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# **Change and Resilience**

## **The Occupation of Mediterranean Islands in Late Antiquity**

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## Sicily from Late Antiquity to the Early Middle Ages: Resilience and Disruption

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*Over the last decade, Sicily in its Late Antique, Byzantine, and Islamic periods has been at the center of renewed interest from both historians and archaeologists. This paper considers the links that could be established between observed socio-political structures and the transformation or persistence of exchange networks, settlements, and agricultural and ecological systems. Sicily seems to have had a very long “Late Antiquity” lasting until the seventh century, as indicated by its close connections with the remaining international networks of exchange, a high level of coin use, and thriving countrysides (where villages were gaining importance, at the expense of the villae). During the eighth century, we can see that many things changed markedly, before Sicily was conquered by Muslim invaders. The networks linking Rome, North Africa and Sicily, if they existed, are nevertheless archaeologically invisible. In the western part of Sicily rural settlement are almost undetectable, while in the east a number of very small sites indicate the weakening of the central places; in some parts of the island, at least, the cultivation of plants, especially cereals, collapsed, and a period of increased dryness started as well. After many centuries, Sicily for the first time had to feed only its own population! Amidst all this disruption, what can be shown to have had significant resilience were the very large villages, the so-called agro-towns (Sofiana and Casale San Pietro). They were sometimes able to last at least until the twelfth century, ending only during the Norman age.*

### Introduction

Over the last decade, Sicily in its Late Antique, Byzantine, and Islamic periods has been at the center of renewed interest from both historians and archaeologists. New data and new interpretations have emerged, calling for reconsideration of the identification and explanation of rupture on the one

hand, or resilience on the other.<sup>1</sup> In particular, I would like to consider the links that could be established between observed socio-political structures and the transformation or persistence of exchange networks, settlements, and agricultural and ecological systems.

Among recent research (Figure 4.1) are elements that prompt serious reflection: the volumes edited by Malfitana and Bonifay (2016) on African ceramics imported into Roman and Late Roman Sicily; recent excavations and new analysis of previously known structures at the Villa del Casale near Piazza Armerina (Pensabene and Sfamemi 2014; Pensabene 2016) and the nearby *vicus* of Sofiana (Vaccaro 2017), and the new data that are emerging from towns.<sup>2</sup> Extensive surveys—for example, in the territory of Iato (Alfano 2015) and Entella (Corretti et al. 2014)—are providing precious information on changing settlement systems in the *longue durée*. Studies of mints, the circulation of coins, and lead seals in Byzantine Sicily continue to provide important elements of analysis (Prigent 2012; 2013). Of great interest is also the combined study of the pollen sequence and the stable isotopes of oxygen and carbon in the Pergusa Lake (near Enna), with crucial information on climatic and vegetation sequences in the last two millennia (Sadori et al. 2016). Much new data is also being assembled by the “Sicily in Transition” project which addresses some 20 sites in Sicily, including intensive research in the area of Castronovo di Sicilia.<sup>3</sup>

It is now increasingly possible to consider whether or not observed changes in society are coeval with documented moments of major discontinuity in the history of Sicily and the Mediterranean: for example, the fifth-century Vandal conquest of Africa and collapse of the population of Rome, or the Byzantine (A.D. 535) and Islamic (starting in A.D. 827) conquests. We can already take as a premise that, not surprisingly, transformations in economy, social structures or ecology do not slavishly follow a change in regime.

In the following pages I first describe some of the phenomena that are being read with increasing clarity in the fields of exchange networks, settlement systems, and partly also in climatic variations and agricultural practices. I then focus on the research in progress at Castronovo di Sicilia and, finally, bring these new observations together.

### **Networks of Exchange**

The extensive census undertaken by Malfitana and Bonifay (2016) of all kinds of African ceramics imported into Sicily between the first and seventh century, accompanied by more than 500 petrographic thin-section analyses, has provided new insights into the exchange mechanisms that allowed Sicily to receive large quantities of pottery and food products from different areas of North Africa, from Mauretania to Cyrenaica.<sup>4</sup>

In particular, within Sicily, three main areas have been identified (albeit with different sub-areas of overlap) that are clearly characterized by different modes of supply. In southern Sicily, the direct supply of African products was a consequence of *cabotage* connecting these two coasts of the Mediterranean. It is probable that the south coast of Sicily exported sulfur (extracted in the area of Agrigento) to North Africa, at least until the end of the seventh century. Conversely, northern Sicily was likely to have received North African ceramics via redistribution through the port of Rome, given the close similarity of ceramic types with what has been found in that city and beyond. A third area, that of southeastern Sicily, benefitted from both types of supply, thanks to routes passing through the Strait of Messina. Sicily would have been incorporated into the very close trade relationship that bound North Africa to Rome, after Egyptian grain was diverted to Constantinople in the fourth century. The demand for food in the megalopolis, in the view of many scholars, would have been the main engine underlying these networks.

Following the central decades of the fifth century, in Malfitana's and Bonifay's opinion, the conquest of North Africa by the Vandals, on the one hand, and the gradual collapse of the population of Rome, on the other, would completely disarticulate the system we have just described. For this reason, in the sixth and seventh centuries, after the Byzantine reconquest of North Africa, African ceramic arrivals in Sicily should have been largely dependent on *cabotage*. As we will see later, however, it is really difficult to discount Rome's role in the economic and social life of the island during these centuries, as well as in wider Mediterranean affairs. Although it is true that the overall structure of imports was altered in the fifth century (for example, with a major increase in imports from southern Italy), African ceramics nevertheless continued to arrive in Rome in large numbers (Panella et al. 2010; Casalini 2015). African pottery was still reaching deposits at *Crypta Balbi* in the second half of the seventh century. The distribution of both ceramics and coins (the latter in particular from the mints of Syracuse and Carthage) demonstrate that Sicily and parts of North Africa were crucial for the sustenance of both Rome and Constantinople during the seventh century (Prigent 2006; Morrisson 2015).

Imports from North Africa to Sicily in the seventh century, generally speaking, are quantitatively smaller than in previous centuries. But in some contexts—and not only on the southern coast, such as at Cignana near Agrigento (Rizzo and Zambito 2016), but also in the northwest, including Segesta and its territory (Faccella and Gagliardi 2016)—African imports still constitute the most prevalent pottery and local products are represented only by cooking pots. The same is true for the island of Marettimo, near the northwest coast (Ardizzone and Pisciotta 2016). Furthermore, we have

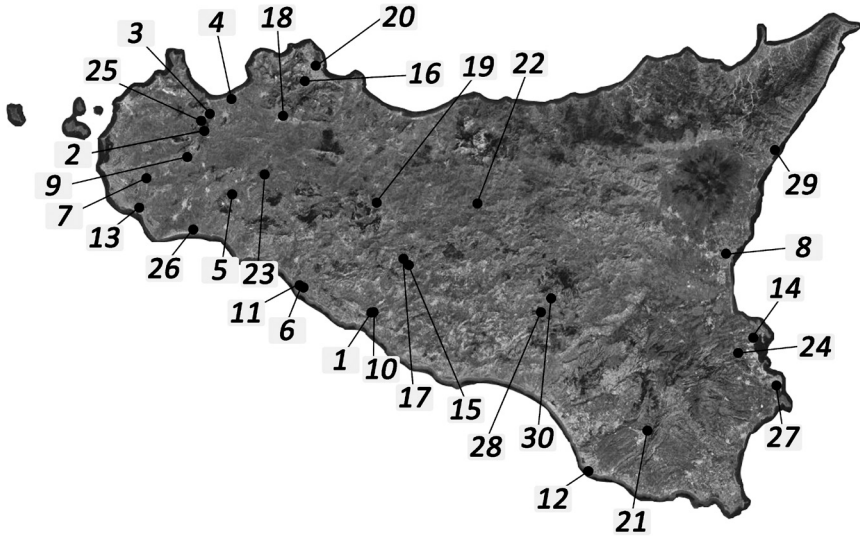


Figure 4.1. Map of Sicily with main medieval archaeological sites: 1. Agrigento; 2. Calatafimi; 3. Calathamet; 4. Calatubo; 5. Calliata; 6. Campanaio; 7. Casale Nuovo; 8. Catania; 9. Contrada Miceli; 10. Contrada Saraceno; 11. Eraclea Minoa; 12. Kaukana/Punta Secca; 13. Mazara del Vallo; 14. Megara; 15. Milena; 16. Monreale; 17. Monte Conca; 18. Monte Jato; 19. Castronovo di Sicilia; 20. Palermo; 21. Ragusa; 22. Resuttano; 23. Rocca di Entella; 24. Santa Caterina/Melilli; 25. Segesta/Caltabarbaro; 26. Selinunte; 27. Siracusa; 28. Sofiana; 29. Taormina; 30. Villa del Casale/Piazza Armerina (after Google maps, by F. Giovannini).

to remember that Sicily was also producing wine in its own right. The information we have on the amphorae, such as those of the type *Crypta Balbi* 2, tell us that they continue to be produced in eastern Sicily and exported to Rome throughout the seventh century (Capelli and Franco 2014).

The eighth century, however, is very different, and not just because we are less able to recognize the local pottery typical of this period and even less so any imports from North Africa. Actually, in the few published contexts we notice a drastic fall in imports, now represented mainly by the so-called globular amphorae, emanating perhaps from the area of Naples, but especially from the Eastern Mediterranean (Ardizzone 2010; Arcifa 2010). In the ninth century, Syracuse had rather significant ceramic assemblages, but supposed mainly to consist of local products (Cacciaguerra 2015). The challenge now is to discover whether these local amphorae, which have many analogues with those of the eastern Mediterranean, are containers that traveled both inside

and outside the island. In sum, much or all seems to have changed in Sicily in the eighth century concerning exchange networks.

If we analyze the circulation and minting of coins, the phenomena are quite complex (Morrisson 1998; Prigent 2012; 2013). During the seventh century there was a significant circulation of gold and bronze coins in Sicily, including those minted on the island, in comparison with other areas of Italy or the Byzantine Empire (with the exception of Constantinople). However, from the second half of the seventh century coins circulating in Sicily are mainly issues of local mints. During the eighth century there are major changes: the supply of bronze coinage contracts from the beginning of the century (Prigent 2012) and the circulation of gold coins diminishes, especially in its second half. A consistent recovery occurred in the first decades of the ninth century, most probably due to needs linked to the costs of military activities for the defense against the Islamic invasion. The gold monetary types coined later by the Muslim mints were influenced by the latest issues of the preceding Byzantine era.

### Settlement Systems

In various parts of the island during the fifth century,<sup>5</sup> we can see growth in the number of settlements, and in many cases a substantial expansion of rural sites like villages or so-called agro-towns. This latter term has generally been used with reference to modern and contemporary times (e.g., in the south of Italy) and normally refers to rather extensive settlements, mainly occupied by peasants, with low levels of craftsmanship and generally without any precise administrative role (e.g., see Curtis 2014). Probably no new grand villas such as those at Piazza Armerina, Tellaro or Patti Marina were built. However, in the case of at least the first of these, it has been ascertained that, as late as the fifth century, they sought to maintain the quality and function of the structures through restoration (although in a rougher way), for example, of the floor mosaics.<sup>6</sup> In several cases in the fifth century, even after abandonment phases, rural settlements, some classifiable as villages, are implanted on *villae* sites, as is the case at Cignana (AG) (Rizzo and Zambito 2010).

Villages and agro-towns endured during the sixth and seventh centuries, although in many areas there was a substantial decline in the overall number of sites (for Sofiana's territory, for example, see Bowes et al. 2011). In some cases, different sites in new locations also emerged. If several *villae* were abandoned, others, such as the Villa del Casale at Piazza Armerina, were clearly restored in more rustic forms, hosting workshops and burials where once there were rooms with mosaics; one of the *triclinia* seems to have been transformed into a chapel (Pensabene 2016).

We do not have a very clear idea of what was going on during the eighth century. It has only been a few years since we began to recognize objects useful for dating sites and contexts (Arcifa 2010; Ardizzone 2010). In any case, data from systematic excavations can be counted on the fingers of one hand; this makes the dating of sites identified only by field surveys very critical. In cases where particular attention has been paid to the early Middle Ages, it seems that a further reduction in the number of sites can be identified, not compensated for by the foundation of new settlements (for example, on hilltops), as in the case of the territory of Segesta (Molinari and Neri 2004). In other territories, such as those of Agrigento (Rizzo et al. 2014) or Entella (Corretti et al. 2014; Corretti, personal communication), the increase in the number of sites corresponds to the emergence of very small settlements, identifiable by just a few ceramic sherds, which seems to be evidence of a disarticulation of the previous settlement system rather than clear growth. In addition, these very small sites seem to be of ephemeral duration. However, some of the major agro-towns seem to continue and remain prosperous—as in the case of Sofiana, which still extended for ca. 10 ha, and where several ceramic kilns dating to this period (i.e., the eighth century) were found (Vaccaro 2017; Vaccaro et al. 2015). Although it is unclear how the structures of the old *villae* were being used, some of those that had been transformed in the previous two centuries have continued traces of occupation (e.g., pottery and coins) in the eighth and ninth centuries, and often later still. In general, eastern Sicily seems to have shown a much greater resilience in its settlement system (Cacciaguerra 2009).

In the tenth century, when the Islamic State had fully consolidated its control, almost everywhere, but especially throughout western Sicily, the growth in the number, type and size of sites and of the quantity of movable finds can be easily seen. If agro-towns continue to play an important role, competition with the hilltop sites becomes progressively more visible, insofar as the latter show the tendency of becoming the new central places.

### **Pollen and Climatic Sequences**

Research recently carried out by Laura Sadori along with other specialists (Sadori et al. 2016), using joint analyses of pollen sequences and stable isotopes of carbon and oxygen in the Pergusa Lake deposits (near Enna), offer some remarkable data for reflection and discussion. The combined analyses of climate and pollen trends, coupled with tighter dating, allowed them to establish more complex relationships between climate dynamics, vegetation history, anthropogenic interventions, and precise historical phases for the last 2,000 years. The pollen and isotopic sequences of Lake Pergusa have helped



identify two periods of greater humidity and intensification of agricultural activities: A.D. 450–720 and A.D. 1400–1800. Between the eighth and the fourteenth centuries there would have been a more arid period. According to these scholars, agricultural recovery was evident, despite the increased dryness, from the twelfth century. This set of results, which seems to be confirmed above all by the pollen series in the Gorgo Basso Lake in southwestern Sicily (but not only there), allows many observations, although it naturally implies the need for the future extension of research of this type in other parts of the island as well. We can focus here especially on the data concerning Late Antiquity and the Early Middle Ages. The period from 450 to 720, besides being more humid, is characterized by significant quantities of the pollen of synanthropic taxa and in particular of cultivated plants, with strong representation of different types of cereals (barley, wheat, and rye). The real collapse of cultivated species by ca. A.D. 750 would also coincide with the increased dryness. These last phenomena were also associated with a possible sharp decline in population. It is known that a further pestilence had touched Sicily right in the middle of the eighth century (Little 2007). According to Pergusa's research team, this climatic and demographic crisis would have weakened the island to such a degree that efforts to resist the Islamic invasion were lacking. This peak of agricultural activities between the fifth and eighth centuries and their collapse after the second quarter of the eighth century are worthy of further reflection (see below).

### **Investigations at Castronovo di Sicilia**

Many of these themes are being further pursued by the project "Sicily in Transition" (Carver and Molinari 2016; Carver et al. 2017).<sup>7</sup> The aim of this project is to investigate how changes during the period between the sixth and thirteenth centuries (i.e., the Byzantine, then Islamic, and finally Norman-Swabian regimes) have influenced (or not) the standards and ways of living, the composition of the subject populations, and more generally the economic structures, settlements and ecological systems in Sicily. In addition to analyzing samples from more than 20 different Sicilian sites, the team has since 2014 been pursuing intensive research in the territory of Castronovo di Sicilia (Figure 4.2). The purpose of this work at Castronovo is not only to collect first-hand data from controlled sequences, but also to examine how a territory in a markedly interior part of the island has reacted to socio-political changes. The present and earlier investigations at Castronovo have allowed a preliminary knowledge of the main archaeological sites from the Roman to the Medieval period (Maurici 2000; Vassallo 2007; 2009; 2010; Castrorao Barba 2015).

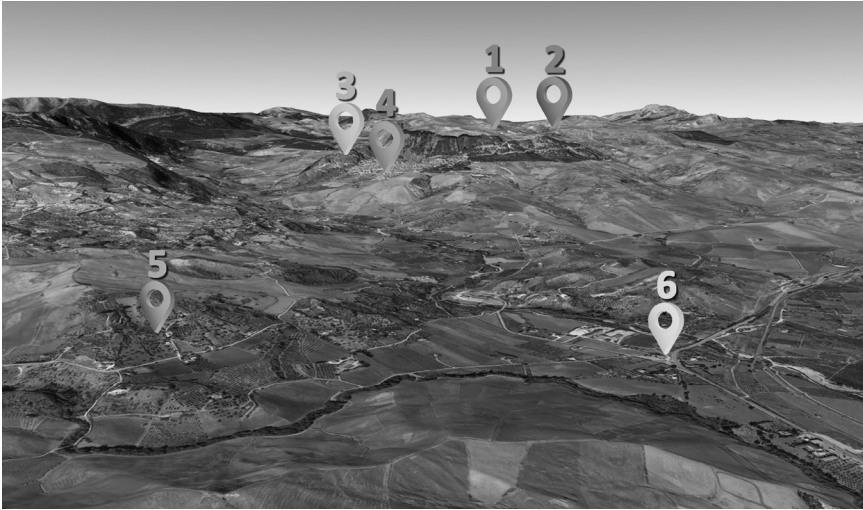


Figure 4.2. The territory of Castronovo with the sites investigated in the SicTransit project: 1. Mount Kassar; 2 San Luca Roman Villa; 3 San Vitale Hill; 4 Castronovo Town; 5 Ministalla; 6 Casale San Pietro (by G. Ciccone—SicTransit Project).

In our research strategy we have planned to conduct intensive investigations at those sites that seem to have been central places between the sixth and the thirteenth century, to perform extensive new surveys, to explore with new methods the origin of some agricultural systems that can be identified in the territory, and to use different approaches to analyze the botanical and animal finds, above all applying the new techniques of molecular bioarchaeology.<sup>8</sup> Many of our research topics are only just beginning and so we cannot yet comment on their results, but the evaluation and excavation activities of the main sites are already yielding appreciable, though preliminary, results. In the Castronovo area, the settlements under investigation are (see Figure 4.2): an extensive agro-town at Casale San Pietro, with phases at least from Roman to Norman times; the Byzantine fortress of Mount Kassar, with its main occupation between the end of the seventh and the ninth centuries; and Colle San Vitale, perhaps inhabited from the late tenth to the eighteenth centuries.

The site of Casale San Pietro occupies a basically flat area at the confluence of the Saraceno and Platani rivers and should probably be identified as one of the *stationes* along the *via publica*, which served the route from Palermo to Agrigento at least from Roman times. Earlier work suggested that the site here extends at least over four ha (this estimate is provisional). Current investigations are examining several aspects of the history of this site, which, although exposed to the floods of the nearby rivers, has undoubtedly had remarkable continuity of occupation. Fieldwork at Casale San Pietro up to

now has included the systematic survey of the area with the largest variety of ceramics, with the collection of all visible artefacts using a grid of 10 m squares; we have investigated about 7000 sq. m in this way. In this same field, magnetometer survey has revealed a large number of anomalies, including one or two probable kilns. In four different places, we have opened three small test-trenches and a larger area of ca. 15×16 m (Figure 4.3). This has begun to outline a complex story of the site, which still needs much clarification. Finds collected in the surveys and the test trenches suggest an extensive occupation between the fifth and the seventh centuries.<sup>9</sup> Surface surveys have also turned up some fragments provisionally dated to the eighth to ninth centuries.<sup>10</sup> Casale S. Pietro seems to have been very lively in the Islamic age, still occupying a fairly extensive area. Finally, it had a much more sporadic occupation after the twelfth century: buildings that are still standing on the site may be attributed, at least in part, to the later Middle ages and have undergone modifications, even until quite recently.

The larger area (Figure 4.3, intervention 5) has rewarded us with a rich and coherent sequence of stratified assemblages, layers, and structures (Figures 4.3 and 4.4), and at least eight distinct phases of occupation have been identified. The earliest structures are constructed of ashlar bonded with good lime mortar and probably date from the third to sixth centuries. One

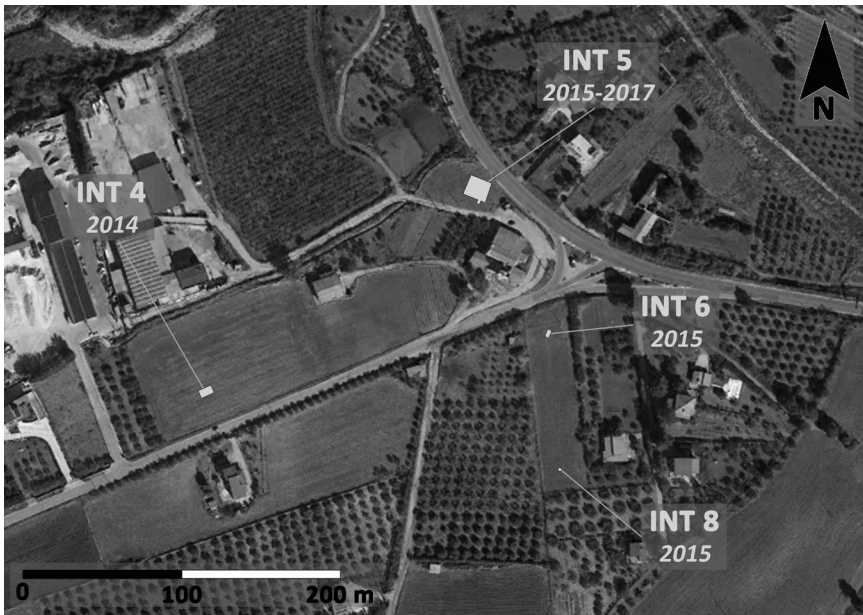


Figure 4.3. The area of Casale San Pietro.



Figure 4.4. One of the trenches (int. 5) at Casale San Pietro (Byzantine to Norman Phase) (Photograph: G. Ciccone/A. Meo—SicTransit Project) (September 2018).

of these structures was reused and extended probably in the Late Byzantine age and in any case before the tenth century. During the Islamic age (ninth to eleventh centuries), the pre-existing buildings were not demolished, but rebuilt several times, using walls made with clay-bonded, rough-cut stones. This stage is rich in finds of all kinds, including glazed ceramics and red-painted amphorae from Palermo, the Islamic capital of the island. The last construction phase dates to the Norman age. In the thirteenth and fourteenth centuries the area was no longer inhabited and was perhaps dedicated only to agricultural activities.

Less than 10 km west of Casale San Pietro stands the imposing massif of Mount Kassar (Figure 4.5), which reaches 1030 m above sea level. Previous research, especially that by the Soprintendenza of Palermo, mapped and examined the fortification wall, explored a gateway, and located a central military building and a possible church.<sup>11</sup> The main phase of occupation is represented by an imposing fortification about 2 km long, with walls over 3 m wide with walkways, 11 towers, and two doors. The area enclosed by the wall on one side and the steep drops on the others was calculated as ca. 90 ha. It contains several water sources, and good arable and grazing land,



Figure 4.5. Mount Kassari with the Byzantine fortifications.

but as far as we can see at present human occupation seems to have been quite sporadic. On the highest peak in the northwest, pottery dating from the eighth to the fifth century B.C. indicates the existence of an Archaic village, while a small scatter of ceramics from the fifth to sixth centuries A.D. has also been located. In all likelihood, the imposing Byzantine fortress was built between the end of the seventh and the beginning of the eighth century<sup>12</sup>—coinciding, significantly, with the establishment of the Sicilian *thema*.

As part of our programme, we have conducted magnetometric surveys and opened areas for excavation in five different places (Figure 4.5). Judging by the results obtained so far, the building of the fortification did not in any way lead to the foundation of a town. The enclosed area seems to have been occupied only in some places, linked to control of the fortification and the surrounding countryside. The military building (about 30 m overall), sited on a hill that controls the east gate, proved to have been built in two phases, with a small tower at one corner (Figure 4.6). In 2014–15 we excavated small houses built against the internal face of the defensive wall, which seem to have collapsed in the eighth century or later (Figure 4.7). Over the interior as a whole, however, the small quantities and undiagnostic character of the finds indicate that the fortress, probably built to defend this part of Sicily from Islamic invasions, did not survive beyond the middle of the ninth century.



Figure 4.6. Mount Kassar: the military “headquarter” (intervention 7).

At present, no coin dating to the main period of occupation has been found on Mount Kassar. However, some valuable items have been discovered in the excavation of the dwelling area on the top of the mountain: a Hippo type buckle, glass goblets, and necklace beads.

After many centuries of total abandonment, a small church was built during the twelfth century (probably over the ruins of an earlier Byzantine building), on a promontory overlooking the so-called S. Calogero spring. The area to the north of the church was explored in a limited area, revealing paved structures adjoining it (Figure 4.5, intervention 11). These structures, possibly part of a small rural monastery, were completely abandoned towards the end of the thirteenth or the beginning of the fourteenth century. After this short and limited episode of reoccupation, the mountain seems to have been largely abandoned until very recent times.

To conclude this brief presentation of the intensively investigated sites, mention can be made of Colle San Vitale (Figure 4.2), a narrow rocky spur (about 3.5 ha) that rises above the current town of Castronovo di Sicilia. In this “citadel”, defensive and religious structures still stand. Archaeological excavations were carried out in the 1990s and the early 2000s (Canzonieri 2007). In 2015–16 we carried out a stratigraphic analysis of the walls and in 2017 dug a small test trench to ascertain the stratigraphic sequence. We are now able to say that substantial construction activity dates back to the thirteenth century, but is preceded by at least two other building phases, which could date to the Norman age. A hypothesis that is gaining increasing strength is that the part of the current old town of Castronovo that is called Rabato could date back to the late Islamic era, perhaps around the second

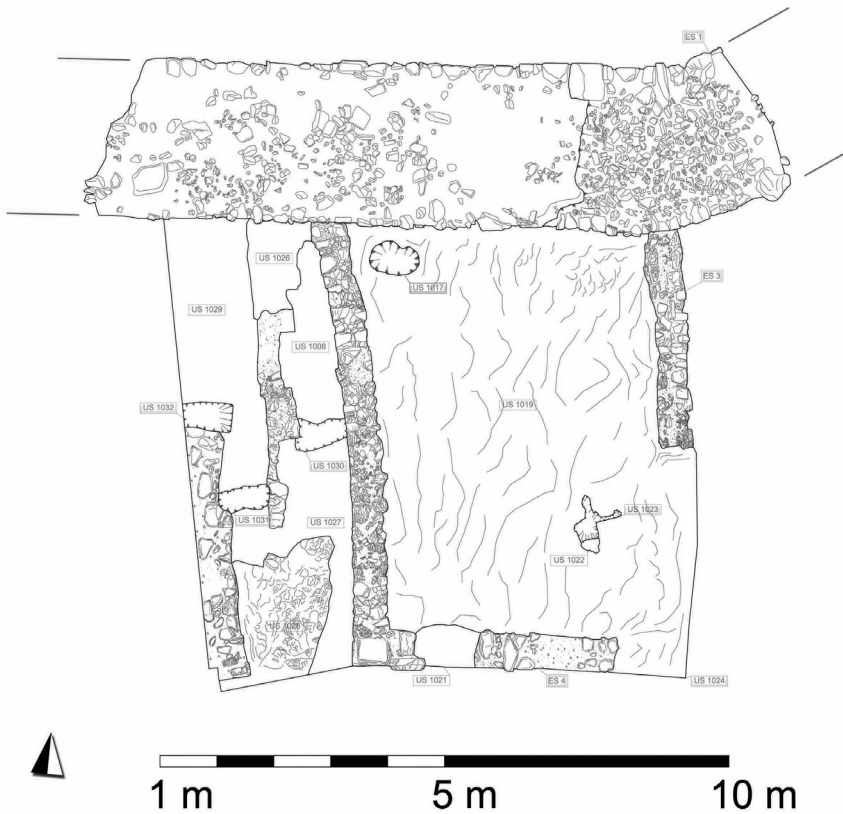


Figure 4.7. Mount Kassar: the “house of soldier” (intervention 6).

half of the tenth century. It is here, however, that the Normans arrived in 1077 and it is Castronovo, with its citadel, that has prospered to this day. Linked to these settlements is a water supply originating on the hills above that feeds a series of irrigated terraces and fountains in the town, before descending to the River Platani, driving several watermills along the way. A new program of investigations is planned to describe and date the origin of this water-management system.

We can summarize the data from current and previous research at Castronovo in the following way. In Roman times, the main settlements of this territory would seem to be located especially in its northernmost part, where a peristyle villa (Villa di San Luca) flourished between the first century BC and second century A.D. (Vassallo and Zirone 2009; Castrorao Barba 2015). A similar settlement can be inferred in the area of Casale San Pietro.

While the third- to fourth-century phases are not clear, a new investment in settlement is evident in the fifth century: the San Luca Villa is reoccupied with the construction of a building with an apse (a church?), and the agro-town of Casale San Pietro is bigger and more prosperous. Several small sites surround the hilltop of Ministalla, a few miles south of Casale. A small farm is perhaps established on a knoll on Mount Kassar. This territorial layout seems to last until the seventh century. In a still viable, but city-free territory, well-positioned in relation to the north-south and east-west road axes and the Platani River Valley, the Byzantine state decided to build the great fortification of Mount Kassar, coinciding with the reorganization of the island as a *thema* and the recurrence of Saracen raids. The fortress of Kassar seems to have had a mainly military character and did not prompt any extensive and lasting settlement within its enclosure. The defensive structure would require the presence of a garrison, but it could also accommodate the surrounding population in the event of danger. Meanwhile, the peasant population probably continued to live mainly at Casale San Pietro. After the Islamic conquest, Kassar was abandoned, while the agro-town continued to be settled, still occupying a large area. The inhabited nucleus around the citadel of Colle San Vitale (perhaps the new central place) could have developed particularly between the tenth and eleventh century, in connection with a system of irrigated terraces. Casale San Pietro would seem to have been reduced to a sparsely settled agricultural area following the Swabian age. It is therefore only the village of Castronovo–San Vitale that continued to thrive in the following centuries.

### Concluding Remarks

It is not easy to speak unambiguously of resilience or continuity in periods of change, nor to identify precise hiatus in the settlements, ecosystems and exchange networks, given the present state of research in Sicily. The structures that probably show the most resilience are the ones we have been calling agro-towns (i.e., extensive settlements inhabited mainly by peasants). However, it seems that the term can also be used for some of the main rural settlements of Late Roman Sicily. There are not many systematic excavations of this kind of site, although we have cited the cases of Sofiana (near Piazza Armerina) and Casale San Pietro (near Castronovo); but it would seem that almost every area that has been subjected to surface survey had such sites (Molinari 2013; 2016a; 2016b). They usually extend over several hectares, are located in areas of the plain or on low hills along the main road and were also connected to trans-regional exchange networks. In the case of Sofiana we know that they could have churches, baths, and workshops. In Sicily, this type of site



sees significant expansion between the fourth and fifth centuries, but it also often endured for many centuries and persisted even into Islamic times; it is only during the Norman age that the crisis for this kind of settlement could lead to their complete abandonment. Their main expansion would coincide with the increasing frequency of extensive *latifundia*, the *massae fundorum*, linked to owners rarely residing locally and relying on the work of *coloni* (Vera 1997–1998; 1999; 2012; Wickham 2005).

The first question that needs to be discussed is their connection with the *villae*, which are considered to be the directional centers from which the estates were directed. In the case of Sofiana, it has long been believed that it should be the *vicus*, the settlement where peasants dependent on the luxurious Villa del Casale (near Piazza Armerina) lived. Recent research that identified the nearly 23 ha extent of Sofiana in the fifth century suggests that this supposed relationship is over-simplified, because in the fifth century Villa del Casale was “surviving”, while Sofiana thrived (Bowes et al. 2011). Even in the case of Castronovo’s territory, the Villa di San Luca in the fifth century would seem to be much less prosperous than the Casale San Pietro site. In this regard, however, it should be remembered that between the fifth and sixth centuries there is an important transfer of the great Sicilian estates from the hands of the lay aristocracy to religious institutions (e.g., the churches of Rome, Ravenna, and Milan) or to the imperial domain (Prigent 2017; Vera 2006). This change seems to have determined the loss of importance of the *villae*, which, where they survive, do not seem to maintain the same architectural organization and value. Gregory the Great’s *Registrum Epistularum*, according to the reading recently given by Prigent (2017), would point out that the center of management of the estates, by now owned by the Church, would no longer be the *villae*, but the *condumae*. These would be substantially identifiable with villages in which lived the peasants and also the *conductores* (supposed to represent a kind of peasant elite). All this would also explain the dynamics between Villa del Casale and Sofiana. But why would the *condumae*/agro-towns be able to withstand the changes of regime and social structures between the Byzantine and Islamic ages? We must probably imagine that there was strong social cohesion within the peasant communities that lived there, so as to allow for “resilience”.<sup>13</sup> The crisis and the abandonment of many of these settlements in the Norman and Swabian age could therefore be linked to the agency of new elite and social groups that broke the system of solidarity within local communities (Molinari 2010).

Regarding the persistence and transformation of internal and interregional exchange networks, we can see, on the one hand, the lengthy persistence of ties (especially with North Africa and with Rome) and, on the other, what appears to be a rather neat break—but only in the eighth century. The

fifth century does not seem to see the disruption of the distribution and redistribution of African goods, in which the supply of food to the ancient capital was one of the main engines. Not only would Rome still look like a very big city in the fifth century,<sup>14</sup> but we can also see that goods did not cease to arrive there from North Africa as well. The role of Sicily as one of the main suppliers of wheat to Rome has an interesting effect not only in the vitality of agricultural settlements, in particular during the fifth century, but also in the pollen diagrams of Lake Pergusa, which mark the decisive increase of all kind of cereal cultivation right from this period.

The Byzantine conquest of North Africa and Sicily allows for the continuity of these exchange relations, basically until the seventh century. Recent studies are also trying to show how North African and Sicilian economies would not be stagnant or collapsing during the whole of the seventh century.<sup>15</sup> In Sicily, monetary circulation, the arrival of African goods even in inland locations, and again the pollen data would all seem to agree with this picture. Apparently in the seventh century the island was crucial to the supply of food to both Rome and Constantinople (Prigent 2006; 2010). We may also add that in Proto-Byzantine Sicily there was immense pressure on its resources, when imperial taxation, great properties of non-local churches, and the imperial domain drained resources that were not consumed locally. Along with the *cabotage* between the south coast of the island and the north coast of North Africa, there was still the possibility that African goods were redistributed through Rome as well. In the same period, the routes to Constantinople from eastern Sicily were certainly improved.

Concerning this trade system, closely linked to social and political dynamics, the eighth century appears to mark a turning point. The fracture between the papacy of Rome and the Byzantine empire that was apparently accomplished within the first half of the eighth century, as well as the ultimate conquest of North Africa by Islamic armies, would seem to be clearly tangible, even in the archaeological record. To understand how important the break between the papacy and its Sicilian possessions may have been (Prigent 2004; 2010), we can remember that not only did the church possess a very large portion of the island's cultivable land, but it also played a prominent role in local social life in a truly pervasive way, as evidenced again by Gregory the Great's letters. The Church of Rome was responsible for the management of its own estates, the levying of taxes or loans to its peasants, and the choice of the *conductores* for its estates, but it also played a big part in the election of the bishops in the towns, the protection of the property of aristocratic orphans, ending with its role in the election of the *Praetor Siciliae*—just to cite a few examples. As is well-known, some scholars believe that the loss of Sicilian properties was the basis for a complete switch of Rome's economy during the eighth century to the exploitation of exclusively local resources. The result of the loss of control

by the Church of Rome, for at least part of Sicily, must have been a decisive loss of social complexity and the impoverishment of peasant elites as well. It may also be added that Sicily was still important for Byzantium in the eighth century, but somewhat less crucial to its supply. The collapse of A.D. 750 indicated by the pollen sequence in Lake Pergusa does not seem so much the result of climate change, but perhaps of the fact that for the first time in many centuries Sicily had only (or mainly) to feed its own inhabitants.

The persistence of the issue of coins (mainly gold ones) during the eighth and ninth centuries would seem to be linked more to the continuity of the Byzantine state system and its taxation, especially sensitive to the needs of military defense financing (Prigent 2012), than a reflection of a commercialized economy. Exchange networks therefore persisted until the end of the seventh century, but they seemed to have been disrupted during the eighth century. Only ties with the eastern Mediterranean seem to continue, as well as greater vitality in the towns (particularly Catania and Syracuse) and the countryside of the eastern part of the island.

One of the tasks of archaeological research over the next few years is to understand whether the low numbers of sites in the eighth and ninth centuries is due to their poor recognition in the archaeological record, or to a dramatic decline in population. As Wickham (2005: 535–550) has repeatedly argued, the impoverishment of aristocracies can indeed result in a sharp simplification in the quality of material culture. Finally, we can also remember how new phases of marked change (e.g., agricultural transformations and new trade networks) occurred during the Fatimid period (Molinari 2016b); brutal breaks also happened in the late Norman–Swabian period (Molinari 2010).

Sicily seems to have had a very long “Late Antiquity” lasting until the seventh century, as indicated by its close connections with the remaining international networks of exchange, a high level of coin use, and thriving countrysides (where villages were gaining importance, at the expense of the *villae*). During the eighth century, we can see that many things changed markedly, before Sicily was conquered by Muslim invaders. The networks linking Rome, North Africa, and Sicily, if they existed, are nevertheless archaeologically invisible. In the western part of Sicily rural settlements are almost undetectable, while in the east a number of very small sites are a sign of the weakening of the central places; in some parts of the island, at least, the cultivation of plants, especially cereals, collapsed, and a period of increased dryness started as well. The overall context is that in which Carthage was definitively conquered, and the Popes had lost their huge properties in Sicily and were finding new alliance with the Carolingians. On the other hand, Sicily was still important to Byzantium, but not as crucial as it had been in the seventh century. It bears repeating that, after many centuries, Sicily for the first time had to feed only its own population.

Amidst all this disruption, what can be shown to have had significant resilience were the very large villages, the so called agro-towns (Sofiana and Casale San Pietro). They were sometimes able to last at least until the twelfth century, ending only during the Norman age. The strong resilience of the Late Medieval and modern agro-town in the south of Italy has been explained by the socially cohesive bonds of the peasant communities living in them. Similar communities in Sicily were apparently able to resist the changes of Byzantine and Islamic times, but were probably broken by the new Norman social system.

### Notes

1. The new data have led me to expand, refine and better articulate the reflections already proposed in Molinari 2013.
2. In particular from Agrigento (Parrello and Rizzo 2016), but also from Palermo (Nef 2013). For a general overview, see Arcifa 2016.
3. *Sicily in Transition* is an ERC project of the Universities of York, Rome and Lecce, co-directed by the author and Martin O.H. Carver.
4. The editors of these volumes in particular are keen to point out that this region is very large and therefore it is immensely reductive and basically wrong to use the general term “African pottery”.
5. See for instance Molinari 2013, 2016a; Cacciaguerra et al. 2015, with references.
6. For recent papers on the transformations of the *villae* in Sicily, see Pensabene and Sfamemi 2014; Castrorao Barba 2016.
7. See [www.sicilyintransition.org](http://www.sicilyintransition.org)
8. Understanding of changes in the population, its diet and origins are being sought through the analysis of DNA, stable isotopes of plants, animal and human bones, and organic residues in transport and cooking pottery, undertaken in the laboratories at the University of York (BioArch).
9. African Red Slip Ware forms Hayes 61A, 102A, 104B, 105B and African amphorae type Keay LXI-LXII can be cited from previous survey (e.g., Castrorao Barba 2015) and also new ones (unpublished materials, studied by C. F. Mangiaracina). A probable decanum of Constans II was also found.
10. For example, casseroles with inturned rims and amphorae with handles with deep median incision (unpublished data provided by C. F. Mangiaracina)
11. The wider report on the characteristics of the walls is in Vassallo 2009; 2010.
12. A house dated to the beginning of the eighth century was built against the fortress wall. The defensive wall shows a masonry style mainly consisting of limestone elements and different kind of tiles datable between the fifth and eighth centuries bonded with lime mortar (cf. Vassallo 2009; 2010; Carver and Molinari 2016).
13. On this same topic, but for different times and places (the south of Italy in the late Middle Ages and modern times), see Curtis 2014.
14. Although the demographic decline was very substantial compared to the fourth century and the estimates are not concordant, it would seem that it was only at the end of the

fifth or beginning of the sixth century that a vertiginous collapse of the population was recorded. The estimate of 60,000 inhabitants for the Byzantine age still makes Rome a very big city by the standards of the period, and in the meantime the areas of possible food supply had been greatly reduced (Meneghini and Santangeli Valenzani 2004).

15. E.g., Morrisson 2015; Reynolds 2015; Fenwick 2013 for North Africa; Prigent 2013 for Sicily.

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