surrounding the parish church and the side alleys remained one of the major characteristics of the early modern village.

Figure 10.7 shows the distribution of local settlements just after AD 1798. It demonstrates that by this time various hamlets had disappeared or were else incorporated into the territorial limits of the nearby major settlements. Many of these hamlets were deserted probably because of economic reasons, where they had become 'too small to support a tavern, a store, a carpenter or a stone mason' (Blouet 1993, 81). This shift from dispersion to more nucleation of rural settlements, together with the simultaneous migration from the countryside to the urban maritime centres brought about three important phenomena in the settlement evolution:

a) the desertion of hamlets that were no longer economically sustainable;
b) the expansion of the major villages in locations where the surrounding land allowed horizontal spread;
c) the expansion of the maritime urban centres at a relatively fast rate. However, these settlements could not expand horizontally because they were fortified. Consequently, to accommodate more families, houses had to be small in size or partitioned into smaller units, or else consisted of multi-storey dwellings built on narrow plots.

Although the Order built new defence systems in different parts of Malta, most of the inhabitants apparently remained reluctant to occupy the island's coastal areas, except for the Grand Harbour area. The hierarchical organization of settlements that emerged in the previous periods persisted also during this phase. In fact, Figure 10.7 shows a similar pattern, with the addition of Valletta, Floriana and the new towns around Birgu. One can also note that the major rural settlements are all located inland, almost towards the centre of the island.

This map also shows that the coastal areas of southeast Malta remained relatively void of any human habitation, except for the tiny village of Marsaxlokk. It also indicates that from the seventeenth century onwards more hamlets in this area continued to be deserted or to be absorbed by the major villages located inland. One can also observe the almost complete absence of built-up settlements in the northernmost part of the island. In western Malta, the main medieval settlements survived too, but a number of hamlets continued to be deserted.

Although cave-dwellings also declined, historical records indicate that troglodytism still survived in several localities (Buhagiar 2002). Therefore, this demonstrates a change in local land-use during this period, with the settlements becoming less dispersed either because the inhabitants of the rural hamlets went to live in the established larger villages or else migrated to the harbour towns, which both provided more employment opportunities. This transmigration of natives to the maritime towns or to the larger villages led to the desertion of a number of hamlets, and presumably also affected the amount of land that was cultivated locally, and while certain rural areas were no longer cultivated (e.g. in northwestern Malta), others became more extensively cultivated (i.e. in western and central Malta).

This period also witnessed the rise and development of various rural settlements in Gozo, many of which eventually became parishes. The sumptuous parish churches that dominate the centre of the main villages of this island show a similar trend towards a better standard of living among the rural community.

10.2.3. Early modern houses

The context of political and economic development of this period undoubtedly had a direct influence on the

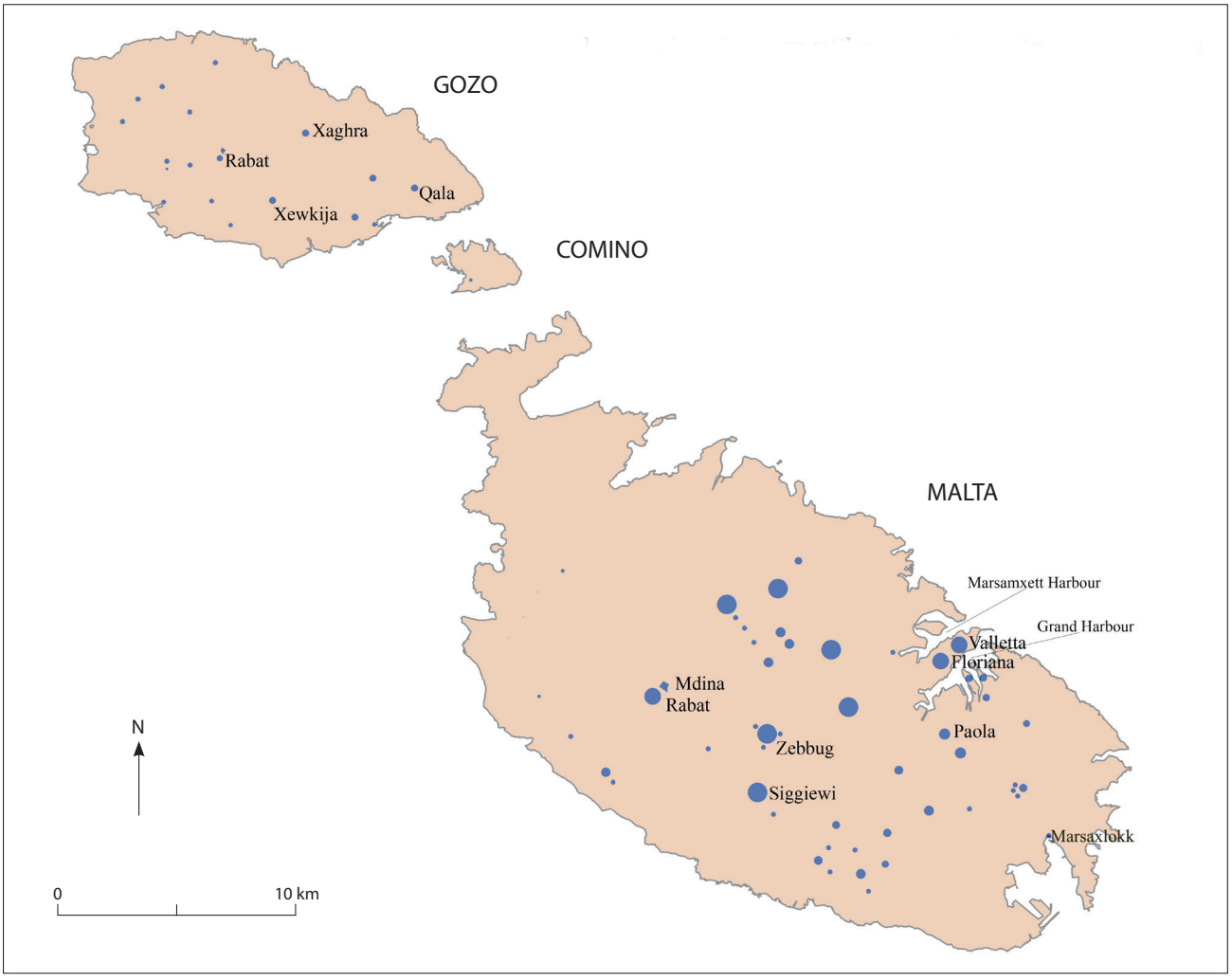

Figure 10.7. *The hierarchical organization of settlements continued, with the addition of Valletta, Floriana and the new towns around Birgu (G.A. Said-Zammit).*

type of dwellings which the local inhabitants occupied in the towns and villages. During this period the evolution of the Maltese houses was not only restricted to the urban centres, but extended to all parts of the islands. This period is characterized by Baroque art and architecture, a style which was popular in the main settlements and in the major villages. With the expansion of the villages from the early seventeenth century onwards, the main dwellings of the village which were occupied by prominent residents or those which served as a country residence of certain noble families, often emulated the Baroque idiom to mirror their urban counterparts.

During this time, both the local architect and local stonemason improved their knowledge and skills. The stonemasons who were involved in the fortification projects or in the building of the Valletta *palazzi* deployed their knowledge and skills to build sumptuous churches and houses that were of a better building quality, even in the villages. This has been particularly observed during the house surveys, which showed a tendency towards improved construction techniques from AD 1650 onwards in the urban and rural settlements.

The townhouse (or townhouse style) façade became more symmetrical, which generated more aesthetic beauty, and was generally dominated at its centre by an open stone or closed timber balcony (Fig. 10.8). Thus, contrary to the medieval *palazzo*, seventeenth and eighteenth century elite houses were characterized by more elaborate and extroverted façades, sometimes also with more than one door that led to the interior. Their façades were often embellished by architectural details, such as reliefs,

Figure 10.8. *An example of a seventeenth century townhouse with open and closed timber balconies (G.A. Said-Zammit).*

columns and coat-of-arms. The use of glass windows and wooden louvered shutters also became commoner.

The courtyard house layout survived and continued to develop through the influence of Baroque art. Examples of early modern courtyard houses can be found in the urban centres, in Gozo, and in a number of villages. Another house layout which became quite popular was the terraced house, its basic plan essentially consisting of a set of rooms with a courtyard at the back (Tonna 1985).

Depending on the area of the building plot and the house layout the ground floor rooms were normally reserved for the kitchen, the *gabinetto* (water closet) and for storage, while those of the *piano nobile* were the occupants' living quarters.

A number of townhouses were extensive enough to include a small mezzanine, which was generally used as living quarters for the domestic staff or else was rented to third parties. The mezzanine, which was usually situated in between the ground floor and the first floor of the house, generally consisted of some rooms characterized by a low ceiling and a window to the outside. Access to the mezzanine was usually through a separate entrance situated near the main door of the house or else via the house through a separate internal doorway.

Within the domestic spaces, the elite dwellings usually had a series of interconnecting spaces. Rooms had the tendency to have more than one access point, so that it was easy to cross from one room to the other in the swiftest time possible. Sometimes, houses had a linear plan layout, thus consisting of a string of rooms (*enfilade*) which gave access to each other forming a straight line. This new concept shows that the courtyard of many elite houses no longer served as a hub which provided access to the other rooms through their separate entrance. This development in domestic space direction and organization reflects the changes that occurred in the configuration of Baroque townhouses and *palazzi* across Europe (Grundmann & Fürst 1998). It also shows the harmonization of the local architect's knowledge and technical skills with what was happening elsewhere on the Continent in architectural planning.

Another important development concerned the staircase. Whereas previously the staircase had been placed in the courtyard, or outside the house, in many early modern townhouses this was relocated to the inside. Hence, access to the upper floor was through a covered staircase. The shift from an open staircase in the courtyard to a covered staircase in a central position of the house is also the result of foreign architectural Baroque influences (Lemerle & Pauwels 2008). A number of *palazzi* and townhouses also had a secondary staircase usually at the rear of the dwelling's spatial network, which connected together all the house floors from the ground floor to the roof. While the grand staircase was usually reserved for the owners, the secondary one was apparently used by the domestic staff, given its particular location near the kitchen and other spaces which, in such houses, were usually associated with domestic servants. The grand staircase was seemingly a symbol of social status, which separated the occupants from their servants (Said-Zammit 2016, 102ff).

The shift from houses with multi-functional domestic spaces to more complex dwellings with additional internal divisions to permit specialized functions, evidently visible in the townhouses and *palazzi*, mirrors the social and economic changes that occurred in early modern Malta and Europe (Johnson 1996). The social change that the market economy of this period generated, especially among the elite and the upper middle class, was reflected in the type of dwellings that they occupied. Their houses were elaborate and elegant in style and internally more complex, with the presence of several private spaces

to separate the owners from the servants as well as to enjoy a lifestyle typical of the urban elite and upper middle class.

10.2.4. Lower class dwellings

The urban centres, despite the strict building regulations, became a place where many lower class families settled in quest of more employment opportunities and a better standard of living. However, with their limited financial resources to acquire comfortable dwellings, poor families had no other option but to live in small dwellings or in cellars (Cassar 2000, 131ff). These houses generally had a limited space and lacked proper ventilation and lighting, particularly when they did not even have a backyard to allow air circulation. They lacked adequate hygienic standards and were often the cause of various health problems and contagious diseases (Mahoney 1996). They were certainly places offering little space and lacking amenities, where the family enjoyed little privacy and where all domestic activities had to be conducted in a restricted space.

This shows that the urban settlements included a combination of different social classes: the elite (the Order, the nobility and the Church), the upper middle class (members of different professions and entrepreneurs), the lower middle class (craftsmen, small business owners and clerical workers), and the lower class (labourers, servants and the destitute).

In the villages and hamlets, the situation was different. In the centre of the major villages a group of rural elite (e.g. the parish priest and the village doctor) lived in houses which often emulated the urban *palazzi*, however on a smaller scale. Many peasant families, with limited disposable income and with a lack of aspiration to change their dwellings according to fashion, continued living in small vernacular houses, often outside the village core which, contrary to the early modern townhouses and *palazzi*, remained similar in style and general layout to those of the late medieval period.

The farmhouses of this period were usually two-storey buildings. The ground floor rooms were generally intended for animal sheltering and storage, while the *għorfa* was the family's living quarters. Others consisted of a single floor, where animals and humans lived together at the same level. A number of rural dwellings also had an underground cellar. On

Figure 10.9. *An example of a two-storey* razzett *belonging to a wealthier peasant family (G.A. Said-Zammit).*

the basis of Aalen's model, it is possible to infer that the single-storey farmhouses possibly belonged to the poorer peasants, while the two-storey *rziezet* belonged to a wealthier group of peasant families (Fig. 10.9). The two-storey farmhouses had become widespread in the Maltese Islands, which demonstrates that a large section of the native peasant community were by now living in dwellings which vertically separated animals from humans.

10.2.5. Cave-dwellings and hovels

Although the number of cave-dwellings had diminished by this period, certain others were still inhabited (Zammit Ciantar 2002). Dry rubble hovels and *giren* experienced a similar fate, with many of them being converted into animal shelter or storage and others ending up completely neglected. This decline in the number of cave-dwellings and hovels demonstrates that rural peasants sought better accommodation and also an improved standard of living either because their economic opportunities increased and/or because their landlords sponsored better housing.

10.2.6. The houses: a reflection of social and economic change

The particular economy that developed during this period, based primarily on different harbour and commercial activities, generated a long phase of urbanization in the Grand Harbour area, with the establishment of new settlements and the expansion of existing ones. By the eighteenth century, about half of the local population was living in one of these urban centres. Houses were acquired according to a person's level of material wealth and social status. The size, the building quality, the architectural style and the dwelling's location were all crucial indicators of class and material wealth.

Outside the urban centres, the villages continued to expand, showing a general trend towards an improved standard of living. The village centre was usually the area where the rural elite lived; it was also here where some of the urban elite established their second residence. The evidence shows that more primitive dwellings declined, while the number of peasant families occupying two-storey farmhouses increased. The emulation of the urban *palazzi* and aspects of town life by the rural elite from the late seventeenth century onwards suggests that, in the proto-urban settlements, village and town life began to merge into each other, narrowing down the cultural barrier that existed between the rural elite and the peasants since late medieval times.

The distinction between the elite houses and lower class dwellings is evident in their exterior and internal organization. While the former were characterized by elaborate Baroque façades, the latter generally adhered to the vernacular idiom, thus having a simpler and an asymmetrical exterior. Regarding the interior, the elite houses became more complex with the addition of separating walls to create spaces with specialized functions. Lower class dwellings had limited domestic space, suggesting that rooms were multifunctional. Apart from class separation, the interior of the elite houses also permitted more individual privacy and gender segregation. For example, it was normal in these dwellings for men and women to sleep in separate bedrooms. In lower class dwellings, however, there was little room for privacy and gender segregation.

10.3. The British Period (AD 1800–1900)

This period constitutes Malta's last phase of foreign colonization. The island's occupation by the British to become a crucial fortress in the Mediterranean, with all the political, economic and social changes that this brought about in the nineteenth century, certainly had a significant impact on local settlement evolution. This phase saw the expansion of already existing settlements and the establishment of new ones in different areas. The main reasons for this settlement development are:

a) a general demographic rise in the Maltese islands;
b) the building of new fortifications in addition to the already existing defensive systems;
c) the prosperous economic activity of the Grand Harbour area;
d) land reclamation incentives for agricultural purposes;
e) an improved road network.

Figure 10.10 shows the distribution of built-up settlements in about AD 1900. The main settlements of northern Malta were the already established in Naxxar and Mosta. However, land reclamation incentives for agricultural purposes led to the re-emergence of Mellieħa, an area with a parish status since the fourteenth century, but which had subsequently been abandoned. A new maritime village, St. Paul's Bay, developed in one of the harbour areas of this district. Some hamlets survived, given their proximity to agriculturally fertile lands. Settlement development in this region, particularly its northernmost part, suggests that this had by now become a safe place for habitation.

The main settlements of western Malta were Rabat, Żebbuġ and Siġġiewi, which remained largely rural. There were some hamlets which were inhabited by different farming communities, for example Mtaħleb and Is-Santi. Towards the eastern part of this district

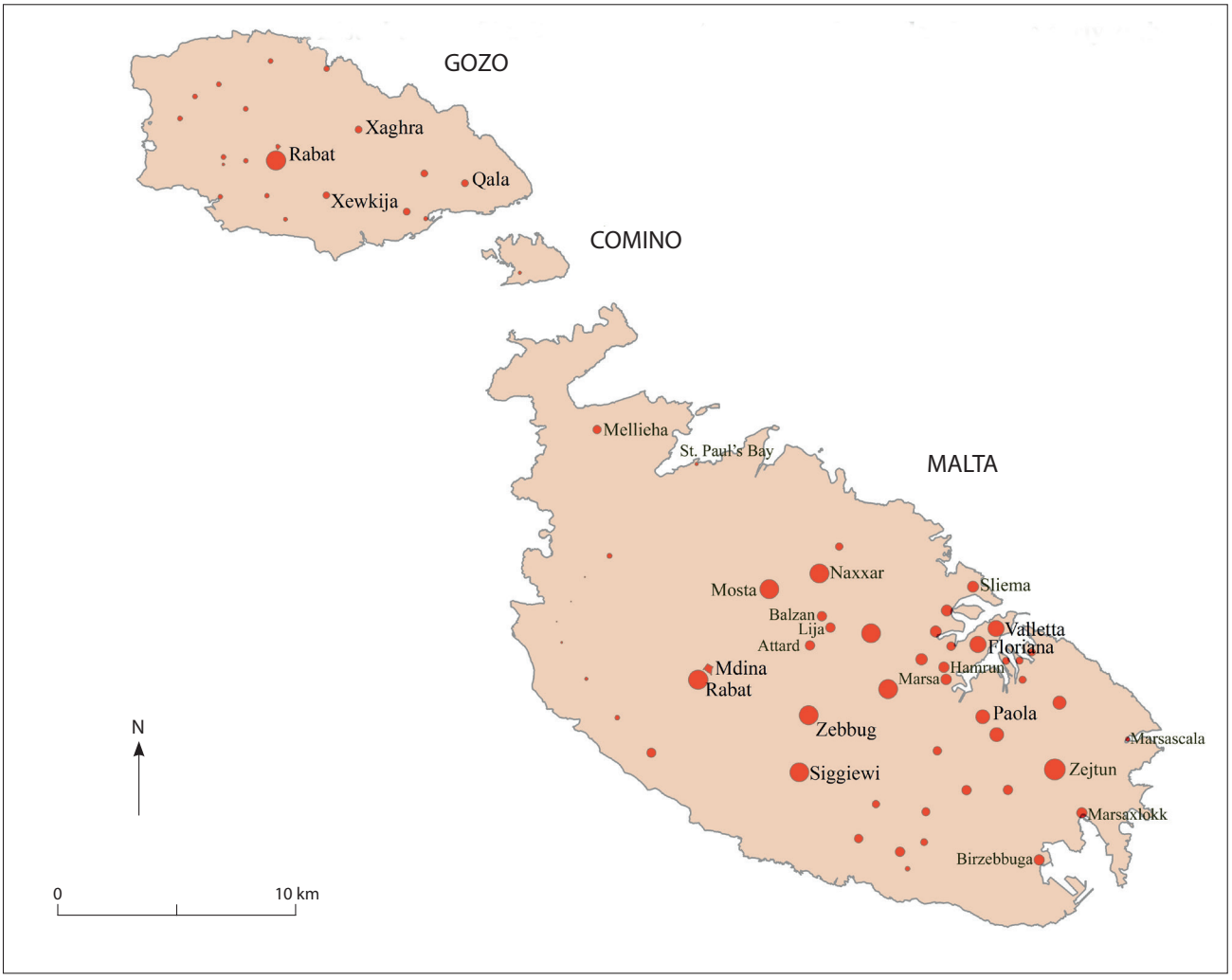

Figure 10.10. *The distribution of built-up settlements in about* AD *1900 (G.A. Said-Zammit).*

the nearby settlements of Attard, Lija and Balzan continued to prosper.

The major development that took place in terms of settlement evolution was in the Marsamxett Harbour district. While the existing settlements continued to expand in terms of population size, several new ones were established too. In the area surrounding Marsamxett Harbour, four new settlements were established, including Sliema, Marsa and Ħamrun, located towards the south of Valletta and Floriana, grew into larger towns to respond to the increasing number of working class families (Tonna 1985, 38).

On the outskirts of the Three Cities a new settlement, Kalkara, developed on the northeastern part of the Grand Harbour. The settlements of this region were the ones that grew rapidly in terms of population size, so much that some of them were eventually divided into more than one parish.

The settlements of southeastern Malta, except for Żejtun, were relatively smaller than those of the other districts. Three other villages (Marsaxlokk, Birżebbuġa and Marsascala) developed in two harbour areas. South-eastern Malta remained an area generally characterized by a low population density.

In Gozo, the settlement pattern remained similar to that of the late eighteenth century. However, one can note the emergence of some coastal settlements in different parts of the island. The small settlement on Comino, which already existed in the previous period, survived until the second half of the twentieth century.

10.3.1. The houses of the British Period

The island's particular political situation and its economic development during the nineteenth century led to the emergence of a new social set-up, comprising different levels which ranged from the Anglophile

elite, the nobility and the Church at the top, a strong middle class, to the lower urban class and the peasantry at the bottom (Cassar 1988). This period also had an indelible effect on the development of the Maltese house. The Knights had left behind them an island fortress, with various defensive systems spread in various localities. The *palazzi* and houses which had been previously occupied by the Order became vacant, and were gradually converted into offices or private dwellings in the British period.

The Baroque idiom remained entrenched in local architecture for many more decades, reminiscences of which survived until practically the early twentieth century. Baroque-style houses continued to be built in the centre of the major villages, where the rural elite normally lived. The persistence of Baroque architecture hampered, in a way, the development of other architectural styles which were already popular in Europe, for example the Neo-Classical and Neo-Gothic styles (Hooker 1994). In fact, these styles were adapted locally from the second half of the nineteenth century onwards and remained popular until the early twentieth century.

The re-utilization of houses by the British meant that certain structural alterations were needed to meet the specific needs of their new occupants. The Victorian age, marked by the effects of the Industrial Revolution, affected the British living in Malta as well as the local community, particularly the Anglophile elite (Frendo 1988, 190). The progress which the Victorian era brought with it generated a major change in Maltese society and how people lived.

As part of its task to improve sanitation and health conditions in the islands, in the second half of the nineteenth century the government issued strict housing regulations which affected the layout of local dwellings. For instance, these encouraged the end of the courtyard house in favour of the terraced house, which had already been quite popular in the previous period (Tonna 1985). The terraced house, consisting of a room at the front, a staircase at the core, another room at the back with an appendage to the kitchen and sanitary facilities, and with a courtyard at the back, remained the standard type of house layout which persisted till well into the twentieth century (De Lucca 1988). This house layout became common in the settlements which were established during this period and in the various new residential areas that developed in the periphery of the agro-towns (Tonna 1985, 38).

10.3.2. The effect of the Victorian Age

The Victorian era had a great influence on the family. It was a time when the mother was considered the ideal housewife and the husband was deemed the dominant and rational *paterfamilias* (Löfgren 2004). The gender segregation and the contrasting roles of both husband and wife influenced the way elite houses were built and their spaces organized. Such segregation led to the development of gender-related spaces within the same house. For example, in a typical nineteenth century elite house the gentleman's area consisted of a study, a smoking or a billiard room and a library; the lady's area included the drawing room, the boudoir and her private bedroom (De Lucca 1988, 321). Whilst after dinner, men would assemble in the smoking room or else remained in the dining room to socialize, women went into the drawing room. The latter had to observe the highest etiquette and decorum in the drawing room, but the boudoir allowed them more flexibility since here they could talk in private, away from the formality of the drawing room (Horn 1997). This mentality, therefore, created a segregation of spaces within the house layout itself.

To ensure a high degree of domestic privacy, interconnecting doorways of Knights' Period houses were usually blocked so that rooms had only a single access point. As in the previous period, however, the ground floor rooms of the elite house remained associated with the domestic staff (the kitchen, stores, etc.), hence there was a clear sense of class segregation between the domestic staff and the house owners (Löfgren 2004, 145).

So far, this section has been concerned with the townhouses, where the elite and upper middle class families lived. These houses were usually situated in the town centres, however from the late nineteenth century onwards there was a tendency among the well-off to settle in villas that were situated in new and quiet residential areas outside the urban centres, similar to what occurred in South Italy and Sicily (Sabelberg 1983, 1986). Consequently, several palaces and townhouses in Valletta left unoccupied by the well-off were gradually converted into common dwellings. However, in the main town of Gozo the situation was different. While the urban centres of Malta experienced a phase of pauperization of the elite dwellings, from AD 1850 onwards Gozo's main town, Victoria, saw the building of a number of houses of Neo-Classical, *Art Nouveau* and *Art Deco* inspiration along its main street, a development which persisted until the early twentieth century (Fig. 10.11). Gozo's traditional economy and lifestyle were perhaps two of the main reasons which, during this period, encouraged the island's elite to continue living and building their houses along Victoria's central street.

The elite and the upper middle class lived in five types of houses, namely:

Figure 10.11.
An example of a Neo-Classical house (G.A. Said-Zammit).

a) Knights' Period *palazzi* and townhouses, with their interior being left in the original state;
b) Knights' Period *palazzi* and townhouses, with their interior being converted to suit the needs of a typical Victorian lifestyle;
c) the houses of Neo-Classical, Neo-Gothic, *Art Nouveau* or *Art Deco* inspiration that were built in the town centres, for example in Victoria, Gozo;
d) the houses of Neo-Classical, *Art Nouveau* or *Art Deco* style which were built outside the towns and agro-towns in new residential areas;
e) the houses located in the agro-town centres, occupied by the rural elite. Several of these belonged to the previous period, while others were built during the nineteenth century, often emulating Baroque-style houses.

10.3.3. Urban lower class dwellings

The urban lower classes, which formed the overwhelming majority of the urban community, lived in smaller houses or cellars. Statistical records show that in about AD 1850 approximately 12 per cent of the Valletta residents were living in houses which often lacked ventilation, air circulation and lighting (Cassar 1988, 93). These overcrowded dwellings permitted neither individual privacy nor a decent quality of life. They often lacked a proper sewage system and a drinking water supply, and therefore contagious diseases here spread like wildfire. With the elite movement to the urban suburbs, various townhouses of the previous period, particularly in Valletta, were partitioned into smaller units to accommodate more low-income families.

10.3.4. Peasant houses, cave-dwellings and hovels

The peasants continued to live in the same type of dwellings as in the previous period. The available evidence has revealed that during this period the farmhouse retained the same layout and features, thus consisting of a central courtyard surrounded by a number of rooms. It also shows that many cave settlements in Malta and Gozo continued to be abandoned, while others were still inhabited by isolated farming communities (Buhagiar 2002, 2012). There are also indications that a small number of rural families still lived in dry rubble hovels or *giren* (Fsadni 1992). This further decline in the number of cave-dwellings and hovels suggests that more peasant families, particularly those with a higher disposable income, sought better accommodation in the villages. Many landless

peasants and farm labourers migrated to the harbour regions in quest of more employment opportunities.

10.4. Conclusions

This study has explored settlement evolution in the Maltese Islands. Our analysis has demonstrated that from a dispersed settlement distribution in the early Medieval period, the economic and social changes that occurred from the fourteenth century onwards led to more nucleation of settlements, with a general tendency to occupy inland areas. By the late medieval period a number of villages were deserted, while others were absorbed by the major settlements. The three urban centres of habitation were Mdina, Birgu and the Gozo Castello.

In the Knights' Period the Grand Harbour area became a commercial hub, while the seat of government was transferred from Mdina to Birgu, and later on to Valletta. The urban demographic expansion of this period, which persisted in the British period, led to the development of new urban settlements and to the extension of existing ones. The main villages of Malta prospered in terms of size and population and became proto-industrial settlements, while the number of hamlets and cave-dwellings further declined. Additionally, the re-population of Gozo from the late sixteenth century onwards led to the establishment of various new settlements.

In the nineteenth century, government incentives and the presence of the British military encouraged settlement in those areas which had been deserted for a long time. This phase of settlement evolution was, in fact, characterized by the spread of new villages, including coastal ones, some of which later grew into towns.

The evidence of houses for medieval Malta has demonstrated that the sumptuous urban dwellings consisted of single-storey buildings; however, by the late Middle Ages a number of them developed into two-storey houses. In the outskirts of the urban centres of habitation the urban poor lived in smaller dwellings, which certainly lacked the architectural elegance of the elite counterparts. Our investigations have shown that the urban poor dwellings were also originally single-storey buildings, but by the late Medieval period a number of them were converted into two-storey dwellings.

In the villages and hamlets the medieval peasants lived in three types of dwellings: the single-storey farmhouses with a central courtyard, the hovels (possibly including the *giren*), and the cave-dwellings. The available evidence does not indicate whether these three types of dwellings developed in different phases or else concomitantly. However it seems that, at some point in time during this period, the peasants were living in one of these three types of dwellings. By the late Middle Ages, possibly in emulation of the two-storey *palazzi*, a number of farmhouses were converted into two-storey dwellings.

In the early modern period new house types emerged. Elite houses were generally characterized by elaborate and extroverted façades. The interior of these houses usually had a series of interconnecting spaces to facilitate movement from one part of the building to the other. On the contrary, many urban poor families ended up living in sub-standard houses, consisting mainly of single-room dwellings or cellars, where living conditions were awful.

From about AD 1650 onwards the centre of the major villages became associated with the rural elite who, like their urban counterparts, lived in elegant houses which emulated the urban *palazzi*. The lower class peasants occupied smaller introverted dwellings which, together with the farmhouses, were characterized by asymmetrical façades and a central courtyard, like those of the medieval period. The number of native peasants living in cave-dwellings or hovels declined, which demonstrates a shift towards a better standard of living among the peasant community.

In the nineteenth century while a number of elite houses in the established urban centres (Mdina and Valletta) adhered to the Baroque idiom, many others, which were built in new urban areas, were inspired by Neo-Gothic, Neo-Classical, *Art Nouveau* and *Art Deco* architecture. There is also evidence that while certain elite seventeenth and eighteenth century houses in Valletta retained a Baroque exterior, they underwent internal structural alterations to resemble Victorian mansions, in which privacy, class and gender segregation were crucial. Comparable to the previous period, the urban poor continued living in small dwellings or cellars, in which sanitary conditions were inadequate. The village centre remained synonymous with the rural elite. Outside the village core the peasants occupied one- or two-storey vernacular dwellings. A few others lived in cave dwellings or in hovels, particularly in northern and western Malta and in certain parts of Gozo.

An important aspect that emerged from this analysis concerns the changes that occurred within the Maltese dwellings during the period under review. While the wealthy houses changed externally and internally through time to suit fashion, changes in the rural and urban poor dwellings were generally minimal and sporadic. With their limited disposable income and with a lack of aspiration to change their dwellings according to fashion, the peasants and the urban poor continued living in small vernacular houses.

Temple landscapes

The ERC-funded *FRAGSUS Project* (*Fragility and sustainability in small island environments: adaptation, cultural change and collapse in prehistory, 2013–18*), led by Caroline Malone (Queens University Belfast) has explored issues of environmental fragility and Neolithic social resilience and sustainability during the Holocene period in the Maltese Islands. This, the first volume of three, presents the palaeo-environmental story of early Maltese landscapes.

The project employed a programme of high-resolution chronological and stratigraphic investigations of the valley systems on Malta and Gozo. Buried deposits extracted through coring and geoarchaeological study yielded rich and chronologically controlled data that allow an important new understanding of environmental change in the islands. The study combined AMS radiocarbon and OSL chronologies with detailed palynological, molluscan and geoarchaeological analyses. These enable environmental reconstruction of prehistoric landscapes and the changing resources exploited by the islanders between the seventh and second millennia BC. The interdisciplinary studies combined with excavated economic and environmental materials from archaeological sites allows Temple landscapes to examine the dramatic and damaging impacts made by the first farming communities on the islands' soil and resources. The project reveals the remarkable resilience of the soil-vegetational system of the island landscapes, as well as the adaptations made by Neolithic communities to harness their productivity, in the face of climatic change and inexorable soil erosion. Neolithic people evidently understood how to maintain soil fertility and cope with the inherently unstable changing landscapes of Malta. In contrast, second millennium BC Bronze Age societies failed to adapt effectively to the long-term aridifying trend so clearly highlighted in the soil and vegetation record. This failure led to severe and irreversible erosion and very different and short-lived socio-economic systems across the Maltese islands.

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