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Change and Resilience

The Occupation of Mediterranean Islands in Late Antiquity

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Macro-economy, Micro-ecology, and the Fate of Urbanized Landscape in Late Antique and Early Byzantine Crete

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In the case of the Cretan Late Antique/Early Byzantine landscape, the dichotomy between change and resilience could be easily defined in terms of changing relationships between long-term local micro-ecology and medium-term Mediterranean macro-economy. The former is to be understood as a long-lasting relationship between a single city and its surrounding territory (i.e., a factor of resilience); the latter as the sum of the changing relationships between the same city and the wide variety of economic, political, administrative, and military systems that connected cities, provinces, and regions across the Mediterranean.

The specific case of Crete is of great interest in this respect, because a major event in local history—the huge earthquake of A.D. 365—chronologically coincides with the shifting of many macro-economies from a Rome-centered system to a Constantinople-centered system. The “rebirth” of Cretan cities after the devastating earthquake—mainly the provincial capital, Gortyn, but also in other case studies—appears to be directly related to the role that the Byzantine imperial administration assigned to Crete as a substantial component of the ‘island backbone’ of the Mediterranean. This new, and closer, macro-economic relationship between Crete and the Early Byzantine empire made the island and its cities very sensitive to the changes in the political and economic scenario. The vain economic effort made by the Empire to regain the West, and the shifting of the imperial center of gravity toward the East after the Arab conquests, created the conditions for a deep change in the local micro-ecology, determining the decline of cities and the creation of a new “city-less” Cretan landscape.

Foreword 1: A Critical Assumption

I would like to ground my discussion of the transformation of the human settlement patterns in Crete during Late Antiquity and the Early Byzantine period (roughly between the fourth and the eighth centuries A.D.) on a

critical assumption, that is, on a general view that human settlement in the Late Antique Mediterranean was governed by the interaction of two distinct but complementary elements. On the one hand, there is the local ecology (the natural and anthropogenic landscape of Crete in a *longue durée* perspective), tending by its nature to be “stable” and thus a factor of resilience; on the other hand, there is the Mediterranean macro-economy (or macro-economies), represented by the political and administrative choices made by the imperial administration at different times, which constitute factors of change. In general, I would encompass within the word “micro-ecology” all the practices of daily life, such as food production and consumption, organization of housing, and basic infrastructures indispensable to everyday life. Under the category of macro-economies, however, fall all the elements related to the life of a complex society at a Mediterranean-wide scale, with a higher level of social/political/economic differentiation, such as the distribution of goods at a supra-regional scale, the public administration, and defense strategies.

Following the approach proposed by Horden and Purcell (2000: 96–101) in their seminal and widely-discussed book on the Mediterranean, this distinction between micro-ecologies and macro-economies can be extended to all forms of human settlement within a natural landscape. In this view, cities and countryside are not seen as two different forms of population, but as a *continuum*, where the cities are just nuclei of “intensification,” both in quantitative and qualitative terms.

Most interestingly, cities are clearly situated at the contact point between local micro-ecologies and Mediterranean macro-economies. They are strictly connected with local micro-ecology, because they largely depend on their surrounding territory (the *chora*) for their daily life (food, natural resources, etc.). At the same time, they are the touch-points of the macro-economies within the same territory, being the “terminals” of imperial administration (Figure 6.1). This approach proves to be particularly interesting when dealing with the cities of a large island like Crete, which is—to use Horden and Purcell’s terms—the embodiment of both insularity and connectivity. Crete is insulated by definition, as it is perhaps the most “invisible” island in the Mediterranean, being the sole large island that cannot be seen from the surrounding Mediterranean coast. At the same time, it possesses a fundamental element of connectivity, being a landmark along the large insular backbone that runs from east to west, representing the major axis of commerce, population mobility, and defense (Zanini 2013a). In other words, in dealing with Cretan towns it is quite easy to distinguish between micro-ecological and macro-economic factors, between “local” and “external” factors, and (following the perspective adopted in the present volume) between *resilience* and *change*.

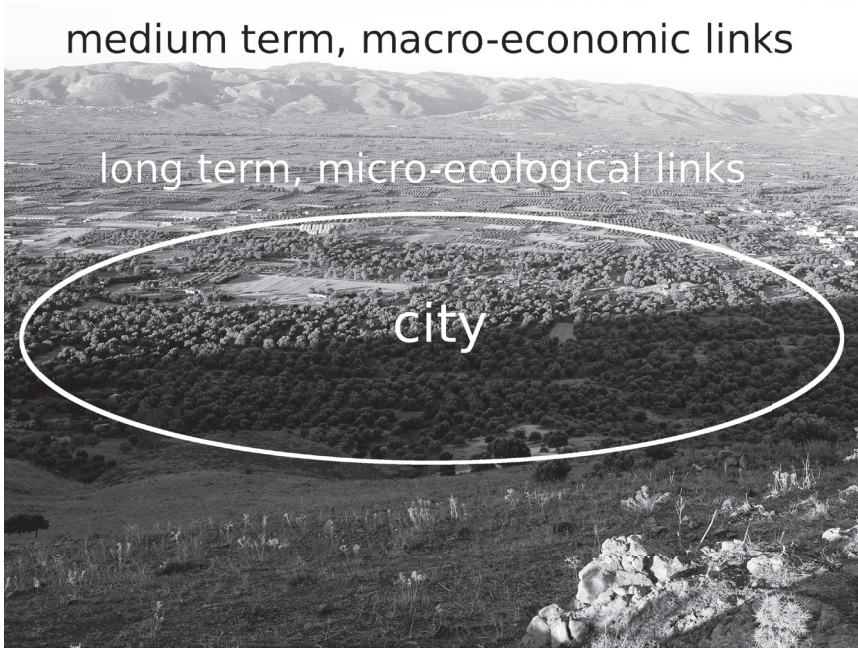


Figure 6.1. City, micro-ecology, and macro-economy.

Moreover, Crete itself occupies a very special place in the Late Antique and Early Byzantine Mediterranean, since it is placed exactly at the intersection point of the Roman and Byzantine large Mediterranean macro-economic systems. This is true in both spatial and chronological terms. Late Antiquity in Crete has a very recognizable starting point in the huge earthquake/tsunami of 21 July A.D. 365 (Stiros 2001), which coincides with the first large change in the macro-economic system in the Mediterranean, due to the affirmation of Constantinople as the place of a second Mediterranean polarity. Furthermore, it is interesting to note that the fault line between the western and eastern Empires passed exactly through Crete, as, in those same years, did the fault line between the two different areas of influence of the Roman and Byzantine Churches (Stiernon and Stiernon 1986).

In short, Crete being a very remote island in the very center of Mediterranean (Arnaud 2005: 30–31), its cities were nuclei of intensification of a human landscape that responded to the “rules” of local micro-ecology. At the same time, on a larger scale, they were contact points between this “stable” local situation and the much more “unstable” Late Antique/Early Byzantine macro-economic system, where resilience and change coexist and can be investigated, starting from the principle of asynchrony: changes

occur in different places and in different ways (Bowersock et al. 1999). Our capability to detect them is dependent upon the specific marker which we decide to take into account.

Foreword 2: What Do We Really Know About the Subject?

This complexity, so worthy of archaeological investigation, is confronted by a substantial lack of knowledge. Only in relatively recent years have the most important archaeological sites of Crete been investigated with a specific interest in the Late Antique and Early Byzantine periods, and it is only recently that focus has been placed on the questions concerning models of settlement change. This is quite evident if one examines the indices of the first four volumes of the *Ergon Kriti* (the large international conference at which the most up-to-date results of ongoing archaeological projects are presented), where the Late Antique and Early Byzantine evidence is scarcely presented and discussed, compared to the attention devoted to the Minoan, Greek, and Roman periods.

The second limiting condition derives from the fact that our knowledge is essentially based on excavations and research focused on cities (Sanders 1982; Francis and Kouremenos 2016). This is mainly because Late Antique and Early Byzantine levels were accidentally encountered—and often rudely removed—in the process of excavating the monumental fabric of ancient Cretan cities. Consequently, our sample is particularly weak from a statistical point of view: if the image we have is mostly one of deep “transformation” or even of “decadence”, this is largely due to the fact we have excavated ancient monuments which were quite obviously abandoned and/or transformed when they became obsolete in the new “ideal” conception of urban life in Early Byzantine times. On the other hand, there have been few urban excavations undertaken with the specific goal of investigating the non-monumental parts of an ancient city, the most extensive examples being Eleutherna and Gortyn. So, if we want to distinguish between the “cities of monuments” and the “cities of people”, we would imagine the Late Antique or Early Byzantine cities as “cities of monuments,” based mainly on churches and, to a decidedly lesser extent, on civil and defensive architecture. We know much less about the ways in which the men, women, and children lived in and interacted with those spaces between the fifth and eighth centuries.

The picture becomes much more complicated if we try to move towards a landscape perspective, because this is still a largely unexplored research field in Late Antique/Early Byzantine Crete (Figure 6.2). This situation is obviously very common all around the Mediterranean basin, but in the Cretan case it is especially problematic, as it is a potentially extremely rich

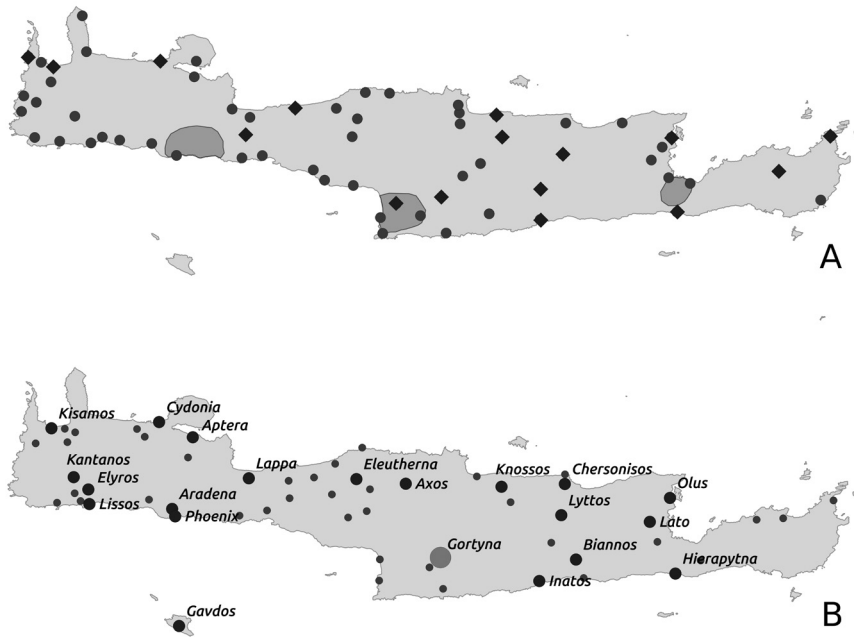


Figure 6.2. The basis of knowledge about the settlement pattern in Late Antique/Early Byzantine Crete: A) cities of Classical tradition (diamonds = Greek cities; dots = Roman cities; shaded areas = published or ongoing survey projects); B) Late Antique/Early Byzantine cities and large villages (small dots = Early Christian basilicas; large dots = cities reported in Hierokles' *Synekdemos*).

territory. Crete is often called the “island of one hundred cities” in the literary sources, and this image is confirmed by the famous distribution map of Late Antique cities in the Mediterranean basin prepared by A.H.M. Jones in 1937 on the basis of Hierokles' *Synekdemos*, on which Crete appears to have one of the highest densities of cities. The same image appears to be corroborated by the distribution of Christian basilicas in Crete between the fifth and the sixth centuries (Volanakis 1990). We have to acknowledge that, for most of these basilicas, we know little more than the location and the dedication, but even the very fact of their uniform distribution throughout the island suggests a dense urban and rural settlement system.

A comparable picture comes from the three major territorial surveys that have been conducted and (more or less extensively) published on Crete: one in the western Messara (Watrous et al. 1993), one in the Sphakia area along the southwest coast (Nixon et al. 2009), and one in the Vrokastro area in the eastern part of the island (Hayden 1990). Here again, we have to be aware

of the diversity of approaches and operational practices that make an overall synthesis of data difficult. But “new generation” projects—such as the one centered on the settlement of Priniatikos Pyrgos (Molloy and Duckworth 2014)—have been conceived to integrate the *longue durée* dimension of the single site with an overall view at the regional scale, with the goal of understanding the changing relationships between the central site and its surrounding landscape.

The development during over the last decade of an intensive program of preventive rescue archaeology connected with small private and large public works, such as the one necessitated by the new highway that will connect Heraklion with the southern part of the Messara plain, is very promising. During these years, despite the great economic crisis, Greek archaeologists have been digging extensively in Crete, and one would predict that—if these excavations are published within a reasonable time frame—we will have a new and extremely interesting dataset about the shape of the Cretan landscape in Late Antiquity and the Early Byzantine era. This would offer an even more interesting picture, since it is based on a random statistical sample (i.e., independent from of the different interests of individual research groups) and this should provide us with fresh and relatively “unbiased” data.

Last but not least, I will mention the very valuable research carried out in recent years by the University of Rethymno, jointly with the IMS—FORTH, with a focus on the fortification systems of Early Byzantine Crete (Tsigonaki and Sarris 2016). It is, to my mind, an exceptionally important piece of work that, despite the difficulty in obtaining a precise and reliable date for every single site, will certainly put new arguments on the table and perhaps produce new critical approaches to changes in settlement models for the Early Byzantine Mediterranean islands.

A Starting Point

As already noted, a point that makes Crete a unique case in the context of the Late Antique and Early Byzantine Mediterranean insular system is represented by the great earthquake (and associated tidal wave) of 21 July A.D. 365. There is ongoing discussion of the real destructive power of that single event and the size of the area affected by the earthquake, and others possibly linked to a “seismic swarm” that may have afflicted Crete for many decades (Di Vita 1979); but it is not particularly relevant to our discussion here.

An earthquake is a specific event, but its archaeological visibility is clearly related to what happens before (i.e., the general conditions of the affected areas before the event) and to what happens afterwards (i.e., the response of the affected society). The destructive power of the A.D. 365 earthquake is evident in the archaeological record from several Cretan sites. In Gortyn,



Figure 6.3. The collapsed *scaenae frons* in the Python theater at Gortyn, after the A.D. 365 earthquake.

the *scaenae frons* of the Roman theatre connected with the temple of Pythian Apollo collapsed (Bonetto et al. 2009) (Figure 6.3), and the same occurred to many houses at Eleutherna, where some people were also buried by roof collapses (Themelis 2005). But, beyond simply recording the event, it is more interesting to reflect on the image of the urban landscape in both these cities just a minute before the earthquake itself. In Gortyn, for example, both the temple of Apollo and its related theatre appear to have been in deep crisis: the scene-building had already been converted into a stable where horses and mules were housed, while the *cavea* itself was re-used as a workshop for cutting up marbles (mainly large statues) to convert them into slabs. The same image derives from a small circular building excavated in front of the entrance to Apollo's shrine: this small but elegant monument had been transformed into a small stable, perhaps to house sheep (Zanini et al. 2009).

It goes without saying that the circumstances of the abandonment of the Python theatre prior to the earthquake cannot be automatically extended to the whole city: we know that the celebration of Apollo's cult was probably halted in Gortyn, as in other Greek cities, some decades before the mid-fourth century, and was not necessarily directly linked to the affirmation of Christianity (Tzouvara-Souli 2001). The same image of abandonment arises in the excavation of the *stadium* at Gortyn, some hundred metres away from

the theater, and that may originally have been connected with the temple and theater of Apollo as different parts of a single, large sanctuary complex (Lippolis 2005). It is very difficult to say whether the semblance of relative crisis evident from Gortyn's public monuments must be connected with a specific situation (all the cited monuments were more or less related to a pagan cult, already abandoned and rejected by rising Christianity), or if it could be extended to the rest of the city.

At Eleutherna, the excavated fourth-century contexts are related to a couple of large urban *domus* that do not seem to present any symptoms of crisis before the earthquake, since their inhabitants were caught out by the seismic event during their daily activities (Themelis 2009). At present, it is hard to know whether this "double" image of Crete on the eve of the A.D. 365 earthquake (continuity of private life, some difficulty in maintaining public monuments or, at least, some of them) may be linked in some way to another well-known, apparently "inexplicable" archaeological indicator: the drastic decline in the presence of Cretan amphorae in the markets of the western Mediterranean, and primarily in Rome, between the second half of the third and the beginning of the fourth centuries (Marangou 1999).

In this case, the image of Crete in those years would not be that of a province that had fallen into a deep economic crisis, but perhaps rather that of an island more "insulated" than before; more "marginalized" within the overall context of the Roman Mediterranean. This was a new situation to be read, possibly, as a form of a new "remoteness" for an island situated exactly on the new inner border between the two parts of the Empire. At present, this could be just a matter of speculation, but it seems to me to be a working hypothesis worthy of discussion within the framework of a *longue durée* perspective (as proposed by the general theme of the present volume).

In fact, the image of a "weak" city is replicated—at least in the case of Gortyn—in the years immediately following the great earthquake, when urban reconstruction ensued. The rebuilding of the monumental fabric of the city is certain, witnessed by a large number of inscriptions, mainly concentrated—at least among the areas that have actually been excavated—in the *praetorium* (Gasparini 2004). But even in that area, so evidently central to the image of the capital city of the province of Crete, the reconstruction was not as rapid as one might imagine: the main building (the *praetorium* itself) was finished around A.D. 382/383 (Di Vita 2000), more than 15 years after the disaster. This is nothing, for example, like the very quick rebuilding of Antioch after the Persian attack and strong earthquake in the time of Justinian. This slow, rather unimpressive reconstruction of the administrative core of a province's capital city poses a question about the scarce capacity—



Figure 6.4. General view of Late Antique Eleutherna: in the foreground, a large peristyle *domus*; in the background, the Christian basilica.

or perhaps the scarce determination—of the late Roman macro-economic system to convey money and resources towards a place that was probably perceived as increasingly distant from the interests of the Roman ruling class.

The same image, moreover, comes from both the excavated parts of Eleutherna and from the countryside. At Eleutherna, the real reorganization of the urban fabric, with the building up of the new Christian basilica, must be dated to the fifth century (Themelis 2004)—incidentally, perhaps, the same date as the new and very large episcopal basilica in Gortyn. The same goes for the large majority of the urban and rural basilicas in other centers of the island (Figure 6.4).

To return to our initial distinction between local micro-ecology/economy and general/Mediterranean macro-economy, the image could be one of a prevailing local dimension for the fourth century and one of a progressive upswing of the Mediterranean dimension in the fifth, when the central administration adopted a massive programme of building churches, as a strategy to reorganize the network of one of the most important macro-economic systems in the new form of Empire.

A New Macro-economic Centrality

This new Mediterranean perspective seems to be radically reinforced in the sixth century, when the appearance of Cretan cities appears to be more in line with those of the eastern Mediterranean cities than with the (more or less accentuated) crisis evinced by the cities of the Late Antique West.

In Gortyn, the signals are numerous and unequivocal: the renewal of the monumental landscape of the city is marked by the construction or substantial renovation of churches, by the reorganization of urban infrastructures (roads and water networks), and by the presence of private houses of good quality. The same picture emerges from the register of extra-archaeological sources: Gortyn is one of the very few cities of the Empire in which a hippodrome is stated as operating in the mid-sixth century, where the Green and Blue factions are attested (Spyridakis 1992). Urban elites are still well-structured, as evidenced by the role of archbishops and curials: some decades later, once again from Gortyn, we have the very last attestation of a “curial” that was well aware of his role in power management (Brandes 1999: 30). The landscape looks more or less analogous to Eleutherna, although the forms in which this positive phase of urban life is manifested may be different.

As always, we are more poorly informed about what the Cretan countryside looked like in the sixth century. The network of urban and rural basilicas should have continued to thrive and grow, simply because there is no reason why this should not happen, but we do not yet have a sufficiently reliable statistical basis for judgement. Systematic archaeological surveys are more difficult to read, on the one hand because, from a few potsherds picked up on the ground, it is difficult to get dates precise enough to allow us to distinguish timespans of a century or less; on the other hand because all these projects are, by their nature, more oriented towards the long-term relationship between people and the environment than the definition of specific chronological phases (the centuries that we are dealing with now, for example, are included variously under the “Roman and Late Roman” or “Byzantine and Turkish” labels).

Among the signals I have indicated, it is particularly interesting, for a number of reasons, to focus on the rebuilding of Gortyn’s urban water system. First, control and management of water resources is a central theme, very frequently discussed in all the Early Byzantine literary sources, especially in the sixth century, when the imperial administration decided to place this important item mainly under the control of bishops. Second, archaeology testifies to the fact that even in Crete this was a “hot topic,” as we have significant waterworks in Eleutherna and in other centers distributed across the island (Kelly 2006). Third, the renewal of the water distribution system

at Gortyn has been the focus of an extensive study (Giorgi 2016). We now have excellent knowledge of the material structures and a refined functional analysis of the whole system, and this allows us to use water as an excellent archaeological indicator to study, in Gortyn, the “city of people” as distinct from (and somehow opposed to) the “city of monuments” (Zanini in press b).

The urban water distribution system at Gortyn in the Early Byzantine period is based on a pre-existing Roman aqueduct, but significant transformations were made to it. The original Roman aqueduct was probably built in the second century A.D., to bring to Gortyn—which at that stage was finally taking on the monumental features of a “standard” Roman provincial capital—a large quantity of water, captured at the foot of the Ida mountain massif, which constitutes the only important aquifer basin in Crete. The Roman aqueduct of Gortyn is important, first, for its dimensions (ca. 15 km long, almost entirely made with underground tunnels, following the natural slope of the terrain); second, for its flow rate (an average of 7,000 m³ per day); and finally, due to the extraordinary availability of water that provided for a city of between 15,000 and 25,000 inhabitants, guaranteeing the daily needs of the population and in addition supplying several *thermae* and *nymphaea*, in accordance with the typical Roman approach to the use (and abuse) of water (Giorgi 2007).

Yet what is most interesting about the Roman aqueduct of Gortyn is its ecological impact. To create this urban water system, the hydraulic engineers of the Severan Age had to intervene dramatically in the whole ecosystem of the Messara, re-routing virtually all the water that had previously flowed to the western part of the plain (through a valley near the ancient city of Festos) to the provincial capital at Gortyn instead. The result was that the western part of the Messara, which until then had been particularly rich in water resources (even resulting in large semi-marshy areas), radically changed its water regime. Conversely, the eastern portion of the same plain came to enjoy a generous and reliable irrigation regime, in lieu of the highly seasonal nature of water availability that had until then been afforded only by the courses of the two main rivers (the Ieropotamos, which cuts longitudinally across the plain from east to west, and the Mitropolianos, its main tributary, and along the course of which the city of Gortyn is located). In this way, the new aqueduct became a sort of artificial river with a constant flow that was substantially similar to that which had previously irrigated, and perhaps flooded, the Festos plain. In addition, a second branch of the aqueduct was designed to capture the waters of the Gergeri springs, which were also at the foot of the Ida massif, likewise contributing to this important reorganization of the ecosystem of the central part of the Messara.

The immediate effect of this intervention—which one can certainly read in terms of a “macro-economic” decision, i.e., a deliberate choice by the imperial administration—was to make a decisive impact on the local micro-ecology, by shifting the main fundamental resource (providing drinking water and irrigation) in a semi-permanent way, since the functionality of the Gortyn water system continued throughout the Early Byzantine period.

In the late Justinianic age—this dating, suggested by a series of convergent clues, is now, after much discussion, generally agreed—the Gortyn water system was restored, probably after a long period of difficulty following the fourth-century earthquake, and it was integrated by a new capillary distribution system, based on a network of reservoir-fountains distributed throughout the city. In this new system, two items are particularly worthy of attention for our reasoning: the functional restoration of the entire water-capture and water-supply system to the city; and the distribution system organized by means of large reservoir-fountains (Figure 6.5).

Functional restoration necessarily involved the continuity of the huge ecological impact determined four centuries before. All the water springing from the Ida massif was again captured and diverted to Gortyn, renewing the earlier image of an artificial river with a considerable and constant flow rate, fueling urban consumption. This supports the idea of Gortyn’s continuity, both in the number of inhabitants and in the “quality” of water use (i.e., continuity of baths and *nymphaea*). Moreover, this amount of water also seems to be intended to support a large cultivated area around the city, thus renewing the basic site-catchment area for city consumption and commerce.

In other words, the restoration of the aqueduct in the sixth century actually renewed the local, productive micro-ecological system that had been artificially built in the Severan age. It is not difficult to see that both the Cretan capital city supply and, very probably, the wealth of Gortyn’s urban élites (through the enhancement of agricultural production), was based on this basic resource in Early Byzantine times,

The new element of Gortyn’s urban water system in the age of Justinian is represented, as noted above, by a network of over 50 reservoir-fountains, irregularly but logically dispersed in clusters throughout the urban fabric, and tied into the urban branches of the aqueduct that were either restored or newly built *ex-novo*. Starting from the obvious assumption that the aqueduct branches and the fountains connected to them were designed to reach the areas where the water was needed—that is, where the main population nuclei were located in the sixth-century town—we may draw an unexpected picture of the “city of people” that overlaps only partially with the “city of monuments”, at least what little we know of it today (Giorgi 2016: 91–118) (Figure 6.6).

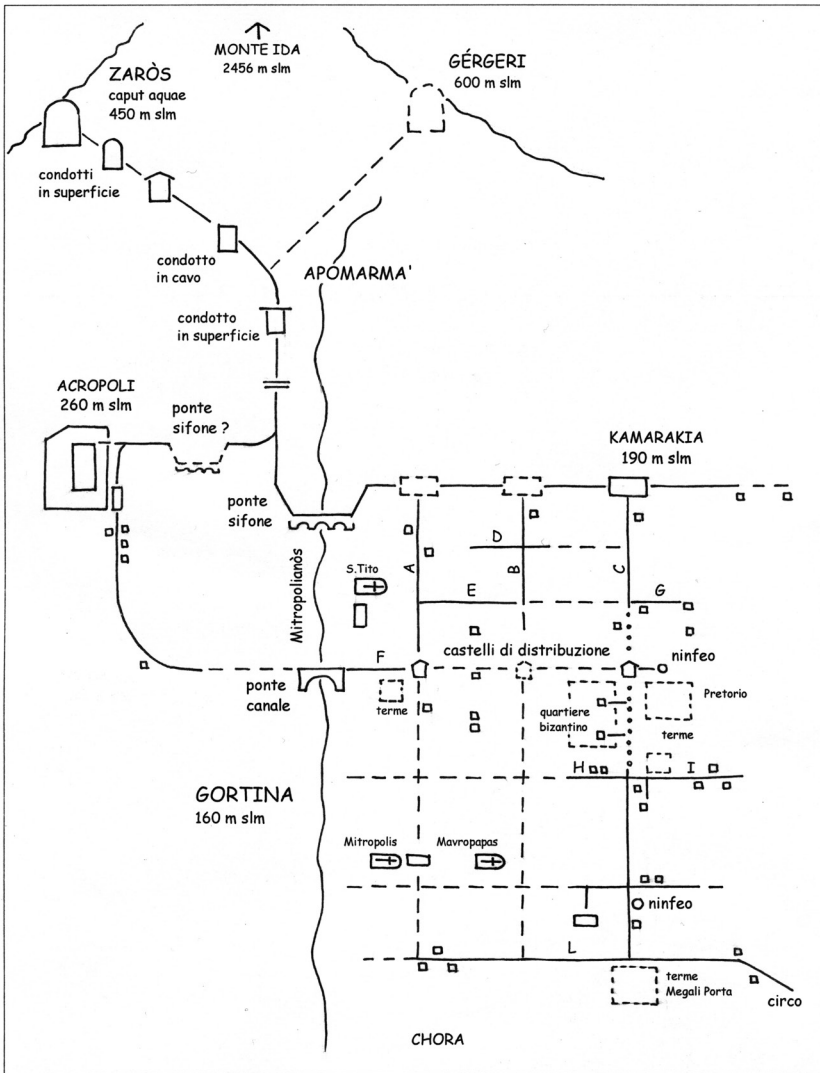


Figure 6.5. Sketch map of the urban water system of Gortyn in Early Byzantine times (after Giorgi 2016: figure 39).

Considering all these archaeological indicators, we have quite a “positive” image for Cretan economic and social life. It is an image that, on the one hand, relies on the quality of local micro-ecology, in terms of continued availability of important natural resources. On the other hand,

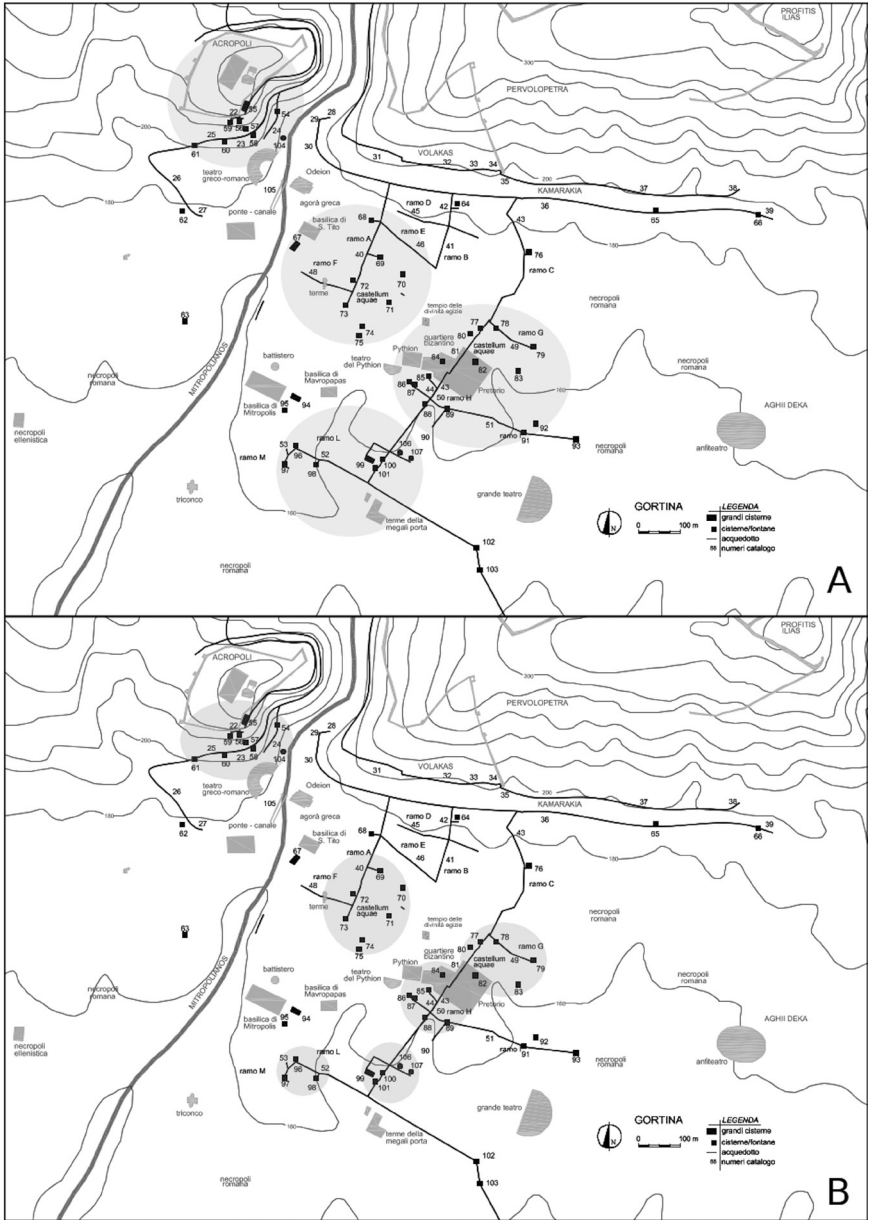


Figure 6.6. The city of monuments and the city of peoples in sixth- and seventh-eighth-century Gortina (redrawn after Giorgi 2016: figure 62).

this same positive image rests on the renewed centrality of the role of Crete in the political-administrative, economic, and strategic scenario of the Early Byzantine Mediterranean. Clues in this direction are certainly not lacking. The main one, in my opinion, is the prestige enjoyed by Gortyn's archbishopric seat, whose holders subscribed to the Church councils of the sixth century in an absolutely privileged position, being positioned immediately after the archbishops of the most important cities of the Early Byzantine empire. Gortyn and Crete, therefore, occupy a very important place in the Mediterranean world of the Early Byzantine emperors and this macro-economic element can well explain the very positive phase that this island, so central but also so isolated, experienced in these decades.

A Mediterranean-sized Macro-economic Crisis?

The close link between Crete and the macro-economics of the Early Byzantine Mediterranean is further underlined, I believe, by the abrupt change of image we have by the last third of the sixth century. The phenomenon is particularly evident in Gortyn, largely because the recent excavations on this site have dealt extensively with urban contexts dating to this period.

The archaeological remains indicate a sharp change in quality of urban life: fragmentation of buildings to create smaller housing units; coexistence of residential and craft areas; encroachment of streets; and the infilling of spaces and partially abandoned public buildings. In short, the whole repertoire is typical of the transformation of urban spaces in most Mediterranean cities around this time (Zanini 2013b; 2015).

In Gortyn, once again, we have been able to match the information that comes from the tightly-controlled stratigraphic sequences of a small urban district with the transformation of the water distribution system into the city. What seems to be the case is that—together with an objective fall in the quality of the buildings, and with an equally objective change in the urban social fabric—there is also the gradual concentration of settlement around the nuclei of the reservoir-fountains. If the reservoir-fountains system, only a few decades before, seemed to have been designed to reach the large areas where people were living, quite the opposite phenomenon is now the case: the reservoir-fountains became so many *foci* surrounded by smaller and poorer districts (Giorgi 2016: 111–117). The picture is one of an urban settlement with many nuclei (the so called “islands-shaped” urban settlement): that is, a new type of urban landscape, in which no new public buildings were erected, while the old ones were restored with poorer materials (e.g., a limestone slab pavement covered the mosaics in the old episcopal basilica in the district of Mitropolis; the “new” *Praetorium* was made with re-used stones).

Now this new situation has been documented, the real question is: what made this change so rapid and evident? In the case of Crete, it seems impossible to take into account the two elements that are usually believed to be responsible for any abrupt changes in the pace of a city's life: war and natural disasters (particularly earthquakes).

So far as war is concerned, Crete in this era was firmly in the hands of the Byzantine administration and well-protected from external invasions by its very isolation in the middle of the Mediterranean. In the literary sources, we have no trace of substantial attacks on Crete until the Arab conquest of the first half of the ninth century, and I would argue that this element may be safely discarded. With natural disasters, the situation is more complicated, because Crete certainly was—and still is today—a land of great seismic risk. The role of earthquakes has, in the past, been emphasized by such experts in Gortyn's archaeology as Antonino Di Vita, who saw a sequence of devastating earthquakes as the main cause of the decline of the city (Di Vita 1996). More recently, however, the review of stratigraphic sequences has seriously questioned this oversimplified explanation of a phenomenon that, today, appears to be extremely complex. In the case of Gortyn, we could examine this change in urban fabric from at least three different scales: the individual areas already investigated; the city seen as a whole; and the city in its wider Mediterranean context.

At for the smallest scale (that of the single area investigated), I can only refer to the context I have been excavating for over 15 years—the so-called Early Byzantine district next to the Pythion shrine—which has allowed us to observe an interesting phenomenon. The excavated contexts tell of a seemingly bizarre asynchrony, with a very narrow spatial co-existence between areas where we have important traces of this “involution” of urban life, and areas where, simultaneously, we have equally important traces of construction of a large, high-quality building, probably a residential one (Zanini et al. 2009). It seems to be a great manor house (or a somewhat similar building, perhaps a monastery), which is surrounded by very poor houses, workshops, stables, and even some burials: in other words, a “rich” building and some “poor” buildings appear to have a direct spatial and functional relationship to each other, opening the door to the hypothesis that this may be one nucleus within a new type of city (Figure 6.7). It goes without saying that it is problematic to extend the image derived from this one small district to the whole city; but the physical and functional relationship with the two main urban infrastructures (the street grid and the network of reservoir-fountains) could be used to project this image onto other parts of an urban fabric whose spatial coordinates escape our comprehension.



Figure 6.7. General view of the seventh-century A.D. large *domus*(?) in the Early Byzantine district of Gortyn.

At the intermediate scale (the whole city), the other elements we can take into account are the modest restoration of some monumental buildings, as we have already mentioned, and some other excavations currently conducted by other Italian teams. These have so far been published only in the form of preliminary reports, but, on the whole, they seem to suggest a similar picture to that just outlined (Lippolis et al. 2010). More complicated are the problems associated with the city's only major structural element that, according to orthodox opinion, has to be attributed to a large urban reorganization of the seventh century A.D.: the walls that enclose the acropolis of the city, which represent the only surviving element of Gortyn's urban fortification system dating later than the early urban phase of the seventh to sixth centuries B.C. (Perna 2012). The dating of these walls is doubly important: first, because they could be connected to a major change in the spatial organization of the city and, second, because it could provide a solid basis for an absolute chronology of several other fortified enclosures that are now under investigation on various hilltops elsewhere in Crete (see Tsigonaki, Ch. 7 in this volume). If the acropolis walls really should be dated to the seventh century A.D., we would have an extremely interesting point to consider, since we would have two contemporary and perhaps complementary phenomena: the formation of an "island city" on the plain with many small nuclei centered around reservoir-fountains and, in parallel,

the repositioning of the main civil and military functions onto the acropolis hill. Unfortunately, at present, we are still far from having a secure date for the construction of the Gortyn acropolis, because the available evidence is the result of poor excavations, and so of dubious quality and even mutually contradictory.

Still at the intermediate “urban” scale, a third aspect has to be considered: the “Mediterranean” dimension of the transformation of urban fabric. The same image of rapid change in urban landscapes occurs simultaneously in many areas of the Early Byzantine Mediterranean, often very distant from one another in terms of geography and diverse local ecological and micro-economic situations. The hypothesis—at present it is not much more than this—around which I am working is that this brutal change in the appearance of many different cities of the Early Byzantine Mediterranean between the last decades of the sixth and the first decades of the seventh century originates not in changes to the different local ecology (or micro-economies), but in a large-scale change, a decisively macro-economic one.

If the same phenomenon occurs in the context of the capital city of one of the largest and most isolated islands of the Early Byzantine Mediterranean, in a city of extraordinary symbolic importance such as, for example, *Prima Iustiniana* (Zanini in press a), and in dozens of large and small cities distributed across different regions, it is quite plausible that the fundamental cause (or at least one of them) could be a failure by the Byzantine administration in managing the empire’s macro-economic forces—in other words, the incapacity to properly manage an empire that was economically exhausted by the tremendous military expenditures of the great Justinianic conquests and debilitated, in terms of manpower and the ability to produce primary resources, by the great plague of the sixth century. It was an empire that may no longer have been able to handle the great macro-economic practices (essentially the collection and management of taxes) on which the basic structural systems of the empire depended: the defensive system, which we see in severe crisis on many fronts during these decades, and the administrative system, based on the dichotomy of provinces and cities.

A Return to Micro-ecologies?

The trend inversion we have outlined in Cretan cities by the last third of the sixth century seems to continue in the subsequent 100 to 150 years. A deep change in urban settlements becomes more and more evident in the archaeological stratigraphy: transformation of buildings and spaces, always involving their diminution; impoverishment of construction techniques; and reduction of imported goods, which are generally replaced

by local productions. At the urban scale—especially at Gortyn, but also at Eleftherna—it seems possible to see a sort of selection of spaces and monuments to be maintained (for example, the main paved streets running across the city center), as opposed to an urban fabric that appears increasingly impoverished and scattered (Baldini et al. 2012).

An emblematic image of this latter phase of urban life emerges, for example, from the stratigraphy investigated in our excavation area in Gortyn, the Early Byzantine district next to the Python shrine, where we have been able to excavate an entire ensemble of collapsed roofs, probably due to an earthquake to be dated to the middle or second half of the eighth century. This simultaneous collapse of roofs sealed a complex situation. To the south of the street that, since the fifth century, had divided the district in two, and later (very probably in the seventh century) was converted into a sort of elongated private courtyard, the situation underneath the collapsed roof is one of a very poor human landscape: a small stable; very small houses with a single room probably shared by people and animals; and impoverished artisanal activities.

Yet just on the other side of the courtyard, the picture is completely different: a large building, which we were able to excavate only in part (perhaps its service area), which has yielded strong evidence of a higher



Figure 6.8. Eighth-century A.D. assemblage found under the collapsed roof of the large *domus*(?) in the Early Byzantine district of Gortyn.

economic and social status. (Figure 6.8). Among the ruins was a marble slab with a monogram, perhaps gilded, that we are not yet able to resolve properly, but that surely refers to a high-ranking person and/or office. In the cellar of the same building, we found many amphorae, still intact at the time of roof collapse; while in the internal courtyard we found a marble *sigma*-shaped *mensa*, and a largely preserved *saltsario* produced in Constantinople at the beginning of the eighth century, together with some bronze belt buckles and other objects of personal ornament (Zanini et al. 2009; Zanini 2013b).

The overall picture is, therefore, that of an individual (or a group of individuals) that had a recognized social status: he/they lived, worked, or acted in a large building still characterized by large spaces; he/they had the right to a precise and recognized definition of his name and/or function (the monogram); he/they still had contact with the Mediterranean exchange of precious goods (the *saltsario*); he/they based his/their status on an economic well-being that was probably derived from land possessions in the surrounding territory (local amphorae in the cellar). This high social and economic status is reshaped and mitigated by other pieces of evidence: in the courtyard of the building, at the time of the collapse, some sheep were being housed, and the luxurious floor paved with limestone slabs appears very worn, probably because of the frequent passage of heavy animals.

In short, the evidence suggests a complex and multifaceted scenario, where some form of recognized power still survives. This same power, however, is based more on a local ecological and micro-economic dimension than on a macro-economic dimension at the Mediterranean scale, as it was only a few decades before. From this point of view, the macro-phenomenon of the decay and then disappearance of the long-standing hegemonic centers of Early Byzantine Crete could perhaps also be seen in terms of transition from a Mediterranean macro-economic dimension to a local micro-ecological dimension, because the Cretan cities progressively lost their fundamental role as centers for the different élites connected with central administration (civil, religious, and military) and the wider economy.

It is difficult to evaluate the fate of the great Cretan cities after the early or mid-eighth century. Based on the excavations in Gortyn—which comprised only a small portion of the settlement in the plain (less than 0.05% of the total urban area)—it appears that there was an abandonment, one that took place well before the arrival of the Arabs around A.D. 825. If this interpretation proves correct, the arrival of the Arabs would have been not the cause, but rather the effect of a deep transformation in the role of Crete in the strategic and economic geography of the Byzantine Empire. It goes without saying that this interpretation could be largely overturned by the excavations on the Gortyn acropolis, for example, and what currently appears to have

been an irreversible crisis for the whole city could alternatively be read as the effect of a socio-economic élite moving to new, better-defended positions.

This is, again, a broader possibility that also finds some analogies with roughly parallel phenomena present in other areas of the Byzantine world (Saradi 2006). At the moment, however, we can only imagine a generalized crisis of the traditionally-based, long-standing urban settlement in Crete during the eighth century, most likely due to a total loss of interest in the island, and in particular its southern portion, by the Byzantine administration. We may also interpret the choice made by the imperial administration at the time of the reconquest of Crete in the mid-tenth century in this context. After A.D. 961, Nikephoros Phokas decided not to return the dignity of a provincial capital to Gortyn: the focus of imperial attention moved to the port cities of the northern coast, perceived as being much more conducive to the new image of the Middle Byzantine Empire, shifting from a fully Mediterranean entity to a rather more Aegean-Anatolian one. According to a recent re-interpretation of some problematic literary sources, this change of attitude by the imperial administration towards Crete would have occurred well before the Arab attacks, and the moving of administrative centres to the northern coast would have been a strategic choice dating back to the second half of the seventh century (Baldini et al. 2012: 246).

This is a very interesting hypothesis, which, if validated, would go in the direction I have discussed in this chapter. The great phenomenon of the end of the long-lasting Cretan cities and the overall change in the settlement model on the island would be the product of two concomitant phenomena: first, the progressive dominance of a local ecological/economic dimension on the macro-economic Mediterranean scale, which had instead sustained the Roman and Late Antique urban system until the generalized crisis of the Byzantine imperial system unfolded following the “golden” age of Justinian the Great; and second, the emergence of a new, purely Byzantine, macro-economy, geographically based in the Aegean and primarily focused on defence.

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