

Suburbia and Rural Landscapes in Medieval Sicily

Edited by

Angelo Castrorao Barba
& Giuseppe Mandalà

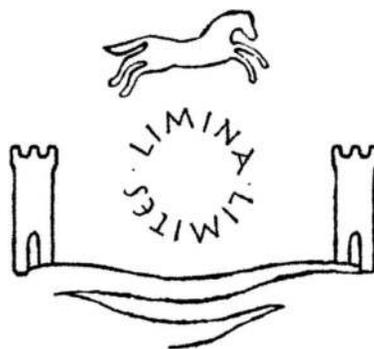




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Archaeologies, histories, islands and borders in the Mediterranean 14

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Limina/Limites

Archaeologies, histories, islands and borders in the Mediterranean (365–1556)

An Archaeopress International Series

Series Editors

Miguel Ángel Cau Ontiveros, Demetrios Michaelides, Philippe Pergola, Guido Vannini, Enrico Zanini

The title, subtitle, and chronological span of the series require a few words of explanation. In the first place, the title ‘Limina/ Limites’ echoes the clear assonances between the root of two Latin words that respectively indicate ‘thresholds’ and ‘boundaries’ (and thus ‘frontiers’), as well as that of the Greek word for ‘harbour’ (λιμὴν), which, for an island – and, more broadly speaking, for any coastal city – is both a point of connectivity and a boundary of isolation.

Islands and boundaries/borders are two of the many possible keys through which we can study the post-Classical Mediterranean. Ever since the Mediterranean ceased to be a great Roman ‘lake’, that same Sea became an often-uncrossable boundary that both separated and protected the many worlds that developed in different ways and at a different pace along its extensive coast. At the same time, however, the Mediterranean continued to be a unifying element: it provided a shared identity to communities that were culturally and geographically distant; and it could still be crossed to reach other frontiers, and even beyond.

From this point of view, islands and borders, forming connecting lines and lines of separation, and offering unified identities but also socio-cultural diversities, can become spaces for reflection. As such, they are ideal for disciplines that seek to understand the past but also aim to make much more widely available the tools with which to interpret some of the basic needs of the contemporary world.

The subtitle – with all nouns in the plural – alludes to the need for a multiplicity of different approaches. Today, history and archaeology – especially in the Mediterranean – are understood as multiple disciplines – disciplines that search not so much for an a priori monolithic, specific definition, but rather for an exploration of the limits that must be overcome and the intersection points that need to be exploited.

The chronological span, 365–1556, providing a long-term vision, is essential for exploring in timedepth the multiple themes of study. AD 365, or, more precisely, the 21st of July 365, the day of the most violent tsunami documented in the literary sources, marks the moment at which, in the midst of transformation of the ancient world, the Mediterranean seems to reclaim its physical centrality. This was due to the devastating effects of this natural disaster and, above all, to its global visibility, as is evident from the many different witnesses describing the event, from both the eastern and the western shores of the Mediterranean. At the other end of the chronological span, January 16th, 1556, the day of the coronation of Philip II of Spain, symbolically marks the date on which the Mediterranean enters contemporary historiography, as understood through the vision of the historian Fernand Braudel and his rewriting of the rules of historiographical analysis, pursuing directions that often cross paths with archaeology.

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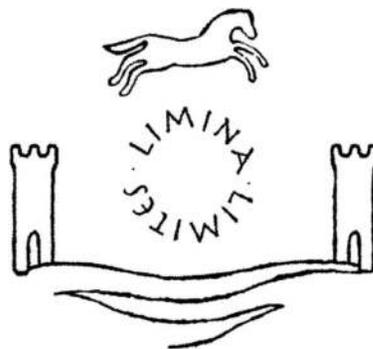
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The *Limina/Limites* series publishes peer-reviewed conference and workshop proceedings, as well as monographs and collective works that respond to a Mediterranean-wide, multi-faceted and long-term approach.

We look forward to your suggestions, proposals, and manuscripts, as well as general support for this important venture that will give fresh voice and impetus to Mediterranean studies from the Late Classical to the Late Medieval period.

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Miguel Ángel Cau Ontiveros, Demetrios Michaelides, Philippe Pergola, Guido Vannini, Enrico Zanini



Limina/Limites

Archeologie, storie, isole e frontiere nel Mediterraneo (365-1556)

An Archaeopress International Series

Series Editors

Miguel Ángel Cau Ontiveros, Demetrios Michaelides, Philippe Pergola, Guido Vannini, Enrico Zanini

Titolo, sottotitolo e ambito cronologico di una serie editoriale richiedono qualche parola di spiegazione da parte dei curatori. Il titolo gioca evidentemente sull'assonanza della radice delle parole latine che indicano rispettivamente soglie e confini, dunque frontiere, con quella della parola greca che indica il porto, che per un'isola – e in senso lato per ogni città che si affacci sul mare – è al tempo stesso una soglia di connettività e un confine di isolamento.

Isole e frontiere sono due delle tante possibili chiavi di lettura per provare a studiare il Mediterraneo post-antico. Da quando cessa di essere un grande lago romano, il Mediterraneo diviene una frontiera spesso invalicabile, che separa e protegge reciprocamente i tanti mondi che si sviluppano con ritmi e forme diversi lungo le sue coste. Al tempo stesso però il Mediterraneo continua ad essere un elemento di unità: fornisce una identità condivisa a comunità culturalmente e geograficamente distanti; può essere attraversato per spingersi verso, e al di là di, altre frontiere.

Isole e frontiere, linee di connessione e linee di separazione, identità unitarie e molteplicità socioculturali divengono da questo punto di vista spazi di riflessione per discipline volte alla conoscenza del passato, ma che intendono mettere a disposizione della collettività strumenti per interpretare alcune esigenze fondamentali della contemporaneità, risolvendo, ad esempio, in termini di 'Archeologia Pubblica' spunti, risultati ed esiti delle ricerche proposte o almeno di alcune di esse, fra ricerca pura e ricerca applicata.

Il sottotitolo, tutto al plurale, allude alla necessità di una molteplicità di approcci diversi. Storia e archeologia – a maggior ragione nel Mediterraneo – sono discipline che appaiono oggi declinabili solo in forma plurale, alla ricerca non di una monolitica definizione disciplinare a priori, ma di un'esplorazione di limiti da superare e di punti di intersezione da sfruttare. Luogo di incontro tra le discipline non può che essere il territorio, inteso come prodotto della interazione tra culture e natura: unità minima di osservazione del fenomeno storico e unità minima di contestualizzazione delle tracce archeologiche.

Le date di riferimento (365-1556) – in un'ottica di 'lungo periodo' – sono sembrate ai curatori una possibile conseguenza logica delle premesse e possono quindi rendere più esplicito il progetto. Il 365 – per la precisione il 21 luglio del 365, giorno del più violento maremoto narrato dalle fonti letterarie – segna il momento in cui, nel bel mezzo della trasformazione del mondo antico, il Mediterraneo riconquista, quasi per metafora, la sua centralità fisica, fatta di onde e di venti, dando vita a un fenomeno epocale, per i suoi effetti disastrosi e soprattutto per la sua visibilità globale, come dimostrano i tanti testimoni diversi che dalle sponde orientali e occidentali descrivono lo stesso evento con lingue e voci differenti. Il 1556 – per la precisione il 16 gennaio 1556, giorno dell'incoronazione di Filippo II di Spagna – segna simbolicamente la data in cui il Mediterraneo entra nella storiografia contemporanea attraverso la grande lezione di Fernand Braudel, riscrivendo le regole del gioco storiografico in una direzione che ha molti punti di intersezione con l'archeologia.

Limina/Limites accoglie ormai atti di convegni e seminari, singole monografie e studi collettivi che, indipendentemente dalla loro origine disciplinare, si propongano come obiettivo l'integrazione di fonti e sistemi di dati diversi in funzione di una ricostruzione globale orientata alla lunga durata e alla dimensione spaziale mediterranea.

Tutti volumi sono sottoposti a una doppia peer review anonima.

Limina/Limites

Archéologies, histoires, îles et frontières de Méditerranée (365–1556)

Titre, sous-titre et arc chronologique d'une collection éditoriale ont besoin que leurs responsables s'en expliquent. Le titre joue à l'évidence autour de l'assonance des racines des mots latins qui indiquent à la fois des lieux de passages et des limites, donc des frontières, comme pour le mot grec qui indique le port, lequel représente, pour une île -et plus largement pour toute ville qui donne sur la mer- un lieu de connexion et à la fois une limite qui isole.

Îles et frontières sont deux des innombrables clés de lecture pour tenter d'ouvrir les portes de l'étude de la Méditerranée post antique. A partir du moment où elle cesse d'être un grand lac romain, la Méditerranée devient une frontière parfois insurmontable, qui sépare et protège réciproquement les nombreux mondes qui se développent à des rythmes et sous des formes différentes le long de ses côtes. Au même moment, la Méditerranée continue à être un élément d'unité : elle fournit une identité partagée par des communautés culturellement et géographiquement distantes ; elle peut être traversée pour aller vers, et au-delà, d'autres frontières.

Îles et frontières sont à la fois des lignes qui unissent et qui séparent, des identités unitaires et des multiplicités socio culturelles. Elles deviennent ainsi de vastes espaces de réflexion pour des disciplines tournées vers la connaissance du passé, mais qui entendent mettre à la disposition des collectivités des instruments pour interpréter certaines exigences fondamentales du monde contemporain, en résolvant, par exemple, en des termes d'Archéologie publique', des pistes, des résultats et des issues pour les recherches proposées, ou du moins pour une part d'entre elles, entre recherche pure et recherche appliquée.

Le sous-titre, entièrement au pluriel, est une allusion à la nécessité d'une multiplicité d'approches différentes. Histoire et archéologie – à plus forte raison en Méditerranée – sont les disciplines qui apparaissent devoir être aujourd'hui déclinées au pluriel, non pas à la recherche a priori d'une définition disciplinaire monolithique, mais qui doivent explorer les limites à dépasser et les points de rencontre à exploiter. Le lieu de rencontre entre les disciplines ne peut qu'être le territoire, entendu comme le produit de l'interaction entre cultures et nature, à savoir des unités minimales où contextualiser les traces archéologiques.

Les dates de référence se situent dans une optique de longue durée et se sont imposées comme l'une des conséquences logiques possibles de notre postulat de départ, pour rendre plus explicite encore notre projet. L'année 365 – et pour être plus précis, le 21 juillet 365, jour du raz-de-marée le plus violent qu'aient jamais rappelé les sources littéraires – marque le moment où, au beau milieu de la transformation du monde antique, la Méditerranée reconquiert, de manière quasiment métaphorique, sa centralité physique, faite de vagues déchaînées et de vents violents, pour donner vie à un phénomène qui marque cette époque par ses effets désastreux et surtout par la visibilité globale qu'il acquiert, comme le prouvent le grand nombre des témoins qui décrivent les dévastations de ce même phénomène, depuis les rives orientales et occidentales, en des langues et avec des voix différentes.

L'année 1556 – et pour être plus précis, le 16 janvier 1556, jour du couronnement de Philippe II d'Espagne – marque symboliquement la date retenue pour l'entrée de la Méditerranée dans l'historiographie moderne à travers la grande leçon de Fernand Braudel, en réécrivant les règles du jeu historiographique dans une direction qui a de nombreux points d'intersection avec l'archéologie.

Limina/Limites accueille désormais à la fois des actes de congrès et colloques, de séminaires, des monographies et des études collectives lesquelles, indépendamment de leur discipline d'origine, ont pour objectif l'intégration de sources et de systèmes, autour de données différentes, en fonction d'une reconstruction globale, orientée vers la longue durée et la dimension de l'espace méditerranéen.

Tous les volumes sont soumis à une double évaluation anonyme.

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Introduction

Angelo Castrorao Barba¹, Giuseppe Mandalà²

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² Università degli studi di Milano 'La Statale'

This volume contains a selection of the papers presented at session no. 574, 'Suburbia and Rural Landscapes in Medieval Sicily', organised by Angelo Castrorao Barba, Giuseppe Mandalà and María de los Ángeles Utrero Agudo at the 24th Annual Meeting of the European Association of Archaeologists held in Barcelona (8 September 2018).¹

Post-Roman Sicily stands as a sort of case study for Mediterranean dynamics, connecting continuity, transformation, innovation and resilience to a wider frame of political change: the island's role in the Byzantine State, the Islamic conquest, the Norman domination, and the emergence of the Swabian empire. The challenge of the present proposal is to approach medieval Sicily and to analyse and interpret the material evidence of these many 'transitions' through the archaeological record. This book aims to present the results of the main ongoing archaeological and historical research focusing on medieval suburbia and rural sites in Sicily. It is thus intended to update traditional views regarding the evolution of this territory from late antiquity to the Middle Ages by bringing into the picture new data from archaeological excavations undertaken at several sites across Sicily, new information from surveys of written sources, and new reflections based on the analysis of both material and documentary sources.

A sign of the renewed interest in the archaeology of medieval Sicily, this volume collects the most recent results of research carried out by teams from various European research institutions and by the Soprintendenze per i Beni Culturali e Ambientali (Superintendencies for Cultural and Environmental Heritage) – and more specifically their Archaeological Heritage Departments – of the Sicilian Regional Government.

The historical framework offered by the analysis of written sources – masterfully conducted since the 1950s by Illuminato Peri² and Vincenzo D'Alessandro³

– has already produced important historical results, for example, as concerns the agrarian history of the late Middle Ages, the more general relationship between city and countryside, and also the legal status of 'villeins' during the Norman period.⁴ This vast amount of data and reflections was evaluated by scholars and was finally brought together in Sandro Carocci's handbook dedicated to the *Signorie di Mezzogiorno*,⁵ but no doubt this frame of reference should be enriched and reconsidered in light of the ongoing archaeological research.

While 'rooting' for the recomposition of the two research lines – i.e., archaeological and written sources – one can observe that, from a general point of view, no matter what method of investigation is adopted, land remains the foundation of the structural social processes governed by the relationship between city and countryside: this is the case with urban gardens and orchards as much as with the most isolated countryside.

These processes are supported by an economic system of production, distribution and sale that hinges on the relationship between the city (understood as a political-administrative pole and commercial and judicial centre) and the countryside (understood as a productive pole). In this area too, one must consider some well-established historiographical myths. For example, in Michele Amari's reconstruction,⁶ the arrival of the Muslims brought an end to the late-antique domination of *latifundia* – consequently restoring the freedom and dignity of the figure of the farmer-colonist – based on a land ownership system that was to reappear under the Normans. Now it is clear that Amari was projecting onto the myth of the Islamic golden age the urgent need for agrarian reform in nineteenth-century Sicily, since a recent historical-archaeological study has brought to light the existence of large-scale properties during the Islamic period, even though it is not possible to know whether these estates originally dated from an earlier time.⁷

¹ The full panel programme can be found in the European Association of Archaeologists. Annual Meeting 2018: 352–354.

² Peri 1978.

³ D'Alessandro 2010.

⁴ De Simone 2004; Nef 2011: 479–579.

⁵ Carocci 2014.

⁶ Amari 1933–39.

⁷ Arcifa, Bagnera and Nef 2012: 265–266.

The archaeological investigations we can expect to be conducted in the coming decades will enable a sharper focus on questions regarding the formation of the Islamic society of Sicily and the taxation system on goods produced on the island, especially in rural areas. Land sometimes served as a symbol of fertility, sometimes as a means to legitimise aristocratic status; at times it was synonymous with wealth or represented an instrument of supremacy. In any case, land – first as *latifundium*, then as fief in the legal sense of the term (*beneficium*), and later still as fief in a figurative sense (that is, again as *latifundium*) – was the cornerstone around which the medieval history of Sicily and its anthropological and cultural identity revolved. Still, this identity changes meaning and value according to time-contingent ‘values’.⁸

Moving on to archaeology, the preliminary archaeological research conducted by French scholars on medieval Sicilian settlements⁹ created neither a proper debate nor a real school of medieval archaeology in Sicily.¹⁰ To this day, no monographic books on late-antique settlements in Sicily have ever been published (only the last chapters in Roger Wilson’s volume on Roman Sicily are devoted to the 4th and 5th centuries AD).¹¹ The only comprehensive overview of settlement patterns in the Byzantine, Islamic and Norman periods remains Ferdinando Maurici’s book (from 1992), which is mainly based on written sources and very little material evidence or data from stratigraphic excavations.¹²

In recent decades, interest in the archaeology of early medieval Sicily has grown considerably.¹³ An increase in knowledge of chronological indicators in early medieval pottery in Sicily¹⁴ has made it possible to better identify the evidence from this age, especially as regards the lesser-known period between the 8th and early 10th centuries.

Recent excavations are revealing a new degree of complexity in the Sicilian countryside, especially for the early medieval period: the Byzantine *castrum* of Monte Kassar (Province of Palermo);¹⁵ the Byzantine village of Rocchicella di Mineo (Prov. of Catania);¹⁶ the rural site of Colmitella (Prov. of Agrigento), with Byzantine and Islamic phases;¹⁷ the fortified Islamic granary of Pizzo

Monaco (Prov. of Trapani);¹⁸ the Byzantine/Islamic hilltop site of Contrada Castro (Prov. of Palermo);¹⁹ the post-Roman phases of occupation in villas²⁰ like the Villa del Casale at Piazza Armerina (Prov. of Enna),²¹ or in large villages along the road network, such as Casale San Pietro at Castronovo di Sicilia (Prov. of Palermo),²² and Philosophiana/Sofiana (Prov. of Caltanissetta).²³ Less known and debated is the archaeological evidence of Islamic architecture in the countryside, such as the baths at Cefalà Diana (Prov. of Palermo)²⁴ or the hilltop/fortified sites of Calatubo²⁵ and Calathamet²⁶ in northwestern Sicily (Prov. of Trapani).

The new relevance of medieval Sicily for a global reconsideration of the transition from late antiquity to the Middle Ages in relation to Mediterranean landscapes has inspired two European projects – *Mediterranean mountainous landscapes* (<https://memolaproject.eu/>) and *Sicily in transition* (<https://www.sicilyintransition.org/>) – along with various others (such as *Harvesting memories: the ecology and archaeology of Monti Sicani landscapes*), which have applied interdisciplinary approaches that may generate new debates and historiographical frameworks in the future.

While a recent volume has dealt with the transformation of early medieval Sicilian cities,²⁷ the present book focuses on extra-urban spaces, from suburban areas to inland territories, with the aim of presenting the critical mass of data that has been emerging in recent years from archaeological research on Sicilian landscapes.

The volume is divided into thematic areas: 1) *Urbanscapes, suburbia, hinterlands*; 2) *Inland and mountainous landscapes*; 3) *Changes in rural settlement patterns*; 4) *Defence and control of the territory*. The first part presents recent discoveries in the suburbs of Palermo which provide new data on the phases of occupation during the Islamic period (AD 831–1072).²⁸ Beyond the limits of the Punic/Roman city and the medieval/early modern walls, evidence relating to artisan quarters and cemetery areas from the Islamic period has been discovered in recent years. These discoveries confirm the indications given to us by Ibn Ḥawqal’s travel report (AD 973) and the mention of settlements just outside Palermo in the *Book of Curiosities* (AD 1020–1050).²⁹ In fact, these

⁸ D’Alessandro 2010: 7.

⁹ Pesez 1984.

¹⁰ Maurici 2013.

¹¹ Wilson 1990.

¹² Maurici 1992.

¹³ Nef and Prigent (eds) 2010; Nef and Ardizzone (eds) 2014; Molinari 2016; Molinari 2020; Arcifa 2021.

¹⁴ Arcifa 2010; Arcifa and Bagnera 2018; Sacco 2020; Vaccaro 2013.

¹⁵ Vassallo, De Leo, Di Stefano and Graditi 2015: 1–34.

¹⁶ Arcifa 2016.

¹⁷ Rizzo 2014.

¹⁸ Rotolo and Martín Civantos 2013.

¹⁹ Castrorao Barba, Miccichè, Pisciotta, Speciale, Aleo Nero, Vassallo, Marino and Bazan 2020.

²⁰ Castrorao Barba 2016.

²¹ Pensabene and Barresi (eds) 2019.

²² Carver 2019.

²³ Vaccaro 2017.

²⁴ Bagnera and Nef (eds) 2018.

²⁵ Di Liberto 2004.

²⁶ Lesnes and Poisson (eds) 2013.

²⁷ Arcifa and Sgarlata (eds) 2020.

²⁸ Vassallo 2023.

²⁹ Ibn Ḥawqal *Kitāb ṣūrat al-arḍ* in Ibn Ḥawqal 1938–39: I, 118–131; French trans. in Ibn Ḥawqal 2001: I, 117–130; *Kitāb gharā’ib al-funūn*

new archaeological data open up new perspectives for research and reflection on Islamic urbanism in relation to the territory surrounding the city, which cannot be reduced to the area enclosed within the physical limits of the defensive walls.

This connection between suburban space and the city is an element of great interest in light of the new research carried out on the San Giovanni dei Lebbrosi complex located in the southernmost outskirts of Palermo.³⁰ This sector of the hinterland emerges as a key point of connection between the city and the countryside. The construction in this place of a Norman hospital for infectious diseases, under royal patronage, testifies to its strategic importance as part of an important road axis extending along the so-called Ponte dell'Ammiraglio, which linked the outskirts to the city-centre of Palermo. Recent archaeological investigations (2017, 2019-2020) have made it possible to expand the picture of the Islamic and Norman occupation of the suburbs of Palermo. Indeed, the Norman hospital was founded around the middle of the 12th century on a site that, according to both written and archaeological evidence (a layered occupation sequence, buildings, an Islamic-rite burial), was an Islamic settlement between the 10th and mid-11th centuries.

Further along this road axis, which allowed access to the city of Palermo for those coming from Messina, essentially overlapping with the Roman Via Valeria, we find another religious complex from the Norman period, the church of Santa Maria di Campogrosso.³¹ The excavations conducted and the study of its architecture have confirmed the chronology for the foundation of the Norman monastery, which is in line with the data from written sources, from the first half of the 12th century. According to the Polish team researching the site, the church shows close parallels to churches within Norman monasteries in France, while the coins associated with the burials in phase with the building and some radiocarbon dating indicate that the complex was in use between the 12th century and the end of the 13th.

A cross-analysis between territory and urban landscape has been conducted for Agrigento.³² Here previous research on the Valle del Platani, new data on the Colmitella excavations, and the new season of archaeological investigations promoted by the Archaeological and Landscape Park of The Valley of the Temples have provided a considerable range of data for a solid reconstruction of the changes between late antiquity and the Middle Ages.

The second part of the volume, discussing inland and mountain territories, shows – already from the first contribution, devoted to the Entella area³³ – how the urban and suburban dynamics of Palermo were connected to the transformation of settlement dynamics in the inland territory, thereby reaffirming the close relationship between medium and long-range connections between city, suburbs, and countryside. In Entella (Contessa Entellina, Prov. of Palermo), many years of excavations and surveys have enabled a reconstruction of medieval population trends. After underlining our very limited knowledge of the Byzantine period, the authors note how the Aghlabid conquest of the island led to an initial intensification of the occupation of the countryside between the end of the 9th century and the beginning of the 10th which, however, underwent even greater development starting from the mid-10th century. This increase in sites and therefore in the vitality of the countryside during the second half of the 10th century is related to the parallel reoccupation of the ancient Rocca di Entella, perhaps in connection with the decree issued by Fatimid caliph al-Mu'izz in 356/966-967, ordering the scattered population to be brought together in the administrative centres of the various rural districts.³⁴

This trend in the Entella area is reflected in the results pertaining to the discovery of a new rural site in Contrada Castro in the neighbouring area of Corleone (Prov. of Palermo).³⁵ The stratigraphic sequence for the Contrada Castro settlement, supported by radiocarbon dating, appears to shed considerable light on the transition from the Byzantine period to the first phases of the Islamic occupation. Indeed, it reveals that the reoccupation of this high ground – already inhabited between the 6th and 4th centuries BC – took place in the mid-7th century, while it was between the late 8th and 9th centuries that masonry structures were built, including a kiln for ceramics and tiles. This attests to a stable occupation connected to agricultural exploitation and animal breeding practices documented by archaeobotanical and archaeozoological finds. A clear change in the topography of the site did not occur immediately following the Islamic conquest of nearby Corleone in 840 but a few decades later, when the buildings collapsed, and during the first half of the 10th century, when new buildings were erected with a different orientation from the previous ones. This site, in other words, experienced intense occupation precisely in the transitional period between the end of the Byzantine era and the first phases of the Islamic occupation. As such, it shows the great potential of new investigations on rural contexts that are totally

wa-mulāḥ al-'uyūn in Rapoport and Savage-Smith (eds) 2014: 178–187 (Arabic text), 457–466 (English trans.).

³⁰ Mandalà, and Utrero Agudo 2023.

³¹ Moździoch, Moździoch and Szubert 2023.

³² Rizzo 2023.

³³ Corretti and Mangiaracina 2023.

³⁴ al-Nuwayri, *Nihāyat al-arab*, in Amari 1987-88: II, 494; Italian trans. in Amari (ed.) 1997-98: II, 546; Amari 1933-39: II, 314.

³⁵ Castrorao Barba, Miccichè, Pisciotta, Speciale, Aleo Nero, Vassallo, Marino and Bazan 2023.

unmentioned by the written sources, and which therefore prove fundamental for the reconstruction of settlement dynamics, as well of the social and economic aspects of the early medieval Sicilian countryside.

A relationship of fundamental integration between written sources and archaeological documentation, on the other hand, is emerging from the research on the Madonie Mountains area in which information from the geographical descriptions by al-Muqaddasī (10th cent.) and al-Idrisī (12th cent.) is being combined with archaeological evidence from important contexts such as Caltavuturo, Petralia Sottana, Petralia Soprana and Collesano (Prov. of Palermo).³⁶ Inland and mountain areas such as the Madonie show enormous potential when it comes to understanding the population structure of a ‘continental’ island such as Sicily, which in its long history owes a great deal to the productive potential of – and human-environment interactions within – this varied hinterland made up of valleys, cultivable hills, and mountains rich in forest-pastoral resources and suitable for animal husbandry.

The inland area of the Erei Mountains is a key territory for understanding the ‘long-lasting economic prosperity’ of the Sicilian countryside during the ‘Long Late Antiquity’.³⁷ This period was characterised by the presence not only of large villas such as Piazza Armerina and the recently excavated one in Contrada Gerace, but also – and especially – by secondary settlements, such as Sofiana. For a long time, the latter maintained a central role both in the management and exploitation of rural spaces and in ensuring a connection with long-distance markets, as demonstrated by imports of North African pottery (African red slip ware and amphorae). The endurance of a certain degree of demographic density in the inland areas of central Sicily – at least between late antiquity and the early Byzantine period – is witnessed by the presence of numerous rock necropolises – such as Nicosia and Sperlinga – which would seem to suggest precisely a pattern of unbroken occupation from late antiquity to the early Middle Ages, especially in the case of settlements connected to the road network. Furthermore, new investigations in the Ninfa district of Enna – between the Castello di Lombardia and the Rocca di Cerere – and at Case Bastione (Villarosa) have highlighted important stratigraphic sequences that attest to the intensity of occupation in the full Byzantine period, between the 8th and 9th centuries, thus opening up new possibilities in terms of the evaluation of demographics and settlement patterns in Sicily on the eve of the Islamic conquest.

A new perspective on the impact of the formation of an Islamic society on rural landscapes in Sicily is offered

by the typical approach of hydraulic archaeology, which over the past few decades has become consolidated through the study of al-Andalus,³⁸ yet has never been applied to the Sicilian context.³⁹ Despite the differences between the two geographical areas of al-Andalus and Sicily, Arabic-Berber terms connected to water and hydraulic infrastructures persist in the micro-toponymy, such as the well with a domed covering known as *cuba* or *cubicella* from *qubba*, or the hydraulic wheel called *senia* from *sāniya*. The mapping of evidence related to the traditional use of water in the Calatafimi area and the economic and anthropological reflections on agro-systems certainly offer new ideas to go beyond a site-centric vision of the network of settlements and to adopt a more holistic approach to the landscape as a stratified system. The ultimate aim is to provide historical reconstructions of the medieval rural world that take environmental characteristics and human-environment interactions into account.

In order to offer an analysis of the changes that occurred during the Middle Ages compared to the previous periods, the third part of the book collects a series of contributions that show various aspects of continuity, change, and resilience in the formation of medieval Sicilian landscapes. A detailed analysis of the relationship between ancient roads and medieval settlement models has been undertaken for the central-northern part of Sicily.⁴⁰ The parallel analysis of the road system, toponymy, historical attestations, and data from archaeological surveys has proven to be an appropriate methodology for identifying persistence and innovations in the formation of a medieval landscape of ‘castles, hamlets and feuds, *hospitalia* and rural churches’ in relation to the endurance and transformation of the ancient road network.

In addition, in a comparative analysis of two survey areas, namely Gela and the Monti Sicani in the hinterland of Agrigento, settlement dynamics show the unbroken occupation up to the Middle Ages of various valley bottom sites which had already been occupied in Roman times or late antiquity.⁴¹ A distinctive phenomenon is the ‘ascent to the heights’ in various sites both in the lower Platani valley (i.e., Pizzo di Minico, Pizzo Santa Anastasia, Monte Castelluzzo) and in the hinterland of Gela. Here – especially at Butera – Iron Age and Greek settlement sites were newly occupied in the Middle Ages after a hiatus during Roman times.

A broken continuity, but with significant structural and functional changes, is found in the late-antique Villa del Casale in Piazza Armerina in the province of Enna.⁴² The

³⁶ Cucco 2023.

³⁷ Valbruzzi 2023.

³⁸ Barceló, Kirchner and Navarro (eds) 1996; Kirchner 2019.

³⁹ Martín Civantos, Corselli and Bonet García 2023.

⁴⁰ Burgio and Canale 2023.

⁴¹ Bergemann 2023.

⁴² Pensabene and Barresi 2023.

revision of the old excavations of the 1950s and, above all, the long excavation campaigns in recent decades have made it possible to outline the history of the villa ‘after the villa’, during the Byzantine and Islamic periods. A relevant issue is the new interpretation of some large pits referable to the Islamic period and interpreted as anaerobic grain stores. These are probably associated with the collective responsibility for the taxation of grain; therefore ‘a similar placement of storage pits could correspond to the need for control among the peasant families of the same community, or be a sign of strengthened control over peasants by owners or administrators’.

Another very interesting area marked by a long period of occupation of late-antique sites at least throughout the Byzantine period is the slopes of Mt. Etna.⁴³ Very interesting ideas have come from the new interpretation of a double wall of large lava stone blocks, extending for almost two kilometres, at Santa Venera (Bronte, Prov. of Catania), which is located next to a fortified enclosure from the Byzantine period.

This presence of defensive structures introduces the fourth part of the volume, dedicated to the defence and control of eastern Sicily in the Byzantine period. A fundamental element in the structuring of the countryside from late antiquity to the late Middle Ages across Europe and the Mediterranean was the progressive militarization of society⁴⁴ and the formation of fortified settlements, often on hilltops.⁴⁵

In the years following the establishment of the *thema* of Sicily and prior to the landing of the Aghlabid army on the west coast, the formation of a system of fortifications – including the imposing public fortification identified at Monte Kassar, in a hinge area between the western and eastern parts of Sicily – can also be seen to reflect a deliberate choice to concentrate defences on the eastern part of the island to protect the capital, Syracuse. The detection of new pottery indicators, such as hand-made casseroles and new types of architecture such as the circular dry-stone dwellings of the villages of Rocchicella di Mineo and Contrada Edera in Bronte,⁴⁶ and the reinterpretation of the rupestrian/rock-cut sites in the Syracuse area or the Byzantine phase of reuse and fortification of the prehistoric site of Pantalica⁴⁷ are elements providing a new wealth of archaeological data for a historical period such as the 8th-9th century that, until a few decades ago, was considered a real ‘Dark age’ from the point of view of material evidence.

⁴³ Gennaro 2023.

⁴⁴ Bennett, Berndt, Esders and Sarti (eds) 2021.

⁴⁵ Christie and Herold (eds) 2016.

⁴⁶ Arcifa 2023.

⁴⁷ Cacciaguerra 2023.

The essays in this volume underline the fundamental contribution of archaeological research in Sicily to propose new topics for the debate on the formation of early medieval landscapes. A comparison with other research areas and constant dialogue with historical sources constitute essential elements for advancing our knowledge of the rural and suburban world of Sicily as a case study illustrating Mediterranean dynamics at the crossroads between the Byzantine and Islamic worlds.

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I - Urbanscapes, Suburbia, Hinterlands

Chapter 1

The Topographical Context of Palermo in the Islamic Age: New Archaeological Research

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Archaeological research over the last 30 years in Palermo has helped to outline some of the main factors that characterised the transition of the town from Byzantine to Norman. This has provided important insights for a renewed focus on issues that have already been the subject of in-depth historical analysis over the last two centuries.¹ This contribution presents a concise update of the results of the most recent excavations relating to the Islamic period. The Islamic period was an important time for the organization of the city and the surrounding area, and for the definition of the fundamental characteristics of one of the most wealthy and important towns of the Mediterranean basin in the period between the Muslim conquest in 831 and the arrival of the Normans in 1072.

General topography

A long tradition of studies, especially of a historical nature, has helped to establish the fundamental elements of the Islamic city. This has allowed us to hypothesise that there was a very large settlement that developed gradually over the first few decades following the Aghlabid conquest. The settlement consisted of a series of populated districts spread over a vast territory that extended outside the limits of the old Roman and Byzantine city. However, it is only due to the intensive excavations within the present city, associated with archaeological preservation activity carried out by the Regional Archaeology Department of Palermo, that we have been able to topographically and chronologically contextualise numerous features related to the Islamic settlement. This has fully confirmed the existence and vast distribution of the Islamic neighbourhoods discussed in the historical Islamic sources.² At the same

time, the results from studies of Islamic and Norman ceramics have allowed us to establish a dynamic and diachronic framework of production in Palermo, and therefore to have more precise historical references for the explored archaeological contexts.³

In this contribution, we will outline only the more general aspects of the topographical structure of the Islamic city, without entering into the complex issues inherent in the identification of the urban elements cited in the sources, such as the names of the neighbourhoods, city gates or other important aspects not yet verified in the excavations. In particular, we think it is useful to point out the archaeological novelties that emerged in surveys conducted outside the circuit of Norman fortifications, the layout of which has remained substantially unchanged for centuries, save for a few early modern transformations (fig. 1).⁴

On the southern side, in the area between the Norman walls and the Oreto River, remains of walls and deposits associated with the inhabited area of the Islamic period have been brought to light in several places: in Corso Tùkory just west of Porta Sant'Agata; in the courtyard of the Convent of Sant'Antonino; in two areas (one to the west, the other to the east) of the Central Station; in excavations along Corso dei Mille (fig. 2); and in Via Antonio Ugo.⁵

archaeological data in recent years, and therefore it is necessary to take enough time to consider before offering a unified panorama based on the comparison between the historical documentation and the results of the field surveys. A recent update on medieval excavations in Palermo in the last 10 years can be found in: Aleo Nero *et al.* 2022; Vassallo 2020; Vassallo in press.

³ A recent work on pottery from the Islamic and early Norman age, with extensive bibliography on the subject, is: Aleo Nero and Chiovaro 2019. We would also like to point out Viva Sacco's in-depth research, conducted as part of her doctoral thesis, on glazed ceramics of the Islamic age in Palermo, still unpublished, of which a summary is presented in: Sacco 2017. See also Aleo Nero 2017.

⁴ A summary of the problems of the medieval fortifications of Palermo is in Maurici 2015: 109–114.

⁵ In the unpublished essays on work in Corso Tùkory, no masonry structures have been found, but only a substantial deposit of ceramic fragments, probably coming from a residential context of the Islamic age located in the immediate vicinity. For the convent of Sant'Antonino, see Aleo Nero 2017. For the two areas near the Station, preliminary results can be found in Battaglia and Canzonieri 2018. A brief report on the investigation in Corso dei Mille is in Battaglia, Riolo and La Mantia 2016.

¹ Recent works on medieval Palermo, accompanied by extensive bibliographic review of previous studies, include: Bagnera 2013; Maurici 2015; Maurici 2016.

² The archaeological research of the Soprintendenza di Palermo in the contexts of the Middle Ages has developed substantially since the late 1980s, first under the direction of Carmela Angela Di Stefano and then Francesca Spatafora, with major advances in the last ten years. The results of the excavations, which are very significant and often irreplaceable for the reconstruction of the city's history during those centuries, have been primarily published in articles in specialist journals to which we will refer in this contribution. There is a lack of general summary works, both because of the complexity of the problems and the unexpected and extraordinary increase in

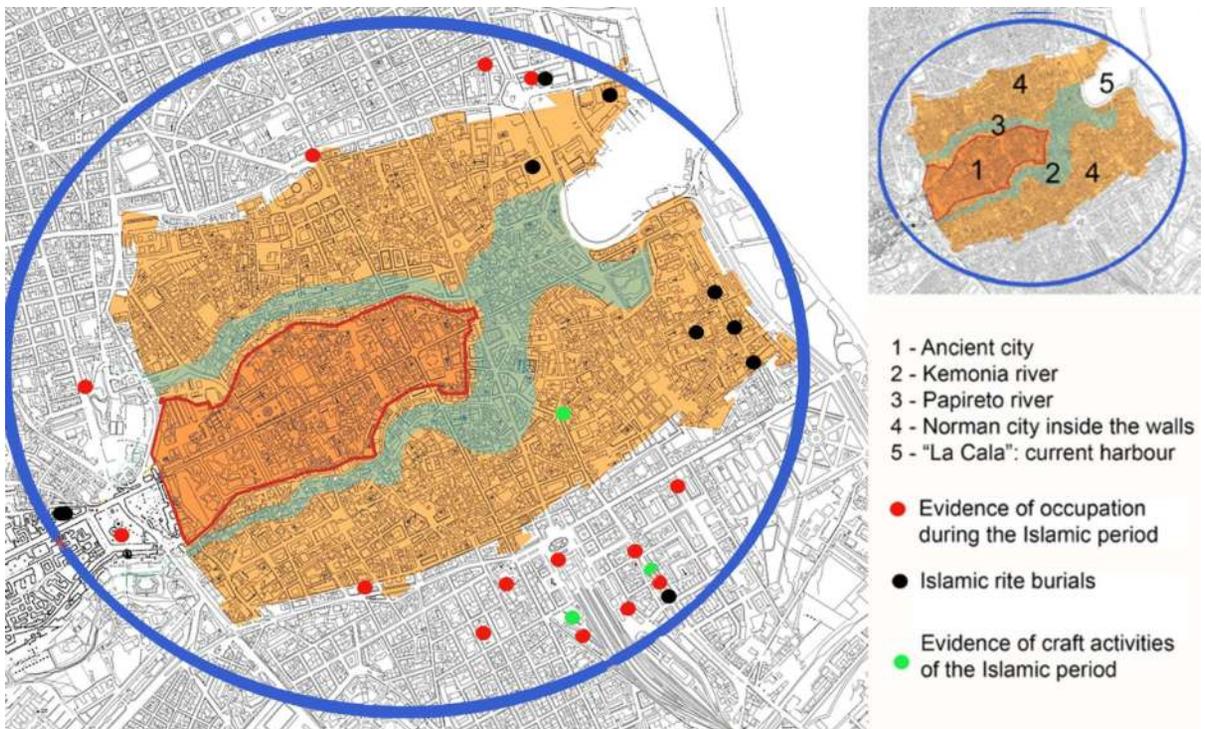


Figure 1 – Map of Palermo with the Islamic settlements outside the Norman city-wall area

To the north of the city, significant remains have been found in excavations in an area located about 200m away from the Norman walls, in Via Guardione and in Via Ferraris.⁶ Traces of the presence of Islamic-period neighbourhoods have also been located in the northeast and west, respectively, in the area of the current Via Imera and in Piazza Indipendenza.⁷

The typology of the archaeological documentation is varied, particularly considering the fact that most work has been undertaken rapidly in rescue excavations. This made it impossible to extend the investigated areas, which were all in limited spaces located in lively and dynamic urban areas of today's city. In several cases, however, it was possible to highlight evidence clearly associated with inhabited areas, such as walls (Convento Sant'Antonino, area east of the Station, Corso dei Mille, via Guardione), a street (area east of the Station), furnaces (Palazzo Scavuzzo-Trigona and area west of the Station) or numerous subterranean cavities with different functions: wells, cisterns, silos, or other as-yet unclear uses related to city contexts (Via Imera, Sant'Antonino, area west of the Station).

It was also possible to recognize significant transformations in the intended use of places in some

sectors of the city. For instance, in the area surrounding the current Piazza XIII Vittime, burials associated with a Byzantine necropolis, discovered in via Guardione and via Ferraris, are overlain first by Islamic burials from the early Islamic age (via Ferraris) and, later, by dwellings from the mid-10th century (via Guardione and via Ferraris) that indicate the new use of the area as a settlement. This is supported by evidence from the nearby archaeological area of the San Pietro district.⁸ The Islamic settlement was later abandoned; evidence from the excavations of Via Guardione, Via Ferraris and Piazza XIII Vittime shows that the area was positioned outside the ring of fortifications when they were constructed in the Norman period.

Overall, the results of recent excavations indicate that the Islamic settlement was spread over a wide area. Following the conquest in 831 and under the pressure of rapid population and economic growth, Palermo extended rapidly to the south and north, beyond the Byzantine city limits and the Kemonia and Papireto rivers, occupying large areas of the plain of Palermo within a few decades. In the east, the city grew to reach the coastline, which was previously outside the extent of the ancient city.

The city was made up of a series of neighbourhoods, some of which are named in historical sources, although

⁶ The investigations in via Ferraris are unpublished; for those in via Guardione, see a preliminary report in Battaglia and Tornatore 2019.

⁷ Regarding the research in via Imera, see Ardzzone and Agrò 2014; Spatafora, Bifarella, Papa and Sciortino 2012.

⁸ Arcifa 1989, 348–350; Bagnera 2013: 67–68.

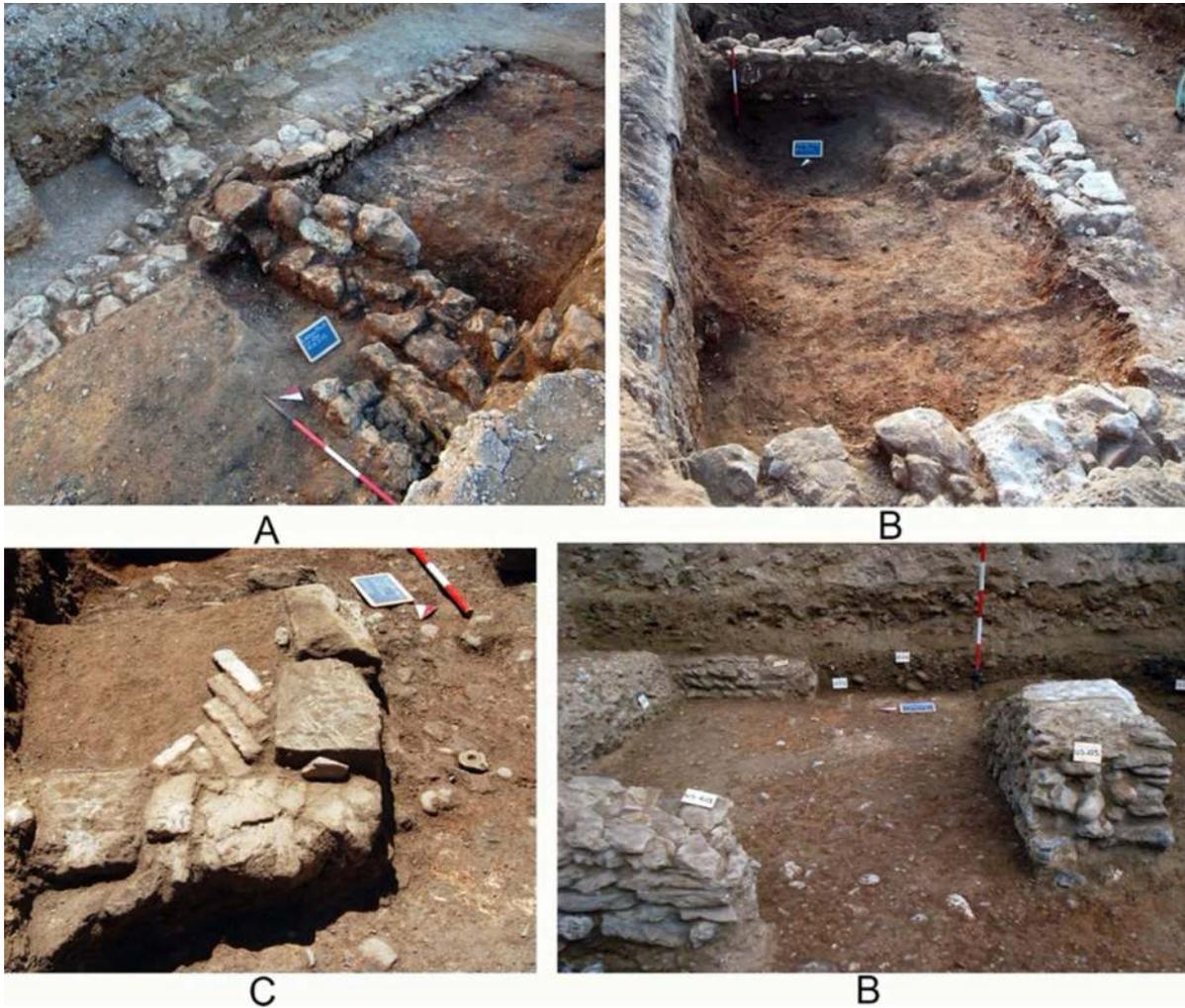


Figure 2 – Islamic houses from the excavation in Corso dei Mille (photos from the Soprintendenza BBCCAA of Palermo)

their exact location is unclear. It is also unknown which of the neighbourhoods were fortified and which, instead, remained ‘open’. The problem of the walls of the Islamic age still remains unresolved; if, beyond the ancient walls of the Galka and the nucleus of the Punic, Roman and Byzantine Panormos, there was an external fortification dating to the late Islamic period, its existence has been confirmed only by historical sources that discuss the Norman conquest.⁹

The sudden closure of the Norman town within the new walls naturally led to a very severe upheaval, with the abandonment of entire neighbourhoods that remained outside the walls, which were probably strategically destroyed or left deserted. This would have created a large area around the fortified city that would otherwise have been easy to conquer.

We are still a long way from having an overall vision of the organisation of the Islamic city. However, on the basis of historical sources and archaeological research, we are beginning to better understand the distribution of the inhabited area, which was divided into sectors and districts that extended over an area of geomorphologically complex and heterogeneous land. Balarm included very different physical spaces; the nucleus of the ancient city occupied a long centre-camber promontory bounded by the course of two rivers with rocky banks, deeply engraved into the plain of Palermo, which strongly contrasts with the flat areas to the north and south.¹⁰

It also remains uncertain how the Muslims solved the issue of connecting the old and the new cities, from a logistical point of view, and created functional continuity between the different areas of the town,

⁹ Maurici 2015: 109–114.

¹⁰ On the site of Palermo in ancient times, see Maurici 2015: 18–24.

due to the natural obstacles created by the two rivers. Moreover, close to the coast where the two watercourses met, upstream from the current basin of the Cala, the land was characterised by strong discontinuities between rocky soils and marshy areas in the lower reaches of the rivers. This can be seen in the final bend of the Kemonia River which widened in the area now occupied by Piazza Marina; in the Islamic and Norman periods, the rocky banks to the east of the river delimited its flow and controlled its height in relation to the surrounding land, preventing the river from being used and integrated into the urban plan. These natural obstacles were regularised in the Norman period or shortly afterwards, creating, in fact, only then the conditions for its full use and integration into the urban plan. In an urban landscape so strongly fragmented by its natural elements, it was not easy to perceive the organic growth of different functional elements of the city, such as streets, blocks, public areas, buildings and religious spaces, in parallel with the strong growth and expansion of the town between the 9th and 11th centuries. Through archaeological research, we have not yet been able to evaluate the consistency and methods of urban planning schemes in the inhabited areas, nor make any hypotheses about the design of the road network, the existence of which was indispensable for the connections within the individual districts and between various parts of the city. The road system and through routes created the necessary transport links for movement between the different districts that gradually developed across the wide flat spaces around the old city, beyond the Kemonia and Papireto rivers, and were also connected to the city gates.

Therefore, what little evidence that has been generated by excavations has proven very important. In particular, some useful clues have emerged in recent years in relation to the road system (fig. 3): in the district of the Kalsa, a small inhabited area has been explored, with houses between 1.6m and 2.2m in width identified on two parallel streets around 10m apart.¹¹

Another short, straight stretch of road, 3m wide, was discovered near the Central Station.¹² Two other probable streets from the Islamic age have been known for a long time in the area of the Nuova Pretura.¹³ Although it is not yet possible to propose a plan of the city's road network, it is nevertheless probable that, by the 9th century, within the new neighbourhoods, there was already a road system designed with a certain regularity and in relation to the main axes of roads connecting various parts of the city with suburban areas.



Figure 3 – Roads of the Islamic period: above, Palazzo Statella-Spaccaforno in the Kalsa neighbourhood (from Spatafora, Canzonieri 2014); below, excavation on the eastern side of Palermo's Central Station (photo from the Soprintendenza BBCCAA of Palermo)

It is still premature to evaluate the presence of production plants in Palermo during the Islamic period, whether regarding their consistency, distribution or typology (fig. 4-5).

We are limited to citing the recent discovery of three Islamic-period furnaces used for the production of clay pottery; two were identified in the excavation area to the west of the Central Station,¹⁴ the third near Piazzetta Rivoluzione, in the Palazzo Scavuzzo-Trigona.¹⁵ However, it is not possible to contextualise whether or not these structures were located in areas specifically intended for production. The presence of different handicraft activities in residential contexts

¹¹ Spatafora and Canzonieri 2014.

¹² Battaglia, and Canzonieri 2018: 6.

¹³ Ardizzone and Arcifa 1995.

¹⁴ Battaglia and Canzonieri 2018: 6.

¹⁵ Aleo Nero 2018.



Figure 4 – Kiln found on the western side of Palermo’s Central Station: a) first phase; b) second phase

has been confirmed at least once, in the case of Corso dei Mille, where there was an area interpreted to have been used for working metal and bone objects, potentially knife handles.¹⁶

Nothing is known about the Fatimid citadel of al-Khālīṣa, probably located in the southeastern quadrant of the city, between the present Piazza Marina and the easternmost part of the southern Norman walls. There has been a long tradition of studies seeking to locate it through its different components mentioned by Ibn Ḥawqal and al-Muqaddasī: walls and gates, a mosque, administrative buildings, military lodgings, markets and arsenals. However, we are still missing important evidence needed to identify both its location on the ground, and the buildings and architectural complexes mentioned in the historical records.¹⁷

Aside from isolated wall structures that have no archaeological context to aid in their interpretation, there is very little architectural evidence of the initial phase of development during the Islamic period. Therefore, one of the most interesting themes of medieval Palermo remains largely obscure. The formation of the great architecture of the Norman age was strongly anchored to tradition and Islamic styles in the choice of plans, decorative devices, architectural lines, and building techniques. Therefore, it is not easy to distinguish which buildings or parts of buildings

¹⁶ Battaglia 2016.

¹⁷ On al-Khālīṣa, see Maurici 2015: 63–75; Pezzini, Sacco and Spatafora 2018. From the archaeological point of view, the most significant element for the location of the al-Khālīṣa is the discovery of a shipyard in the area of Piazza Marina, datable between the Islamic and Norman ages, which would confirm how the al-Khālīṣa, of which the arsenal was an integral part, could be attested, in the area north of Piazza Marina: Spatafora, Aleo Nero, Calcagnile, Quarta, D’Elia, Montana, Randazzo and Terranova 2012.



Figure 5 – Evidence of productive workshops: above, ovicaprid horns related to craft activities from the excavation in Corso dei Mille; below, kiln found in Palazzo Scavuzzo-Triona (photos from the Soprintendenza BBCCAA of Palermo)

were built before 1072, the date of Robert and Roger’s conquest of Palermo. Only a precise reading of the wall stratigraphies will allow us to identify any pre-existing structures, continuity, or discontinuity in some of the most important Norman monuments.

In recent years, there have only been two cases in which it has been possible to recognize and isolate architectural phases prior to the middle of the 11th century. The first



Figure 6 – Norman Palace: in the middle, evidence of Islamic walls below the first Norman wall (on the right) of the Palace (photo from the Soprintendenza BBCCAA of Palermo)

is Palazzo dei Normanni,¹⁸ on the eastern front of the building, facing the city, the imposing, 5m-thick outer wall was discovered to have been constructed in the last decades of the 11th century and is thought to be related to the first fortification of the palace of power (fig. 6).

Under the layers that document the large and complex Norman building site, with overlapping levels of drains and evidence of mortar manufacture, substantial masonry from the Islamic period, dating from the 9th to mid-11th centuries, has been discovered but not yet investigated. Research into the foundations of the Cappella Palatina has also identified walls dating to the Islamic period that were cut up for use in the construction of the first Norman church. This is the first archaeological evidence in this area that indicates the presence of strategically important, prestigious buildings that pre-date the Norman period.

The second building that we hypothesise had an initial construction phase in the Islamic period is the Castle of Mareddolce.¹⁹ Here, archaeological excavation both inside and outside the building has allowed us to isolate remarkable older masonry structures beneath the 12th-century Palace of Roger II, probably built from the 10th century onwards (fig. 7).

¹⁸ On the excavations at Palazzo dei Normanni, see Vassallo 2019; Vassallo and Chiovaro in press.

¹⁹ On Mareddolce, with previous bibliography, see Vassallo 2018.

These structural remains define a building with a solid quadrangular plan with a base of large square blocks. The strategic and defensive functions of the building were likely associated with the control of the road connecting to the city. In this regard, the existence of a road that put Palermo in contact with its southern outskirts in the direction of the centres of the Tyrrhenian coast seems increasingly likely. The current route of Corso dei Mille from Porta Termini, along the southern walls, to the Oreto River and towards the area of Mareddolce, probably follows the route of an ancient road, such as the Via Valeria. The Via Valeria was established in the Roman-Republican age and was increasingly consolidated during the Islamic and later Norman periods, becoming the primary axis of the communication and trade with the fertile stretch of urban periphery, along a narrow strip defined downstream by the Tyrrhenian coast and upstream by the line of high limestone reliefs of which Monte Grifone, overlooking the Mareddolce area, is one of the main peaks.

There are several pieces of evidence of intensive use of, and investment in, this axis. For instance, remains of Islamic-period houses along Corso dei Mille underlie a Norman-age necropolis, which was subsequently overlain by a road in the 14th century. In addition, there is the 12th-century Ponte dell'Amiraglio bridge, an important crossing point on the Oreto River, and recent excavations in the area of San Giovanni dei Lebbrosi, which have shown consistent traces of use in the Islamic age, prior to the construction of the Norman church above it²⁰ and, subsequently, the Castle of Mareddolce. All evidence supports, in our opinion, the idea of the intense use of this route for both the external connections from the city, and for the investment in a strategically important area, not only for the control of the city, but also for the agricultural exploitation of the surrounding fertile land.

Investigations have also revealed new information regarding the Islamic necropolis or Islamic rite burials, characterised by the position of the skeleton in lateral decubitus with the head facing East (fig. 8).

Newly revealed information about the necropolis in the coastal part of the city, at Castello a Mare, Castello San Pietro, and in the area of Kalsa and Via Butera,²¹ includes a tomb discovered in the coastal area northeast of the town, in Via Ferraris, about 300m away from a strip of Islamic necropolis that was discovered a few decades ago, just outside the Castello a Mare. It is likely that this necropolis overlapped a Byzantine necropolis at Via Ferraris, but was soon sealed by dwellings, as revealed by the remains of structures superimposed on the

²⁰ Mandalà *et al.* 2018.

²¹ Bagnera and Pezzini 2004; Maurici 2015: 119–120.



Figure 7 – Mareдолce Palace: a) door from the Islamic period; b) door of the Modern period; c) northern side of the Islamic building; d) upper part of the building in the Norman period (photo from the Soprintendenza BBCCAA of Palermo)



Figure 8 – Islamic rite burials. 1) Via Ferraris/Patti: a) Byzantine burial, b) Islamic burial, c) walls of the Islamic period; 2) Corso dei Mille; 3) Corso Calatafimi (photos from the Soprintendenza BBCCAA of Palermo)

burial sites. These remains appeared to have a series of functions, which mirrors the findings of the excavations in the 1980s in the nearby district of San Pietro. Another area of Islamic ritual burials is located 350m to the west of the ancient and medieval walls, along Corso Calatafimi, in an area already home to a necropolis from the Hellenistic period. It is not certain, however, whether it was a Muslim necropolis or an Islamic style

of burial carried out in Norman times. The persistence of the Islamic funerary rite after the 11th century is now attested by the excavations already mentioned in Corso dei Mille. Having abandoned the Islamic settlement, the area was converted into a necropolis in the 12th century, with mixed burials of various types and rites, including some Islamic ones, before the main road leaving the city to the south overlapped with the

necropolis, probably during the 13th or 14th century. The mixture of various rites is further indication of the strong persistence of cultural traditions in the Norman city as well as the Islamic population, which is clearly manifested in funerary evidence.

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Chapter 2

The King's Hospital in Norman Palermo: San Giovanni dei Lebbrosi in Context

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San Giovanni dei Lebbrosi in the written sources: Roger II's donation and William I's additions (1154– 1155)

The archive of the church of San Giovanni dei Lebbrosi has not reached us. Only two documents survive from the Norman age, pertaining to the hospital and the church annexed to it. For reasons that will be explained later on, these documents were incorporated into the archive of the church of the Santa Trinità, better known as the Magione, in Palermo; currently, they are stored in the Archivio di Stato of Palermo.¹ The earlier of the two texts is an Arabic *platea* from December 1154 which has reached us via a Latin translation from 11 February 1259 and an authenticated copy made on 7 July 1286;² the second document is a late 12th-century chancery draft copy of a privilege issued by William I in May 115[5].³

The 1154 document was originally a *jarīda* in Arabic, describing the boundaries, rights and men pertaining to the estates of Margana and Haiarzeneti (< Ar. *hajar al-Zanāta*, 'the stone of the Zanāta'). It was donated in perpetuity to the hospital of San Giovanni Battista – located outside the city of Palermo (*hospitali sancti Iohannis Baptiste extra civitatem Panormi*) – and confirmed to the 'aforementioned' church. The latter is mentioned here for the first time and was evidently associated with the hospital from the very beginning, as an annexed legal entity (*que gratia concessa est perpetuo et in eternum hospitali predicto, quod executum scriptum est privilegium hoc et confirmatum ecclesie supradicte*).⁴ The

second document, from 1155, mentions an 'anonymous' hospital founded by King Roger – suggesting that it was identified by antonomasia – and located in the Palermo area (*hospitali a domino et glorioso rege Rogerio, genitori nostro felicis memoriae, sito in territorio eiusdem urbis Panormi*).⁵ The King had endowed it with estates (*casalia*) and villeins, as well as vineyards and lands, donations which were later confirmed and significantly extended by William I.

The juridical measures taken by the Norman rulers are *pro anima* donations, primarily for the salvation of the souls of Roger II and his parents (*idem predictus dominus rex, pater noster, eidem hospitali ob salutem animae suae et parentum suorum*, 1155),⁶ and for the remission of his sins (*ut dictus rex haberet meritum a Deo petendo remissionem peccatorum eius et sequendo voluntates eius*, 1154),⁷ but also for the commendation of the souls of the sovereign and of his son William, who was still alive at the time (*ad remedium animae eiusdem domini regis, patris nostri, et nostrae augere*, 1155).⁸ This donation follows a tradition of Norman *pro anima* donations, some of which were made to hospitals: in 1101 Roger Borsa (d. 1111), the son and successor of Robert Guiscard, and the brother of Bohemond of Antioch, sought to make a donation of a third of a thousand gold bezants to the Hospital of St John the Baptist in Jerusalem: *pro peccatis suis et pro requie anime ipsius suorumque... in sustentatione hospitalis languidorum et ceterorum inualidorum*.⁹

On an unspecified date, through the use of legal instruments such as registers of villeins and lands as well as issued privileges (*in plateis et scriptis*), Roger II endowed the hospital he had founded with a considerable patrimony consisting of the estates

¹ On the Magione archive and its history, see Lo Cascio 2011.

² Palermo, Archivio di Stato, Tabulario della Commenda della Magione nos. 78 and 173; published in Enzensberger 1996: no. 4, 11–14; document summary in Lo Cascio 2011: no. 5, 23.

³ Palermo, Archivio di Stato, Tabulario della Commenda della Magione no. 1; edition in Enzensberger 1996: no. 8, 23–26; document summary in Lo Cascio 2011: no. 6, 23–24.

⁴ Enzensberger 1996: no. 4, 12; Russo 1975: 131. In light of the 1154 Arabic *jarīda/platea*, it has been hypothesised that the church was founded before the hospital: see Di Stefano 1979: 25. It must also be noted that the hospital is referred by name unlike the *ecclesia supradicta* is not explicitly mentioned by name in the 1154 Arabic *jarīda/platea* transmitted through the two Latin transcriptions of 1259 and 1286.

⁵ Enzensberger 1996: no. 8, 25.

⁶ Enzensberger 1996: no. 8, 25.

⁷ Enzensberger 1996: no. 4, 12.

⁸ Enzensberger 1996: no. 8, 25.

⁹ Albert of Aachen 2007: 572, 574 and n. 78; Mitchell 2004: 63 (in both texts one must correct the attribution of the donation to Roger the Great Count, *sic*). On the topic of *pro anima* donations in medieval Southern Italy see Fonseca 1996: 186; Peters-Custot 2019; more generally see Magnani S.-Christen 2003; Bacci 2003; Magnani 2009.



Figure 1 – Map of Sicily showing the five estates mentioned in the 1155 letter of privilege: 1. Meselarmet. 2. Butont. 3. Gurfa. 4. Margana. 5. Raalginet/Haiarzeneti

of Meselarmet in the Mazara district (also known as Meselarmel, between Mazara, Castelvetro and Salemi), Butont in the Menneni district (also known as *rahl Butont*, present-day Rebuttone, between Altofonte and Piana degli Albanesi), and Gurfa (near Polizzi), with their villeins and estates. Roger II also added the vineyards and lands around the hospital (*quae sunt in circuitu hospitalis*), many of which had formerly belonged to prominent individuals, as in the case of the vineyard of the prothonotary Philip, the vineyard of emir (*ammiratus*) Theodore, the vineyard bordering the hospital and formerly owned by the wife of the *gaitus* (< Ar. *qā'id*) Amet/Aḥmad, the vineyard adjacent to one in *Mascari* and bordering the *Migeles* vineyard, formerly owned by Nicholas Lagucet, an olive grove located near the hospital, and the lands bordering the olive grove up to a place known as *Iusifia* and then extending as far as the sea, and – finally – the *Anselia*'s land.¹⁰ As already noted, Roger II's donation was made at an unspecified date; however, thanks to Carlo Alberto Garufi's investigations of the people mentioned above, it can

reasonably be dated to the period between January 1145 and December 1146 or, alternatively, to 1148.¹¹

In 1155, Roger II's conspicuous donation was confirmed by William I, along with that of the estate in the Vicari district and what is referred to as Raalginet (< Ar. *rahl al-Zanāta*, 'the village of the Zanāta', a place name equivalent to Haiarzeneti) near Corleone (fig. 1), which had already been donated in 1154. To these, the sovereign added the vegetable garden once owned by Michael of Antioch, the son of George of Antioch, located near the Oreto River, adjacent to the Saracens' *mahumeria* near the vegetable garden of the 'emir of emirs' (*ammiratus ammiratorum*) Maio. The hospital had full ownership and management rights over all its properties, free from any controversy or calumny, and was not subject to any obligations or services, except towards the sovereign and his heirs.¹²

¹⁰ Enzensberger 1996: no. 8, 25.

¹¹ Garufi 1940: 46; for an in-depth analysis of place names, see Enzensberger 1996: 23–25.

¹² Enzensberger 1996: no. 8, 25–26.

William I's confirmation and enlargement of the donation must have been well-known and accepted at the local level, so much so that the *Consuetudines* of the city of Palermo (ca. 1250/1270-78) mention the sovereign as the 'founder' of the lepers' hospital. It is also interesting to note that, at the time of the extension of *Consuetudo* 81, the hospital complex was referred to as a group of 'houses' (*in domibus*, a word which might also have had a religious meaning),¹³ already developed into a *mansio* by the Norman king.¹⁴ William I's role is further emphasised by an addendum to the 1560 edition of Fazello's work, where the sovereign is credited with the founding – at an unspecified date – of the *Leprosorum xenodochium* near San Giovanni dei Lebbrosi. This was transferred from the church of San Leonardo which, in Fazello's day, was located half a mile outside Porta Nuova.¹⁵ Although there is no real evidence to confirm this hypothesis, it may be that the original *hospitale* founded by Roger II was specifically adapted to house lepers by William I. In this case, after an initial phase in which the *hospitale* was intended to provide simple assistance in a religious milieu – which is to say board and lodging for the sick and poor, as well as pilgrims – there may have been a second phase in which a leper hospital was set up by separating the lepers and administering specific medical treatments to them, which is essentially what also occurred in hospitals in the Holy Land: at Acre, Jerusalem and Nablus.¹⁶ Be that as it may, it seems as though Palermo's leper hospital was de facto set up before guidelines on such matters were issued with canon 23 of the Third Lateran Council, presided over by Alexander III in 1179. This was the final outcome of a process begun in the middle of the century. Given that lepers were forbidden to live among healthy people and to attend church like other Christians, the canon established the possibility for them to have their own churches, cemeteries and priests, wherever it was possible to gather together a large enough number of lepers to ensure a communal life.¹⁷

By contrast, during William II's reign, the hospital of Palermo experienced a significant *diminutio patrimonii*, as the estate of Haiarzeneti was revoked by the Crown and donated to the Monastery of Santa Maria Nuova of Monreale. This information can be inferred from a *jarīda*, or Arabic-Latin estate register, with a detailed description of the boundaries of the lands and villages granted to Santa Maria Nuova of Monreale by William II on 15 May 1182. In this document, the vast territory of Corleone also includes the *divisa*, which is to say the boundaries, of Haiarzeneti, which – except for a few discrepancies due to the 1258 translators – reproduces that of the Haiarzeneti estate which William I donated to the hospital of San Giovanni Battista in 1154.¹⁸

In light of the available written sources from the Norman age, and especially of the archaeological and architectural evidence we shall be reviewing, it is difficult to accept the widespread idea that the current church of San Giovanni dei Lebbrosi dates from the years between 1071 and 1085,¹⁹ and hence that it is the oldest Norman church in Palermo, if not one of the earliest architectural structures in the county.²⁰ The royal building project emerged in an independent and original form during the reign of Roger II, and this dating is confirmed – albeit indirectly – by the church's adherence to the aesthetic standards of that period.

This is evidenced by, among other things, decorative details such as the only surviving capital in the right-hand apse of the church, 'a rare example of an Andalusī Umayyad decorative capital in Sicily, derived from the composite Roman capital', to quote Umberto Scerrato's authoritative opinion (fig. 2).²¹ The echinus bears a hitherto undeciphered Kufic inscription, within a frame which may be read as: *al-'izza li-Llāh / al-yumn al-yumn*, i.e. 'Glory be to God / prosperity, prosperity' (fig. 3).²² It is worth recalling that *al-'izz* ('power', and by extension 'glory'), sometimes spelled *al-'izzā*, and *al-yumn* ('prosperity') are 'invocations' (*ad'iya*) occurring – often jointly – among the Kufic inscriptions painted

¹³ Niermeyer 1976: 354–355; for a parallel for the use of *domus* to mean 'religious house', see Miller and Nesbitt 2014: 146.

¹⁴ *Ut omnes lepre vitio maculati, in domibus Sancti Iohannis Leprosorum Civitatis Panhormi, ubi Rex Guillelmus eorum statuit mansionem, debeant permanere*, La Mantia 1900: no. 81, 218.

¹⁵ *<Ubi post modum Guillelmus Siciliae Rex, Leprosorum xenodochium ex Aede Divi Leonardi extra moenia ad occidentem .500. p. ab urbe distant, eo translatum, instituit>*: see Fazello 1560: 187 and *addendum*. In a slightly later *addendum*, Fazello states that the spring of Ainsindi could be found half a mile outside Porta Nuova; to its right was the ancient church of San Leonardo, which used to be a leper hospital; to the left, extending for roughly 300 feet, was the Zisa: see Fazello 1560: 188 and *addendum*. On the church of San Leonardo, located near the present-day church of the Cappuccini, see Ingrassia 2005: 216 and no. 24 on the map, 151, 217–218, 224–225; Villabianca (F. M. Emanuele e Gaetani) 1873: 386–387 and n. 1; Carta 1969: 53; Lo Piccolo 1995: 159–161.

¹⁶ In the Holy Land this process took a few decades, with a turning point around 1180: see Mitchell 2004: 84.

¹⁷ On canon 23 of the Third Lateran Council, see Bériac 1988: 160–162.

¹⁸ Cusa 1868-82: I/1, 196 (Latin text), 232–233 (Arabic text); Garufi 1902: 47–49.

¹⁹ 'Ma la vera e propria fondazione avrà fatto seguito non molto dopo la conquista di Palermo (1072), come per adempimento di un voto, probabilmente prima della morte del Guiscardo (1085)'; Di Stefano 1979: 25; followed by Bagnarini 2012: 27–28; Di Liberto 2013: 169; Maurici 2016: 74.

²⁰ Inveges 1649-51: III, 77; Valenti 1920; Guiotto 1952: 133; Maniaci 1994: 52; Genovese 2010: 66.

²¹ 'Un raro esemplare in Sicilia del capitello di tipo omayyade andaluso derivato dal capitello romano composito', Scerrato 1979: 327 and fig. 98; the scholar describes the capital as a 'probabile importazione, come un'importazione, in circostanze diverse, è il capitello andaluso che si conserva nel Battistero di Pisa'. By contrast, Bellafiore 1990: 126, describes it as a 'capitello aglabita di reimpiego con iscrizione cufica'; on the capital, lastly, Gandolfo 2019: I, 72.

²² The capital measures between 35 and 36 cm in height and 25 cm in width, while the height of the epigraphic band (excluding the frame) measures between 4 and 5 cm; we hope to publish the capital and a commentary on its inscription at some point in the future.



Figure 2 – Capital with Kufic inscription

was *al-mu'tazz bi-Llāh* ('he who is powerful through God').²⁴

What we have is an apparently insignificant ornamental detail – a capital with an Arabic inscription adorning the apse of a Christian church – which actually reflects the distinguishing style and political and cultural horizon of the Norman sovereigns.²⁵

San Giovanni dei Lebbrosi in archaeological records

In Palermo, archaeology has only played an important role in historical research in the last few decades, and in the case of San Giovanni in particular, it has remained entirely absent.²⁶ In order to properly value the importance of this site, then, an archaeological analysis of the building was undertaken for the first time. This methodology understands construction as material culture, viewing a building as an object in context and subject to modifications and alterations throughout its history. Such an approach implies that no single building is preserved as it was originally planned and constructed, and that architecture therefore possesses its own stratigraphy, which is the result of such subsequent actions.



Figure 3 – Kufic inscription (detail)

on the ceiling of the Cappella Palatina in Palermo.²³ We should further bear in mind that the formula *al-'izza li-Llāh*, which is very common in Arabic epigraphy, might also echo the *laqab*, or honorific title, of Roger II, who

Looking first at the sequencing of the existing building made it possible to truly understand the construction process, to ascertain whether there are any remains

²³ More specifically, *al-yumm* occurs even two and/or three times in a row (with or without asyndeton) among the inscriptions on the ceiling of the Cappella Palatina: see Johns 2010: 355–379.

²⁴ On Roger II's *laqab*, found on coins and in inscriptions, as well as in texts such as al-Idrisi's *Nuzhat al-mushtāq fi ikhtirāq al-āfāq*, see Johns 1986: 22–23, 25, 39–40, 43–44; Johns 2010: 362.

²⁵ See Tronzo 1997; Bongianino 2017.

²⁶ A synthesis is available in Spatafora 2004; as regards San Giovanni dei Lebbrosi, see Utrero Agudo and Mandalà 2016: 47–49.



Figure 4 – General view of San Giovanni dei Lebbrosi

likely to date from previous and later periods, and to pinpoint those areas that require further archaeological research *in situ*. In other words, the archaeological stratigraphy of the architecture helped us to make full use of the excavation process in accordance with the questions that have already arisen. This stratigraphy was also required for the archaeometric examination of the building materials, though prioritising the archaeological trenches played a key role in protecting the landscaped site while respecting its current function as a parish church.

San Giovanni today is a three-aisled basilica with a tripartite transept, three semi-circular apses and a projecting porch at the west end of the hall, which is roofed and divided by pointed arches resting on pillars. The transept and apses, meanwhile, are vaulted, with a dome on squinches covering the crossing space (fig. 4 and 5).

Archaeological analysis of the existing building

Archaeological analysis has identified up to 117 stratigraphic units in the existing structure of San Giovanni, which may be summarised in terms of six construction phases. Only the first of these dates back to the Norman era. This analysis focuses on this phase, but in order to understand the origin and later evolution of San Giovanni, restorations undertaken in the late 19th century (Phase IV) and in the 20th (Phase V) must also be taken into consideration. Initial interventions by Giuseppe Patricolo and subsequent works directed

by Francesco Valenti, between 1912 and 1927, aimed to recover the primitive medieval church of San Giovanni; this involved dismantling the inner plastering, the southwest room, the façade, the north sacristy, the hall vaults and the bell gable, all of which are from the modern period (Phase III).²⁷ Valenti recovered the internal height of the paving, conceived and built a new central-west tower, rebuilt the upper part of the walls and introduced new timber roofing, reusing old elements. He also replaced the bases, shafts and capitals of the apses, except for the capital with a Kufic inscription in the south apse (fig. 2). During this work, a number of schematic and partial drawing surveys of the state of preservation of the church were carried out, along with others showing the results after the restoration.²⁸ Later on, in 1956-57, the homogenising intervention of heritage supervisor Giuseppe Giaccone revealed the structures surrounding the church, including paving and architectural elements dating to different periods.²⁹

Archaeological analysis shows that the original church of San Giovanni (Phase I; L 29 m, W 11 m) was very similar to the current one: a three-aisled basilica built of limestone, with a tripartite transept, three semi-

²⁷ Valenti 1920; Valenti 1932: 216–217, fig. XXXIX–XL; Guiotto 1952; Russo 1975: 132–134; Maniaci 1994: 51–59; Scaturro 2005: 28; Genovese 2010: 66–72; Vassallo *et al.* 2019: 15–17.

²⁸ Plan and longitudinal section in Valenti 1920. One axonometric, one longitudinal and two cross-sections have been published by Di Stefano 1979, fig. XXXII–XXXIV. See also Ciotta 1988: 157; Maniaci 1994: 53; Genovese 2006: 114.

²⁹ Vassallo 2018: 19–20 and fig. 3.

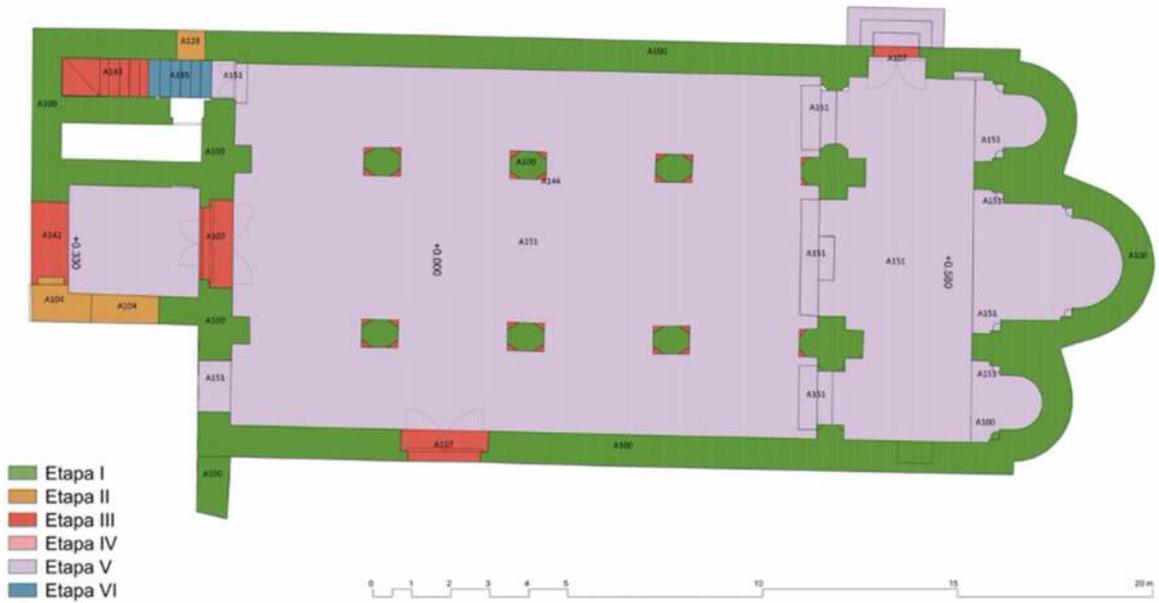


Figure 5 – Plan of San Giovanni, including the phases of construction



Figure 6 – Archaeological records of the south façade of San Giovanni

circular apses and a projecting porch at the west end of the hall (fig. 5 and 6). The hall was roofed and divided by pointed arches resting on pillars. The other spaces were, as explained below, covered in stone vaulting.

The original walls were built in two faces, using small ashlar stones (H 20-22 cm) of local limestone. The rows are continuous throughout the whole plan of the building, providing unity to all the walls. The stone

was cut by adze and placed in horizontal rows, with headers and stretchers (L 30-47 cm) used indistinctly. As was the norm, only the lowest rows are a little higher (visible mainly in the external façade of the apses), with a few fragments of bricks or tiles used to fill in the thin joints. The core of these walls, visible in the broken perpendicular wall of the western façade, is made of small rough stones bonded with a strong, whitish mortar. Although no putlog holes are visible, scaffolding was clearly used to build these walls and their corresponding vaults. This scaffolding was free standing and attached to the walls, making it easy to remove and reuse once work had finished.

Although the jambs of the windows lighting the hall and the apse have been partially restored (Phase V), their form remains the original one. The same is true of the doors, with internal timbered lintels and larger stones used to build up the jambs. Access points were opened in the northern wall of the hall, the western or main façade and the southern one, all of which have closing mouldings which show that their doors were closed and therefore controlled from the inside.

The entrances to the apses are the only places where bases, shafts and capitals are used to support the arches. Although this had not been noticed previously, archaeological analysis confirms that none of these elements are original, but were restored in recent times (Phase V, plaster cast on a timber core, possibly completed after the Second World War), apart from the capital with a Kufic inscription that supports the southern springer of the entrance to the southern apse. This element was especially designed for its current location, as is shown by the inscription and by the three-quarter form of the capital. It is also evident that the capital was inserted while the plaster covering the wall was still fresh, and it is possible that similar capitals were originally placed at the opposite north support and also at the entrance of the other two apses.

The arches of both arcades of the hall and the crossing space, as well as those at the entrances to the apses, are slightly pointed, with voussoirs which are not lined on the outside. They do not always use keystones, and stand on rectangular pillars with chamfered corners, built from huge ashlar stones (H 45-50 cm). Those pillars separating the hall from the transept are cruciform in plan and also have chamfered corners.

As mentioned above, the transept, apses and porch are all vaulted. The square crossing space of the transept is covered with a semi-spherical dome resting on a cylindrical tambour with transitional elements at the angles, which are in fact tall squinches generated by successive arches, similar to large *muqarnas* (fig. 7). The lateral spaces of the transept, rectangular in plan, are

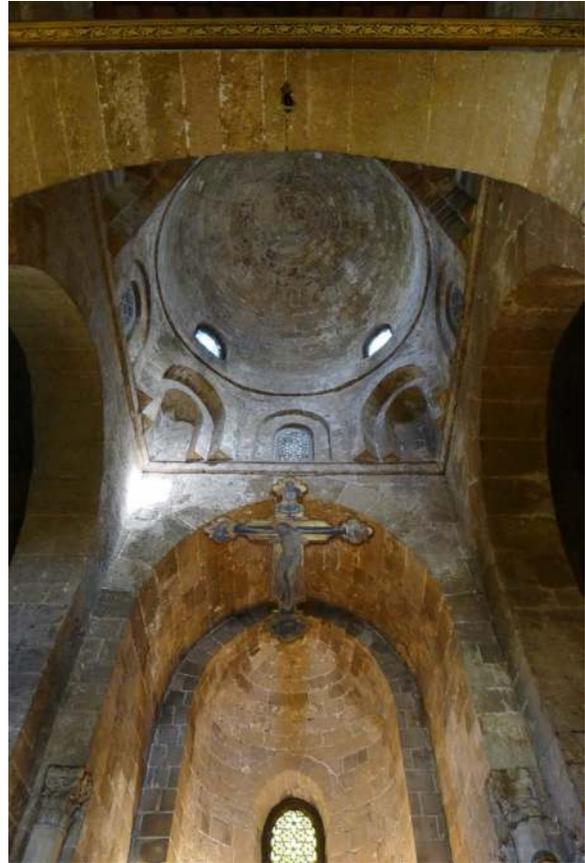


Figure 7 – Domes of the crossing space and main apse

groin-vaulted, with the groins springing from the walls and not from the angles. The lateral apses are shallow and semi-circular in plan and vaulted with a quarter-sphere, and the main apse also has a straight western section, this time barrel-vaulted.

The porch was also roofed with groin vaulting. Since this space later fell into ruin or was destroyed (Phase II) and was then restored (III), only its springers are preserved today. Analysis, though, allows us to establish that it had two entrances, to the south and to the west. The former was later converted into a window, while the latter is still in use.

Examination of the lowest areas and of the staircase of the westernmost bay of the hall shows that these spaces are original and were built at the same time as the church, as well as vaulted with slightly pointed barrel vaults. The direction of the staircase shows, too, that the central tower erected by Valenti (Phase V) does not correspond to the original one. If a tower did indeed exist here, it would have probably stood at the northern angle. From a liturgical point of view, two new elements may have been added to the original furnishings of the

church, with two niches opened in the northern (this one recently transformed by the introduction of a wardrobe) and southern walls of the transept.

The design and construction of all these spaces was unitary, including two perpendicular west walls, the remains of which are only preserved at the southern corners of the western façade. These structures confirm that the temple was not built in isolation but planned as part of a larger complex, roughly 80 m in length and 44 m wide. This structure continued beyond the current fencing of the parish church and was partially destroyed to the east by the urbanisation of the area. Two long galleries, one running N-S and another W-E, are partially preserved today, leaving in between a 3.6 m wide porched courtyard in front of the western façade. The southern gallery extends beyond the east wall of the church and includes a large pool (7.35 m long and 2.65 m wide) at the eastern end, paved with hydraulic mortar and reinforced with internal mouldings.

Both galleries are wide (10.7 m), and they are divided by a central row of square pillars. Along with the thick perimeter walls, these would have supported a second level and were built using the same techniques as the church, with local limestone, regular-sized stones in horizontal rows and thin white mortar. In contrast, the perimeter walls were built of rough stone masonry, protected with plaster on the inside. The circulation levels for these galleries are different today, owing to the subsequent introduction of brick paving, the varying dimensions of which show that they may date back to different periods (e.g., west nave, bricks 28 x 21 and 35 x 23 cm; south nave, 41-42 x 23-24 x 5 cm).

Archaeological interpretation of the Norman church

Plan of the building. The original church of San Giovanni is a building which was perfectly planned not only in terms of its design, but also in its execution. The homogeneity of the dimensions and placing of the ashlar stones, the regular height of the walls and the execution of the openings and vaults reflect a thoroughly coordinated building project which was practical and dynamic and in which there were neither mistakes nor rethinking.

All of the walls were built at the same time and not in phases, thus avoiding jumps or discontinuities between the different elements. Freshly-quarried stones were cut with the help of a set square and used to create continuous courses. The openings (doors and windows) are always tall and narrow, with strong jambs, and the pillars are solid enough to support the loads of the stone groin and barrel vaults. Squinches serve to cover the square plan of the crossing area with a circular dome, driving the loads of the vaulted structure downwards.

These squinches are both high and deep, double-arched and supported by diagonally-sectioned groin vaulting identical to that found in another Palermo church, San Giovanni degli Eremiti. Groin vaulting with horizontal springers covers the lateral spaces of the transept, another feature which can also be seen in other churches in the city, such as at the entrance of the Martorana. In contrast to other churches in Palermo, San Giovanni employs pillars rather than reused shafts in the hall. This reflects an economical use of materials, as for a building with a clear functional purpose it was quicker and easier to build masonry pillars than to plunder or otherwise acquire reused bases, shafts and capitals. For the same reason, the building lacks any decorative elements such as mosaics or friezes, and the window screens and capital(s) in the apse are the only sculpted elements. Although only one capital is preserved today, there must originally have been six, that is, two at the entrance of each apse.

These features have nothing to do with the skill of the artisans, since the aforementioned stereotomy of the stones used to build the vaults on high squinches rather demonstrates the relevance of the geometry and the design involved in the planning process.³⁰ Voussoirs and ashlar stones needed to be accurately designed and cut in advance if vaults were to be built free of mistakes.

Finally, once it was confirmed that the west walls projecting from the façade of the church did, in fact, belong to the same building project, it became possible to make two further suppositions. The first is that these walls cannot be related to a previous Islamic settlement whose existence would appear to be suggested by written sources.³¹ If such a settlement did exist, then these walls were not part of it, though ongoing archaeological excavations reveal Islamic levels, defined by pottery records, a grave (also dated by carbon-14) and other structures earlier than the Norman building.³² The second is that church and complex were built coevally, and the latter was made up of galleries and at least one courtyard, with access from the west porch of the church.

Chronology of the church. The second of these suppositions leads us to the question of the chronology of the church. Many researchers date the current church to the late 11th century.³³ Di Liberto considers besides the use of pillars (and not of reused columns) within a conquest context and defends its likeness to other churches

³⁰ Regarding the stereotomy of the Norman vaults in Palermo, see Ciotta 1988: 151–162 and Guerrero 2014.

³¹ Di Stefano 1979: 24–26.

³² Archaeological excavations were carried out in 2017–2019 and 2021, and a synthesis of these is currently in progress.

³³ Calandra 1938: 32 (wrongly named as San Giovanni degli Eremiti); Calandra 1941: 237 and 239, n. 10; Costantino 1986: 117–119; Ciotta 1988: 151; Ciotta 1992: 88 and 252.

dated to that same period in the region of Messina.³⁴ In our opinion, although these churches are similar in plan, they are not comparable in technological terms, since these examples are built in rough masonry and brick, materials which do not require the kind of skills reflected by a building as meticulously planned as San Giovanni. In an attempt to correlate written and material records, it has been also suggested that the supposed church of San Giovanni built during the Norman conquest was replaced by the present one.³⁵

It is our view, according with other researchers,³⁶ that the church of San Giovanni was built at a later date. The contemporaneity between the church and its surrounding structures provides ample reason to link its construction with the written records which mention the foundation of the hospital, namely the reference by William I (1154 and 1155), who attested to the founding of such an establishment by his father, Roger II. Although it has to be highlighted that the document of 1155 does not mention specifically neither a church nor the name of the hospital.³⁷ Besides this, both building techniques and single elements (timber lintels, pointed arches) are evidence of technological features to be found in other churches of the first half of the 12th century in Palermo. Furthermore, the presence of some common technical details also employed at San Giovanni degli Eremiti (such as angular squinches) could in fact reveal not only artistic influence, but the activities of a common workshop. Elements such as the dual-centred pointed arches and the chamfered pillars of the domes on squinches are also common to Islamic architecture, and in particular to the 10th and 11th century style preserved in Ifriqiya and in Egypt.³⁸ This fact could indeed suggest that Islamic artisans worked in the church, especially bearing in mind the capital with the Kufic inscription.

Form and Context. It is within the context of the reign of Roger II and his aim of establishing a church in consonance with this new power that San Giovanni and the common architectural and decorative language it shares with others contemporary buildings must be understood.

Other historical and archaeological research shows that the 12th century was the age when most *leprosaria* were founded in Europe, in accordance with the maximum spread of this epidemic.³⁹ Close to urban areas and protected either by a wall or a trench and accessed

via one or more gates, these complexes were usually provided with a chapel, an infirmary, several rooms, a refectory and a cemetery. They were managed by monastic communities which offered both confession and burial.

This same archaeology shows us, though, that there was no common architectural model for this kind of hospital.⁴⁰ The regularity and symmetry of the spaces in the Lebbrosi church could be interpreted as evidence of a royal commission, the management of which was then ceded to a monastic community (as is shown by the courtyard). In other words, the layout of San Giovanni appears to be more that of a monastery than of a hospital.

Its location outside the city and at some distance from the centre, where land was available and probably cheaper, was a convenient one for a hospital with a small chapel. The church is therefore mainly functional in style, lacking in outstanding ornaments but by no means devoid of resources or suitable technology. It is important to bear in mind that what we see today only amounts to a quarter of the original site, which was therefore an important project in terms of financial, material and human resources, and one which highlights the role played by the royal commission. The location of San Giovanni close to the entrance to the city and the Oreto River is also an indicator of the size of the population at the time. Medieval hospitals were understood as entities with limited medical services designed to take care of body and soul, and their purpose was more to relieve poverty than to save patients.⁴¹ San Giovanni marked the outer limits of Palermo and represented a milestone on the road, which was important for attracting alms from people passing by. The Oreto provided fresh water, a key requirement for the subsistence and economy of a *leprosarium* (note also the mention of the pool). The construction was proof of the piety, generosity and prestige of the commissioner, and this was materially visible to those arriving in the city.

Consequently, although San Giovanni today seems isolated and distant from the Norman core of Palermo, in its day it was integrated within the city, albeit on its edge, and certainly in terms of royal planning.

The hospital of San Giovanni Battista in the historical and cultural context of the Norman age

The hospital of San Giovanni Battista was thus located on the edge of the city, presumably where more land was available, at the crossroads between the urban and

³⁴ Di Liberto 2013: 169. Examples also already proposed by Di Stefano 1979: 25 and Costantino 1986: 118.

³⁵ Di Stefano 1979: 24–26; Maurici 2016: 74.

³⁶ Garufi 1940: 43–49; Guiotto 1952: 137.

³⁷ Enzensberger 1996: no. 8, 23–26; Lo Cascio 2011: no. 6, 23–24; Santoro 2019: 182–183 and n. 15.

³⁸ Bloom 2008.

³⁹ Gilchrist 1992; Magilton 2008; Roffey 2012.

⁴⁰ Roffey 2012: 225.

⁴¹ Gilchrist 1992: 101.

rural worlds.⁴² The hospital was set within a landscape marked by the presence of the Oreto and its estuary, so it is plausible to assume that the building of this complex was coeval and consistent with that of the Ammiraglio bridge used to cross the river: it stood as a solemn monumental gateway to the city.⁴³ In the Norman age, the complex would have been surrounded by vegetable gardens, vineyards and cultivated plots of land owned by the highest-ranking personalities in the kingdom. Near it was also a large date palm grove which was revived in 1239–40 by the Jews from *Garbum* (< Ar. *Gharb*, '[Arab-Islamic] West under the Almohad control') and which only vanished in 1316, when the palm trees fell to the axes of the Anjou soldiers attacking the city.⁴⁴ Certainly, greenery was not the only distinguishing feature of the suburban landscape surrounding the hospital, as this also included urbanised areas such as the *mahumeria Sarracenorum*, a Muslim mosque – presumably attached to a borough⁴⁵ – that was located next to Michael of Antioch's vegetable garden, near the river. It was probably a vestige of the settlements that existed along the Oreto and in the Palermo plain in the Muslim period, as mentioned by Ibn Ḥawqal.⁴⁶

Norman Palermo was a large city and the capital of a kingdom. As such, it experienced a gradual increase in the poor strata of its population, the outbreak of diseases and epidemics, and the need for social reforms and public health measures. The creation of new hospitals reflects this urban growth and was designed to meet the needs of a widely populated area, at the centre of a powerful process of economic expansion and political and social reorganisation.⁴⁷ The 12th century witnessed a significant increase in leprosy rates, and this is directly linked to the increase in

trade and urbanisation: paradoxically, it is an index of economic growth.⁴⁸ At the same time, it must be borne in mind that the establishment of leper hospitals may also reflect a social reaction to leprosy, not necessarily related to an increased spread of the disease.⁴⁹

Although it is difficult to infer this from the available written sources, the hospital of San Giovanni Battista just outside Palermo must have been a highly articulated complex, comprising one or more churches and chapels, possibly a cloister, at least one kitchen and refectory, dormitories and infirmaries, bathrooms and lavatories, granaries and storerooms, cisterns and wells, stables, vegetable plots and gardens, and some burial areas. Presumably, these were all marked off by a fence or moat, since – to quote Jole Agrimi and Chiara Crisciani – 'it is disease that generates the space which must contain it, but both have moral and religious connotations'.⁵⁰ Like other large-scale projects, the hospital of San Giovanni Battista was a monument designed to create a lasting memory of its patron and to embody his pious works and political programmes: his care for his people, the desire to exercise political and religious power within the framework of a Christian kingdom, and the ambition to establish a new dynasty with Palermo as its capital. Along with other monuments, such as the Ammiraglio bridge and the palace of Mareddolce, the hospital was designed to reinforce the sovereign's image within the new capital of the kingdom, located as it was in an area of considerable strategic importance such as the southern entrance to the city. In particular, the hospital of San Giovanni Battista was a visible marker of the charitableness and piety of its founder and of his descendants, which is precisely how Ibn Jubayr perceived and interpreted the complex when assigning it to Christians. In December 1184, the Andalusī traveller recorded what, to his eyes, seemed like a Christian peculiarity: the fact that both in the suburbs of Palermo and in other cities he had visited in Sicily and in the Holy Land (Acre and Tyre were then part of the Latin Kingdom of Jerusalem), some Christian 'churches' (*kanā'īs*) – i.e., places chiefly reserved for religious worship – were fitted out as shelters for sick Christians and actually functioned like the Muslims' hospitals (*'alā šifāt māristānāt al-muslimīn*).⁵¹

⁴² Gilchrist 1992: 115; Roffey 2012: 220.

⁴³ Although a bridge across the river may have already been built in the Roman age (see Uggeri 2004: 88), in its present form the Ammiraglio bridge dates back to the second quarter of the 12th c.: see Villabianca (F. M. Emanuele e Gaetani) 1986: 18–22 and n. 2 (with reference bibliography); Di Stefano 1979: 132–133; Costantino 1983: 6; Bellafiore 1990: 160–161; Maurici and Minnella 2006: 41; Fatta 2015: 2 (published also as Fatta 2018: 237); Santagati 2018: 72–73. As far as the patronage behind the monument is concerned, the scholarly consensus is that it was commissioned by George of Antioch (d. 1151), 'emir' from 1124 and Roger II's *amiratus amiratorum* ('emir of emirs') from ca. 1132. However, it cannot be ruled out that the sovereign himself was directly involved in the project. Scholars unanimously reject the local version according to which the bridge was built in 1113 – i.e., before George's rise to prominence – as mentioned by Palermo 1857: 294. Attached to the bridge there was a church, or more probably a chapel or shrine, devoted to St Michael the Archangel, and which according to local tradition was erected by George of Antioch himself in order to celebrate a victory over the Saracens: see Villabianca (F. M. Emanuele e Gaetani) 1986: 22; Palermo 1857: 295; see also, critically, Maurici 2016: 78 and n. 214.

⁴⁴ Cusa 1873: 47–53; Peri 1957: 53–54; Mandalà 2013: 449.

⁴⁵ The term *mahumeria*, *mahomeria* or *machomeria* would indicate a 'mosque' or 'Muslim district': see Caracausi 1983: 275.

⁴⁶ Ibn Ḥawqal 1938–39: I, 120; French trans. Ibn Ḥawqal 2001: I, 119.

⁴⁷ On hospitals in Norman Palermo, I refer to (not always reliable) surveys carried out by Rocco Pirro and other scholars, see Pirro 1733: I, 310–312; Carta 1969: 45–53; Mazzè 1988: 52–53; Mazzè 1998: 19–20, and, most recently, Santoro 2019.

⁴⁸ Bériac 1988: 165; Agrimi and Crisciani 1993: 249–252; Roffey 2012: 204; Miller and Nesbitt 2014: 120–121.

⁴⁹ Roffey 2012: 208.

⁵⁰ Agrimi and Crisciani 1993: 250. Unlike in the case of monasteries, in all probability there was no set plan for the building of leper hospitals, so the shape and layout of individual structures varied considerably. Among the decisive factors were the availability of land, the patients' social status, the kind of patronage exercised, and the intensity and distribution of the disease. See Roffey 2012: 219, 228.

⁵¹ Ibn Jubayr 1907: 329–330; Italian trans. in Ibn Jubayr 1995: 230. The identification with San Giovanni dei Lebbrosi has been made by Amari (ed.) 1997–98: I, p. 126 n. 61.

At the same time, the founding of the hospital altered the suburban landscape and ‘replaced’ the memory of the buildings that had previously stood there. As a charitable institution, the hospital of San Giovanni Battista was the outcome of a project carried out for a very particular purpose and having a well-defined meaning that transcended its specific functions; no doubt, the establishment of the hospital was also meant to recall the glory of the Norman siege and conquest of the city of Palermo which, according to a tradition deeply rooted in local historical memory, had found their epicentre precisely in that area.⁵² Regrettably, no trace remains of those performative acts such as processions, ceremonies and liturgies, which conveyed the founder’s desires and intentions. In any case, the monument itself transmitted the memory of certain events within the pre-existing suburban fabric and the system of relations with which it interacted. In this context, the hospital of San Giovanni Battista symbolically stood in continuity with and/or replaced a pre-existing structure, be it a *qaṣr* and/or a *ribāṭ*, that also exercised functions related to hospitality and/or care for the sick, and which dated back to the Islamic period.⁵³

The choice of this particular location for the hospital of San Giovanni Battista may also have been influenced by the ambivalent medieval attitude towards lepers who were seen, on the one hand, as images of Christ and people chosen for redemption and, on the other hand, as the symbol of sin par excellence and exemplars of God’s justice. Like heretics – and indeed as a metaphor for heresy itself – lepers needed to be excluded from the community and banished from human society (Leviticus 13:46 and 14:2).⁵⁴ What better symbolic

gesture could be performed – than re-adapting an old institution of the Muslims – ‘heretics’ par excellence in medieval Latin thought⁵⁵ – to cater to lepers, thereby establishing a strong ideological continuity in terms of the people frequenting such places? The idea that the Norman sovereigns simply re-adapted and lent a Christian meaning to a pre-existing institution serving similar purposes is only a hypothesis – a no doubt plausible and intriguing one – which at present cannot be further substantiated. Let us add that an example of an ancient Islamic *ribāṭ* surviving into the Norman period may emerge from the writing of Ibn Jubayr, who spent a night at the *Qaṣr Sa’d*, on the road between Termini and Palermo, and who provides a rather detailed and laudatory description of this structure and its function. This place – whose name includes the Arabic word *qaṣr*, meaning ‘castle’ or ‘palace’ – would appear to have gradually lost its connotation as a stronghold garrisoned by ascetic warriors (*ribāṭ*), evolving into a structure providing hospitality for wayfarers and Muslim pilgrims (*funduq*). Still, it preserved the memory of its original character associated with the Islamic religion and the exercising of asceticism through a mosque and the graves of pious men.⁵⁶

With the transition to the Teutonic Knights (1219), fleeting mention is made of the customs of the patients staying at the hospital of San Giovanni ‘of the invalids’ (*hospitales Sancti Joannis infirmorum*), with a clear reference to the way in which the hospital was organised: the lepers, for example, had the right to appoint representatives.⁵⁷ However, it remains unclear which ‘order’ ran the hospital of San Giovanni Battista and who celebrated mass there before it passed into the hands of the Teutonic Knights. Our sources are completely silent on this point. It must be noted that medieval sources often mention leper hospitals without adding any information as to who was managing these institutions.⁵⁸ The dedication of the hospital to St John the Baptist would appear to be a ‘speaking name’ referring to the far more famous hospital of St John the Baptist in Jerusalem. However, Erich Caspar’s suggestion that the Hospital of San Giovanni dei Lebbrosi was donated to the Knights of the Hospital of Saint John of Jerusalem in October 1151 is based on the erroneous interpretation of a concession of fiefs made by King Roger to the Hospitaller Order of Saint John of Jerusalem in 1151, mentioned by Filadelfo Mugnos (1607-1675).⁵⁹ In actual fact, the document

⁵² The *Cronica Sicilie*, drafted between 1338 and 1348, states that eleven years after landing on the island (1060 or 1061) Robert Guiscard and Great Count Roger built – as their personal abode and fortress – *hospicia magna et mansiones*, in stone and mortar, beyond the Emir/Admiral’s river (*flumen Ammirati*), i.e., the Oreto, towards the sea. In the chronicler’s time, this complex of solid brick buildings was almost completely dilapidated and was known as San Giovanni dei Lebbrosi. In other words, this complex was regarded as the place where the two brothers had resided while laying siege to the city of Palermo: see *Cronaca della Sicilia* 2013: 21–22. Considering that Geoffrey, a son of Roger I, died of leprosy (*morbis elephantinus*) in 1120, it is difficult not to assume that the hospital was also founded *pro anima* of the sovereign’s half-brother. See Malaterra 1927: lib. IV, § 14, 18; D’Angelo 2007: 173, 175. A late local tradition has it that Adelasia, Roger II’s mother and hapless Queen of Jerusalem (1112-17), suffered from leprosy and was healed at the Acquasanta spring at Patti, associated with the veneration of St Febronia, just before her death in that city (18 April 1118): see Pisciotta jr. 1994: 9, 49; Sciacca 2004: 123; Fasolo 2013-14: I, 148 n. 809 and II, 5, 9 n. 15.

⁵³ On the *ribāṭ*-s on the Palermo coast, see Ibn Ḥawqal 1938-39: I, 120; French trans.: Ibn Ḥawqal 2001: I, 120; Amari 1933-39: III, 119–120; Mandalà 2019. For a more general overview on *ribāṭ*-s, *funduq*-s and hospitals in medieval Islam, see, respectively, Kennedy 2011; Constable 2003; Ragab 2015; Dols 1979; Dols 1983. In particular, both in North Africa (al-Qayrawān, 9th c.) and in al-Andalus (Cordoba, 8th-9th c.) there is evidence of leper hospitals located outside city walls: see Hamarneh 1962: 375; Dols 1983: 907–908, 914; Mazzoli-Guintard 1998: 322–323.

⁵⁴ For a succinct overview, see Agrimi and Crisciani 1993: 250.

⁵⁵ Moore 1987: 61 and *passim*; on Muḥammad and Muslims as heretics and pagans, see Tolan 2002; e.g.: *Unde verius heretici quam Sarraceni nominari deberent, sed usus falsi nominis prevaluit*, Oliverus 1894: 204.

⁵⁶ Ibn Jubayr 1907: 329; Italian trans. in Ibn Jubayr 1995: 230.

⁵⁷ Huillard-Bréholles 1852-61: I/2, 590–591; Lo Cascio 2011: no. 30, 36. The document was also confirmed in Taranto in April 1221: see Huillard-Bréholles 1852-61: II/1, 165–166.

⁵⁸ Miller and Nesbitt 2014: 147.

⁵⁹ ‘Un privilegio di concessione di feudi, fatta dal Re Ruggero alla

which Mugnos is referring to is the confirmation of a donation made that same year to the Knights Templar – not the Knights Hospitaller – in the areas of Pantalica and Scordia by Geoffrey, the son of Oliverius, together with his wife Galgana, the daughter of Henry de Buby.⁶⁰ The presence of Knights of the Hospital of Saint John the Baptist in Sicily dates back to 10 October 1137, when Roger II granted the Hospital royal protection, tax exemption, the right to make use of royal land, the right to house the sick and judicial autonomy.⁶¹ However, it seems as though the privilege of 1137 offered only theoretical support to the Knights of the Hospital, and did not involve the donation of any royal property. Knightly orders only really settled in Sicily over the course of the following decade: before the 1140s, the Knights Hospitaller did not own any lands or properties on the island, even though it is most likely that they were present in Messina.⁶² Furthermore, they would appear to have become a stable presence in Palermo only in 1203, when *magnus admiratus* William Malconvenant granted them some properties in the city and two large estates in Val di Mazara.⁶³

It is quite likely that already in the Norman period the hospital of San Giovanni Battista responded to the need to segregate the sick and to exercise social control over leprosy, as was certainly to be the case later on.⁶⁴ In the context of Norman southern Italy, the renowned translator Constantine the African, active in Salerno and Montecassino in the second half of the 11th century, devoted the brief treatise *De elephancia* to the 'elephant disease', viz. leprosy. The text adopts the classification of different kinds of leprosy based on the four humours, but says nothing about its transmission. Still, it implicitly attests to a certain prevalence of – or, at any rate, interest in – this disease.⁶⁵ By contrast, Salernitan physicians believed that leprosy could be easily transmitted from one person to another *ex infectione aeris*. *Quaestiones Salernitanae*, a Salernitan work put together around 1200, states that leprosy can be caught simply by talking to a leper; the text also compares leprosy to scabies, a parasitic infection that is easily transmitted.⁶⁶

One remarkable testimony sheds light on the predominant view of leprosy and its transmission at

court.⁶⁷ Manuscript Vat. gr. 300 (f. 248 rv), an Italo-Greek codex from the time of Roger II, contains the *Ephodia tou apodemontos*, which is to say the Greek translation of the *Zād al-musāfir wa-qūt al-hādir* by Abū Ja'far Aḥmad b. Ibrāhīm Ibn al-Jazzār (d. 979-80).⁶⁸ In the chapter devoted to elephantiasis, i.e. leprosy (VII, 23),⁶⁹ we find a marginal gloss from the height of the 12th century, which has been published and carefully studied by Anna Maria Ieraci Bio.⁷⁰ This gloss – whose relevance to the topic under investigation has hitherto been overlooked – represents a Greek redaction of the *quaestio* pertaining to the connection between sexual intercourse and leprosy, which enjoyed considerable popularity in its Latin form.⁷¹ In its Greek version, the *quaestio* is posed by the 'king' himself to a physician referred to as 'Salernus' (*eis ton Esalerinon*) – probably to be identified with Master Salernus, a Salernitan physician active at the Palermo court around the mid-12th century (he was charged with poisoning in 1167) – during the illness of Robert the Constable, probably Robert of Binetto/Beneth, who was in charge of the *comestabulia* of Bari (ca. 1150).⁷² The 'king' in question, therefore, could be William I (r. 1154-1166), or possibly Roger II (r. 1130-1154). The *quaestio* begins as follows:

The king posed the following question to [Master] Salernus when constable Robert fell ill with elephantiasis. A difficult and arduous problem according to expert physicians and excellent teachers. This is the question: 'Why, when a leper has sexual intercourse with a healthy woman and another healthy man has intercourse with the same woman to which this previously happened, does the latter man fall ill with leprosy instead of the woman?' Solution to the question. And I say: 'Many experts have stated that those who have this disease contaminate the air we breathe and that we mustn't have them sit near us up[wind] when the wind is blowing. If they persistently advise us to avoid this ample space, why are we not allowed to avoid a narrow and shared space, inhaling and exhaling mouth to mouth, and nose to nose?'...⁷³

The doctrine underlying the *quaestio* is that infected air is a cause of contagion and disease, a theory widely attested to in Hippocratic treatises, further elucidated by Galen in relation to 'miasmas', and taken up by numerous later authors. In this specific case, the Greek *quaestio* produced by the Norman court states that lepers

sacra Religione Gerosolimitana nel 1151', Mugnos 1655: 190; Caspar 1999: reg. 231, 536–537; followed (tacitly) by Brühl 1987: 312.

⁶⁰ Petracca 2006: II, 497–498 and 606–607; for Enrico de Bugli's donation (July 1146), see Petracca: II, 496–497, 606.

⁶¹ Document published in Pirro 1733: II, 931–932; Brühl 1983: 139–141.

⁶² Toomaspoeg 2003: 51–52.

⁶³ Toomaspoeg 2003: 60.

⁶⁴ On the segregation and social control of lepers, see the overview in Agrimi and Crisciani 1993: 249–252; on San Giovanni dei Lebbrosi between the 13th and 14th centuries, see La Mantia 1900: no. 81, 218; Sciascia 2006: 37.

⁶⁵ *Constantini Liber de Elephancia* in Martín Ferreira 1996.

⁶⁶ *The Prose Salernitan Questions* 1979: 98.

⁶⁷ As regards the concept of contagion and infection, I refer to Nutton 1983.

⁶⁸ On the manuscript tradition of this work, see Miguet 2017.

⁶⁹ On leprosy in Ibn al-Jazzār's Arabic text (l. VII, 17–18), see Ibn al-Jazzār 2015: 104–108 (*judhām*), 108–113 (*baraṣ* and *bahaq*).

⁷⁰ Ieraci Bio 2007; for an edition and translation of the text, see Ieraci Bio 2007: 271–274.

⁷¹ Ieraci Bio 2007: 267–269.

⁷² Ieraci Bio 2007: 252–255; on Master Salernus, see Pseudo Falcando 2014: 246–251; Ausécache 2008.

⁷³ Ieraci Bio 2007: 271 (Greek text), 273 (Italian trans.).

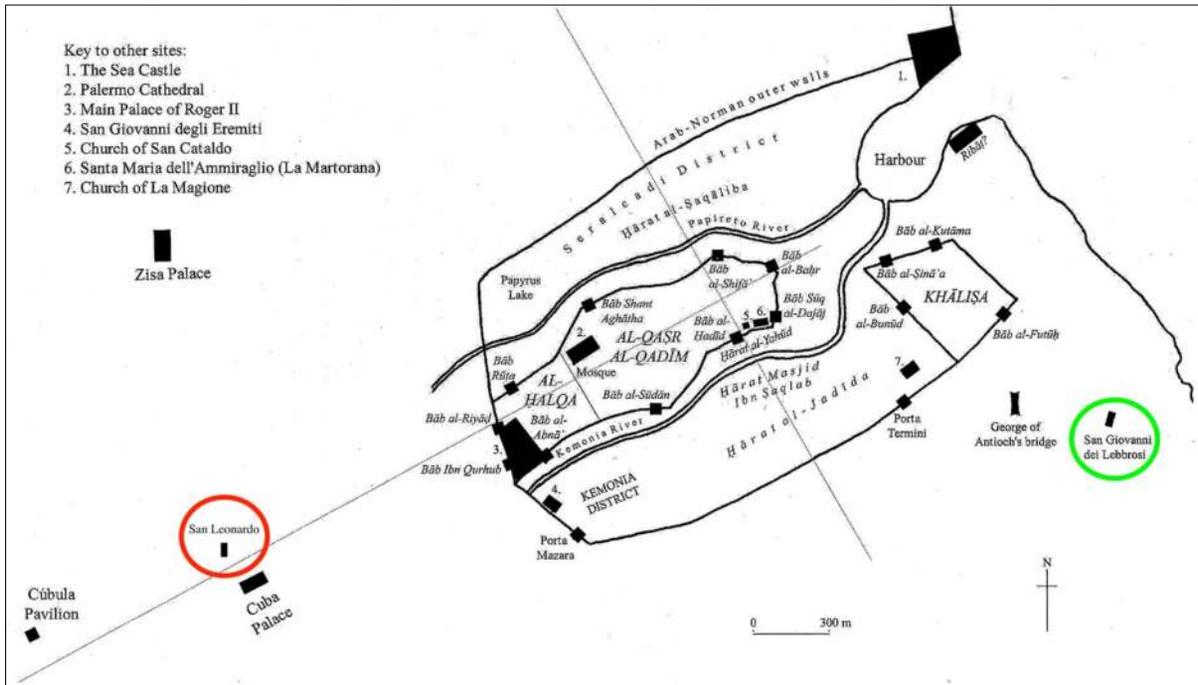


Figure 8 – Map of Palermo in the Norman period showing the location of the hospitals of San Giovanni dei Lebbrosi and of San Leonardo (adapted from Metcalfe 2009: Map 4)

contaminate the air through their breath that healthy people inhale, which suggests that the latter should not keep close to lepers, and especially sit downwind from them ‘when the wind is blowing’ (*anemou pneuontos*); the close proximity of mouths and noses is particularly lethal. This hypothesis is expounded by offering a range of explanations for the link between sexual intercourse and leprosy.⁷⁴ The *quaestio* also provides historical insight as to the medical and philosophical thought underlying the establishment of the hospital of San Giovanni dei Lebbrosi. As already noted, the complex is located southeast of Palermo; hence, with respect to the winds in the fourth quadrant, which blow quite regularly from the north and the west, the hospital finds itself downwind from the city: implicitly, the position recommended by the *quaestio* to avoid the transmission of the disease. The same topographical logic could also lie behind William I’s wish to transfer the lepers from the hospital of San Leonardo to San Giovanni: for the San Leonardo hospital was also located *extra moenia*, but to the west/southwest of the city and of the Royal Palace, which is to say upwind from the city – a location which did not agree with the medical theories circulating at court (fig. 8). The transfer of the lepers – potentially ‘contagious’ and hence unwelcome neighbours – must also have been motivated by the desire, during the reigns of William I and William II (r. 1166–1189), to create a royal park filled with grand buildings that might serve as dwellings for the court

and the sovereign himself (Zisa, Cuba, Cuba soprana),⁷⁵ and which in some cases were located very close to the San Leonardo hospital (note, for instance, the close proximity of the church of San Leonardo and the Cuba in the planimetric sketch by G. F. Ingrassia, 1576;⁷⁶ fig. 9).

In any case, it must be noted that, in the Norman-Swabian context, considerable attention was paid to the problem of air pollution and hence to the spread of diseases, as is shown by the Constitutions of Melfi (1231) and by the almost coeval laws in Palermo.⁷⁷ The city’s *Consuetudines* prescribe the segregation of lepers outside ‘the camp’, in compliance with the biblical text of Leviticus, lest they corrupt the air and pose a danger to healthy people – an assumption which may be associated with the medical reasoning behind the abovementioned *quaestio* (*Quo colligitur manifeste huiusmodi egritudine maculatos debere ad aliis hominibus segregari, ne aeris corruptio inducatur, et sanis hominibus preiudicium generetur*).⁷⁸

⁷⁵ Di Liberto 2013: 156–165; Maurici 2016: 122–129.

⁷⁶ Already Villabianca stressed the ‘Saracen origins’ of the San Leonardo church, ‘which it carries in its framework’ (‘origine saracenică, che porta ella nella sua fabbrica’) – a reference, presumably, to the ‘Arab-Norman’ style of the exterior: see Villabianca (F. M. Emanuele e Gaetani) 1873: 386; in Ingrassia’s planimetric sketch, we see a domed belfry adjacent to the building (whose position seems to mirror that of San Giovanni degli Eremiti): see Ingrassia 2005: 216–217, no. 24.

⁷⁷ *Friderici II. Liber Augustalis* 2003: lib. III, § 48 (*De conservandis aeris*); English trans. *Liber augustalis* 1971: 132; Powell 1978: 89–92.

⁷⁸ La Mantia 1900: no. 81, 218.

⁷⁴ Ieraci Bio 2007: 256–259.



Figure 9 – Planimetric sketch by G. F. Ingrassia, *Informatione del pestifero et contagioso morbo* (1576); at no. 24, “The Church of San Lunardo, opposite the [house of] convalescent women” (“La Chiesa di San Lunardo, di rimpetto alle donne convalescenti”)

Furthermore, we must bear in mind that, in the 12th century, the Latin translation of Avicenna’s *Canon* reinforced the idea that leprosy was highly contagious and warned readers not to approach lepers. Avicenna emphasised the danger of transmission, although certain Muslim authors condemned the very idea of contagion, insofar as it violated the principle of divine predestination as regards man’s fate.⁷⁹

⁷⁹ Avicenna 1507: f. 443; Miller and Nesbitt 2014: 110–111.

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Author contributions

The two authors have shared ideas and tasks, including the writing of the paper; academic responsibility lies with Giuseppe Mandalà for the ‘San Giovanni dei Lebbrosi in the written sources...’ and ‘The hospital of San Giovanni Battista...’ sections, and with María de los Ángeles Utrero Agudo for the ‘San Giovanni dei Lebbrosi in archaeological...’, ‘Archaeological analysis...’ and ‘Archaeological interpretation...’ sections.

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Chapter 3

The Process of the Creation and Decline of the Local Religious and Economic Centres of Medieval Sicily: a Case Study of the Santa Maria di Campogrosso Monastery

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In 2015-2021, the research team of the Centre for Late Antique and Early Medieval Studies of the Institute of Archaeology and Ethnology of the Polish Academy of Sciences, in cooperation with the Soprintendenza per i Beni Culturali ed Ambientali of Palermo, conducted excavations at the ruins of the church of Santa Maria di Campogrosso (also known as San Michele del Golfo) in Altavilla Milicia, near Palermo, in Sicily (fig. 1). The Polish National Science Centre funded the excavations under project 2017/25/B/HS3/01699.

This church, because of information in written sources, is referred to as a Norman church and assigned to the Norman period in the history of Sicily.

Norman rulers conquering Sicily at the end of the 11th century found a significant cultural mosaic in this area. From the religious point of view, they were dealing not only with an Islamic (mostly Muslim) and Christian (mainly Greek) population, but also with the Jewish community. Along with the Normans, the Latin population came mostly from the northern regions of today's Italy.¹

The image of tolerance prevailing in the Sicilian court of the Norman rulers, sometimes presented in the literature, could have been shaped differently at the local level. Was the relationship between the invaders from the north and peoples of Sicily based mainly on the use of violence or, instead, on some kind of consensus?² An analysis of both the structure of the church ruins, the adjacent cemetery and the monastery area, as well as material culture, which can reflect the nature of contacts between the invaders and the local population, may bring us closer to answering these questions.

The implementation of a leading research topic involves solving many questions related to the nature of a given archaeological site. The main problem is the lack of agreement on the time when a church or monastery was built and fell.

We find information about the beginnings of the church and monastery of Santa Maria di Campogrosso only in a few written records. According to the 16th-century historian Tommaso Fazello, the church was built after the Normans defeated the Saracens in the battle of Misilmeri,³ but before the capture of Palermo, hence between 1068 and 1072.⁴ The initiator of the construction was said to be Count Roger. Another Sicilian chronicler, Rocco Pirro, assigned the monastery foundation to Roger I's brother, Robert Guiscard.⁵

Further information is contained in a document from 1134 regarding the area which was granted to the monastery by the King of Sicily, Roger II (1130 - 1154), to create a monastery grange.⁶ The area, which stretched west of the San Michele River to Misilmeri, was gradually developed and expanded after 1134. In later years, this caused a conflict between the monastery of Santa Maria di Campogrosso and the neighbouring monastery of Santa Maria dell'Ammiraglio. The dispute was resolved in 1173.⁷ Monks from the monastery of Santa Maria di Campogrosso had to leave part of the developed areas. The second half of the 12th century (1170-1176) was a time of prosperity for the monastery, which at that time paid the diocese of Agrigento the recognitional rent from the church of Santa Maria di Revenosa (Ravanusa).⁸ Under the rule of the Angevins, in the second half of the 13th century, the period of decline of the Italo-Greek monasteries began, of which a significant number

³ Malaterra 1927: *lib.* II, § 41.

⁴ Fazello 1558: 192-193.

⁵ Pirro 1733: I, 292.

⁶ Mongitore 1734: 20-21.

⁷ Garofalo 1835: 33-34.

⁸ White 1938: 425.

¹ Abulafia 2004; Enzensberger 2000; Houben 1996; Johns 1995; Metcalfe 2002; Takayama 1993: 25-47; Tramontana 1977; Tramontana 1986; von Falkenhausen 1987; von Falkenhausen 2002.

² Metcalfe 2003; von Falkenhausen 1979.

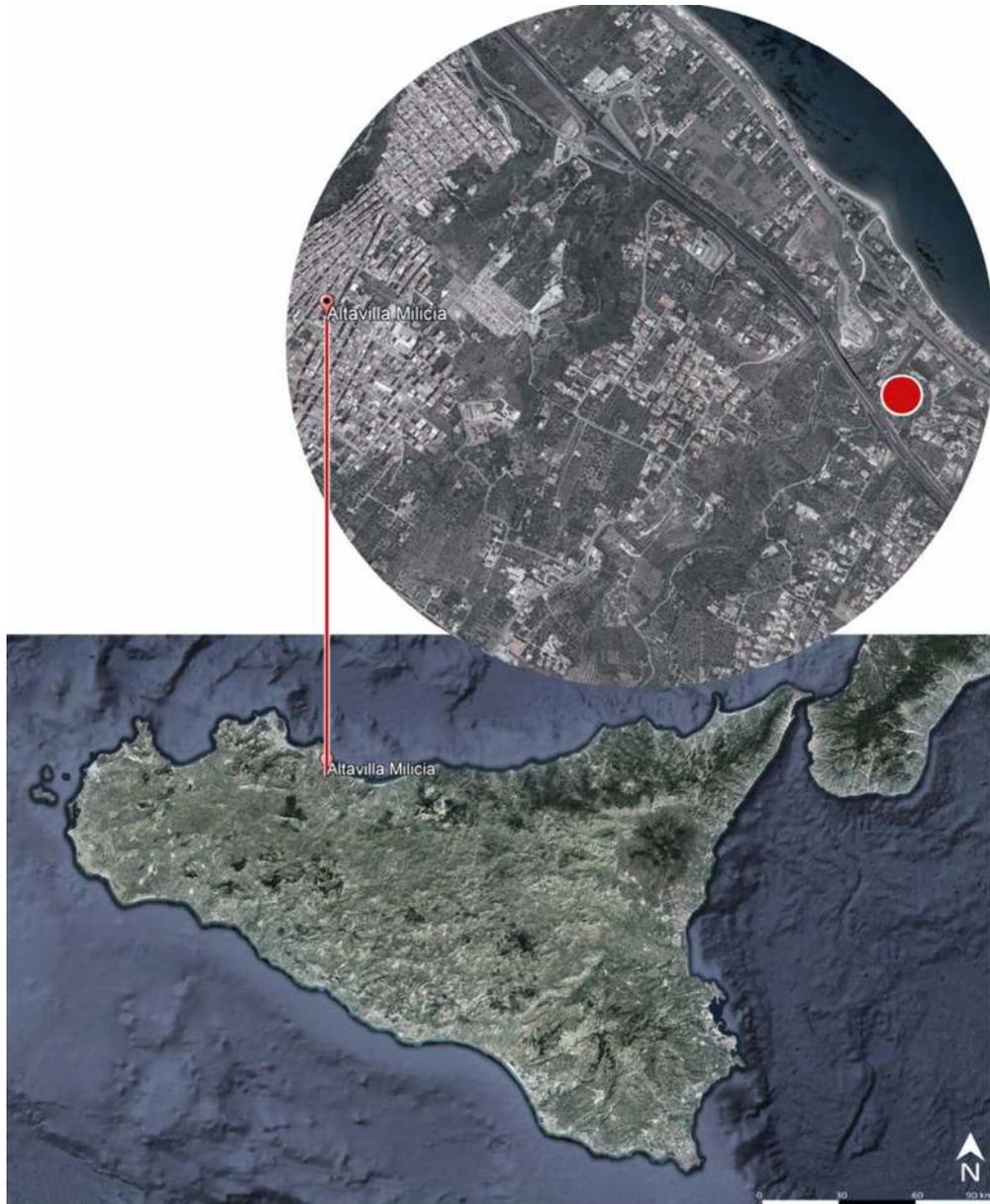


Figure 1 – Santa Maria di Campogrosso. Location of the site

were impoverished, deprived of material support, i.e., due to the strong Latinisation of the church in Sicily.⁹ The crisis also affected the monastery of Santa Maria di Campogrosso. Its fall could also have been caused by fights between the Angevins and Aragonian forces after the so-called Sicilian Vespers. At that time, the area near the San Michele River was looted. At the end of the 13th century, all movable and immovable goods of the abbey were taken over by the Archbishop of Palermo.¹⁰ The fate of the monastery and the church in the 14th and 15th centuries is unknown. A defensive structure

probably functioned nearby (in 1354 – *fortellicium Sancti Michaelis de Campogrosso*,¹¹ in 1418 – *castello*).¹²

In his monumental work from 1558, Tommaso Fazello described the church as a ruin serving as a shelter for pirates, robbers, or accidental wanderers.¹³ The 16th-century accounts of royal inspections of the former monastery area (1542¹⁴; 1583¹⁵) confirm that the church of Santa Maria di Campogrosso did not play a sacred role

⁹ Scaduto 1982: 16.

¹⁰ Mongitore 1734: 138.

¹¹ Pesez 1984: I, 84.

¹² Bresc and D'Angelo 1972.

¹³ Fazello 1558: 192.

¹⁴ Brancato, Brancato and Scammacca 2011: 25.

¹⁵ Oliva 2008: 40–41.



Figure 2 – Location of archaeological trenches (no. 1-19) from 2015-2019

for long. Following the will of the inspector Francesco del Pozzo, in 1583, the final decision was made on the desacralization and partial demolition of the church.¹⁶ Archaeological research indicates the massive scale of the demolition work. The remains of the floors were removed to the level of the native rock. The upper part of the walls was demolished.

As a result of eleventh excavation campaigns from 2015-2021, data were obtained which allow us to address the issues formulated at the beginning of the article (fig. 2).

During these works, previously unknown elements of the church's structure and remains of the churchyard were found (fig. 3).

The currently perceptible church walls placed directly on the rock allowed us to recognise it as having a three-apse, single-nave structure. The analysis of mason's marks preserved on stone blocks of the southern wall confirms the hypothesis that we are dealing with a single-phase structure. The similarity of the mason's marks from Campogrosso to the ones discovered on the walls of the cathedral in Cefalú allowed V. Zorić to hypothesise the simultaneous construction of both

buildings, which would have taken place in the first half of the 12th century.¹⁷ According to some historians of architecture, some features of the church of Santa Maria di Campogrosso point to a later, perhaps even 13th-century, origin.¹⁸ However, this is rather unlikely because, in the second half of the 13th century, the monastery complex was already in the phase of decline.

Although archaeological works enabled the discovery of new information about the church plan, we still have few premises for the reconstruction of the upper part of the building. The lack of stone elements of a barrel vault or a cross vault in the debris layers preserved inside the church suggests that the nave was covered with a wooden ceiling, unlike the chancel part and transept. In the southern part of the transept undoubtedly existed a cross vault locked with a keystone, which was found in 2017¹⁹ (fig. 4).

Finding remains of the pillar supporting the chancel arch indicates the possibility of the existence of a tower at the intersection of the nave and transept. An important discovery was made by unearthing a narrow passage

¹⁶ De Ciochis 1836: 143.

¹⁷ Zorić 1988.

¹⁸ Di Stefano 1979: 30-31; Guiotto 1955: 3; Schwarz 1942-44.

¹⁹ The second keystone was published in Guiotto 1955: 8, fig. 5.

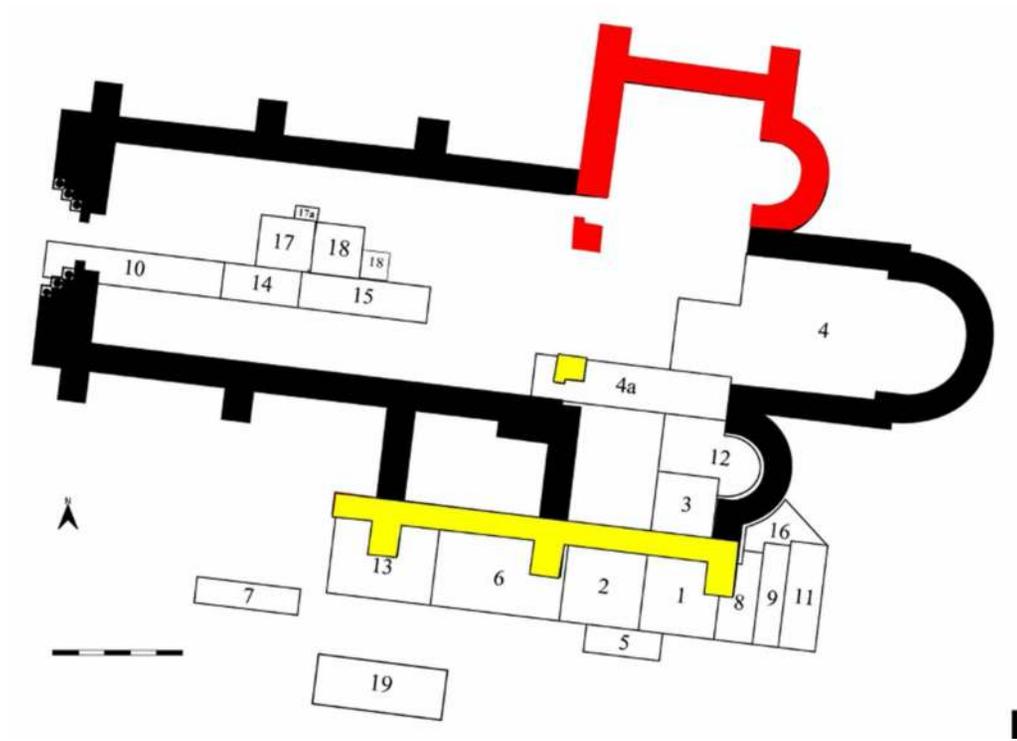


Figure 3 – Santa Maria di Campogrosso. The church plan. Legend: black - parts of walls known before the beginning of excavations; yellow - parts of walls discovered during archaeological works; red - hypothetical reconstruction



Figure 4 – Vault keystone *in situ* (photograph by Sławomir Moździoch)



Figure 5 – View of the passage between the pillar and the southern wall of the church (photograph by Sławomir Moździoch)

between that pillar and the southern wall connecting the nave with the transept (fig. 5). This fact allows us to include the church of Santa Maria di Campogrosso in a small group of Romanesque churches known in France as *l'églises du passage* (German: *Passagenkirchen*) (fig. 6). This type of church, mainly associated with monasteries, was built in France in the 11th and 12th centuries.²⁰ Close analogies include churches from France, e.g., the church in Saint-Céneri-le-Gérei in Normandy or Saint-Léon-sur-Vézère. In the architecture of the church of Santa Maria di Campogrosso, there are no apparent traces of the Byzantine or Islamic influences that are visible in many other churches of Sicily and Calabria.²¹

Valuable information was also provided by research in 2015–2021 carried out in the area of the churchyard,

²⁰ Konerding 1976; Mallet 1982.

²¹ Although churches with a similar plan are also found in southern Italy, where they are usually dated to the second half of the 11th or 12th century (San Filippo di Fragalà, San Giovanni Vecchio di Stilo, San Nicolò in Sciacca, Santa Maria di Terreti, San Giovanni Theristis), they also have features that clearly distinguish them.

where 42 burials were discovered, including 35 wholly preserved graves (fig. 7). In three cases, children's skeletons were covered with roof tiles, which allows them to be included in the type of grave called a *cappucina*, which has been present in the Mediterranean since antiquity.

The significant social position of the deceased may be evidenced by the forms of some of the unearthened graves. Closest to the southern wall, a monumental stone structure (grave No. 4) – (fig. 8) and an anthropomorphic stone grave (grave No. 9), the so-called *à logette* grave,²² were discovered (fig. 9). Most of the preserved skeletons were deposited in an east-west orientation, with the head on the west side, according to the Christian rite.

During the excavation works carried out between 2015 and 2021, 116 coins of small face value, minted in bronze or billon (i.e., base silver), were found. The oldest coin is dated to the first half of the 12th century, while the most recent is from the 16th–17th century.²³

The oldest coins were discovered in grave No. 7, located at the southern wall of the church (fig. 10). A pendant in the form of two 12th-century denari from the Continent (*denaro provisino*, *denaro enriciano*) was discovered on an infant's chest. Denari from Lucca and Provins were used for trading at fairs or markets, acting as a local coin in Sicily and southern Italy until the 13th century.²⁴

In the layers of the cemetery, mainly coins from the 12th and 13th centuries, i.e., from the period of the monastery operation, were found.

In light of the dating of the human bone samples, the end of the cemetery's operation coincided with the liquidation of the monastery at the end of the 13th century (fig. 11).

The beginnings of its use, despite previous assumptions, may go back to the time before the construction of the currently existing church and be associated with an earlier sacred building, the traces of which were recently discovered in the form of numerous post-holes (fig. 12). Comparison of the chronology of coins with the dating of bones from graves as well as mortar from the church wall (fig. 13) suggests that the main works related to the construction of the church were carried out in the third quarter of the 12th century and continued to the end of this century. Based on the available data, it is impossible to exclude an earlier moment of the construction's

²² Anthropomorphic graves, also called the *à logette* type, were already known in antiquity, but often appeared in the monastery cemeteries of Western Europe in the period from the 9th to the 12th century.

²³ Moździoch: in press.

²⁴ Travaini 1999: 219.

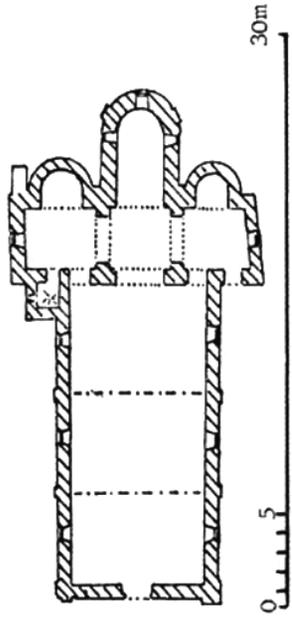


Fig. 1. — SAINT-QUENTIN-LÈS-BEAUREPAIRE (M.-et-L.). Plan de l'église.

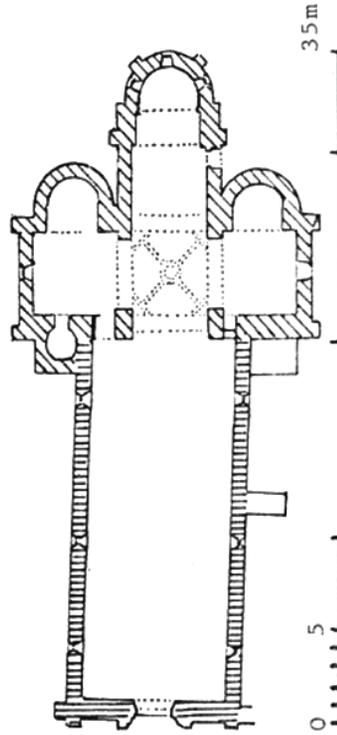


Fig. 2. — GOUIS (M.-et-L.). Plan de l'église.

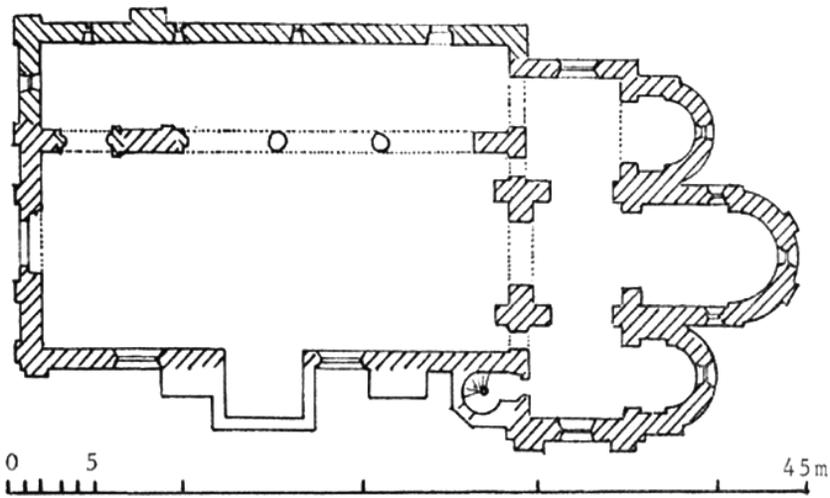


Fig. 3. — CHEMILLÉ (M.-et-L.). Église Notre-Dame, plan.

Figure 6 – Examples of churches with passages from France (from Mallet 1982)

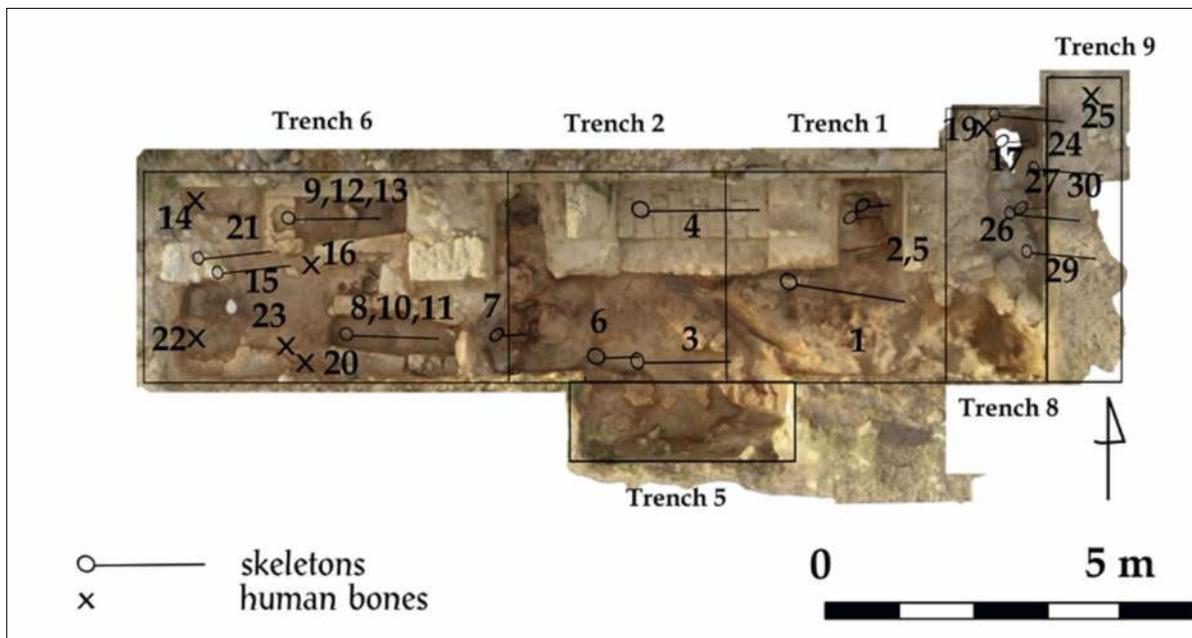


Figure 7 – Excavations in the church cemetery (2015-2018)



Figure 8 – Santa Maria di Campogrosso, Tomb No 4 (photographs by Anna Kubicka)



Figure 9 – Santa Maria di Campogrosso, Tomb No 9 (photograph by Magdalena Przysiężna-Pizarska)

commencement; however, it is possible to reject the hypotheses placing this moment in the 13th century.²⁵

We know little about the monastery buildings mentioned by Fazello. Basilian monasteries were built on the initiative of the Normans from the second half

of the 11th century. The concentration of Norman foundations can be observed particularly in the region of Val Demone (northeastern part of Sicily) and on the northern coast of Val di Mazara. Lynn Townsend White Jr., an American historian, identified 68 Basilian monasteries in Sicily.²⁶ Italo-Greek monasteries of that

²⁵ Krąpiec, Moździoch and Moździoch 2020.

²⁶ White 1938: 42.



Figure 10 – Santa Maria di Campogrosso, Tomb No. 7. 1. The grave before the removal of the tile; 2 - after the removal of the tile; 3 - coins from the pendant on the child’s chest (photographs by Magdalena Przysiężna-Pizarska and Ewa Moździoch)

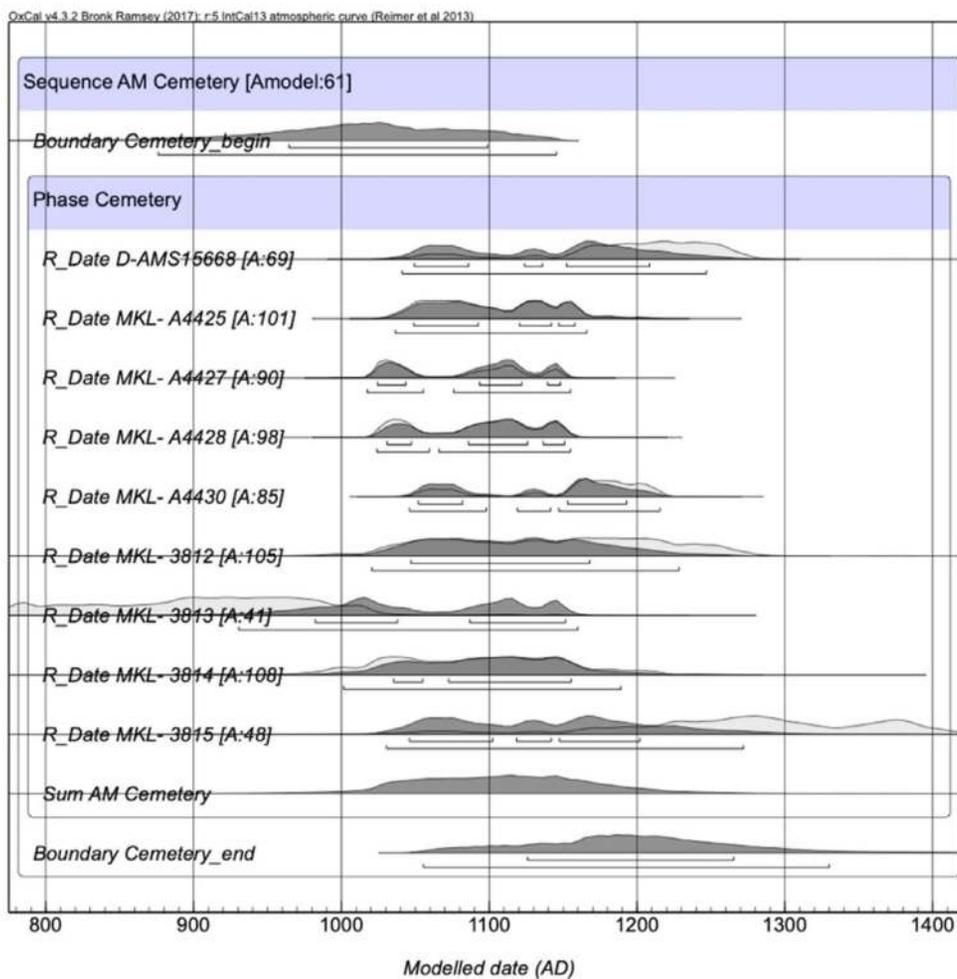


Figure 11 – Radiocarbon dating of bone samples from the cemetery (after Krapiec, Moździoch, Moździoch 2020)

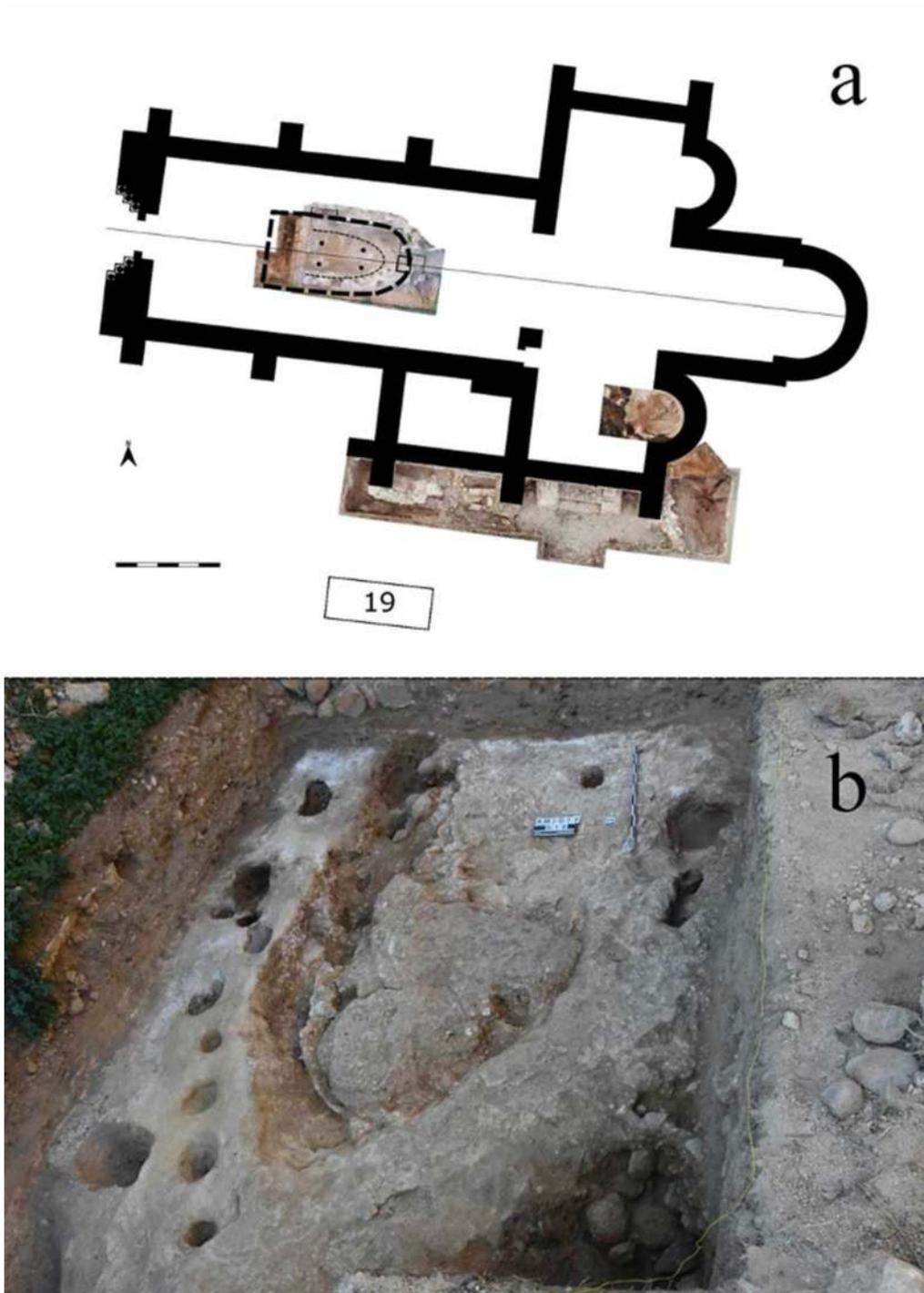


Figure 12 – The postholes of an earlier timber church. 1 – An attempt to reconstruct the outline of the building;
2 - View of the remains of the structure from the east side

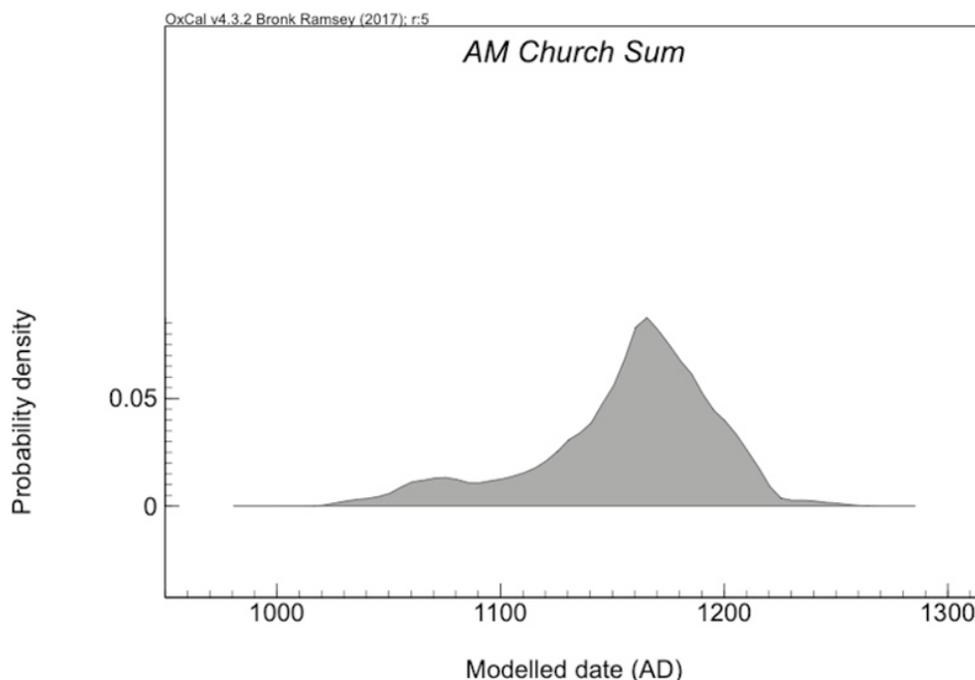


Figure 13 – Radiocarbon dating of mortar samples from the church walls
(after Krąpiec, Moździoch, Moździoch 2020)

time did not have a spatial structure determined by the rule. Amongst several dozen ‘Basilian’ monasteries founded in Sicily, mainly in its eastern part, none in shape from the Norman period has survived.²⁷ Landscape changes, the progression of urbanisation, and the re-use of construction materials from older buildings make research difficult.

Non-invasive research carried out using several methods showed the existence of longitudinal strips of measurement anomalies, with a regular arrangement, occurring west and south of the church building which could reflect the course of the remains of the walls of the former monastery (fig. 14).

At this stage of the research, one cannot say too much about the social and intercultural relations of the local population. Thanks to the discoveries in the cemetery, we can only conclude that the deceased were buried in the Christian rite, without grave goods, using the typical arrangement of bodies in the east-west orientation with the head on the west side. Some of the deceased had their heads fixed with stones to look east towards the Holy Land. The dimensions of most of the discovered skeletons indicate that they were tall individuals, and therefore most likely came from outside Sicily, perhaps along with the wave of Latin people, the so-called Lombards.²⁸

The inflow of people from the Continent meant that, in the mid-12th century, coins such as denari from Champagne and Lucca appear here. From the beginning of the 12th century, Christian symbolism dominated on coins as a result of the consistent colonisation of Sicily by a Christian, mainly Latin-speaking population. The old Greek-speaking population was also Latinising, which was one of the reasons for the fall of Basilian monasteries.²⁹ A fragment of grave stele with an inscription in the Kufic style is associated with the Muslim population (fig. 15). It could have come from an earlier Islamic cemetery destroyed to make way for Christian graves. Still, it could also have been an element of an Islamic burial made in a cemetery shared with Christians. In the initial period of the church’s operation, Norman coins with Arabic inscriptions continued to circulate (William I and William II).

According to some researchers, there was an Islamic settlement, *Alyyel* (< Ar. *‘Ayn al-liyān*), located near the San Michele River which became the economic base of the monastery from the beginning of its operation. However, these hypotheses are difficult to prove because this settlement was mentioned only in one document from 1179 (Palermo, Archivio storico diocesano, 25), according to which William II granted it to a hospital, probably located at the monastery of Santa Maria di Campogrosso.³⁰ Unfortunately, the Islamic

²⁷ Giunta 1983.

²⁸ Di Salvo 2020.

²⁹ Reina 2016: 16–17.

³⁰ Caracausi 1993: I, 154.



Figure 14 – The traces of the walls of the monastery in the light of non-invasive research (by Piotr Wroniecki).



Figure 15 – Santa Maria di Campogrosso.
A fragment of a stone with a Kufic inscription
(photograph by Ewa Moździoch).

settlements in Sicily are usually known only from documents because they generally lack archaeological verification. There is no certainty as to the location of this settlement, as no material traces of it were found near the church.

Archaeological research has led not only to the discovery of an older church building but also made it possible to determine that the more recent church whose walls survive today was constructed during the fourth quarter of the 12th century. What caused the abandonment of the old building? Do the traces of fire reveal a conflict with the local community? In the 1260s in Sicily, there were clashes between indigenous people and settlers who came from the Continent. Perhaps they also affected the area belonging to the monastery. The destruction of the monastery may have necessitated its reconstruction.

Or, on the contrary, did the economic development of the monastery in the second half of the 12th century favour new construction investments? At the moment, it is impossible to answer these questions with certainty. The fact is that, at the end of the 12th century, a new building was erected in place of the former church.

The new church was dedicated to St. Michael the Archangel.³¹

The very fact of building such a significant church in a rural area can be explained by the desire to demonstrate the power of both the new Christian rulers and their religion. No less important was the intention to control the communication route connecting the east with the west of the island. During the church's construction, the relations between the Norman victors and the conquered indigenous population remained tense, as shown by the fact that the building was given a defensive character, with the narrow main entrance to the church, as well as the few narrow windows located relatively high. The church and monastery were a centre for spreading Christianity in an area inhabited by the Muslim population. Its fall at the end of the 13th century was probably the result of Latinisation of the Church in the last years of the reign of Norman rulers. This process continued in the time of the Hohenstaufen.³² The final blow to the organisation of the Greek rite church in Sicily was inflicted by the rule of the Angevin and Aragon dynasties.³³

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³¹ Scaduto 1982: 16.

³² Tramontana 1986: 181–183.

³³ Scaduto 1982: 287.

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Chapter 4

A Pattern of Changes in Southern Sicily: Agrigento and its Hinterland between the Byzantine and Norman Periods

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The area, currently included in the province of Agrigento, between the rivers Belice and Salso, extends for 3052.59 square kilometres in the south-central part of Sicily. As it extends from the sandy coastline to the Sicani mountains, with their peaks over 1500 m, its landscape is varied as is its geolithological structure and agricultural land use, predominantly utilised for the cultivation of wheat and tree crops with little water requirements. The valleys of rivers, short and with a torrential regime, are the main ways that the coast is connected with the hilly inland, conditioning the settlement pattern.

Since its foundation in 580 BC by settlers coming from Gela, Akragas, then called *Agrigentum* after the Roman conquest, was the main urban settlement in this area. For the history of the city and its hinterland the relationship with its port, the *Emporion*, near which the earliest necropolis is located was very important; it worked at least until the Byzantine age. For the activity of the harbour of Agrigento, an important role was always played by its connection with Carthage: Diodorus of Sicily, in fact, recalls that, already in the classical era, there was a massive export of olive oil to the Tunisian city (Bibliot. 13, 81). From the imperial age, the close relationship with the Tunisian coast is well-documented by the fairly large quantity of African tableware and amphorae found in the urban area and in the hinterland, dating until about the middle of the 7th century.¹ The fall in commercial contacts with Carthage after the Arab conquest was probably a major reason for the harbour ceasing to work in the late 7th century.²

During the last 20 years, some field survey projects have been realised³ that have allowed us to reconstruct the settlement history of a large part of this territory; thanks

to POR 2000-2006 programmes (Cignana, Vito Soldano, Saraceno)⁴ and as a result of protection activities (Verdura, Carabollace, Canalicchio di Calamonaci, Colmitella),⁵ many archaeological excavations in settlements of late antiquity and the Byzantine age have been done that have significantly enriched our knowledge regarding the transitional centuries in our territory; furthermore, protection measures performed in the outskirts of San Leone have given new and significant information on the *Emporion* area, the port suburb by the Akragas River mouth, which particularly flourished during late-antiquity.⁶ Based on the results of this research, I will attempt to make an initial and provisional overall evaluation about settlement pattern dynamics between late antiquity and the Norman age.

The latest research on the Sicilian early Middle Ages have highlighted how, in the transition between antiquity and the Middle Ages, the differences among the individual areas of the island deepened and arose more clearly.⁷ These differences related to time and modes of transition, to economic and cultural poles of attraction and to the level of openness to the Mediterranean context. As a result, each phenomenon needs to be analysed on a territorial level, detecting the specificities of each geographical and cultural area, while referring to contacts, connections, interference and exchanges on a regional and Mediterranean level. The focus of this paper is on rural settlement; however, where it is possible, we will attempt to compare what happened in the countryside with certain phenomena occurring in the urban centre: in fact, today, new data about the city of Agrigento are available which, even though incomplete, highlight the last phases of occupation of the Valley of the Temples, the southern

¹ Caminnci, Cucchiara and Presti 2016: 65. On African imports in Agrigento and its hinterland, see Malfitana and Bonifay 2016: 142–190.

² Caminnci, Cucchiara and Presti 2016: 67.

³ Wilson 1980–81; Di Bella and Santagati 1998; Rizzo 2004; Burgio 2013; Rizzo, Danile and Zambito 2014; Toscano Raffa 2017; Klug 2018.

⁴ Castellana and McConnell 1990; Rizzo 2014; Rizzo and Zambito 2014; Rizzo and Zambito 2016; Rizzo and Zambito 2012.

⁵ Parelo, Amico and D'Angelo 2010; Parelo, Amico, Giannici and Giarrusso 2014; Parelo and Amico 2015; Caminnci and Franco 2012; Caminnci 2014.

⁶ Caminnci, Cucchiara and Presti 2016; Caminnci and Cucchiara 2018; Caminnci and Rizzo 2018.

⁷ Arcifa 2010.



Figure 1 – The coastal sites of Carabollace and Verdura

portion of the city which had been the beating heart of civil and religious life of the ancient centre.

Late Antiquity

The 5th century was an important phase in the re-organization of rural settlement patterns: recent excavations and surveys confirm what previous

survey campaigns on the hinterland had highlighted, identifying, from the end of the 4th century and into the 5th, a set of changes that formed a new pattern of settlement, made of an intensive occupation of agricultural land with the spread of rural villages.⁸ This trend is recognizable both in the areas closest

⁸ Rizzo 2004: 151–153.

to the coast (Cignana district, Montagna di Licata)⁹ and in the hilly hinterland, far from the sea (Monti Sicani).¹⁰ Settlements developed in areas that were still occupied by villas of the early and middle imperial age (Cignana, Saraceno, and also many sites identified by archaeological surveys, such as Margio Canneddaro, Mortilli, Viticchié in the Cignana district),¹¹ on farms (Campanaio, near Montallegro),¹² in quasi-urban settlements, the so called ‘agro-towns’, such as Vito Soldano, and in previously uninhabited sites (Canalicchio di Calamonaci, for example,¹³ as well as several settlements identified by survey projects carried out in the Eraclea Minoa hinterland and in the basin of Platani River). At the same time and, I think, in close connection with the spread of rural villages, we observe the development of a network of small ports near the mouth of some small rivers, connecting the coastal area with the agricultural inland.¹⁴ Thanks to the excavations carried out in the sites of Verdura and Carabollace (fig. 1), we know two of these coastal settlements, whose topographical position, only a few metres from the sea, suggests their function as harbours.

The two sites are similar with regard to their topographical collocation, that is at the mouth of the Verdura and Carabollace torrents, which served as important communication routes to the hilly inland area. These settlements, which functioned as terminals for inland rural products *deportatio ad aquam*, attest to how the agricultural development of this territory in the 5th century was focused on exports. It is possible that the development of these settlements was connected to the expansion of free commerce, which would have been the reason for the intensive exploitation of the island countryside in those times.¹⁵ They developed during a particularly active phase of the harbour suburb of Agrigento, the ancient *Emporion*, based on recent archaeological research.¹⁶

The ‘rural boom’, perceived from the settlement dynamics in the countryside, is part of a development context that involved many areas of Sicily, connected, according to scholars, to the founding of Constantinople and the consequently reinforced role of Sicily in rural trade with Rome.¹⁷ However, expressions of private wealth and luxury, such as the famous big villas in eastern Sicily, are not known in this area;¹⁸ there is

no evidence of a consistent expansion of the rural population during the 4th century, which seems to have started only between the end of the 4th and the beginning of the 5th centuries. Among the sites taken into account, only Vito Soldano experienced a significant process of monumentalization at the beginning of the 4th century (fig. 2), maybe as a result of a state intervention rather than of a private action, assuming that its identification as a *mansio* of *cursus publicus* is correct.¹⁹ It is supposed that, during the 4th century, Saraceno’s villa experienced a restructuration phase, while the excavation of the nearby Stefano quarter, where remains of a glass polychrome mosaic have been discovered, is not known in detail.²⁰

In the second half of the 5th century, we can see a critical juncture in different sites (Verdura, Saraceno, Campanaio, Castagna) due to the apparent traces of a violent and sudden destruction, while in other cases, such as Vito Soldano, there seem to be signs of a slow abandonment of monumental buildings. The coincidence of this with the time in which the southern coast of the island was destroyed by Vandal raids is certainly important; however, only in a few cases, such as Castagna, can the abandonment of settlements after these attacks be attested, while more frequently a reoccupation of these sites is registered, in addition to a reorganisation which accelerated ongoing phenomena: this is evident, for example, in Vito Soldano where, after the 5th century, the installation of kilns inside some rooms of the ancient *thermae* shows the process through which these buildings were finally deprived of their ancient function. In other cases, such as Cignana, inhabited areas only developed after the mid-5th century, after a previous abandonment of the rural villa. These settlements were composed of small houses, made with dry masonry, clay floors, multifunctional rooms and artisanal installations near domestic activity zones (fig. 3).

One fitting example is Saraceno, near the current town of Favara, where an imperial-age villa ceded its place to a rural settlement that reused the structures of the most ancient building to house artisanal activities and storage containers, *dolii* that pierced the *spicatum* floors of two contiguous rooms (fig. 4).

With regard to material culture, the territory of Agrigento shows a homogeneous distribution of transport amphorae and imported pottery, mainly from

⁹ Toscano Raffa 2017: 235.

¹⁰ Klug 2018: 84.

¹¹ Burgio 2013.

¹² Wilson 2000.

¹³ Parello and Amico 2015.

¹⁴ Caminnci 2014.

¹⁵ Vera 2005: 28–30; it has also been suggested by Michael McCormick for the African ‘beach markets’ attested to by literary and iconographic sources, see McCormick 2008: 100–103.

¹⁶ Caminnci and Rizzo, 2018: 492–493.

¹⁷ Cracco Ruggini 1980; Vera 1997–98: 37–60.

¹⁸ A general framework of known Roman mansions in Sicily in Wilson 1990, 196–214. The Roman villas known so far in the Agrigento

hinterland (*villa maritima* of Durruei, Cignana, the mansion of Saraceno) were all built in the 1st/2nd century AD.

¹⁹ La Lomia 1961: 164–165; Uggeri 2004: 261. Particularly interesting are parallels with the baths of Sofiana, built during the Constantinian age and transformed between the end of the 4th and beginning of 5th centuries, with the construction of pottery and maybe glasses kilns, La Torre 1994: 120–122.

²⁰ Castellana and McConnell 1990: 43.



Figure 2 – The baths of Vito Soldano



Figure 3 – The village of Cignana. One of the housing units

Africa but also from eastern Mediterranean workshops, between urban centres and rural settlements, until the late 6th and 7th centuries. So, even though the residential buildings in villages do not show any differentiation, rural society should not be imagined in a general state of poverty; actually, indicators of social and economic differentiation and of the existence of a wealthy class can be assumed from other contexts, mainly burials, which demonstrate the existence of a social and economic hierarchy.

Some interesting artifacts in this regard have been found inside tombs found in a funerary area dated to between the second half of the 4th and the 7th centuries near Eraclea Minoa; the burials contained several ornamental objects, particularly jewellery, which include simple bronzed bracelets and silver earrings, as well as the rich dowry of a supposed privileged grave containing gold and bronze ridge needles, an ivory pin, a bronze foil and a pair of earrings with a golden pendant and gemstones.²¹ The variety and different value of these pieces, in addition to the importance of some graves, testify to the existence of social and economic differences. It seems significant that, until now, no tomb similarly rich has been found in the city

of Agrigento, where two late antique funerary areas, the paleo-Christian cemetery of the Temples Hill²² and burials in the so-called ‘Hellenistic-Roman quarter’,²³ are known.

The rich archaeological documentation that attests to the spread of rural villages does not have a counterpart in written sources, which would be helpful for understanding their status and function and for defining a kind of hierarchy: our primary source relating to this period, Gregory the Great’s epistolary, while mentioning *habitatores massae* or *homines massae*, does not make any reference to the existence of inhabited centre²⁴ and, generally, seems to give little attention to rural settlement forms. However, Gregory’s *Epistula IX, 236*, related to the request of directing the annuity expected from spouses Veneziano and Italice *in massa quae dicitur Gelas*, testifies that in the *massae* there were rural rents for harvesting structures, in the form of fee payments or charitable oblations. According to V. Prigent, the shift of the tax burden from the *fundus* to the *massa*, and the registration of the labour force at the level of the latter, could have favoured the development

²² Bonacasa Carra 1995.

²³ Di Giuseppe 2015; Fanelli 2016.

²⁴ The term *vicus*, for example, is not used in the *epistulae* relating to Sicily.

²¹ Fiorentini 2002.



Figure 4 – Dolia in a room of the rural settlement of Saraceno

of villages.²⁵ It is probable that the *condumae* were located within those settlements. The term *conduma*, which occurs frequently in the *Registrum*, has had different interpretations,²⁶ but primarily, as the way in which it is used in the *Epistula* II, 38, it suggests the existence of a place, *domus* or settlement, used as an animal shelter and as a storage for instruments and foodstuffs; it also concentrated the labour force.²⁷ Therefore, *condumae* were probably found in the settlements known from the archaeological point of view, which probably hosted peasants and also some members of higher classes, maybe small landowners and the *conductores*, whose close relationship with the *conduma* is attested to in historical sources.²⁸

With regards to the city of Agrigento, the archaeological evidence available so far seems to highlight a crisis at the end of the 4th century that became more evident in the middle of the 5th century; it is mostly noticeable in those sectors of the ancient city which had been the main centres of activity for the urban élite. Firstly, this is evident in the so-called ‘Hellenistic-Roman

quarter’, a district of the ancient residential area that, between the late Hellenistic age and the first imperial age, experienced the construction, extension and monumentalization of a large number of rich peristyle houses. The recent edition of the excavation campaigns carried out in the 20th century²⁹ and the new research done by the team of the archaeological park, have allowed us to know some of interventions made in the late-antique age in the prestigious *domus*. It seems that, from the end of the 4th century, many houses showed signs of decline: missing maintenance of old valuable elements (ruined mosaic that was not fixed, clay floors laid out above the more ancient fine pavements, etc.) on the one hand, and an apparent disregard towards those sectors with a major monumental value, on the other. Peristyles, as an example, often suffer from the closing of the spaces between the columns. Even the collapse of the roof in some rooms of the houses could be occurred by the end of 4th century;³⁰ afterwards, the rubble was not removed and the following interventions were applied above it, testifying to a possibly reduced spending capacity of the owner and a disregard for traditional elements of luxury expression.³¹ In another

²⁵ Prigent 2017: 230–231.

²⁶ Cracco Ruggini 1980; Guillou 1977; Prigent 2017: 229–231; Recchia 1978; Rizzo 2004: 151.

²⁷ Prigent 2017: 229–230.

²⁸ Prigent 2017: 229.

²⁹ De Miro 2009.

³⁰ Rizzo 2015: 143–144.

³¹ The abandonment of the peristyle *domus* architectural type is attested in different parts of the empire starting in the 5th century



Figure 5 – Hellenistic-Roman sanctuary in Agrigento: the fallen roof of the northern portico

privileged area of urban élite activities, the Foro and the annex buildings, which had been the most important Roman age monumental sector, signals of abandonment seem evident already during the 4th century. In the so-called ‘Hellenistic-Roman sanctuary’ the portico roof collapsed and the ground level was raised by a clay floor until it was abandoned and the area began to be used for cattle breeding and the discharge of waste, containing 4th and 5th century pottery (fig. 5).³²

In the area which had been occupied by the Ginnasio in the Roman age, commercial Costantinian age buildings were abandoned by the end of the 4th century; the abandonment was accompanied by the breakdown of the drainage system so that the area was covered by thick alluvial deposits.³³

The boundaries between the city and the suburban area became rather indefinite: during the late-antique age, indeed, a large necropolis, composed of a *sub divo* graveyard³⁴ and several burial hypogea, invaded the

whole southern area of the city where the great temples rose during the Classical age (fig. 6); furthermore, arcosolia and hypogeic graves were excavated in the city walls, which lost not only their defensive capacity but also their purpose of closing the city and separating it from the suburban area.

Further investigations into the urban centre will be undoubtedly necessary to better understand and contextualise those phenomena that we fragmentarily know at the moment. It is possible, in fact, that research in different sectors of the city could modify the framework arising so far. At the moment, it does not seem that rural settlement expansion and agricultural exploitation reflect a similar expansion of urban life, which instead shows an evident contraction in the private sector as well as areas related to political activities and civil life. On the other hand, some of the phenomena we have briefly discussed, the birth of the coastal *emporion*, the traces of privileged classes in rural villages, may be considered aspects of a ‘polycentric’ system,³⁵ according to which the production, consumption and exchange of products, on both the local and interregional level, take place in different

and was related to a ‘late-antique aristocracy evolution’, whose peculiar characteristics, with regard to Sicily, are analyzed in Arthur 2000: 179–181; Rizzo 2008.

³² Parello 2018.

³³ Fiorentini 2009.

³⁴ Bonacasa Carra (ed.) 1995.

³⁵ Arthur 2000: 182–185.



Figure 6 – The early Christian cemetery near the temple of Concordia

areas far from the city³⁶ where the privileged classes could choose to live.

The Byzantine period

This settlement pattern remained broadly stable until the 7th century, when there was a drop in the number of settlements, revealed by archaeological surveys carried out in the Agrigento area, especially near Monti Sicani;³⁷ in the Cignana district the number of settlements also decreased, but three of the largest villages continued to be inhabited in the 7th century; some sherds of Rocchicella type pottery show that some of the sites were still populated in the 9th century.³⁸

Similarly, Cignana, Saraceno, Colmitella and Vito Soldano continued to be inhabited, but they probably became smaller. At Saraceno, the proto-Byzantine occupation of the spaces of the classical villa ended before the first decades of the 7th century; consequently, the inhabited area became smaller, reduced to the B sector alone (fig. 7).³⁹

There, in the 1990s, structures attributed to three different building phases were excavated, discovering some fragments of strip handles with central grooves and cooking pottery with a grey calcitic fabric. In Cignana, a similar reduction of the inhabited area may have occurred between the end of the 7th and the first decades of the 8th century. A clay layer covers the 7th century structures, containing, in addition to several residues, two Sicilian type lamp sherds and some fragments of ollas and lids in a characteristic grey calcitic fabric,⁴⁰ which could be a chronological indicator for the phases between the end of the 7th century and the beginning of the 8th in this territory;⁴¹ pottery of the same type, indeed, was also found in Vito Soldano, Saraceno and Colmitella.

The large village of Colmitella,⁴² north of Agrigento, grew during the 5th and the 6th centuries and was inhabited until the 12th century. During this long period, it maintained the characteristics of a rural village, with spaces for household activities, particularly for preparing and cooking food, buildings with artisanal structures (fig. 8) and areas used for the

³⁶ Belvedere 2004: 5.

³⁷ Klug 2018.

³⁸ Burgio 2013: 36.

³⁹ Castellana and McConnel 1998.

⁴⁰ Rizzo 2014: XII, 411–412.

⁴¹ Rizzo and Zambito 2012.

⁴² Rizzo 2010; Rizzo, Danile, Romano, Scibona and Zambito 2012; Rizzo, Danile and Zambito 2014.



Figure 7 – The early medieval settlement in sector B of the Saraceno site

storage of cereal grains. Many pits, dug throughout the area, were found (fig. 9); after their abandonment they were filled with rubbish, containing many animal bones and pottery sherds.⁴³ The existence of a rural product storage system and the discovery of a seal of *notarios Antiochos*,⁴⁴ who may have been involved in the administration of land goods, may have been related to the role of our village in the rural production collection of duty payments, such as happened in the Byzantine world in the second half of the 7th century, with the transferring of fiscal competences from cities to rural settlements.⁴⁵

A preliminary study of the finds shows that the storage system was used during the entire life of the village; given the small size of the pits, each silo probably contained the wheat for each family's consumption and their tax payment.⁴⁶ The village may have maintained its role as a central place in the fiscal system even after the end of Byzantine rule, thus ensuring its survival also in the Islamic and Norman ages.

Sicily's prominent role within the Byzantine Empire and the close relationship with the centre of power,

attested by the rich collection of seals proceeding from the island,⁴⁷ is not reflected in the material culture. Pottery finds indeed show, since the end of the 7th/first decades of 8th centuries, a shrinkage of ware and amphorae imports, not only from Africa, by now under the Arabs, but also from the eastern Mediterranean Sea. At Cignana, for example, the latest imports from the Aegean Sea are probably represented by some sherds of 'Samo cistern type' amphora,⁴⁸ whose diffusion in the West was related to Byzantine interests and linked with the official wine supply. Very few artifacts testify to the arrival of imports after the early 8th century: worth mentioning is a sherd of a lead-glazed chafing dish of the so-called '*vetrina pesante*' type, with a crude greyish fabric that can be compared to southern Italian productions,⁴⁹ dating between the mid-8th century and the the mid-9th. Two specimens of 'Sicilian' type lamps, found in layers dating between the late 7th century and the early 8th, could be imports from eastern Sicily. However, the early medieval layers yielded small amounts of pottery, mainly cooking ollas with a grey calcitic fabric. It is interesting to note that the territorial context of Cignana appears, still during the late Byzantine age, to have been included

⁴³ Rizzo and Romano 2014.

⁴⁴ Rizzo 2014: XI, 412, figg. 9–10.

⁴⁵ Brandes and Haldon 2000; Haldon 1994.

⁴⁶ Arcifa 2008; Arcifa, Bagnera and Nef 2012; Prigent 2008.

⁴⁷ Nef and Prigent 2006; Prigent 2009.

⁴⁸ Arthur 1990.

⁴⁹ Arcifa 2010; Cacciaguerra 2009.



Figure 8 – An early medieval production unit in the village of Colmitella



Figure 9 – Grain pits at Colmitella

in Constantinople's interests, as is attested by a lead seal of *Christophoros megas meizoteros*, a role that demonstrates the presence of officers responsible for the management of the imperial domain.

Some ongoing research in Agrigento is yielding new data about the hitherto-unknown early medieval urban centre. The central area of the ancient city, the highest sector of the Hellenistic theatre, the residential Hellenistic-Roman quarter', were newly inhabited, often occupying older abandoned structures, such as a small building 'in summa cavea' in the theatre area, or the baths in the fourth *insula*.⁵⁰ The study of the findings, in progress, draws a picture very close to that of the rural settlements; Sicilian type lamps, so called 'a ciabatta', cooking pots with a grey calcitic fabric, handles with central grooves, indeed, were found in the early medieval layers of the urban centre as well: we do not actually know of any artefact that could highlight the existence of a wealthy elite and the endurance of a social organisation in the few sources we have.⁵¹

The Islamic period

The Islamic conquest of the city, according to scholars, led to the abandonment of the valley and the concentration of the urban population onto Girgenti Hill, where the medieval urban settlement developed. In the rural settlements, instead, data relating to this era are increasingly numerous, particularly in the eastern area of the hinterland of Agrigento. In the site of Colmitella,⁵² extensively investigated during the construction of the new Agrigento-Caltanissetta road, the continuity of life during the 9th century is witnessed by the recovery of many ceramic fragments belonging to a particular pottery production, which takes its name from the Byzantine village of Rocchicella. This pottery, characterised by its so-called 'a stuoia' decoration, is thought to be a significant chronological indicator of the 9th century. Some sherds of this type have also been found in other sites of the Agrigento hinterland, thanks to two archaeological surveys carried out by the University of Palermo in the district of Cignana, and by Luca Zambito, who studied the Naro River valley during his research on sulphur production. Some of the sites discovered are similar to Comitella, for the large extent of the areas of pottery sherds and the long period of their life. The Naro valley survey, moreover, has also identified a number of sites, often located near low rock outcrops, characterised by the small size of the

areas of fragments and low frequency of archaeological records, consisting almost exclusively in Rocchicella pottery, handles with central grooves and combed roof tiles with vacuolated fabric. These small settlements were probably connected in some way with the main population centres; however, they had a very short life: in none of them was glazed pottery found, so it is probable that they were abandoned before the middle of the 10th century. On the contrary, three of the four major settlements identified in the area continued to be inhabited at least until the 10th century, when it seems that the population concentrated again in the largest sites. The case of Colmitella suggests that a role as a central place with regard to taxation and land management may have made it easier for the settlement to survive during that difficult period, together with its proximity to water sources and to the main roads.⁵³ The settlement pattern that was established during the 10th century may be connected with the new system of land organisation, agricultural exploitation and taxation based on the *rahl/casale*.⁵⁴ In most cases, the villages that constituted the main nodes of this network had already been central places in the late Roman and Byzantine systems. However, the population pattern is the result of a reorganisation and selection process that saw only the survival of the settlements which, located close to the major roads and water supply sources, fertile soil and other features, could still play a role as central places within the new land organisation model thanks to their administrative role. Chronologically, the new organisation we see thanks to archaeological surveys and excavations coincides with the issue of the al-Mu'izz rescript that demonstrates a strong impulse to the reorganisation of the land and settlements, with the aim of a better political and religious control of the rural population. Archaeological research demonstrates that it did not lead to the abandonment of the villages or the general occupation of the heights, but it may have directed settlement towards more concentrated forms at the expense of smaller inhabited areas.⁵⁵

The Norman period

Archaeological research shows that the settlement system began to suffer as early as the first decades of the 12th century and that it finally collapsed before the middle of that century. We can see this trend especially in the Platani River valley, which is highlighted by the distribution of a specific ceramic class, the so-called 'solcata', whose decorations are engraved on the raw clay of the vases under a green glaze. This pottery, produced by the Norman kilns of Agrigento, is rare in unfortified villages and is, instead, the fine tableware

⁵⁰ Caminnci and Rizzo 2018; Parello 2018; Parello and Rizzo 2016; Rizzo 2015; Rizzo 2018. Rizzo and Piepoli 2019.

⁵¹ Especially from the *Vita* of Bishop Gregory, see Berger 1993; Caliri 2006; Motta 2004: 285–289. The identification and dating of the Bishop, whose *Vita* was written by Abbot Leontius, are controversial; see Caliri 2005; McCormick 2008: 305. However, nobody questions that the author had direct knowledge of Agrigento.

⁵² Rizzo, Danile and Zambito 2014; see also note 39.

⁵³ Belvedere 2004: 9–10.

⁵⁴ Arcifa, Bagnera and Nef 2012: 267.

⁵⁵ A different opinion on this topic is expressed by Arcifa, Bagnera and Nef 2012: 267.

class mainly represented in the hilltop settlements that grew along the river and in the Agrigento hinterland during the 12th century. Thus, soon after the mid-12th century, the process of abandoning the lowland and low hillside settlements and moving towards the top of the heights could have begun, perhaps following the flight of Muslim peasants expelled from their hamlets in central-eastern Sicily by Lombard immigrants.

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II - Inland and Mountainous Landscapes

Chapter 5

Contessa Entellina: Rural vs. Urban Medieval Landscapes in Inner Western Sicily

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Introduction

The theme we are discussing here is part of the preliminary results of the archaeological survey carried out by the Scuola Normale Superiore – Pisa in the territory of the Comune di Contessa Entellina in western Sicily, from 1998 to 2004.¹ The 136.4 km² area surveyed yielded 285 sites and 152 offsites, ranging from Prehistory to the post-medieval age. We will focus here on the medieval phase (early 8th-15th centuries AD).² In particular, we will compare data from the countryside and the main settlement, i.e., the town of Entella, where the Scuola Normale Superiore (SNS), together with the Soprintendenza BB.CC.AA. – Palermo, has carried out excavations and surveys since 1985.³ The aim is to ascertain possible different settlement patterns in urban and rural contexts and to try to provide an explanation.

The territory

The investigation area (fig. 1) lies between the Belice Sinistro and Belice rivers to the northwest, the Senore torrent to the south, the Monte Genuardo ridge to the southeast, and a complex of torrents and creeks flowing into the Belice Sinistro to the north.

The choice of delimiting the investigation area following modern administrative boundaries derives from a precise request by the Assessorato Regionale BB.CC.AA. In 1998, the SNS team was asked, in fact, to develop a model of archaeological map suitable for communal administrations.⁴ In the case of Contessa Entellina,

the modern administrative boundaries follow major and significant geographical features or important ancient roads. Modern administrative boundaries may therefore be representative of ancient boundaries, too. This circumstance can justify this choice.

The geomorphological structure of this sector of inner Sicily is complex and varied.⁵ In the southern corner, the Monte Genuardo ridge rises more than 1000 m high, yielding water, timber and building stone. All of the main torrents flowing through the territory under examination spring from Mt. Genuardo sources. On the opposite, northwest corner, the Rocca d'Entella plateau rises to 550 m, surrounded by impressive cliffs. The rest of the surveyed countryside consists of a complex system of low hills and fluvial plains, well fitted for agriculture (mainly cereal-growing, as recorded through the last few centuries,⁶ with vine- and olive-growing today as well), pastoralism and raising livestock.

In the 19th century maps, the old route system in use in this area is recorded;⁷ aerial photos⁸ and historical documents (including the *Registro delle Regie Trazzere*)⁹ add further insights. When positioning archaeological evidence retrieved from the survey on this road network, a clear coincidence of ancient (i.e., prehistoric to medieval) settlements to long- and medium-distance itineraries is perceivable. It has been assumed, therefore, that routes and mule-paths recorded in 19th century maps give a reliable overview of the road system in use during the Middle Ages. Of course, ancient roads leading to Entella gradually fell out of use after 1246, when the town was forcibly abandoned and never inhabited again.

¹ The results of the survey have been recently published: Corretti, Facella, Gulletta, Michelini and Vaggioli 2021. The volumes are downloadable in open access: <https://ricerca.sns.it/handle/11384/108644>. On the first investigation of the Entella territory, see Canzanella 1993.

² Corretti and Mangiaracina 2021. See also Corretti, Facella and Mangiaracina 2014; Corretti, Gargini, Michelini and Vaggioli 2004; Corretti, Michelini and Vaggioli 2010.

³ For an updated and comprehensive state of the art on excavations at Entella, see Michelini 2021: 237, n. 37 (with former literature); Ampolo, Corretti, Guglielmino, Michelini, Parra and Vaggioli 2022.

⁴ Facella 2021.

⁵ Di Maggio, Madonna, Monteleone, Pierini, Sabatino and Vattano 2021, with previous literature.

⁶ Equizzi and Rosciglione 2021: 51.

⁷ Corretti 2021: 185; Equizzi and Rosciglione 2021: 52–56.

⁸ Arnese, Corretti, Facella, Michelini and Vaggioli 2021, with previous literature.

⁹ We thank the Special Technical Office for the *Trazzere* of the Region of Sicily for kindly making available maps and documents concerning the '*Regie Trazzere*', a road system in Sicily for transhumance, in use up to recent times. The old '*trazzere*' partly survive in some of the current roads and paths.

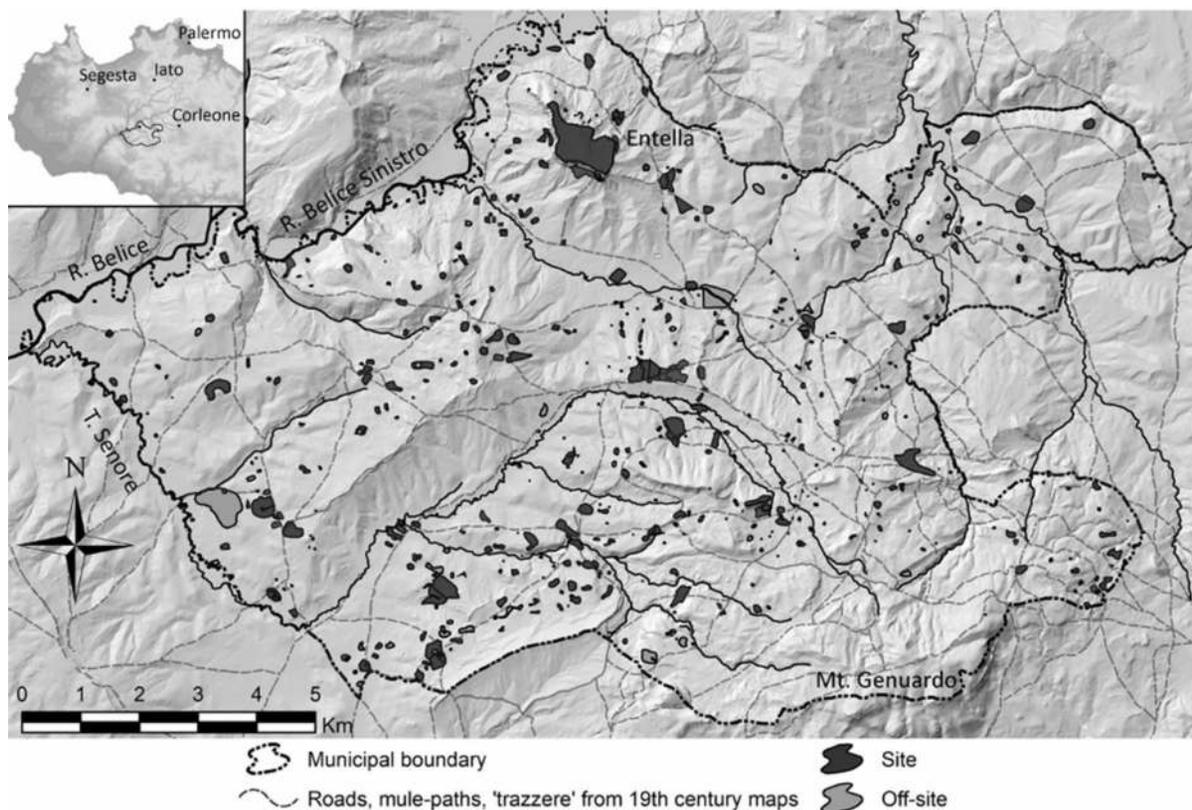


Figure 1 – The Contessa Entellina survey. Sites, off-sites, historical road network. Upper left, the location of the investigation area in Sicily

The town of Entella

The mountain of Rocca d'Entella was the place of the town of Entella, a settlement active from prehistory to the 2nd century AD and, again, from the early 10th century to 1246. The place maintained its ancient name over the centuries, notwithstanding the relevant hiatuses in settlement described above. Entella lies in a strategic position for controlling the Belice Sinistro River and several important long-distance roads nearby. In fact, several ancient paths run along the river or cross it near Entella through fords mentioned in documentary sources,¹⁰ recorded in 19th century maps and still in use up to the 1970s, when an imposing earth dam was erected to create an enormous water reservoir. On the plateau of Rocca d'Entella, excavations brought to light several sectors, albeit limited, of the ancient and medieval town of Entella. In addition to excavations, repeated in-depth investigations in the area of the town have produced a reliable record that has allowed us to detect even those periods in which the site was abandoned, and to trace the evolution of the urban settlement throughout the entire medieval period.

¹⁰ Filingeri 2014: 310, 357.

The site rested on a gypsum plateau (fig. 2). Only a few water springs were available, and they were outside the town. Throughout its history, Entella was therefore barely endowed with water, and its inhabitants were forced to make use of water tanks and to collect rainwater.

A defence wall (built in archaic age but restored in the Middle Ages) with two main gates (in the northwest and northeast) protected the only accessible side, to the north.¹¹ A fortified medieval palace, equipped with a *ḥammām* and yielding a luxury ceramic assemblage, occupies the top of q. 542, on the southern edge of the plateau.¹² Other medieval fortresses have been detected in the northwestern (Cozzo Petraro, surveyed) and southeastern corners (Pizzo della Regina, trial excavations 1991 and 1997).¹³ Other medieval buildings, unearthed around the medieval palace and elsewhere, consist of houses based on single rectangular rooms, often grouped around a central courtyard, therefore following the typical plan of North-African Islamic

¹¹ Corretti, Gargini, Michelini and Vaggioli 2004: 160-162; Gargini, Michelini and Vaggioli 2006.

¹² A comprehensive literature up to 2004 is in Corretti, Gargini, Michelini and Vaggioli 2004: 149-151, n. 11; see also Corretti 2014.

¹³ Corretti, Gargini, Michelini and Vaggioli 2004: 152, n. 22.

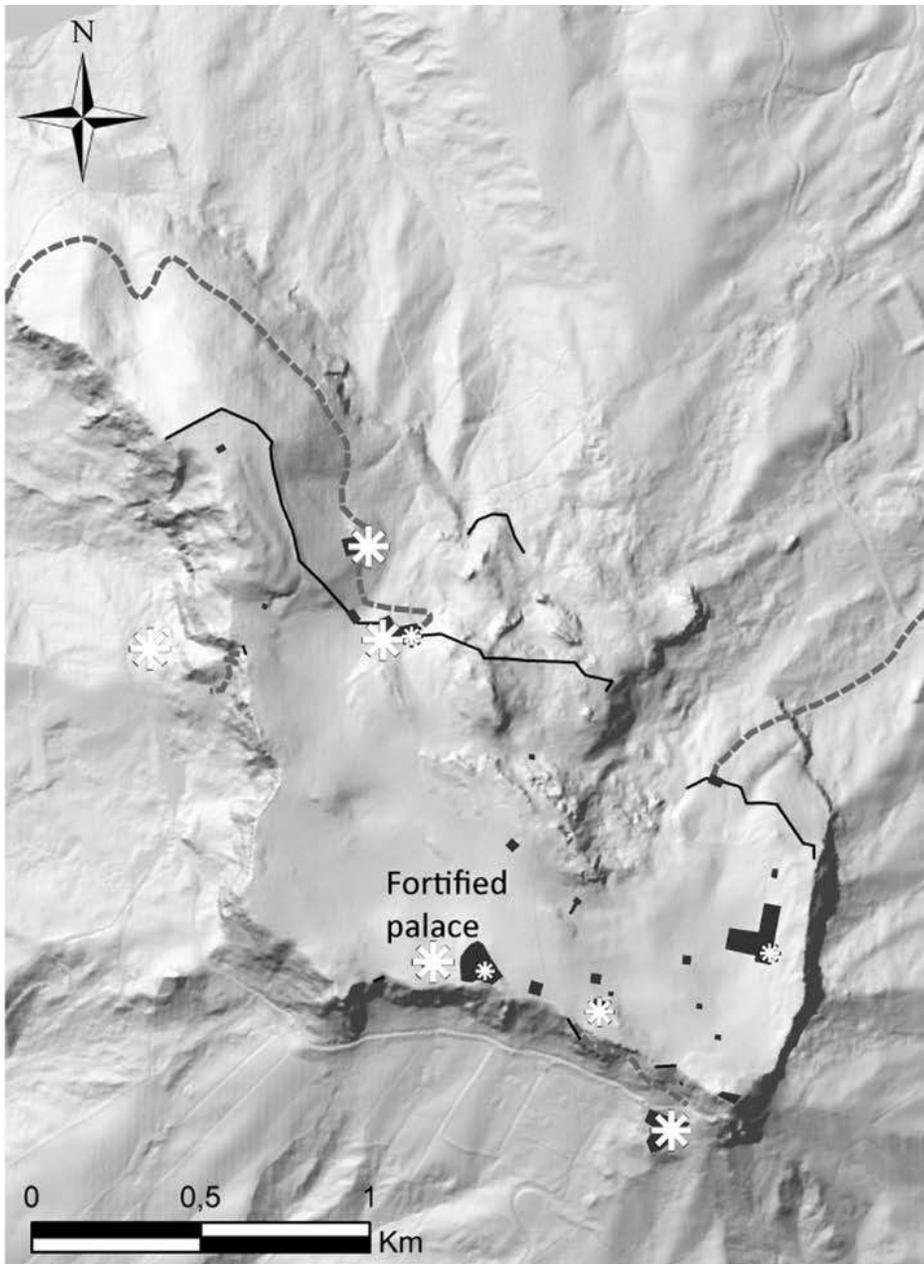


Figure 2 – Rocca d'Entella. The excavation areas, city walls, access roads, Islamic tombs and necropolises

houses.¹⁴ While ancient (i.e. before 2nd century AD) necropolises were located around the town, below the cliffs, medieval Islamic cemeteries and isolated tombs have been found both outside and inside the circuit of

the walls. The presence of tombs in residential areas seems to contradict Islamic precepts and still needs further explanation.¹⁵

¹⁴ Bazzana 1992; Corretti 1992; Fentress 1987.

¹⁵ Corretti, Fabbri and Viva 2010; Corretti, Gargini, Michelini and Vaggioli 2004: 167–172, with previous literature.

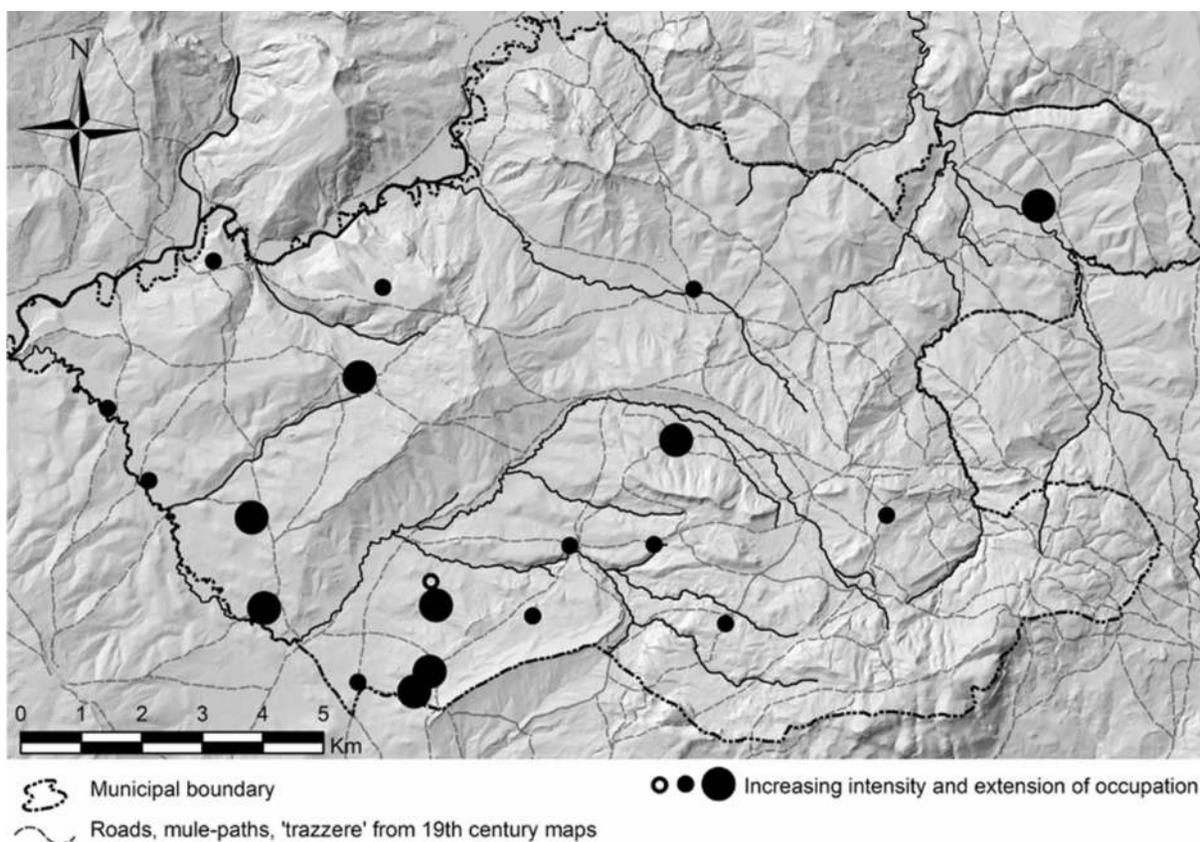


Figure 3 – The Contessa Entellina Survey. The 7th century settlements

The legacy of the late Roman period: the 7th century AD

Seventh century AD (fig. 3) settlement is traceable through the last African sigillata, imported amphorae and grooved tiles.¹⁶ The sites are concentrated in the southern part of the territory, while the northern area is almost empty. In the northwest corner of the investigation area, Entella has not been an active site since the early 2nd century AD. Its inhabitants gradually moved from the town down to the fertile valley bottoms, near the water streams and main roads. After the abandonment of Entella, a sparse settlement in the surrounding area was organized in farms, villages and villas; from the 4th century AD, an ‘agro-town’ grew up on a hill dominating the Senore River plain. The survival and success of the settlement in the southern area is due, among other factors, to its proximity to the main roads¹⁷ (from Palermo to Sciacca and to Mazara) that crossed near the southern edge of the territory under investigation.

¹⁶ Facella 2014; Corretti, Facella and Mangiaracina 2014: 344–345; Corretti, Gargini, Michelini and Vaggioli 2004: 173–174; Corretti, Michelini and Vaggioli 2010: 170.

¹⁷ Molinari 2015: 194.

The late Byzantine period: 8th–early 9th centuries AD

The typologisation of late Byzantine pottery in Sicily is still ongoing. Inner western Sicily seems to have been excluded from the commercial circuits that redistributed certain imported pottery classes whose chronology is better established (e.g. ‘globular amphorae’ and ‘*vetrina pesante*’).¹⁸ Reconnaissance of 8th–mid-9th century sites in the Entella territory must therefore rely only on very few ceramic fragments, the identification of which is still uncertain. The high fragmentation typical of surface collection pot sherds constitutes, in this case, a serious obstacle. Therefore, the map (fig. 4) is only intended to show the places where possible late Byzantine pottery has been retrieved.

Our guide fossils for the late Byzantine period consist mainly of amphora handles with a shallow longitudinal groove (a vessel type whose kilns have recently been located at Sofiana,¹⁹ though the Entella items show a different fabric and therefore cannot come from Sofiana) and pans in calcitic ware with inward rims. With regard to these latter pots, indeed, given the highly

¹⁸ Molinari 2017: 351–353, 356–357.

¹⁹ Vaccaro and La Torre 2015.

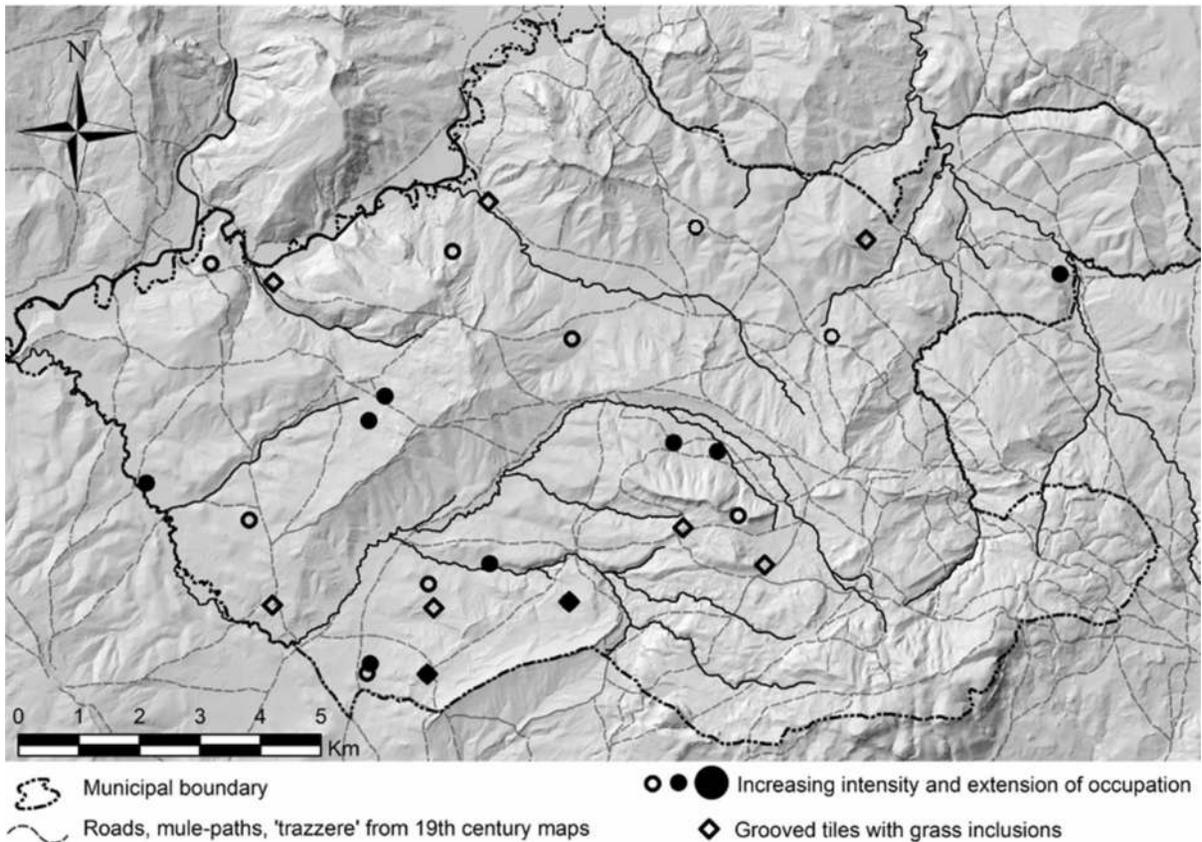


Figure 4 – The Contessa Entellina Survey. The 8th-early 9th century settlements

fragmentary status of conservation typical of surface findings, it is difficult to distinguish them from other, slightly later (9th to early 11th century) pots in calcitic ware, known thanks to recent studies on Palermo's Islamic contexts.²⁰ Roof tiles with grass inclusions (both grooved and plain) may also date to this period, though recent findings at Castronovo suggest re-use of ancient tiles as well.²¹

With these caveats, we observe that settlements are still concentrated in the south and show a strong continuity with the previous 7th-century phase, with only a few new sites. In the late Byzantine period, former late Roman villages and villas show traces of occupation or frequenting, possibly aimed at finding and recovering metals, building stones and other kinds of materials.²² Due to the continuity in occupation/frequentation of the sites, it is impossible to ascertain the dimension of late Byzantine settlements. The scarcity of pot sherds belonging to this phase hints, in any case, at a very limited extension of the

sites.²³ All of the 8th-mid-9th century sites, both those in continuity with 7th-century sites and the new ones, lie in open positions and therefore do not show any defence aim.²⁴ No positive evidence of settlement dating to this phase has, in fact, been recovered in the places with the best natural defences within the Entella territory, namely Entella and Calatamauro.²⁵ The supposed existence of a Byzantine fortress at Calatamauro is based only on a controversial interpretation of the *Cambridge Chronicle* for the years of the Islamic conquest of Sicily.²⁶ This depopulated inner area could not provide or support enough resident soldiers to equip a stronghold like that of the Kassar at Castronovo.²⁷ At the moment, given the insufficient knowledge about 8th-early 9th century ceramics in Sicily, we cannot ascertain whether the settlement scheme we traced

²⁰ See Pezzini and Sacco 2018.

²¹ Carver and Molinari 2018: 40; Molinari 2017: 352.

²² A synthesis of the issue is in Munro 2012. On Sicily, see Castronovo Barba 2016.

²³ Corretti, Facella and Mangiaracina 2014: 345. Similar evidence from other Sicilian areas is in Molinari 2017: 359; Rizzo, Danile and Zambito: 352-354.

²⁴ Other examples are in Molinari 2017: 352, and Molinari 2015: 198-200.

²⁵ Corretti, Di Noto, Michelini and Vaggioli 2004; Corretti, Michelini and Vaggioli 2009.

²⁶ Corretti, Michelini and Vaggioli 2009.

²⁷ An overview on fortified vs. unfortified settlements in this period is in Molinari 2016.

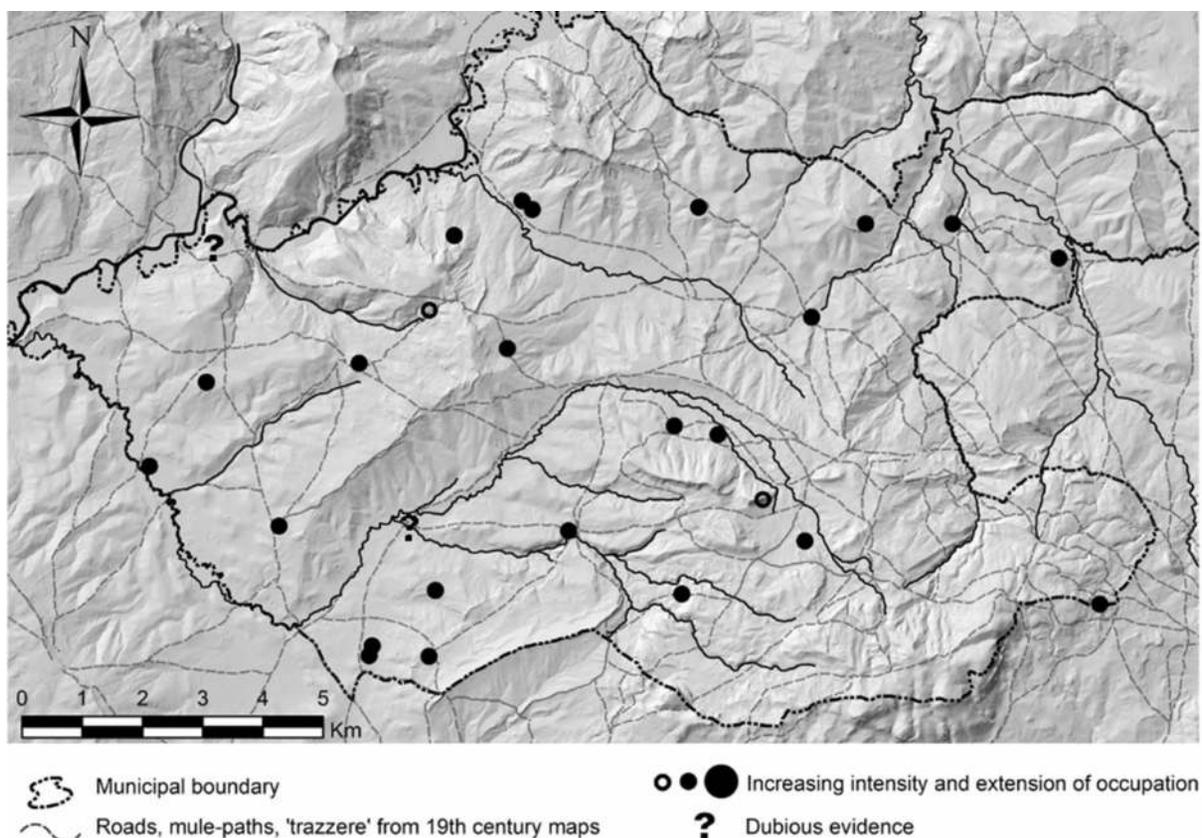


Figure 5 – The Contessa Entellina Survey. The second half 9th–first half 10th century settlements

above reflects the late Byzantine situation or already shows the first consequences of the Islamic conquest.²⁸

The early Islamic period: second half of 9th–first half of 10th century AD

The early Islamic period, as appreciated within the Contessa Entellina territory (fig. 5), roughly corresponds to the time of the Aghlabid rule in Sicily.²⁹ Recent insights on Islamic assemblages at Palermo also shed light on the findings from Entella and its territory.³⁰

Only a few glazed cups from the Contessa Entellina survey can be hypothetically dated to the early 10th century, while most of the polychrome glazed pottery belongs to the following, late 10th–11th century phase. Anyway, cooking ware and amphorae with inward rims and painted decoration allow for a reliable identification of late 9th–mid 10th century sites.

Sites grew, both in number and dimension, as witnessed by ceramic assemblages and pot sherd dispersion areas.

Several late Byzantine and late Roman sites continued to be occupied, but new settlements developed too. Moreover, early Islamic sites also flourished in the northern part of the territory, always in open places, near roads and torrents, possibly in correspondence with fords. A new site sprang up at the eastern edge of the territory, in a mountainous environment, near a long-distance road. This specific settlement is of particular interest because iron slag and possible iron ore (ochre) was retrieved as well, testifying therefore to local iron-working activity.³¹ New sites seem to have filled the space between old ones, so the whole territory shows evidence of (re)occupation; moreover, distances between sites are almost homogeneous and suggest, therefore, a regular occupation and exploitation of the resources of the countryside. This intensive land use was contemporary to the introduction of new plants and new agricultural practices in Sicily, as documented by ancient sources and recent research.³²

²⁸ Corretti and Chiarantini 2012.

²⁹ The actual impact of agricultural innovation in Islamic Sicily is still debated. See Primavera 2018. A general view is in Barbera 2005. On the importance of water resources, as mirrored in archival documents, see Metcalfe 2017. The project SicTransit, Sicily in Transition, coord. Martin Carver and Alessandra Molinari, have a new and multidisciplinary approach to this issue and to the consequent question of exported goods: see, e.g., Drieu, Carver and Craig 2018.

²⁸ The same general statement is in Molinari 2016: 330.

²⁹ Nef 2015.

³⁰ A first comprehensive view is in Molinari 2015; see also Sacco 2017, and Sacco 2018.

Entella, instead, was not yet reoccupied. As specified above, the reliability of this *argumentum ex silentio* about Entella derives from an attentive and periodical investigation of the site, through both surface surveys and stratigraphical excavations. Nowhere at Entella did late 9th-early 10th century pieces of evidence come to light. A few early 10th century sherds from the northern slopes of Calatamauro, instead, could suggest an Islamic settlement there, although evidence is scanty and does not come from a reliable context.

The growth in number and dimension of settlements that we have recorded within the Contessa Entellina territory throughout this phase also testifies to population growth. This could mean both an increase in the local population, due to better living conditions, and migration from other areas of Sicily and/or (more probably, in this phase) from abroad. Historical sources and documentary evidence do not suffice to trace the provenance of the new, Islamic settlers: as a whole, several migrations of Berber tribes from North Africa to Sicily are recorded, together with smaller groups from the Near East, Morocco and Spain.³³

The coexistence of old and new settlers would have brought several problems with regard to land distribution and ownership.³⁴ As seen above, numerous sites had been inhabited continuously since Roman times. We do not know whether this continuity in settlement after the Islamic conquest also meant continuity in land ownership. We know that local farmers could integrate into the new Islamic society and maintain their possessions by converting to Islam or paying the tax on *jizya*. However, new immigrants may also have joined or replaced inhabitants of farms or villages, with no perceivable change in material evidence from surface surveys. It seems reasonable to suppose a growth of the pre-conquest population, accompanied by mass conversions to Islam, and several migratory waves from North Africa. The result was, in any case, a systematic and homogeneous occupation of the area.

The Islamic period: second half of 10th- mid-11th centuries AD

This phase coincided with the establishment and consolidation of Fatimid rule in Sicily (fig. 6),³⁵ and ended at the time of the *reinos de taifa* and the following Norman conquest.³⁶

³³ Chiarelli 2011: 39, 53–54, 157–158; a nuanced statement is in Molinari 2016: 330, and in Molinari 2015: 215–216.

³⁴ De Simone 2009; Metcalfe 2009: 32–35; Molinari 2015: 49–50.

³⁵ In the map a distinction has been made between those sites that yielded ceramics surely dating to the second half 10th-mid-11th century (in black), on the one hand, and those settlements where only pot sherds generally dating to the 10th to 12th century were found (in white).

³⁶ Metcalfe 2009: 44–69.

The guide fossils for this phase (glazed pottery, amphorae, cooking ware) are increasingly being studied and classified; moreover, in most of the sites, the Contessa Entellina survey yielded significant, and in some cases imposing, amounts of ceramic fragments. So, the dataset is reliable and allows for even further insights.³⁷

From the second half of the 10th century, some of the existing sites grew to the size of villages. In some cases, smaller settlements – characterized by a merely utilitarian ceramic assemblage: amphorae and cooking ware – sprang up in the area around the larger sites, suggesting the existence of hierarchical relationships between settlements and, therefore, a complex organisation in the management and exploitation of the countryside. The main sites always lie directly on the long-distance roads; they show a quantitatively and qualitatively rich ceramic assemblage, including fine tableware, and stand at the level of the contemporary urban contexts. This resemblance between urban and rural ceramic assemblages is consistent with the fact that most of the pottery found in these rural sites (from coarse ware and amphorae to fine ware) shows fabrics typical of the productions from Palermo.³⁸ This suggests, on the other hand, that most of the agricultural products from the territory of Entella were directed to the urban markets of Palermo.

As for Entella, every time that the archaeological excavations brought to light the oldest medieval layers, these dated no earlier than the end of the 10th-11th centuries and lay directly on ancient (Hellenistic or Roman) deposits. This is the case, for example, of the ‘fortified palace’, where the layers below the late 12th century floors were investigated in 2001 and 2014.³⁹ Actually, the presence of polychrome basins with bifid rims from these layers could suggest an even later date (11th century), that could refer instead to the collapse and abandonment of the building.

Late 10th-11th century contexts and materials have been recovered in several places at Entella,⁴⁰ suggesting an intense and apparently simultaneous reoccupation of the site during the Islamic phase.

Ceramic assemblages recovered outside Entella and within 5 km from the town, on the other hand, do not include the glazed pottery typical of the 10th-11th centuries, and consist mainly of coarse ware and amphorae, the chronology of which cannot yet be defined with precision. The material evidence

³⁷ Corretti, Facella and Mangiaracina 2014: 346–348.

³⁸ Corretti, Facella and Mangiaracina 2014: 343; Molinari 2017: 361–362, and Molinari 2015: 210.

³⁹ Corretti 2014, with previous literature.

⁴⁰ Corretti, Gargini, Michelini and Vaggioli 2004: 149–154; Corretti, Michelini and Vaggioli 2010: 148–154.

indicates that, at the time of the growth of the ‘new’ town of Entella, i.e., in the second half of the 10th century, settlement around and near the plateau of Rocca d’Entella either disappeared (if the coarse ware and the amphorae predate the mid-10th century), or downgraded to the level of a logistical site for agricultural activities (if, on the other hand, the amphorae and the coarse ware are dated after the mid-10th century: in this case, the absence of fine, glazed tableware from these sites would suggest that their residential use was secondary and temporary).⁴¹ People from the nearby countryside probably moved to the new settlement (town?) of Entella, and could reach the fields that lay within 5 km from Entella in the daytime. Furthermore, this distance also coincides with the area directly under the full visual control from Entella.⁴²

This sudden rebirth of Entella after the middle of the 10th century seems to closely follow the disposition of al-Mu’izz in 967,⁴³ a caliphal initiative aimed at defending and controlling the territories of Sicily. Open settlements, so widespread in the Sicilian countryside, seemed on the one hand to weaken the defense of the territory and, on the other, to hinder effective control of the local population by the central government. Thus, the population dwelling within a district (*iqlīm*) were instructed to leave the farms and villages in the open places and to concentrate within a walled town with a congregational mosque. In an attempt at contextualizing the resettlement at Entella within the frame of this effort for a reorganization of the Sicilian settlement, it seems reasonable to suppose that Entella, too, became the chief town of an *iqlīm*. Unfortunately, the hypothesis of an *iqlīm* pertaining to Entella relies only on the archaeological evidence of a large late 10th-early 11th century settlement on the Rocca d’Entella plateau, and on the suggestion of the ‘*tenimentum Entelle*’ mentioned in a 13th-century document by the Diocese of Agrigentum. In this document, which quoted a 1093 donation by Roger I, Count of Sicily,⁴⁴ the word *tenimentum* could be the continuation of a previous, Islamic administrative subdivision, i.e., an *iqlīm*. As for the passage in Malaterra supposedly referring to the town of Entella in the context of the Norman conquest, it has been suggested that its reference to Entella derives from a mistake that occurred after the anti-Frederick II revolts of the first half of the 13th century,⁴⁵ though most scholars of medieval Sicily continue to consider the mention of Entella in Malaterra to be reliable.⁴⁶ This last statement would reinforce, on the

other hand, our hypothesis of an urban settlement at Entella between the end of the 10th and the first half of the 11th centuries.

Of course, we ignore the boundaries of this *iqlīm* of Entella, if any. So, we cannot ascertain whether the administrative and political control by Entella was limited to the immediately neighbouring area, within 5 km, or if it extended further on. In the first case, the caliphal prescript would turn out to have been strictly observed. In the other case, the evidence from the survey suggests that the orders by al-Mu’izz were in fact followed only by the inhabitants of Entella: indeed, 5 km from the chief town of Entella, open villages and farms continued growing in both size and number throughout the Islamic phase, as we have seen above.

This apparent double way of occupying and exploiting the territory – through open settlement amid the cultivated fields, and from a newly-born town that controlled the land, the main roads, and the Belice Sinistro River – has been compared to the *hiṣn-alquerias* model, though the origins of the *huṣūn* in the Iberian Peninsula and those of the hilltop sites of Islamic Sicily are definitely different.⁴⁷

The existence of a town, where the main administrative and political activities had to be carried out, would not be in contrast with the permanence of open settlements, inasmuch as a walled town could provide people living in the countryside with a safe place in case of troubles, as actually happened later.

Moreover, most of the major sites active in the Entella countryside in this period appear to have been strictly connected to the main road network (fig. 6): three of them, for instance, border the Palermo-Sciacca route, others lie near crossroads or fords. Beyond the usual agricultural and breeding activities, people living in these sites could therefore look after the nearby roads and support travellers. If so, these sites had a strategic relevance, and it was a government’s concern that they were permanently inhabited.

A further note concerns the composite character of the population of Entella and its countryside – resulting from several subsequent arrivals of immigrants that joined the local settlers.⁴⁸ These groups would have differed from each other with regard to ethnicity, religious creeds, tribal identities, mode and antiquity of land ownership, and could therefore have reacted in different ways to a prescription promulgated by the recently-arrived, Fatimid rulers.

⁴¹ Corretti, Michelini and Vaggioli 2010: 173–175; Corretti, Facella and Mangiaracina 2014: 348.

⁴² Manti 2021: 217, fig. 179.

⁴³ Chiarelli 2011: 108–109; Metcalfe 2009: 56–57; Molinari 2015: 201–202; Tramontana 2014: 112–113.

⁴⁴ Collura 1961: 300, 301–312; Corretti, Michelini and Vaggioli 2010: 154, with previous literature.

⁴⁵ Corretti 2011: 24.

⁴⁶ E.g., Metcalfe 2009: 94; Chiarelli 2011: 132.

⁴⁷ Molinari 2015: 200–201.

⁴⁸ See, in general, Metcalfe 2009: 49–51.

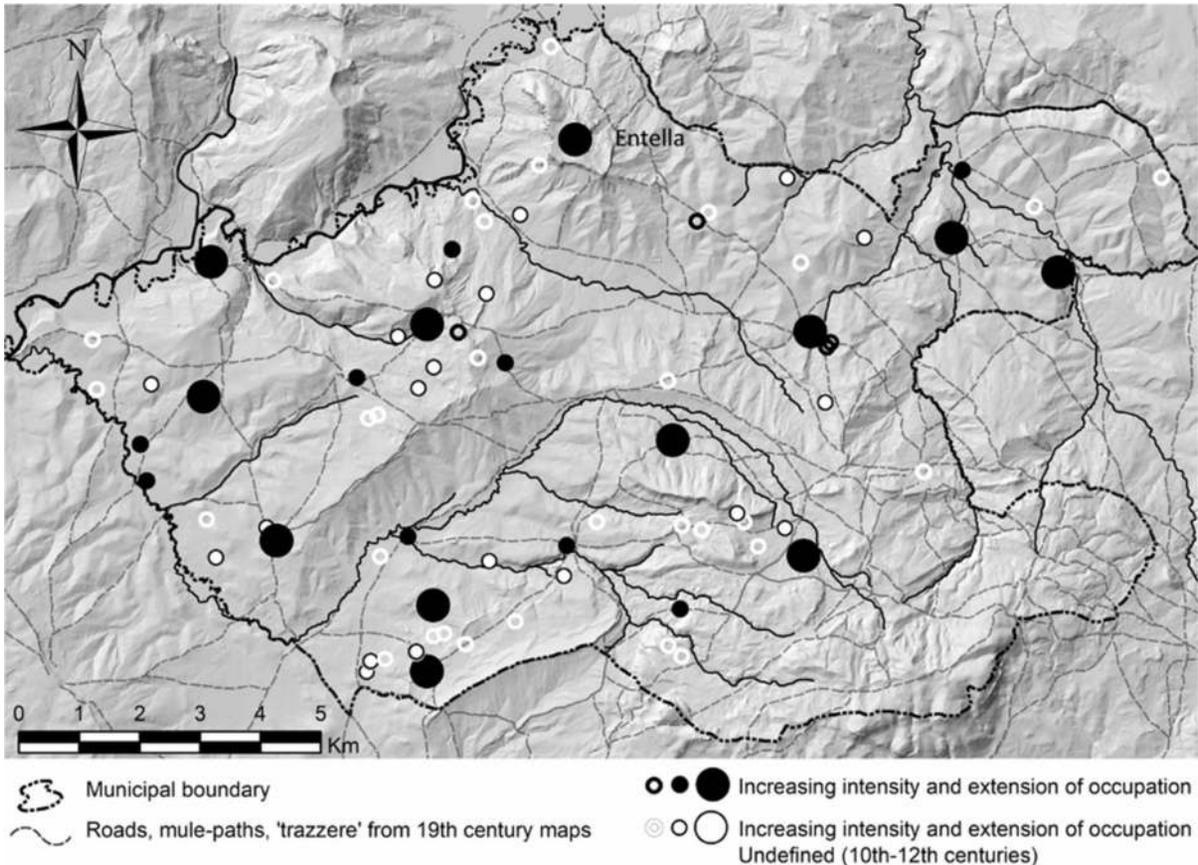


Figure 6 – The Contessa Entellina Survey. The second half 10th-mid 11th century settlements

The Norman phase: last decades 11th-last decades 12th centuries AD

Only a part of the settlements active in the mid-10th-mid-11th centuries yielded ceramics surely dating to the period of Norman rule (polychrome low bowl basins; green glazed pottery); moreover, in these sites, late 11th-12th century ceramics are quantitatively less abundant than 10th-early 11th century pottery (fig. 7).⁴⁹ This suggests a reduction in both the number and dimensions of the sites active in this period. Moreover, in several settlements, only coarse ware and amphorae were recovered that could be dated to a period of time too long to be useful for the current analysis.

A rich archival documentation illuminates Entella and its territory under Norman rule, that is to say, the three *jarā'id* written in 1178, 1182 and 1183 to list the land and the people donated by William II to the

archbishopric of Santa Maria la Nuova di Monreale.⁵⁰ In particular, the 1182 descriptions of the boundaries of the *Divise Battalarii*, of the *Divise Kalatatrasi* and of the *Divisa Futtasine* give a precious, albeit schematic, picture of the countryside where it was crossed by the estate borders, including the area where the town of Entella lay.

The text of the *jarīda* of 1182, in the passages relating to Entella, seems to describe a decrease in, if not a total abandonment of, the settlement.⁵¹ In fact, the description of the boundaries of the *divise* that crossed the site of the town of Entella does not offer any positive mention of a living settlement, but rather records abandoned hamlets. Of course, this kind of evidence may be deceptive, inasmuch as the *jarīda* focuses exclusively on the elements of the landscape that constituted the boundaries and does not mention other features of the immediately adjacent territory. Moreover, some problems still affect the

⁴⁹ In the map, a distinction has been made between those sites that yielded ceramics surely dating to the second half of the 10th-mid-11th century (in black), on the one hand, and those settlements where only pot sherds generally dating to the 10th to 12th centuries were found (in white).

⁵⁰ Johns 1993; Johns 2002; Vaggioli 2004, with previous literature.

⁵¹ Johns 1993: 73–74. Another hypothesis is in Metcalfe 2017: 106: at the time of the *jarīda*, Entella would have been severely damaged by the 1169 earthquake.

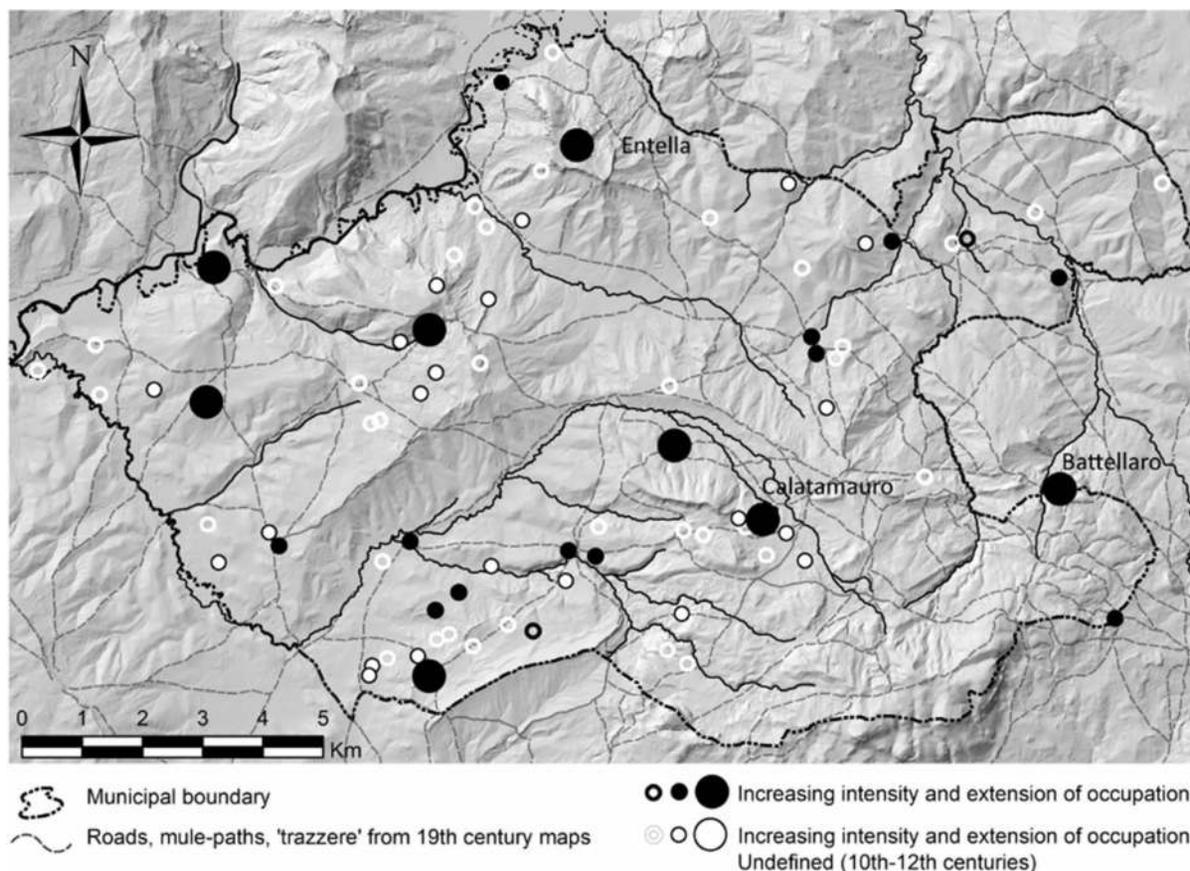


Figure 7 – The Contessa Entellina Survey. The last decades 11th - last decades 12th century settlements

comprehension of the Arabic or Latin texts in the passages concerning Entella.⁵² Also, the silence of al-Iḍrīsī about Entella may be of some significance.⁵³ With regard to the archaeological evidence, the 2001 and 2014 excavations at the Fortified Palace confirm that, around the end of the 11th-first decades of 12th centuries, the building that preceded the palace underwent a sudden destruction, and suggests that the place was temporarily abandoned, to be reoccupied at the end of the century with a new and monumental building – the Fortified Palace, in fact.⁵⁴ If this interpretation of the documentary and archaeological sources is true, we can interpret a temporary decline of the town,⁵⁵ which would seem reasonable to connect to the feudal system, as introduced by Norman rule.

In the subdivision of lands following the Norman conquest, the location of Entella and its territory had been assigned to an otherwise unknown Baron Goffridus

de Battalario.⁵⁶ The castle of Battellaro, therefore – and, in parallel, the castle of Calatrasi on the Belice Destro River, see of the Barony of the Malconventant – became the administrative centre of a vast countryside, which also included Entella and its territory. In this new context, the concentration of a conspicuous Muslim population at Entella, on a naturally fortified plateau, would pose obvious problems in terms of security and truly effective control over the whole area by the new, Norman power.⁵⁷

The *jarā'id* written in 1178, 1182 and 1183, at the time of the foundation of the Abbey of Santa Maria la Nuova di Monreale, in particular the 1182 *jarā'ida* that described the boundaries of the *divise* of Battellaro and Calatrasi, contain the names of several *casali* which existed in the investigation territory.⁵⁸ In some cases, the material

⁵² Johns 1993: 73–74. A general overview is in Metcalfe 2009: 265.

⁵³ Corretti, Michelini and Vaggioli 2010: 155; Johns 1993: 74; but see Canzanella 1993: 212.

⁵⁴ Corretti 2014.

⁵⁵ Corretti, Michelini and Vaggioli 2010: 155, with previous literature.

⁵⁶ Corretti, Michelini and Vaggioli 2010: 177; Johns 1993: 76. This same Goffridus de Battalario is considered by Johns (2002: 185), as a 'retainer' of the Malconventant family which kept the castle of Calatrasi in the Belice Destro valley.

⁵⁷ Corretti, Michelini and Vaggioli 2010: 155; Johns 1993: 74–75.

⁵⁸ Though we know that this list is not exhaustive: 'In the Monreale register, only the district boundaries of the ex-baronies Battellaro and Calatrasi are given, and not those of their constituent estates' (Johns 2002: 185).

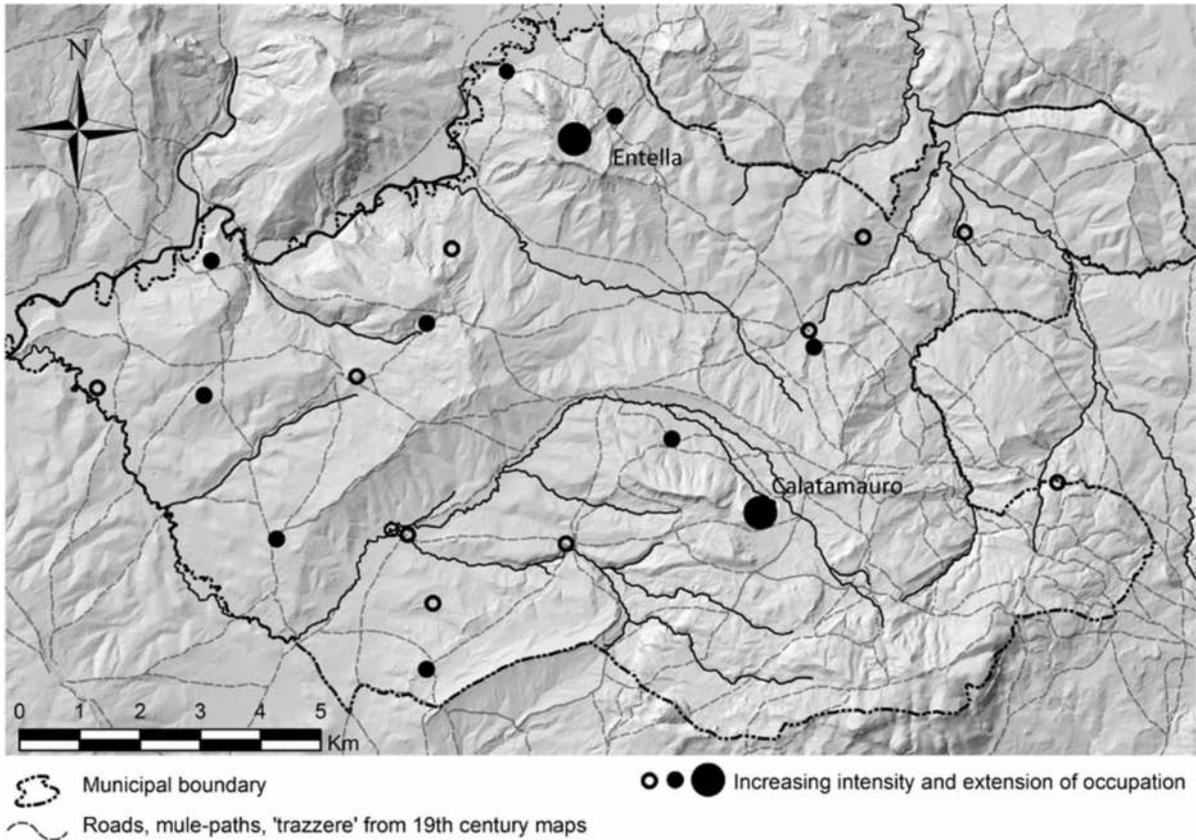


Figure 8 – The Contessa Entellina Survey. The last decades 12th–first half 13th century settlements

evidence brought to light by the survey could be put in connection to some of these *casali*. It often emerged, anyway, that the documentary record concerning these *casali* was not fully paralleled by material evidence retrieved through the survey: in some of these sites, ceramics dating to the Norman period were, in fact, scarce; in some others, they were even completely missing. There is no proof, therefore, that these sites were inhabited when they were being recorded in the *jarida*. This is consistent with the fact that the *casali* were primarily administrative entities for fiscal purposes, independently of the existence of farms and villages within their boundaries.⁵⁹ In the Norman age, and especially after the events of 1161, many villains had fled from the *casali*, and it was an aim of the new, powerful owner of these tenures, i.e., the Monastery of Santa Maria la Nuova, to repopulate them either through a forcible return of the former inhabitants or easing the arrival of new ones.⁶⁰

The Staufen rule and the Islamic revolts (ca. 1189 to 1246)

The sudden end of the Hauteville kingdom in Sicily opened a period of disorder, with persecutions against the Muslim population. After Henry VI (d. 1197), it was only in 1220 that the new king, and Holy Roman Emperor, Frederick II, succeeded in returning to Sicily and began to re-establish his rule over the island.⁶¹

Documentary evidence testifies to a depopulation of the countryside due to this period of instability. This emptying of the *casali* and the abandonment of the cultivated lands constituted an obvious threat to agricultural production. Frederick II repeatedly ordered the fugitives from the *casali* to return to the places where they had been registered, but it was in vain.⁶²

In the investigation of the territory (fig. 8), most of the sites that had flourished under the Kalbid rule, and that had survived after the Norman conquest, disappeared

⁵⁹ Carocci 2014: 87–89, 94–95; Nef 2011.

⁶⁰ Metcalfe 2009: 270–271, n. 28.

⁶¹ Maurici 1988 is still a precious companion to the period of the revolts against Frederick II, with a special focus on Entella. See also Maurici 1997: 270, and Maurici 2010.

⁶² Carocci 2014: 328–331; Maurici 1997: 270; Metcalfe 2009: 279–280.

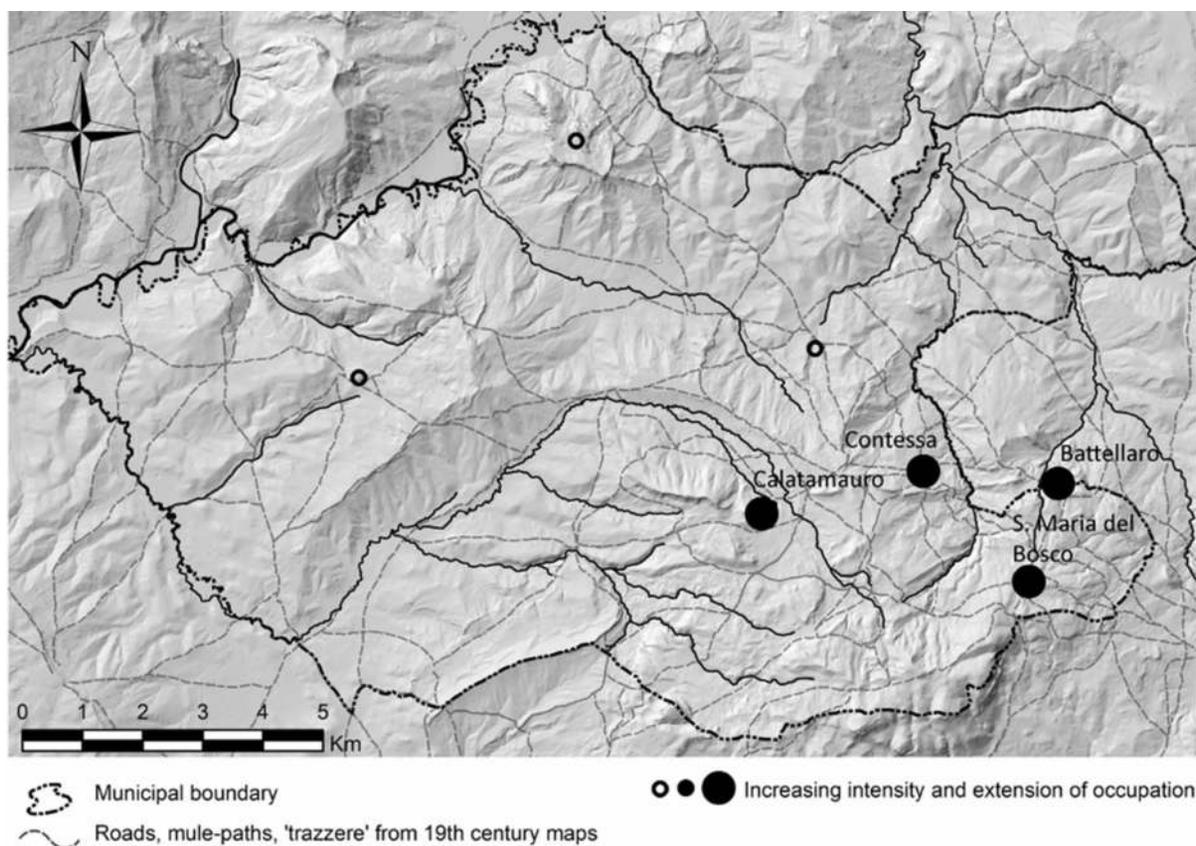


Figure 9 – The Contessa Entellina Survey. The second half 13th- end 15th century settlements

completely.⁶³ Only a few of them, in particular the ones lying on the main road routes, yield meagre material evidence testifying to their survival during the first half of the 13th century.

A significant exception to this general trend is the fortress on top of the Calatamauro peak, dating to the Norman age, but possibly empowered by Frederick II when the castle was included among the *castra exempta* which depended directly on the Crown. The material evidence datable to the early 13th century, though recovered out of context, is conspicuous and resembles the assemblages from the Fortified Palace of Entella.⁶⁴

Entella, the town on the plateau, is instead the true protagonist of this troubled period. From the last decades of the 12th century, in fact, Entella was newly and massively reoccupied. We can suppose that not only people from the surrounding countryside fled to Entella, but also fugitives from the anti-Muslim pogroms that took place in Palermo after the collapse of Norman rule.⁶⁵ On the plateau of

Rocca d'Entella, late 12th-early 13th century pottery, together with coins of William II, Henry VI, Frederick II and Muḥammad ibn 'Abbād, the leader of the Muslim rebellion, have been recovered in abundance in every single excavation that was carried out in the different sectors of the town. During the first half of the 13th century, the city walls were restored and strengthened; new dwellings were built, on the typical, North-African plan; at least three necropolises with Islamic funerary custom were in use outside the town, in correspondence to the main gates (other cemeteries inside the town pose several problems that only a C-14 dating campaign will solve); the Fortified Palace was erected, in the form of a monumental building, with a *ḥammām*, two courtyards, two staircases, an entrance tower, a water reservoir and a rich ceramic assemblage.⁶⁶ Misfired glazed sherds and furnace separators (*'zampe di gallo'*) testify to a local production of green monochrome glazed pottery.⁶⁷ Stone moulds refer to the manufacturing of cast metal objects at Entella.⁶⁸ The Arabic texts define Entella as

⁶³ Corretti, Michelini and Vaggioli 2010: 179, with previous literature; for a similar picture in other areas of western Sicily, see Maurici 2010: 418.

⁶⁴ See above, n. 23.

⁶⁵ Maurici 1997: 265–266.

⁶⁶ Corretti, Gargini, Michelini and Vaggioli 2004: 156–163; Corretti, Michelini and Vaggioli 2010: 157–166.

⁶⁷ Corretti, Mangiaracina and Montana 2009.

⁶⁸ See De Luca 2005; De Luca's suggestion is that the Arabic letters in the stone mould of a medal or amulet from the Fortified Palace closely parallel the scripture of the coin minted by Ibn 'Abbād. This would connect Entella to the mint of Ibn 'Abbād.

the chief place of the rebels against the central, imperial power;⁶⁹ Latin sources, together with the conspicuous archaeological evidence brought to light by the Swiss team at Monte Iato, suggest, however, a pre-eminent role for Iato as the main place of the rebels against Frederick II.

After a partial imperial success between 1222 and 1226, the revolt exploded again in 1243 and was finally doomed in 1246. The town of Entella was emptied, this time definitively. The survivors were deported to Apulia, where they started a new existence in the service of Frederick II.

The Epilogue

Notwithstanding an attempt to repopulate the vast area of western Sicily where the unfortunate Islamic state of Ibn 'Abbād had lived its short existence, the landscape around Entella, and Entella itself, continued to be abandoned and empty for centuries (fig. 9).⁷⁰ Two churches are recorded at the beginning of the 14th century at Santa Maria del Bosco (later to become a powerful abbey, endowed with a conspicuous territory) and at Contessa (*Casale Comitissae*, which became the administrative centre of the whole area and was renamed 'Contessa Entellina' in the 19th century). The castle at Calatamauro gradually lost its military relevance and was abandoned in the 16th century. The castle of Battellaro was restored in the 14th century and, in modern times, was transformed into a *masseria*, now ruined. Only in three other off-sites were a few sherds recovered which could be dated to a period between the second half of the 13th and the second half of the 15th centuries.

Albanian colonists arrived in the second half of the 15th century, and a conspicuous group settled at Contessa Entellina in 1520. In the following centuries, new farms were built on the very place of former *casali*, testifying therefore to a continuity in open settlement to this day.

Conclusions

In the discussion of the relationship between countryside and urban settlements in the Sicilian Middle Ages, the case of Entella is of relevance inasmuch as we can compare archaeological and documentary data from both the town and the surrounding landscape.

The development of settlements in the region of Entella was characterized by different dynamics regarding the town, on the one hand, and the territory on the other.

Settlement continuity is particularly evident in those sites that lie on the main roads and therefore bore strategic importance. Their growth and decrease were closely connected to the fortunes of the roads along which they lay. As long as people, livestock and items continued to move along these routes, the villages or farms that were located along them and could therefore support this traffic, and/or take advantage of it, went on to prosper. Political changes did not seem to affect them as much as they did with other open sites.

Farms/villages in the countryside, but more distant from the main traffic routes, seem instead to have been more dependent on changes in agricultural practices, land tenure, people movement and political events. This is more perceivable in the case of those settlements that started and prospered during the Islamic period, survived under Norman rule in a feudal system, and then collapsed at the time of the revolts against Frederick II.

Turning to the only medieval urban settlement in the investigation territory, i.e. Entella, it appears that its place-name is deeply rooted in the plateau also that today bears this name, even after centuries of total abandonment. The same had happened at the time of the resettlement in the 10th century on the plateau of Rocca d'Entella, which had the same name of the town that had been deserted eight centuries before, in the Roman imperial age.

It looks as if local settlers continuously kept, and even transmitted to newcomers, the consciousness that the outstanding gypsum plateau visible from kilometres around, though temporarily abandoned, would yield the opportunity of defence, and of political and military control over that wide area which it was centred in. In other words, there were opportunities for an urban centre. And, in fact, this opportunity was exploited at least twice in the medieval period: at the time of the prescript of al-Mu'izz; and during the so-called Muslim rebellions. In the first case, Entella was the obvious place to put in effect the caliphal order. The site was provided with conspicuous remains of ancient city walls (which were surely reused at the end of the 12th century), ruins of ancient buildings within the plateau, along with building stone quarries, in a location suitable for controlling a large area. In our reconstruction, the birth of the Islamic settlement at Entella was therefore a state initiative, deriving from a precise political address. At the end of the Norman kingdom, instead, the sudden and massive reoccupation of the plateau was a spontaneous reaction to a threat

⁶⁹ Arabic texts in Johns 1993: 83–89, with previous literature. Johns (1993: 91), suggests, indeed, that the chief place of the 'emirate' of Ibn 'Abbād was not Entella but Iato, as witnessed by the Latin sources.

⁷⁰ Corretti, Gargini, Michellini and Vaggioli 2004: 176–177; Corretti, Michellini and Vaggioli 2010: 181. A general view is in Maurici 1997: 276.

and was therefore primarily aimed at defence. The urban settlement at Entella assumed a political valence later on, when it became the main see, or at least one of the chief places, of the rebellion's leader.

In addition, the repeated efforts to desert Entella, and therefore to annihilate its political, military and urban role, carried out possibly (as we have seen above) by the Norman lords at the beginning of the 12th century, and later and more massively by Frederick II, indirectly testify to the relevance of this urban settlement near the Belice River.

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Chapter 6

The Settlement of Contrada Castro (Corleone, Palermo) between the Byzantine and Islamic Periods (7th-11th c. AD)

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Introduction: The Harvesting Memories project ‘Ecology and Archaeology of Monti Sicani landscapes (central-western Sicily)’

Since 2015, a fruitful collaboration between a private bio-farm, Bona Furtuna LLC, the University of Palermo and the ‘Soprintendenza BB.CC.AA.’ has been established within the ‘Harvesting Memories’ project, which is focused on the study of long-term landscape transformations as a result of the diachronic interaction between human socio-economic patterns and environmental and ecological trends.¹ The project study area is located in the Sicani Mountains, specifically in a rural zone between the municipalities of Corleone and Campofiorito (Province of Palermo). The whole project area measures approximately 300 hectares, inside the Bona Furtuna estate, and includes Contrada Castro, Contrada Giardinello and Contrada Valle Fredda, which extends up the slopes of Monte Barraù (or Monte Barracù), a Special Conservation Zone (ZCS) of the Monti Sicani district (fig. 1).

The study area is quite diverse from a bioclimatic point of view, presenting different gradients from lower mesomediterranean (upper dry) to lower supramediterranean (lower subhumid).² The landforms were shaped by frequent changes in geological strata, such as the alternation of clayey or marly hills and calcareous reliefs in the Mesozoic Era (Sicana facies). This has resulted in a sequence of hills with gentle

slopes that are irregularly interrupted by isolated mountains with steep, if not abrupt, slopes, which reach the considerable height of 1420 m a.s.l. (Monte Barraù). The rural landscape is heterogeneous due to its environmental variability and centuries of human activities involving natural resource exploitation. The ecological characteristics of Contrada Castro and Contrada Giardinello – particularly rich in freshwater springs – offer optimal conditions for agricultural exploitation, silvo-pastoral activities and historical human settlement. The area is an example of traditional Mediterranean farmland with a mosaic of arable land, olive groves, vineyards, mixed crops, fruit orchards and agro-forestry systems. A few remains of a holm oak forest, which once probably covered the area, are located on the southern slopes of Monte Barraù. Indeed, a Latin manuscript (5 October 1428) of the *Tabularium* of the monastery of Santa Maria del Bosco di Calatamauro (the owner of the area since at least the end of the 14th century) mentions a forest covering Mount Barraù.³ Today, the forest consists of a coppice of *Quercus ilex* characterised by a 5-10 m high closed woody layer and includes *Viburnum tinus* in the shrubby undergrowth. The agro-sylvo-pastoral system also includes extensive grasslands and garrigues dominated by *Ampelodesmos mauritanicus* due to grazing and repeated burning of the vegetation.⁴

The case study area in the Corleone area of central-west Sicily has a long tradition of settlements, such as the renowned site of Montagna Vecchia⁵ and 30 settlements spanning from prehistory to the medieval period.⁶

¹ Castrorao Barba, Rotolo, Bazan, Marino and Vassallo 2017; Castrorao Barba, Rotolo, Bazan, Marino and Vassallo 2018a; Castrorao Barba, Miccichè, Pisciotta, Marino, Bazan, Aleo Nero and Vassallo 2018b; Castrorao Barba, Miccichè, Pisciotta, Speciale, Aleo Nero, Marino and Bazan 2020.

² Bazan, Marino, Guarino, Domina and Schicchi 2015.

³ Arcadipane, Balletta and Miceli 1991.

⁴ Bazan, Castrorao Barba, Rotolo and Marino 2018a.

⁵ D’Angelo and Spatafora 1995.

⁶ Spatafora 1997.

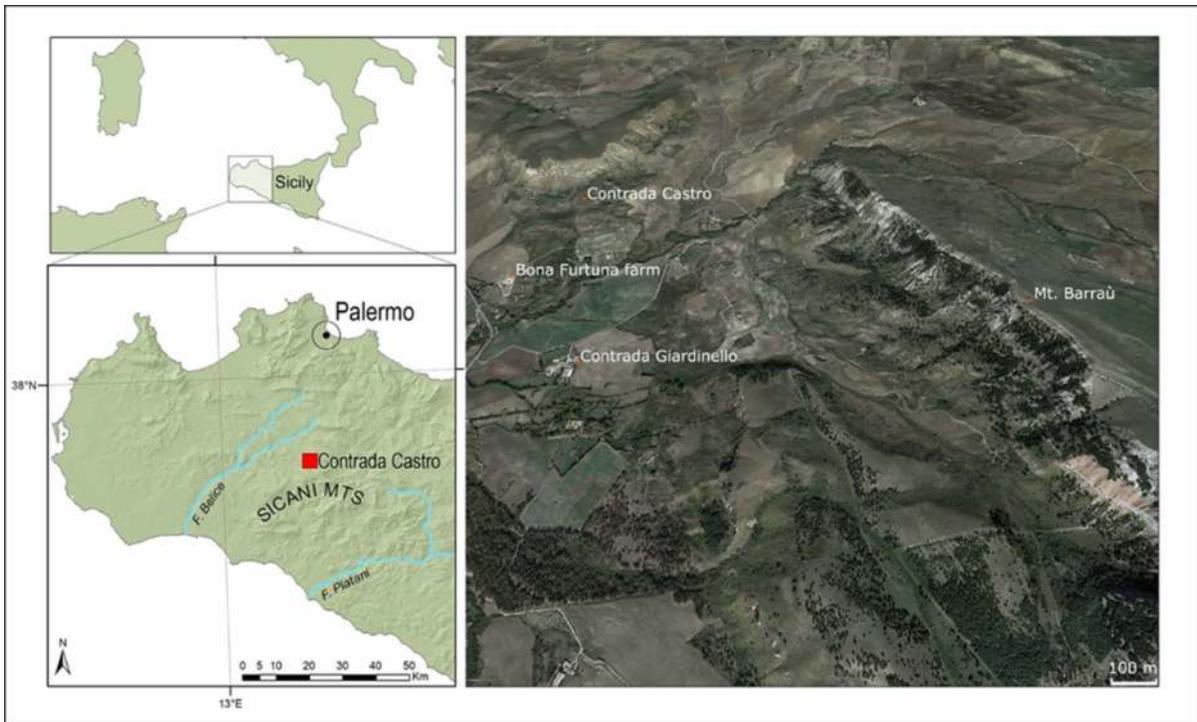


Figure 1 – Map and location of the case study area (Contrada Castro, Corleone, Palermo)

Within this huge district, our area was almost pristine from an archaeological point of view; the only known archaeological site was a small, allegedly prehistoric settlement located on the southern slopes of Rocche di Castro.

The Alto Belice Corleonese district probably acted as a hinge between the southern and northern coasts of Sicily. It is likely that a network of roads between Palermo and Agrigento had been established by the Roman period,⁷ as became apparent in the medieval period.⁸

In fact, it is not a coincidence that the first historical mention of the area dates to the Middle Ages. The toponym *Ra's Bū l-rakhū*, latinized into *Burrachu*,⁹ is cited in the *jarīda* of Monreale (1182 AD), a Sicilian medieval counterpart of a contemporary land register written in Latin and Arabic, which describes the boundaries (*divisae*) of the lands of Jato, Corleone, Battellaro and Calatrasi, which were donated by the Norman King William II to the Abbey of Santa Maria Nuova of Monreale.¹⁰ This toponym shows a clear Arabic origin, with a possible derivation from a former Greek toponym: *Ra's* and *Jabal Bū l-rakhū*, latinized into *Burrachu*. In the part of the *jarīda* that describes the

boundaries of the *Divisa Ialcii* (District of Jato) and the toponym *Burrachu*, it is possible to identify several other micro-toponyms of the area.¹¹ The reference to Monte Barraù is related to a dispute about the localization of *Qal'at Jālšū* (Calatralci) which, according to Maurici, may be identified with Pizzo Cangialoso.¹²

The 'Harvesting Memories' project's field surveys¹³ (fig. 2), conducted within the boundaries of the Bona Furtuna, LLC, estate, led to the identification of 16 sites of human occupation dating from Protohistory to the Middle Ages to the Modern period. In particular, we identified and delimited 12 areas of concentrated pottery (Sites 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12 and 16) and 4 areas with architectural evidence (Sites 10, 13, 14 and 15).

A particular site in Contrada Castro (Site 5) emerged among the others for its location on top of a small hill in the foothills of the southern slopes of Rocche di Castro/Rocche di Mezzogiorno, its topographical shape as a plateau, with a clear visual connection with other important settlements such as Rocca di Entella and the Castellaccio di Campofiorito and the presence of 10th-11th century sherds of pottery (within few

⁷ Verbrugge 1976.

⁸ Uggeri 2001.

⁹ Caracausi 1994; Nef 2011.

¹⁰ Johns 2002.

¹¹ Cusa 1868-82.

¹² Maurici 1987; Maurici 1998.

¹³ Castorao Barba, Rotolo, Marino, Vassallo and Bazan 2016; Castorao Barba, Rotolo, Bazan, Marino and Vassallo 2017.

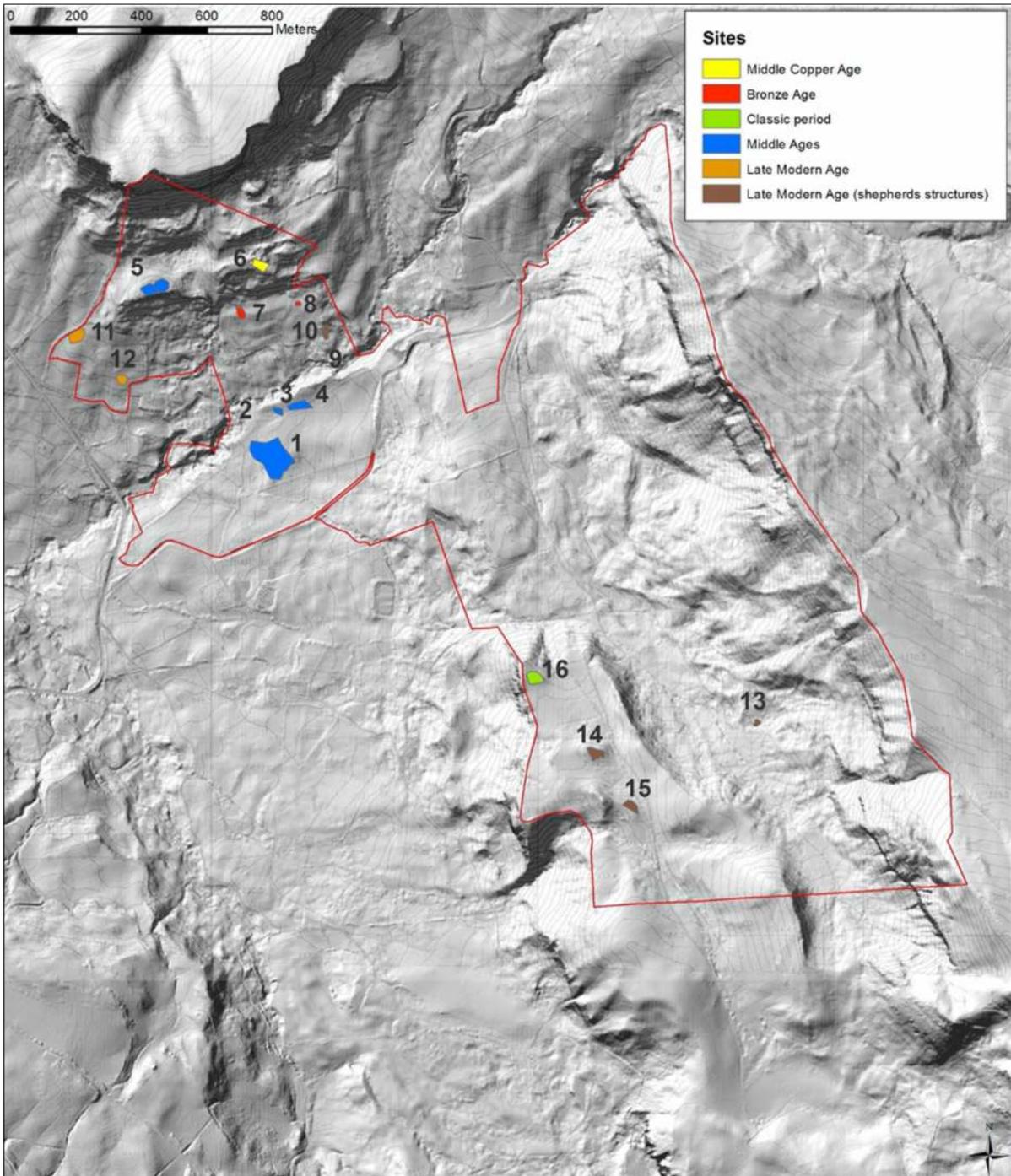


Figure 2 – Map of archaeological sites identified during the field survey

fragments of black gloss pottery). It was in this site that archaeological excavations started in 2017.¹⁴

In this paper, we present some results and data, some of them still in-progress, about the archaeological

evidence related to the early medieval occupation of the site between the 8th and 11th c. AD.

The archaeological excavation in Contrada Castro

The site of Contrada Castro extends over a flat, raised, east-west plateau (0.54 ha). In the north, it is adjacent to a sinkhole that separates it from the steep slopes of

¹⁴ Castrorao Barba, Miccichè, Pisciotta, Marino, Bazan, Aleo Nero and Vassallo 2018b.

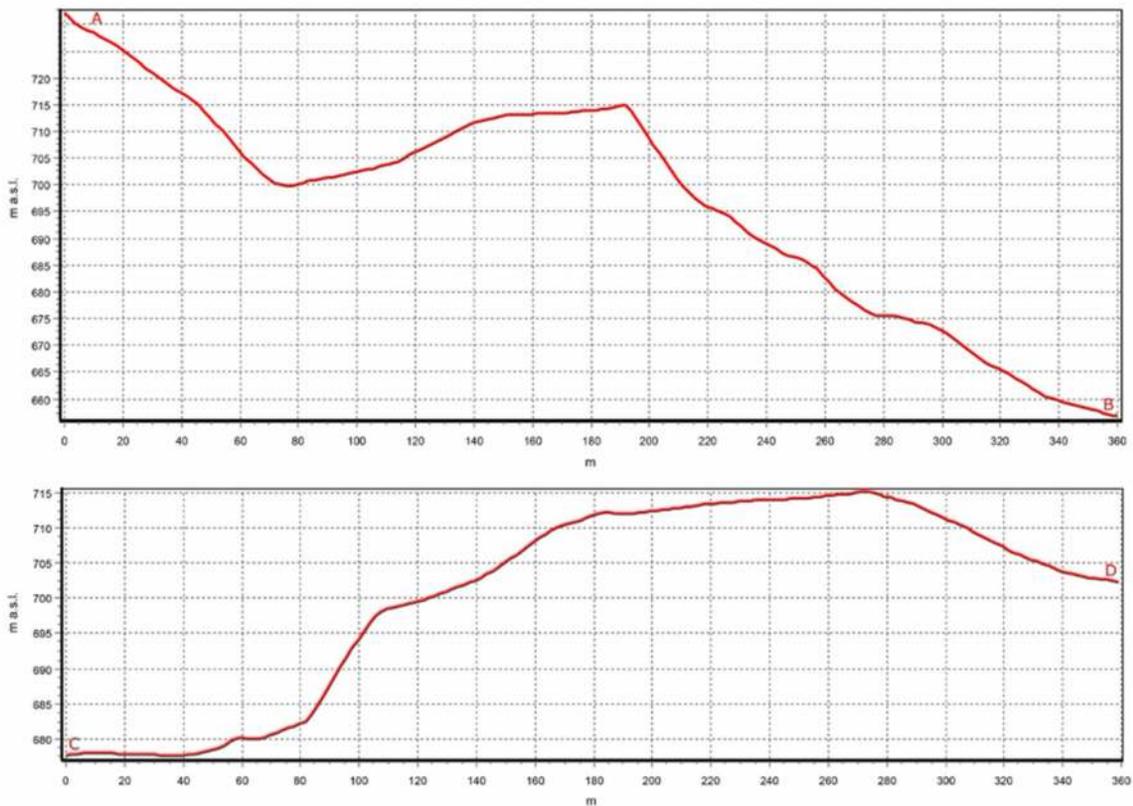


Figure 3 – Location of the site in Contrada Castro (Corleone, Palermo) and N-S and W-E profiles

Pizzo Castro/Rocche of Mezzogiorno, and in the south, there is an almost vertical slope towards the valley of the Giardinello torrent (fig. 3). The site is more accessible from the west via a non-carriage path and from the east via a dirt road built in recent years.

The site occupies a defendable and strategic position, but at the same time, is directly connected with underlying valleys that are potentially exploitable for agriculture and crossed by possible road axes in this sector of the Sicani Mountains. This plateau is occupied by the remains of interconnected enclosures with 1-m high dry walls formed by square blocks of various sizes

installed under dry conditions, which are related to transhumant herding activities.

In 2017 and 2018 (partially also in 2019), a first excavation area was opened in the southeastern part of the plateau. The open area excavation has revealed a long history of the hill that, after occupation in the 6th-5th c. BC, was reoccupied during the Byzantine and Islamic periods (7th – 11th c. AD) (fig. 4).

From the findings made up to the summer of 2019, the most ancient evidence of the site's occupation dates back to the pre-Roman period (late 6th-4th c. BC) and

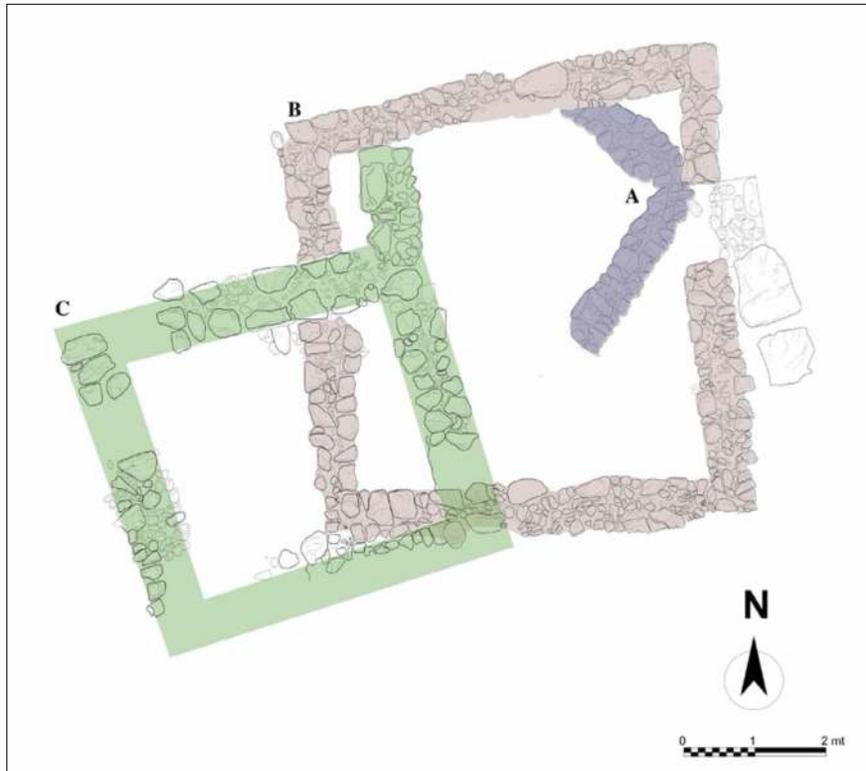


Figure 4 – Occupation sequence of the Contrada Castro settlement: a) 6th-5th century BC; b) late 8th-9th century AD; c) 10th-11th century AD

is testified by some ceramic finds related to a collapsed squared/rectangular building.

After a long hiatus, according to the current survey and excavation data, the site was reoccupied in the Byzantine period.

The only evidence above the classical period layers is represented by two peri-natal burials (fig. 5); the death of these individuals occurred at a gestational age of 40 ± 2 weeks. The first one was found in a layer cut by the southwestern walls of a later building (which we will discuss below). It is a simple oval burial with a northeast-southwest orientation containing a child lying partially on his right side, with the upper part of the body (trunk and head) rotated in a semi-prone position. The skeleton did not show any traces connected with the potential presence of a shroud or a bandage wrapped around the body. According to a radiocarbon analysis of bone samples, the individual's death dates to the 7th-early 8th c. AD (sigma 1 (65%) AD 662-AD 778; sigma 2 (95%) AD 620-AD 906). This chronology is further confirmed by the discovery of a roof tile decorated with stamped striations typical of the Byzantine period in Sicily¹⁵ on the surface of the layer where the burial was cut.

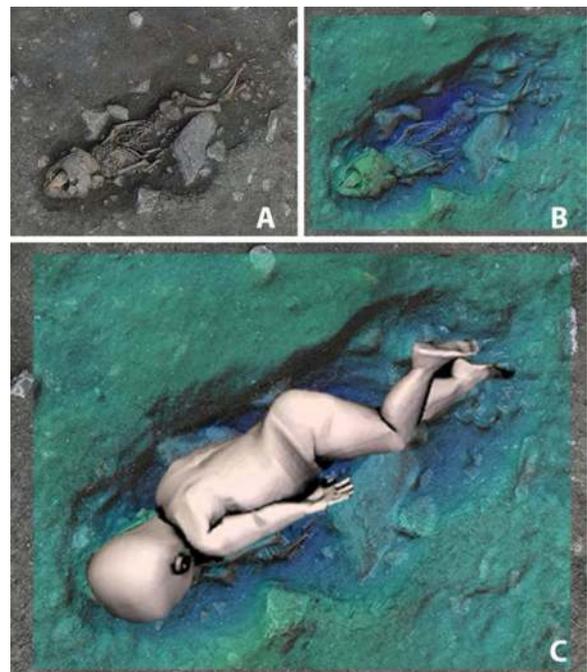


Figure 5 – Byzantine infant burial: a) orthophotograph; b) DEM generated using photogrammetry; and c) reconstruction of body position of the infant in the burial

¹⁵ Arcifa 2010.

Preliminary genetic data produced by the Laboratory of Molecular Anthropology and Paleogenetics, Department of Biology, University of Florence showed that the skeletal remains from Corleone still contain well preserved endogenous DNA. Therefore, it was possible to determine that the individual was male and that his mitochondrial DNA belonged to the rare sub-clade HV4a2b of haplogroup HV4, belonging to the macro-haplogroup HV*, which is more frequent in the Middle East.

The other peri-natal inhumation was found in the northeast corner of the building, which was built in a subsequent period and whose construction activities affected this earlier sepulchral context. The skeleton, north-south oriented, was laid in a dorsal decubitus. The skull was slightly facing east. The upper right limb was folded up, with the hand under the face, while the upper left limb was only represented by the humerus, which was laterally placed along the axis of the body. The lower limbs, only partially recovered, were disturbed by subsequent activities that did not allow a satisfactory interpretation of their original position. However, the presence of the proximal part of the right

femur cautiously would suggest a spread position of the lower limbs. The maintenance of the main anatomical connections would indicate a decomposition of the body in a full space.

The occurrence of these two perinatal burials opens many interpretive questions about the use of this area (a marginal zone dedicated to infant burials due to an extremely high infantile mortality during childbirth?) and the settlement layout in this early Byzantine period.

Apparently not much later (probably the second half of the 8th c. AD), a squared 5x5 m building with two pottery kilns was constructed in this area (fig.6).

This building is partially sunken, cut in the bedrock in the south and in an earlier layer in the west, while the entrance to the building is open on the east side through a sort of sloping ramp. In the first phase, the building was probably not entirely covered, perhaps only a roof of tiles on some sides and, inside it, only craft activities related to pottery and tile production took place. In fact, in the south side of the building, the

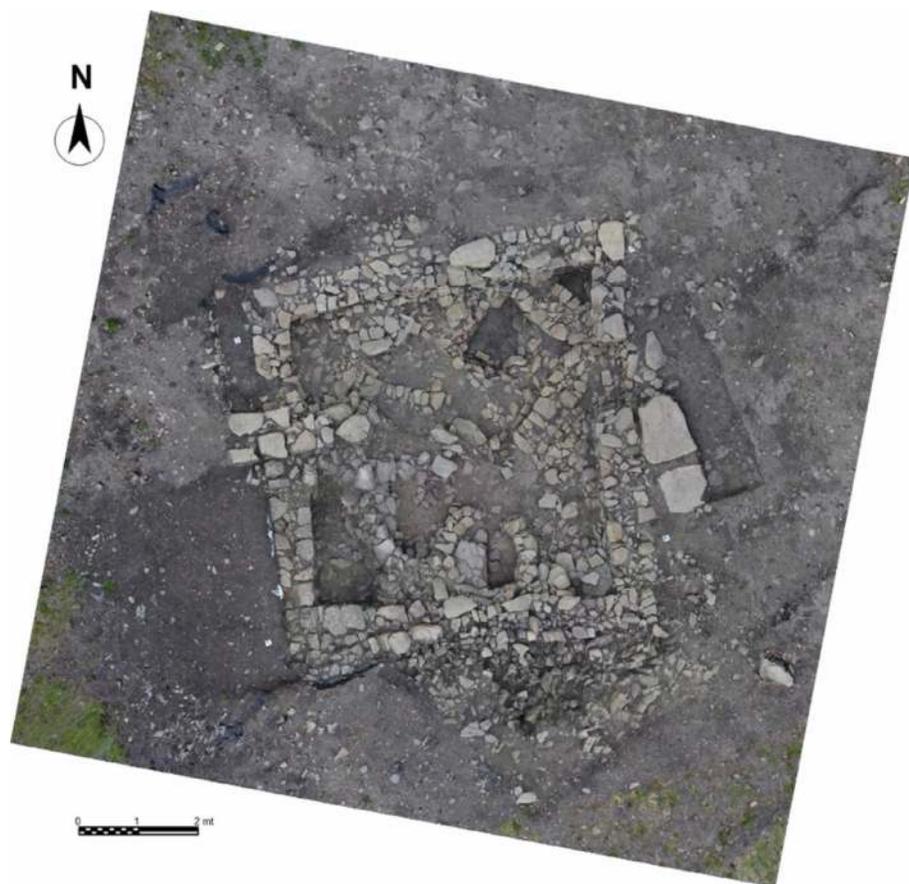


Figure 6 – Orthophoto of the squared building within the remains of the two productive kilns in the southeastern corner

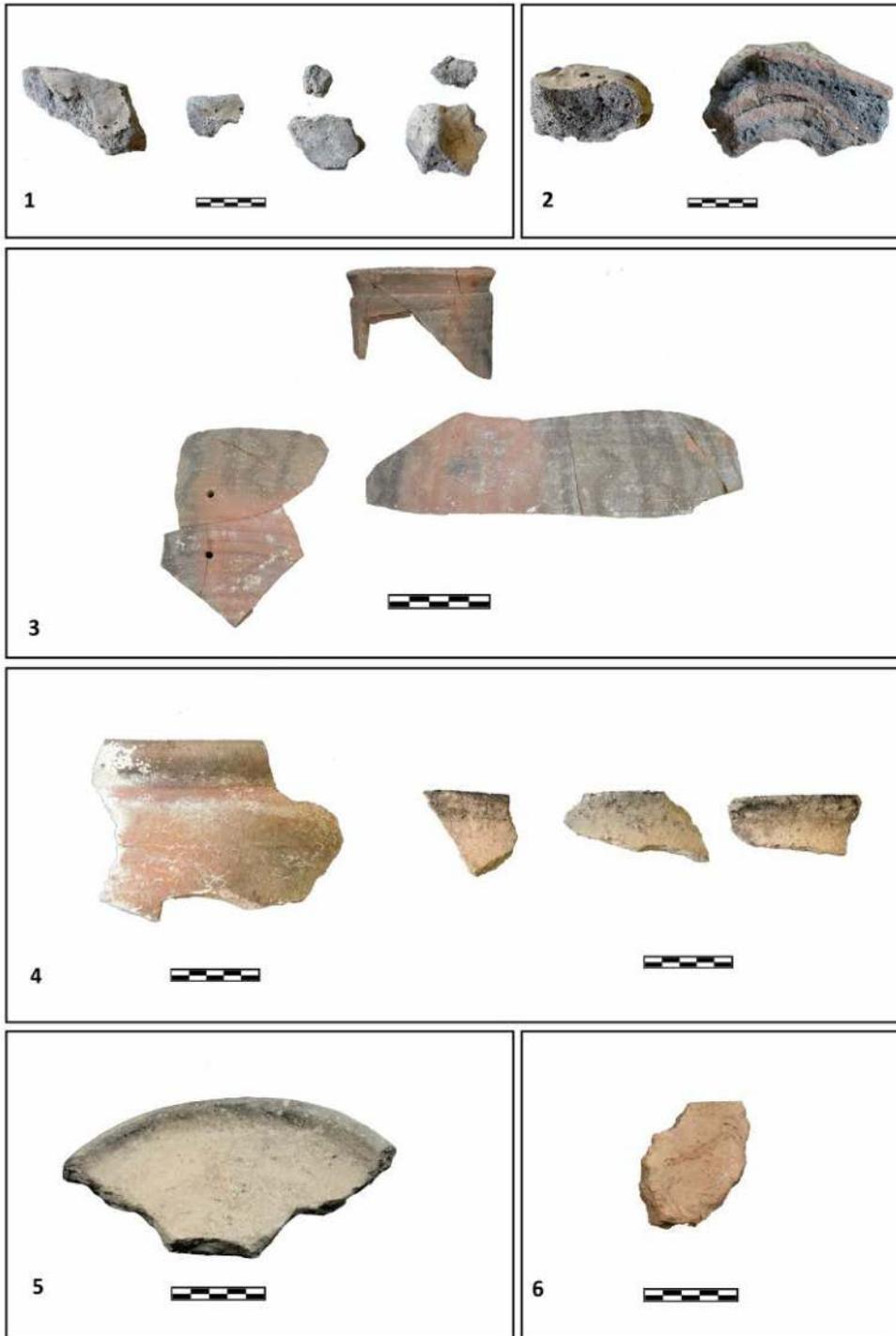


Figure 7 – Early medieval pottery: 1-2) late 8th-9th c. sherds of pottery production waste; 3-6) 9th century painted amphora; cooking pot; flat bread baking plate; combed tile with grass inclusions

remains of two circular kilns were found, connected to burnished layers and a good amount of production waste (fig. 7, 1-2).

A first kiln (diameter 1.26 m) was dismissed soon and another one (diameter 1.12 m), well preserved, was

built nearby. This latter kiln presented a circular stone-structure. Immediately in front of the kiln's mouth the soil was strongly reddened by solid ash layers full of charcoal linked to combustion processes. One of the charcoal pieces, a fragment of the small shrub *Pistacia* sp., was radiocarbon dated, which confirmed the use

of the building between the second half of the 8th and the 9th centuries (sigma 1 (65%) AD 774-AD 878; sigma 2 (95%) AD 762-AD 900). The inner part of the firing chamber and the dome were probably made of a yellow clay that also created a sort of curb around a pilaster made in stone to support a probable cooking floor.

Evidence of a cooking floor was not found because, during a second phase, the building was transformed: the western entrance was closed – some restoration traces are recognizable also in the eastern walls – a new earth floor covered the disused southeastern kiln, and the other was converted into a cooking oven (for bread?), and in the northern part a base for a hearth was added.

Fragments of loop-motif painted amphorae with sinusoidal decoration and ollae (cooking pots) and so-called *testi* – flat bread baking plates – in ceramic and stone belonging to the same phase have also been found (fig. 7, 3-4-5).

This building completely collapsed as attested by a thick stone layer. In association with this layer, cooking pots such as ollae, a flask painted with sinusoidal bands as well as a fragment of a combed tile with grass inclusions have been found (fig. 7, 6). Radiocarbon analysis of an animal bone found in this layer indicates a probable chronology of the collapse during the 9th century (sigma 1 (65%) AD 800-AD 878; sigma 2 (95%) AD 766-AD 897).



Figure 8 – Orthophotograph generated using a photogrammetric procedure with the stone layer, in particular, the walls of a medieval building (10th-11th century AD) were already partially visible

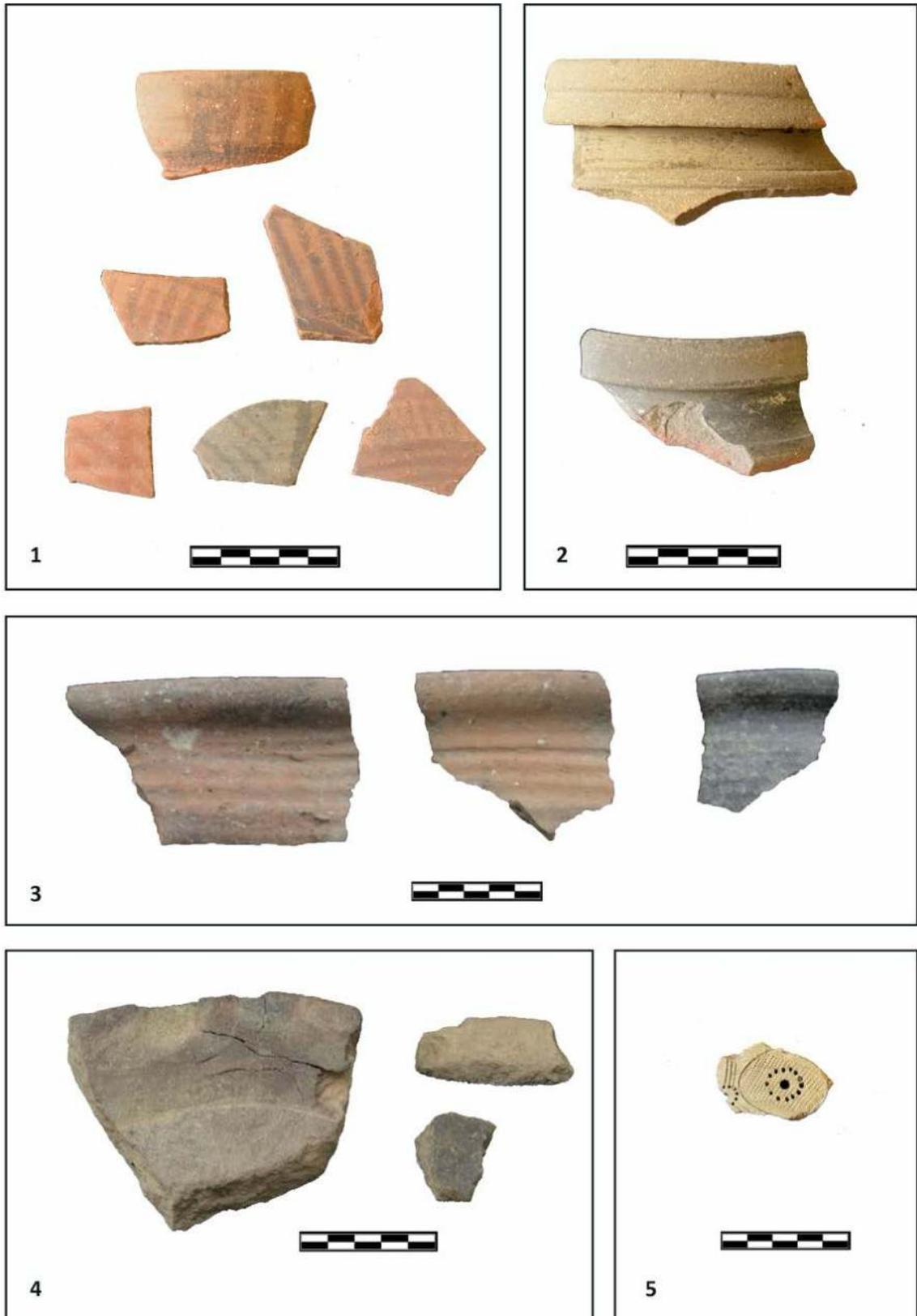


Figure 9 – Islamic period pottery (10th-11th century AD): 1-2) painted amphorae; 3-4) cooking pot (olla); 5) lithic flat bread baking plate; 6) jug with filter

After the collapse of the structure, some layers with many sherds of pottery and animal bones probably indicate the transition to a new occupation period, related to another building with a completely different orientation than the previous one. This new building was preserved in a single foundation row and was, presumably, made in two different periods (fig. 8), as will be further explained.

During the first construction stage, an east-west wall (approximately 2.95 m in length) consisting of a single line made up of two outer faces formed of large blocks put in place from the flat side (thickness of approximately 0.8 m) was built. The structure was formed by a continuous wall interrupted in the west by a wide gap of 1.15 m filled by materials from the upper layer, after which it continues, with the same orientation, into a strip of wall 0.9 m long and 0.7 m wide that may have functioned as a threshold 0.85 m wide. After the first building stage, two rough walls made of medium dry-stones were attached: on the east side, there was a north-south wall approximately 3.5 m long and 0.65 m wide; on the west side, there was a north-south wall approximately 2.06 m long and 0.68 m wide. The structures of this building and the life layer of this period are very badly preserved and heavily damaged by post-abandonment spoliations and agricultural activities. In fact, a stone layer found below a dark layer full of findings, immediately under the top-soil surface, was a result of the spoliation and levelling of medieval structures after the abandonment of the site and perhaps, during the construction of the shepherd's enclosures, which may have been built with reused stones. Among the many animal bones from this stone layer, the ones of particular interest included the skeletal elements of a donkey with a radiocarbon date in the 10th-11th century AD (sigma 1 65% AD 965 – AD 1042, sigma 2 95% AD 890 – AD 1159). In addition, several classes of pottery for storage/transport, including fine and coarse ware, cover this chronological range (Islamic period, 10th-11th c. AD).

Among the most frequent shapes are amphorae with enlarged and introflexed rims and external painted decoration in brown or red, which are comparable to those found in some Islamic contexts especially in the Province of Palermo¹⁶ (fig. 9).

Additionally, many common types of pottery, fine-ware and lamps are representative of the Islamic period. In particular, sherds of a mug with a dark surface, a simple carinated bowl with a rounded rim and a fragment of a jug with a filter, which may have been imported from North Africa, lamps with elongated canal nozzles and other planar and circular objects with filling holes

on the domes, which may both have been made in Palermo, were found. The cooking pottery includes a large variety of *olle* (deep cooking-pots) with a brimmed rim and an ovoid body marked on the outside by a series of grooved lines and a few examples of flat-bottomed pots. These types are very frequent in urban contexts of Palermo from the 10th and 11th century AD, found in Castello San Pietro;¹⁷ the Church of the Gancia;¹⁸ the Kalsa district;¹⁹ Piazza Bologni;²⁰ Via Imera.²¹

According to the pottery data, this is the chronology of the last medieval occupation of the site that was only sporadically frequented and then abandoned during the 12th c. AD, and then just partially used for agriculture and shepherding practices until the early 20th century.

Zooarchaeological data

The zooarchaeological analysis was mostly aimed at exploring, in a diachronic perspective, all interactions between human and non-human animals to provide fundamental information on economic and productive aspects of the ancient communities that lived on the Castro hill-top, and their relationship with the surrounding natural environments.²²

Although most of the osteological sample is still under study, it is possible to present a preliminary report that has some interesting evaluations on the husbandry practices and the exploitation of animal resources over the two main periods of occupation of the site (late 8th -9th and 10th -11th centuries AD).

The sample analysed consists of a thousand specimens of which 46% (n.461) was taxonomically attributed at species level. The prevalent presence of domestic species characterised the faunal assemblages for both periods.

The fauna found in the layers attributed to the occupation of the area for the late 8th -9th centuries (fig.10) see the caprovines (*Ovis aries/Capra hircus*) as the most numerous group, which alone constitutes 51% of the identified fraction, followed by pigs (*Sus domesticus*) with 19% and cattle (*Bos taurus* L.) with 16%. The domestic assemblage also includes poultry (*Gallus gallus*) which, together with a group of remains attributed more generically to the order of the galliforms, reaches 8% of the sample examined. Wild animals are little represented, with a distribution between 1% and 2% of the identified fraction and report the presence of hares

¹⁷ Arcifa and Bagnera 2014.

¹⁸ Ardizzone, Pezzini and Sacco 2014.

¹⁹ Spatafora and Canzonieri 2014.

²⁰ Aleo Nero and Chiovaro 2014.

²¹ Ardizzone and Agrò 2014.

²² Castorao Barba, Speciale, Miccichè, Pisciotta, Aleo Nero, Marino and Bazan 2021.

¹⁶ Castello S. Pietro in Palermo, see Arcifa and Bagnera 2014; Corretti, Facella and Mangiaracina 2014.

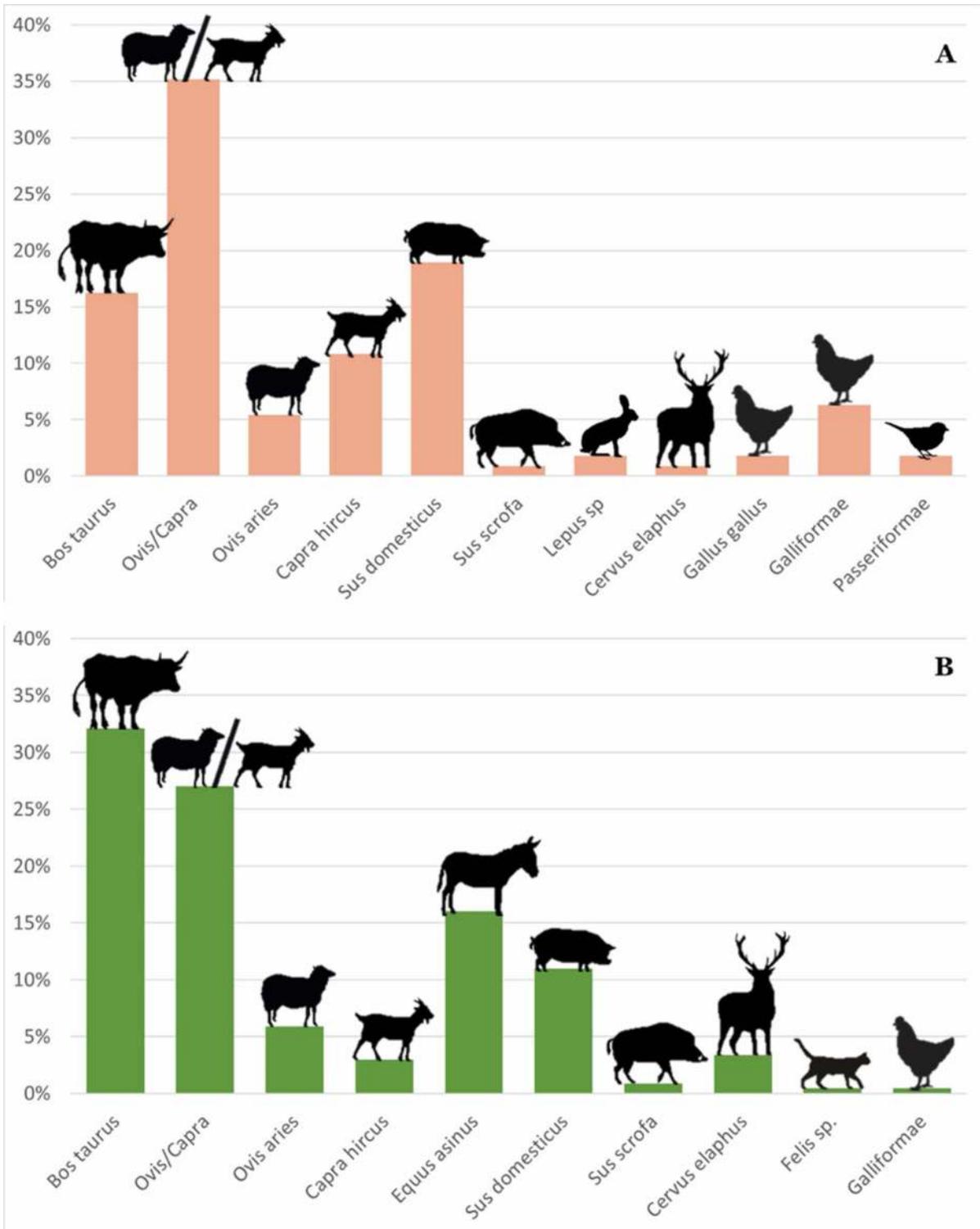


Figure 10 – A) Percentage distribution of identified faunal remains of the late 8th-9th century AD; B) Percentage distribution of identified faunal remains of the 10th-11th century AD

(*Lepus* sp.), deer (*Cervus elaphus* L.), and wild boar (*Sus scrofa* L.).

During the 10th -11th centuries, the distribution of the various *taxa* identified highlights a general continuity with the situation of the late 8th - 9th centuries, although showing significant exceptions (fig. 11). Even though the number of wild species remains extremely low and the percentage of caprovines remains high, the settlement saw a marked increase in cattle during this period. The killing patterns of cattle would suggest herd management mainly aimed at meat production since most of the cattle remains referred to animals killed in sub-adult age. A further discontinuity factor in the distribution of the fauna between the two periods of occupation of the site is the presence of the donkey. Indeed, remains of this equine were found only in the 10th-11th century sample, where they had a fair distribution that reached 13% of the total of the identified remains.

The general picture presented by the zooarchaeological analysis, although still partial and incomplete, would seem to refer to the substantial maintenance of a rural economic model strongly characterised by caprovine husbandry, to which, starting from the 10th century, was joined by the will to significantly increase the economic role of cattle. This change in the exploitation of animal resources could perhaps be an expression of a period of greater economic dynamism in the settlement during the 10th-11th centuries.

Woods exploitation and human-environment interactions

Soil samples for archaeobotanical analyses were selectively collected during the 2017 and 2018 excavation campaigns. For each stratigraphic unit, 8-15 litres were randomly collected on average: only in a particular case - the layers of burnt soil from the kiln - a total sampling of the stratigraphic units was carried out. The preservation of the vegetal remains was quite good, despite 19% of the specimens not being taxonomically identifiable.

Thanks to a comparison with the local current vegetation, 10 species were identified [*Quercus ilex* L., *Quercus virgiliana* (Ten.) Ten., *Pistacia terebinthus* L., *Rhamnus alaternus* L., *Anagyris foetida* L., *Fraxinus ornus* L., *Ulmus minor* Mill., *Acer campestre* L., *Ostrya carpinifolia* Scop., *Sorbus torminalis* (L.) Crantz, *Populus nigra* L.]; identification reached the detail of genus or families in 4 cases (*Phillyrea* sp., *Prunus* sp., *Pyrus* sp., perhaps a species belonging to Moraceae).

The tree vegetation is therefore represented by evergreen oaks, semi- and deciduous oaks, maples, ash trees, associated with riparian species such as

elm, poplar and hornbeam, and shrub species such as buckthorn, terebinth, sorb, plum trees.

In the late 8th-9th century phase, 9 species/genera are present. The holm oak prevails with 35% of the samples and, together with the other oaks, represents 48% of the total. Terebinth makes up 9% of the wood charcoal, and all other species are present at a percentage between 1 and 5%.

Finally, in the second medieval phase (10th-11th centuries), the variability seems slightly greater, with 11 species/genera, but with a clear preponderance in the presence of the holm oak, which in terms of volume constitutes 49% of the total, followed by lower percentages of unidentified oaks, terebinth, poplar, elm, a leguminous plant perhaps identifiable as *Anagyris foetida*. The identification of the mulberry (Moraceae) is more doubtful.

Crossing the archaeobotanical data with the analysis of the current vegetation series allowed us to confirm the possibility of using the phytosociological approach to determine the potential use of the land.²³ The species found in the archaeobotanical record indicate a co-presence in the exploitation of different environments, from the thermophilic forest to the riparian contexts; this variability reflects the current heterogeneity of the area, both in terms of present vegetation and ecological and geomorphological features. The potentially cultivated species represent a very low percentage, consisting of Prunoideae and other Rosaceae (for the latter, the comparison with *Pyrus* sp. is the most likely one);²⁴ for this reason, an exploitation of wild species of these families is presumable, and they are naturally present in the current territory as well. Furthermore, at this phase of analysis, no tree fruits were identified in the archaeobotanical record. On the other hand, the presence of mulberry wood (identified only in a few fragments and therefore indicated here only in a hypothetical way) should stimulate a debate on the introduction of this tree in the local flora.

The holm oak is by far the most exploited species for all the chronological phases, with percentages ranging between 30 and 50%. The massive use on the site of wood species referable to different stages of the holm oak vegetation series clearly indicate an exploitation of the range of this series for silviculture, while the low percentage of woody elements attributable to the series of deciduous oaks allows us to hypothesise a limited use of this forest resource, probably due to the fact that the area of deciduous oaks was intensely deforested to make space for land to be used for

²³ Bazan, Speciale, Castrorao Barba, Cambria, Miccichè and Marino 2020: 3201.

²⁴ Marino, Schicchi, Barone, Raimondo and Domina 2013.

agriculture.²⁵ Agricultural exploitation is documented in the recovered charred seeds of varieties of cereals and legumes, which are representative of cultivation in the area. The data indicates the prevalence of wheat in the cereal diets. The genus *Triticum* (wheat in the generic sense) identified in the samples belongs to the small- and medium-hulled varieties, and also to naked varieties, although it is not possible to clearly distinguish between 'common' or 'bread wheat' and/or 'durum' or 'pasta wheat'. The relevance of hulled grains could be explained by the persistence of food traditions or other agricultural choices. Another cereal present, although less represented than wheat, is barley. The cultivated landscape, therefore, was characterised by cereal farming, and the identification of a fair number of legumes (beans, ervils, chickpeas, peas, lentils) is an indicator of the practice of crop rotation.

Considering the archaeobotanical data of the same phases from Sicily, the site of Contrada Castro fits well into the context of the sites known so far during the Middle Ages; a high exploitation of wild species is recorded, although the absence of olive trees, a species widespread in the Sicilian countryside,²⁶ and a low percentage of cultivated arboreal species deviates from the average of the sites of western Sicily. This absence could be attributed to the high investment of time and effort and the continuity of work required by some tree cultivation activities and to economic choices, such as the reliance on other staple resources like cereals and pulses.

Conclusions

This discovery of a new site paves the way for new knowledge of the dynamics of settlement patterns in Sicilian rural landscapes under a long-term perspective. The development of hill-top sites or sites in defensible locations that were optimal for controlling valleys was a phenomenon that characterised many parts of central-western Sicily between the archaic and Hellenistic periods.

The first period of occupation of the elevated plateau of Contrada Castro is attested by the late archaic pottery found in the lower layer, which is probably related to the presence of a rural community linked to the exploitation of agro-pastoral resources. Choosing to occupy a location higher than the surrounding area, with a well-defined perimeter, seems to have been linked not only to primary defensive needs but also to the opportunity to occupy a strategic position among hilly areas and plains, perhaps a fertile area suitable for agriculture with the high reliefs of Pizzo Castro or Rocche of Mezzogiorno to the north and Monte Barraù

to the east mainly exploited for pastoral activities. The site of Contrada Castro provides significant and unique evidence of a small archaic settlement that seems to have grown from the need to exploit local resources in a landscape rich in water, fertile soil and productive rural space that created ideal conditions for demographic and settlement development in the Belice Valley and, more generally, in central-western Sicily.

It is very likely that, during the archaic/classical period, the inhabitants of Contrada Castro had to refer to more extensive centres of this area of the Belice Valley, such as Entella (Contessa Entellina)²⁷ and Monte Maranfusa (Roccamena)²⁸ or other sites that are known only through surveys or small excavations and are closer to Contrada Castro: Montagna Vecchia (Corleone),²⁹ Pizzo Nicolosi (Corleone)³⁰ and Monte Triona (Bisaquino).³¹ A not-very-dissimilar settlement to the Contrada Castro site was recently discovered on Castellaccio di Campofiorito,³² a relief located not far from Contrada Castro, which is only three kilometres away. These two sites were probably connected to the indigenous settlement pattern formed by the two large fortified centres mentioned above, which were in a widespread network of sites strategically located to control productive activities.

Furthermore, at the current stage of research, we do not have any evidence of a significant phase during the Hellenistic period, which is apparently in contrast to the data from this part of the island, where there had been a general revival of large settlements and small centres since the mid-4th century BC.

The settlement pattern linked to the selection of reliefs and hills as places for controlling rural districts seems to have changed in the Roman age, when it was characterised by the intensive occupation of low-lying lands associated with potential agricultural productivity and proximity to road networks. A shift in the settlement pattern with the rise of agglomerated hill-top settlements during the early Middle Ages was a global phenomenon³³ that is also documented in the Sicilian landscape.³⁴ In western Sicily, there are several cases of re-establishment of ancient sites located in hilly positions, often after a long hiatus (or significant contraction) during the Roman period and the Byzantine, Islamic and Norman period, for example, at: Pizzo Casa in Campofelice di Fitalia (second half of

²⁷ Nenci 1993.

²⁸ Spatafora 2003.

²⁹ D'Angelo and Spatafora 1995.

³⁰ Vassallo 1984.

³¹ Spatafora, Scarano, Maggiulli and De Giosa 2009.

³² Vassallo and Graditi 2010.

³³ Francovich and Hodges 2003; Quirós Castillo 2009; Christie and Hajnalca 2016.

³⁴ Maurici 1992; Molinari 2016.

²⁵ Bazan, Castrorao Barba, Rotolo and Marino 2018b.

²⁶ Gianguzzi and Bazan 2019; Gianguzzi and Bazan 2020.

6th-early 3rd centuries BC/11th-13th centuries AD);³⁵ Monte Iato in San Giuseppe Jato (8th-1st centuries BC/late antiquity, Byzantine period and 12th-13th centuries AD);³⁶ Monte Maranfusa/Calatrasi in Roccamena (7th-5th centuries BC/11th-14th centuries AD);³⁷ Makella in Marineo (8th-3rd centuries BC/Byzantine period and 11th-12th centuries AD);³⁸ Rocca di Entella in Contessa Entellina (6th-3rd centuries BC/11th-13th centuries AD);³⁹ Castellaccio di Campofiorito (7th-5th centuries BC/12th-15th centuries AD);⁴⁰ Monte Kassar in Castronovo di Sicilia (7th-5th centuries BC/late antiquity and 7th-8th centuries AD).⁴¹

Therefore, the site of Contrada Castro could reflect the dynamics of a rise in hill-top settlements in changed socio-economic contexts that marked a shift compared to the Roman villa system and the later phase characterised by the emergence of large villages – so called agro-towns⁴² – that were probably related to Church estates.⁴³ These large rural agglomerations remained active in the Byzantine period during which, upon the impulse of the State, defensive sites were built across the countryside, including the impressive fortification on Mount Kassar in Castronovo di Sicilia, which dates to the thematic period (late 7th-8th c. AD).

The 7th-early 8th c. perinatal burials at Castro are the only evidence of the first Byzantine (re)occupation of the hill-top plateau. At this stage of our research, it is very difficult and dangerous to suggest any kind of concrete interpretation about the settlement type during the Byzantine period.

The production of pottery and especially of tiles, so concentrated in a short time-frame, may be the sign of a planned and ‘quick’ reorganisation of the site.

The data from the new area (Area B) excavated in Spring 2019 will surely improve our knowledge of the Byzantine period. In fact, a very preliminary interpretation of the excavation is oriented toward interpreting the massive two-room rectangular building as a storage structure with a small paved storage room and a silo dated back to the late 8th and 9th centuries.

If this interpretation is correct, a new interpretative scenario may be built up: could it have been a nucleated village or a military (fortified?) settlement

created during the insecure period before the Muslim invasion of Sicily and then re-organized (or re-settled) in the Aghlabid period after the fall of the closer city of Corleone in AD 840? Also, in this building, as in the structure with the kilns, a second phase of reuse is probably dated to the 9th century.

In Contrada Castro, evidence of a radical change probably did not occur before the 10th century when the previous structure was in ruins and not visible anymore and new buildings were built – in Area A, as well as Area B – with a completely different orientation and not used after the late 11th century.

The early stages of rural settlement during the Aghlabid period (827-910 AD) are poorly known in the archaeological record. Knowledge improves for the phases between the mid-10th and 11th centuries AD when the number of low-land sites increased and hill-top settlements often developed in places that had been long abandoned. The layout of these hill-top Islamic settlements is unclear; fortifications that date to the 10th-11th centuries AD with certainty have not yet been documented, and the internal topography, household articulation, indicators of social hierarchy and presence of public, communal and religious buildings are uncertain.⁴⁴ This reshaping of post-Roman settlement patterns⁴⁵ does not imply a consequent and absolute depopulation of low-lying areas. The occupation of low-lying lands and valleys during the 10th and 11th centuries AD was detected in several field surveys conducted in western Sicily in the Trapani Mountains,⁴⁶ Jato and Belice valleys⁴⁷ inland of Entella.⁴⁸ These low-lying settlements have also been investigated by excavations of new early medieval sites⁴⁹ that were re-occupations of Roman rural complexes⁵⁰ or long-term secondary settlements related to road networks.⁵¹

To conclude, the investigation of this ‘unknown’ site of Contrada Castro reveals new insights into the settlement dynamics before and after the first stage of the Aghlabid

³⁵ Vassallo and Maurici 1987.

³⁶ Isler 1995.

³⁷ Spatafora 2003.

³⁸ Spatafora 1997.

³⁹ Corretti, Michelini and Vaggioli 2010; Corretti, Facella and Mangiaracina 2014.

⁴⁰ Vassallo and Graditi 2010.

⁴¹ Vassallo, De Leo, di Stefano and Graditi 2015; Castrorao Barba 2015; Carver and Molinari 2016.

⁴² Wilson 1990: 232–236.

⁴³ Molinari 2013.

⁴⁴ Molinari 2015.

⁴⁵ Molinari 2009.

⁴⁶ Rotolo and Martín Civantos 2013.

⁴⁷ Alfano 2015.

⁴⁸ Corretti, Michelini and Vaggioli 2010.

⁴⁹ Relevant new excavations have been conducted in Contrada Colmitella (8th-early 13th centuries AD) in Racalmuto-Agrigento (Rizzo, Danile, Romano, Scibona and Zambito 2012) and Rocchicella (8th-9th centuries AD) near Mineo-Catania (Arcifa and Longo 2015).

⁵⁰ Castrorao Barba 2016. Medieval rural settlements (10th-12th centuries AD) re-occupied the Roman sites of Villa del Casale di Piazza Amerina (Pensabene 2010) during the second half of 10th-12th centuries AD and of Caliaata a Montevago during early 11th-13th centuries AD (Castellana 1992).

⁵¹ Contrada San Nicola/Hyccara a Carini was occupied until the 12th century AD (Cucco 2012); Casale San Pietro/Statio Petrina (?) in Castronovo was also occupied until the 14th century AD (Castrorao Barba 2015; Carver, Molinari, Aniceti, Capelli, Colangeli, Drieu, Fiorentino, Giovannini, Hummler, Lundy, Meo, Monnerau, Orecchioni, Primavera and Ughi 2019; and Sofiana/*Philosophiana* in Caltanissetta was occupied until the 13th century AD (Vaccaro 2017).

conquest of western Sicily, a real ‘dark age’ from the perspective of archaeological knowledge, especially in a rural area. The material culture, archaeozoological and archaeobotanical data have also indicated the high potential of the site for the reconstruction of economic and human-environment interaction trends of an early medieval community during the complex transition from the Byzantine to Islamic periods.

Only the continuation of research will allow us to understand some open issues and shed more light on settlement patterns, landscape management and lifestyles in the early medieval Sicilian countryside.

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Chapter 7

The Madonie Mountains Area during the Norman Age: from al-Idrīsī to Archaeology

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Introduction

One of the most beautiful and important natural and historical sites in Sicily is the Madonie mountain range. The Madonie Mountains stretch across the northern coast to the heart of the island. This area was of great importance from prehistoric to medieval times, and several archaeological sites bear witness to the various chronological phases. The entire area has not yet been fully explored, although archaeological excavations have been carried out on some parts, mainly along the valley of the North Imera River. Excavations were carried out on prehistoric, Hellenistic, imperial, late Roman rural sites - particularly associated with the agro-pastoral economy of the land - along with medieval villages and castles. In several cases, the research, some of which is still ongoing, has been carried out in collaboration with the Soprintendenza of Palermo, Italian and foreign universities and interested communities. *Via Messina Montagne* is the road which crosses the area, and it was built during the rule of the Byzantine State. It became indispensable for transport between Palermo and eastern Sicily and for the Norman conquest of the island.¹

The Islamic geographer al-Idrīsī, author of *The Book of Roger*² around the year 1138, used this road to cross the Madonie range and, probably, the roads that branched off from this main axis, which would justify blatant inconsistencies in specified distances between the towns described. This paper focuses on the ancient towns of the Madonie area that were described by al-Idrīsī, many of which had even more ancient origins (fig. 1).

Medieval settlements in the Madonie Mountains

I will focus on two settlements that al-Idrīsī probably came across along the way but does not directly mention.

Setting off from Palermo and arriving in Vicari, al-Idrīsī followed the '*Magna via francigena Castrinovi*', as written in a document from 1090,³ proceeding up to the *casale* of Pitirrana, located on Pizzo Pipitone,⁴ and from there, possibly crossed the slopes of Rocca di Sclafani, although no reference is made to this, finally arriving in the town now known as Terravecchia.

Although no archaeological data from excavations conducted in Sclafani (*Isqāfiya*) exist at present, it should be noted that this town, along with Caltavuturo (*Qal'at Abī l-thawr*) and *Qal'at al-ṣirāt*, as reported by the *Chronicle of Cambridge*, was besieged by the Arabs in 939 AD.⁵

Caltavuturo, the name that al-Muqaddasī gave to one of the towns,⁶ is described by al-Idrīsī: 'A well-populated castle of considerable strength with substantial arable fields' (fig. 2).

It is likely that al-Idrīsī visited a fortified town similar to that illustrated by the monk Angelo Rocca in 1584, with the castle in the foremost position.⁷ These excavations in Terravecchia in 1999 and 2006 involved the following monuments: the Castle, the Church of S. Bartolomeo and Dammusi.⁸ Along the southern edge of the rock on which Terravecchia stands, there are visible traces of the fortification wall, undated so far due to a lack of thorough investigation. During an excavation carried out in 1999 in the castle area, which was restored by the Soprintendenza of Palermo, ceramic sherds were found dating from the Islamic (fig. 3) and Swabian ages, and which are currently undergoing further study.

¹ Arcifa 1995; Burgio 2000; Cucco and Maurici 2014: 21–26; Trasselli 1974.

² Rizzitano 1994.

³ Maurici 1998: 16.

⁴ D'Angelo 1971; Lauro 2009: 172.

⁵ Belvedere, Burgio and Cucco 2014: 368.

⁶ Peri 1955: 629.

⁷ Romana and Romana 2009: 30–31.

⁸ Vassallo 2009.

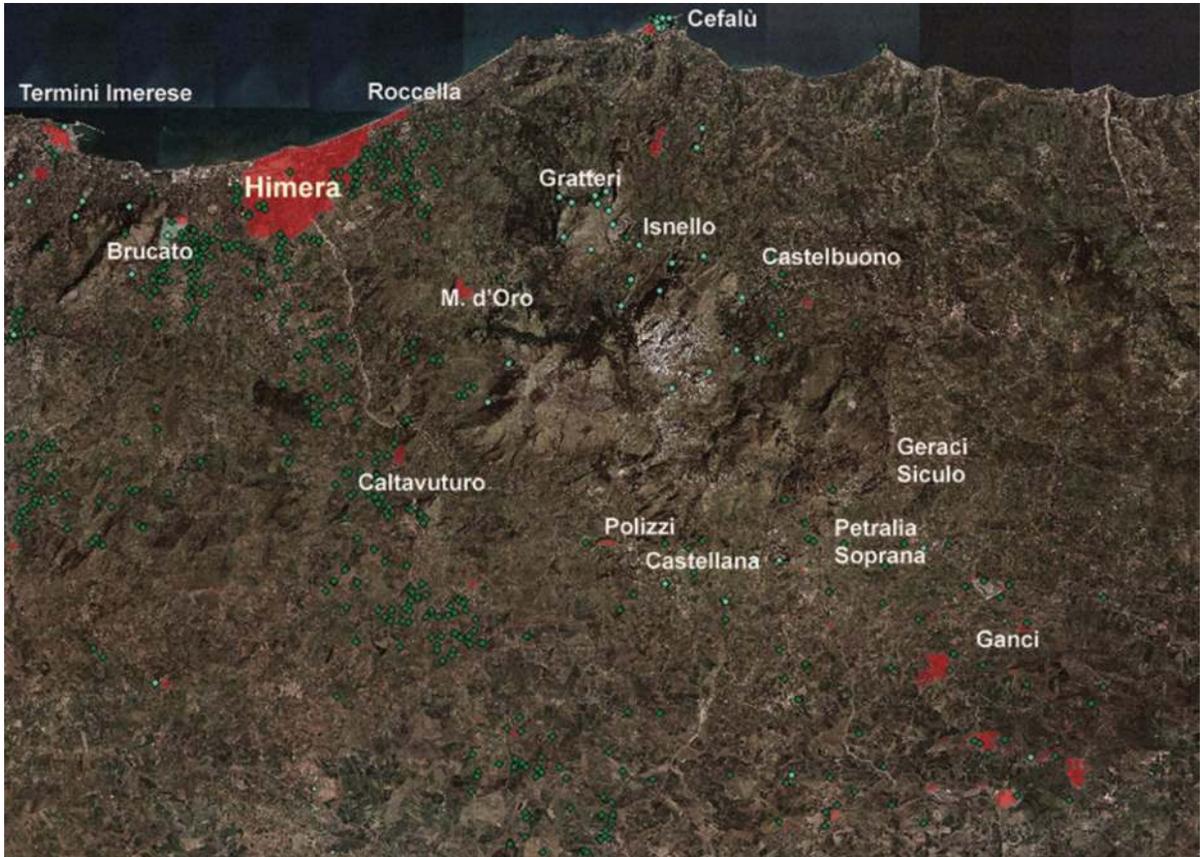


Figure 1 – Sites visited by al-Idrisī in the Madonie Mountains and on the coast. al-Idrisī did not report seeing the Greek town of Himera



Figure 2 – Caltavuturo under Terravecchia. The current town was founded in the late 16th century and developed as a result of the depopulation of Terravecchia



Figure 3 – Islamic pottery (10th-11th century AD) from the castle area (Terravecchia of Caltavuturo)

Similar sherds were also found in the excavation of the so-called Dammusi (fig. 4), buildings of dubious interpretation, possibly warehouses, dating from the same period. In 2017, in collaboration with the municipality of Caltavuturo, in an excavation project involving young people from the national civil service, the Soprintendenza di Palermo took over the project of the Chiesa di S. Bartolemeo. In the area of the church, pottery dating back to the Byzantine and Islamic ages was found, thus supporting, for the first time, the hypothesis that Terravecchia was frequented in the Byzantine age. The recent excavation concerns a portion of the houses. The excavation has so far brought to light remains from the post-medieval age.⁹



Figure 4 – Islamic pottery (10th-11th century AD) from Dammusi (Terravecchia of Caltavuturo)

At the time of al-Idrīsī's visit to Caltavuturo, there is likely to have been the site of a settlement on top of Rocca di Sciarra, where in 1584 the Hermitage of San Nicola had already been attested to (fig. 5). The

archaeological excavation conducted on this site during renovation work in 2014 and 2015 unearthed a medieval building outside the church on the east side (fig. 6).

Two phases have been identified, which are probably very close chronologically. Pottery fragments were found in contact with the floor of the first phase (fig. 7). This building, which is older than the Church of S. Nicola, was probably a warehouse.¹⁰

The area around the church was also frequented in the Hellenistic age. As a result of information obtained from documents and archaeological excavations, it can be assumed that the Church of S. Nicola was built after the 13th century and some time before 1584.

The Arab traveller continued his journey through the Madonie Mountains and indicated that Caltavuturo runs five miles to the south of Polizzi. Then, al-Idrīsī wrote that the castle of Polizzi is in quite an admirable position. Actually, al-Idrīsī managed to visit two places in Polizzi: the castle and the *casale* located in the contrada which is now known as San Pietro.¹¹

A watercolour from 1584, perhaps by the same artist as the drawings of Caltavuturo, gives us an eloquent idea of the location of the castle of Polizzi.¹² Very little remains of the castle. The remains of San Pietro are more substantial. In Contrada San Pietro, the town's current expansion area, the ruins of the church are still evident.¹³ Pottery fragments found during field surveys from the Islamic (fig. 8), Norman and Swabian ages are visible at the local museum.

Continuing to follow al-Idrīsī, he went from Polizzi to Petralia (Petralia Soprana), six miles to the east. He went on to say that Petralia has a remarkable castle and well-armed fortress; its vast extent of lands for planting provides for an abundant harvest (we can recall that, in the 20th century, Petralia still remained in an agrarian context rooted in the Roman age). al-Idrīsī wrote that Petralia is equipped with a fortress and a market very similar to those of other large cities. A photo from the last century attests to the importance of the cattle market in this town in the Madonie, a tradition that lasted at least until the mid-20th century. Previously to al-Idrīsī, al-Muqaddasī contextualized Petralia between the cities and told us the following details: it is surrounded by walls; inside stands a fortress with a church.¹⁴ We do not know which church al-Muqaddasī is referring to, but we can refer to a local tradition according to which the Chiesa del Salvatore, elliptical in design, was originally a mosque.

¹⁰ Ianni 2016.

¹¹ Tullio 2005. Cucco and Vassallo 2022: 275.

¹² Albanese 2017.

¹³ Alfano 2018: 44–48.

¹⁴ Peri 1955: 631.

⁹ Cucco and Vassallo 2022: 274–275.



Figure 5 – Overview of the Hermitage of San Nicola and the archaeological excavation from the east (Rocca di Sciara, Caltavuturo)



Figure 6 – Medieval building from the northwest (Rocca di Sciara, Caltavuturo)



Figure 7 – Medieval pottery (imitation of vase with filter) found on the floor, 12th-13th century AD (Rocca di Sciarra, Caltavuturo)

Malaterra says that Count Roger, to protect and control the roads, built another castle to the south which is not mentioned by al-Idrisi. It would be very interesting to try to locate the remains of this second castle. Between Polizzi and Petralia Soprana there are two other towns, Castellana Sicula and Petralia Sottana, of which al-Idrisi does not speak, and where archaeological excavations conducted by the Soprintendenza for the past few years have revealed evidence of the Byzantine, Islamic and Norman ages. The settlement of Contrada Muratore, in Castellana Sicula, was formed during the imperial and late Roman age from a village and necropolis nearby, with chambers and *arcosolium* tombs in rocky outcrops. Life there continued into medieval times, as confirmed by findings dating back to the Byzantine and Islamic ages found in two areas investigated in 2000 and 2001, Area 1 and Area 2, through excavations of the Soprintendenza in collaboration with the town of Castellana.¹⁵

We highlight two amphorae from the late antique storage of Area 2, destroyed between the late 5th and early 6th centuries AD, which attest to trade activity with the eastern world¹⁶ (fig. 9).

In addition to this, we highlight a trove of 12 gold Byzantine coins dating from the 6th century. I would

¹⁵ Valentino and Vassallo 2016; Vassallo and Valentino 2016; Valentino and Vassallo, 2018.

¹⁶ Portale 2011.



Figure 8 – Islamic pottery from the medieval settlement area near the San Pietro church (Polizzi Generosa)

now like to focus on the newer investigations conducted at Contrada Muratore in 2016.¹⁷ The cleaning of the outskirts of the settlement was carried out with the help of young people from the national civil service, where an ancient crusher was identified by Mingazzini in 1939.¹⁸ Pottery found inside one of the tanks and in a minor excavation behind the crusher suggests the site was used between the Byzantine and Middle Ages. The second site not mentioned by al-Idrisi is Petralia

¹⁷ This work was supervised in the field by Santo Ferraro.

¹⁸ Mingazzini 1939; Mingazzini 1941: 7.



Figure 9 – Late Roman amphora from Contrada Muratore (Castellana Sicula)

Sottana. Archaeological excavations in 2006¹⁹ revealed part of the basement and architectural elements of the castle tower of Petralia, which upon the first evaluation of the data seems to date back to at least the Norman age. A deeper analysis of the pottery artifacts found, which have yet to be studied, will certainly provide more information. The castle occupied a site emerging in control of surrounding territory. The tower was still visible at the beginning of the last century, before being subsumed by housing. North of Petralia, proceeding towards Piano Battaglia, the highest point of the Madonie Mountains, you can reach the site on which the Church of San Miceli stood, from which the town is visible. Around the middle of the last century, Giovanni Mannino drew the plans of the church,²⁰ probably of Byzantine origin, a hypothesis based on the name and the cult of San Michele. The site has never been the subject of systematic archaeological investigations, and a recent dig failed to locate diagnostic findings on site. In local tradition, San Miceli is regarded as an archaeological monument of great importance, which until the beginning of the last century maintained a certain monumentality.

¹⁹ Directed by the Soprintendenza of Palermo under the supervision of Emanuele Canzonieri.

²⁰ Archive of the Soprintendenza of Palermo.

Returning to al-Idrīsī, after visiting Petralia Soprana, he noted that Petralia runs eight miles to *Maqāra* (?). *Maqāra* Castle is a prosperous habitation, with plenty of arable fields and basic necessities, and is ten miles to the south of Sperlinga. *Maqāra* was identified with Gangi by Illuminato Peri, but this identification is unsupported by archaeological data.

The same scholar, also in the Gangi territory, more precisely in Gangivecchio, identified the establishment of *J.fla*, at which, according to al-Idrīsī, one of the branches of the Salso River originates. This hypothesis is very impressive when you consider that, in the Norman age, a small church was built there dedicated to Our Lady of the Annunciation, which was the original nucleus of the significant 14th-century Benedictine abbey. In Gangivecchio there was a wealthy settlement in the imperial and Byzantine ages, as documented by excavations by Iowa University scholars near the monumental complex of Gangivecchio and in its courtyard.²¹ An excavation conducted by the University of Palermo in the cellars of the monastery revealed that it was used for waste disposal, where several fragments of pots '*a stuoia*' were collected, of a type often found in eastern Sicily in the 9th century.²²

From *Maqāra*, al-Idrīsī moved amongst Sperlinga, Nicosia and Cerami, in the Nebrodi Mountains, then came back to the Madonie. He wrote: '*Jarāsh* [...] produces a lot of fruit, has well cultivated crop fields and a large village'. Despite al-Idrīsī's reference to Geraci as a 'large village', at present we do not have archaeological proof older than the castle of Ventimiglia, built after Geraci became the seat of this family in the mid-13th century. According to Giuseppe Antista, the first fortified settlement of Geraci probably dates back to the mid-8th century. In fact, the site, in an elevated position, corresponds to the Byzantine needs for control and defence.²³ We now know the phase of the castle for the period of occupancy of the Ventimiglia family, dating from the 13th to 15th centuries, but it is very likely that the most protruding point of the village had already been fortified during the Byzantine period.²⁴ If it is likely that the first settlement of Geraci dates back to the Byzantine age, the settlement is mentioned for the first time in the year of the Arab conquest (839-840 AD) by the chronicler al-Nuwayrī, which puts Geraci among the numerous fortresses of Sicily which made agreements with the invaders.²⁵ Under Arab rule, Geraci must have been a town of considerable importance, as it was included in the list of cities established in 988 by the geographer al-Muqaddasī in his description of the island.

²¹ Storey 2019.

²² Ardizzone and Manenti 2015: 757-758, 761.

²³ Antista 2009: 11.

²⁴ Graditi and Vassallo 2018; Vassallo 2018: 5.

²⁵ Antista 2009: 12; Peri 1995: 642, note 42.

Today, in the town below the castle, there is still an urban fabric of probable Arab origin, rich in courtyards, closed alleys and underpasses.

During the subsequent Norman conquest, the city was defeated by the great Count Roger and given in vassalage to Serlo. In the mid-13th century, Geraci became a dominion of the Ventimiglia family. Nine miles north of Geraci is the fortress of Basil. This site, of uncertain identification, does not qualify as a settlement, but al-Idrisī wrote that it was very beautiful, had substantial means for livelihood, unlimited assets and very fertile arable land.²⁶

Due to the distances from Geraci and then from Isnello provided by al-Idrisī, Peri suggested the fortress of Basil corresponded to the site of the town of Castelbuono, probably to the *casale* of *Ypsigro*. The oldest nucleus of Castelbuono, whose other names are varied (*Sichro/Ypsigro*), was perhaps of Byzantine origin. In the Norman age it belonged initially to Countess Adelasia, wife of the great Count Roger, who around 1100 donated it to Hugh de Craon. According to a reconstruction of Orazio Cancila, the *casale* should be placed in the area of Castelbuono named 'Terravecchia'.²⁷ Until now, to my knowledge, there are no archaeological claims of a medieval *casale*. It is mentioned only in documentary sources.

Perhaps in the 12th century on the plateau where the castle of Ventimiglia stands, a tower was built, partially rebuilt and incorporated into the current Castle of Ventimiglia in the 15th century.²⁸ Norman findings from the castle consist only of a few coins found in samples outside the tower itself. The site of the castle probably became a fortified place with walls and towers in the 13th century, annexing the Norman tower. So far, excavations within the Castle of Ventimiglia and in urban areas have not unearthed evidence linked to the Islamic or Norman ages.²⁹

In the territory of Castelbuono, we cite the late Roman site in Contrada Bergi, which has never before been the subject of systematic excavations. To the north of the town, in the Norman age, there was the Abbey of St. Anastasia and the *casale* of St. Elia, attested to by documentary sources.³⁰

At a distance of ten miles west from the fortress of Basil and thirteen miles from Geraci is Isnello: a *casale* on the summit of a mountain (al-Idrisī says). So far, we know

little of the medieval stage of Isnello. The remains of the castle are in Contrada Terravecchia, perhaps dating back to the early Middle Ages, but al-Idrisī did not make any reference to it.

Isnello is nine miles from *Qal'at al-ṣirāṭ*, moving to the west (al-Idrisī wrote). The *Cambridge Chronicle* states that the site was conquered in 939 by the military commander Khalīl b. Ishāq al-Tamīmī, together with the fortresses of Caltavuturo and Sclafani. Another very interesting source for dating it at least to the second Islamic age is al-Muqaddasī. al-Idrisī, writing about *Qal'at al-ṣirāṭ* ('fortress of the street'), described that 'there once stood a strong and defensible castle... but King Roger destroyed the castle and moved the [settlement] to the site where it is today'; this town from the time of the writer has been identified with the modern village of Collesano. This event happened between 1130 and 1154, when Roger was King of Sicily, and it is difficult to give a more accurate absolute chronology.

Monte d'Oro, the current name of the site, has an important position between the coast and the Madonie area. On the mountain remains of buildings and walls are still visible. The review of materials recovered mostly during excavation of rooms 3, 4, 5, revealed in 1972, and the results of sporadic discoveries made simultaneously with the excavation, suggest that, for the medieval stage of the settlement, there are no claims prior to the mid-10th century. Among the finds attributable to the Islamic period, there was a shard of glass and, from the Norman-Swabian age, a fibula. There are doubts about the occupation of the site during the Byzantine period. Neither the excavation nor the latest surface surveys detected the presence of artefacts clearly attributable to this period.³¹

In the village of Collesano, downstream from Monte d'Oro, there are remains of a castle founded in the Norman age. al-Idrisī wrote that it was eight miles from Collesano to Cefalù; between these two towns is Gratteri, small but ever prosperous. Along the ancient road running through the woods linking Collesano and Gratteri is the Abbey of Pedale (fig. 10). The abbey, situated 2 km from the village and surrounded by a forest of cork trees, was a Basilian Foundation of the Norman age passed on to the Benedictines in the 14th century. At the beginning of the 14th century, the abbey still belonged to the Byzantine monks, who performed orthodox rituals. The strong Basilian tradition in Collesano is comprehensible when you consider that the 9th century Italo-Greek Saints Christopher, Sabas and Macarius were born there.³²

²⁶ Antista 2009: 50–51.

²⁷ Cancila 2010: 15–22.

²⁸ As hypothesized by Domenico Pancucci following the excavations carried out in 1996–97.

²⁹ Report on Domenico Pancucci's excavations (archive of the Soprintendenza di Palermo).

³⁰ Alfano 2018: 38, 29, notes 48 and 49.

³¹ Belvedere, Burgio and Cucco 2014: 368–370.

³² Belvedere, Burgio and Cucco 2014: 368.



Figure 10 – The Abbey of Pedale (Collesano)

The medieval building of Pedale was subject to numerous alterations in the modern age.³³ In the apse, art historian Marco Failla recently discovered paintings referable to an artistic time of the Byzantine tradition and dating from the late 14th-early 15th centuries. Among the subjects depicted in these paintings are a praying Madonna between two sets of four saints, placed in the centre of the apse wall.³⁴

Arriving in Gratteri from Collesano, al-Idrīsī did not provide much guidance. The castle was probably founded in the Norman age, but it is not cited by al-Idrīsī. Southwest of the town there is one of the most impressive monuments of the Madonie: the Abbey of San Giorgio.³⁵ It is thought to have been built around the middle of the 12th century, at the same time as the Cathedral of Cefalù, at the behest of Duke Roger, son of Roger II. If the most common traditional belief is valid, this is the only abbey founded in Sicily by Premonstratensian monks (from Prémontré in Picardy). According to a recent theory by Francesco Caputummino, it was perhaps the first Cistercian Foundation in the Kingdom of Sicily.³⁶ Between the early 16th and mid-17th centuries, the complex, then abandoned, was ceded to the order of the Knights of Malta who owned it until the early 19th century. Today, the remains of the church, restored by the Soprintendenza of Palermo in 1991, are likely to have slid downwards towards those in the north valley of

the monastery annexed to the church. On the northern side, an opening with an arched roof has remained *in situ*, which probably served as a fitting between the two structures, the church and monastery. During the course of the restoration, engraved decorative motifs with remnants of red, made with the help of tools such as compasses, were discovered in the plaster of the southwest corner of the monument. These are likely to have been preparatory drawings for the decoration of floors or plutei. In 1991, the area of the church was excavated.³⁷

Concluding remarks

From this information we can comprehend the extraordinary historical and archaeological wealth of the Madonie Mountains. Although al-Idrīsī stopped in emerging sites, which undoubtedly played a prominent role in the territory, we can be certain that, along the way, he came across smaller settlements located in open places. Therefore, the data is an incentive to expand or embark on archaeological excavations in the sites described to provide answers to these open questions as well as generate new ones. I hope that future research, including surveys in the Madonie Mountains and other areas, can improve our knowledge of settlement dynamics in the Middle Ages.

³³ Termotto 1991.

³⁴ Failla 2011.

³⁵ Alfano 2018: 51–55.

³⁶ Caputummino 2017.

³⁷ Tullio 1993-94; Tullio 2019; Cucco and Vassallo 2022: 271-274. The results of the last excavations carried out by the Soprintendenza of Palermo in 2020-2021 in Cucco and Di Maggio 2021.

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Chapter 8

Water Management, Territorial Organisation and Settlement in Calatafimi (Trapani, Western Sicily)

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Introduction

This study forms part of a Landscape Archaeology project carried out in the northwest of Sicily in the Municipalities of Castellammare del Golfo, Buseto Palizzolo, Valderice, Custonaci, San Vito lo Capo, Alcamo, Calatafimi Segesta, Vita and Salemi.¹ The study's main objective is to examine the cultural landscapes in the chronological framework stretching from late antiquity to the late Middle Ages, the time frame that saw the greatest transformations in Mediterranean rural environments until the advent of industrialisation.

To achieve the study's objectives, it was necessary to analyse the specific relationship that the historical processes exerted on the environment, in particular the exploitation of natural resources in certain social contexts. More specifically, this diachronic analysis focuses on land and water use, fundamental ingredients for the creation of agro-systems.

The study's secondary objectives are to expand the archaeological data from the territory and develop a cartography serving the administrations responsible for the protection, valorisation and promotion of its cultural heritage. Likewise, an attempt was made to promote sustainable development strategies in the rural areas under study through the analysis of historical agro-systems and the problems related to their survival.

The current study, nonetheless, limits itself to the findings of research carried out in the Municipality of Calatafimi Segesta (Trapani), an area where it is still possible to observe numerous traces of the relationship between humans and the environment from the Islamic period. The type of agriculture and the territory's relative geographic isolation have, in fact, led to a preservation of traditional agricultural practices and many of their infrastructures.

This study thus offers an unprecedented perspective on historical areas of irrigation and attempts to offer basic models and describe certain strategies and techniques related to the subsistence and autonomy of rural communities, elements that, in the case of Sicily, are still for the most part restricted to the celebrated *qanat* (underground channels) of Palermo and its fertile Conca d'Oro.

Morphology and land use

A general overview of the territory reveals two main morphological landscapes. The first, to the east and south, is characterised by undulating hills generated by the morphogenetic processes typical of sandy-clay reliefs. The slopes are smooth, devoid of erosive phenomena (such as badlands), due to their scant gradients and a strong anthropisation linked to agriculture. The rolling landscape is interrupted in its central-western area, the study area, by isolated carbonate mountainous reliefs and ridges (fig. 1).

The Fiume Freddo (Cold River), a tributary of the San Bartolomeo with its origin to the south of Calatafimi, marks the eastern limit of the territory. It delimits a fertile valley with numerous streams flowing into the main course. The southern sector, corresponding to the source of the Fiume Freddo and oriented toward the neighbouring town of Salemi, is today mainly a landscape of cereals interspersed with vineyards. The northern sector, toward the mouth of the river, is sealed to the northwest by the limestone Monte Inici, whereas

¹ The Trapani Landscape Archaeology project was financed by the programme of Foreign Archaeological Missions (Spanish Ministry of Culture) and the MEMOLA FP7 project (<http://memolaproject.eu>). This project was carried out in collaboration with the Soprintendenza per i Beni Culturali ed Ambientali of Trapani, based on an agreement authorised by the Assessorato dei Beni Culturali e dell'Identità Siciliana. We would like to thank the supervisors, P. Misuraca and R. Guazzelli, as well as the archaeology officials, R. Giglio and G. Mammina, of the Servizio Soprintendenza, for their technical-scientific support.



Figure 1 – Calatafimi’s irrigation area. Kaggera valley: Contrada Anceli, Contrada Santa Agate, Contrada Pietralia, Contrada Marzuco

to the northeast this river joins the course of the Kaggera River, which at this point is called the Fiume Caldo (Warm River) due to the existence of hot springs. The area is marked today by an intensive cultivation of grapes and, to a lesser extent, olives, especially along the boundaries of the plots.

The Kaggera River is actually a prolongation of the Calemici whose source is next to the Contrada Capo di Fiume at the margin of the Municipality of Vita. The river is marked by features of a series of hydraulic mills equipped with horizontal wheels whose source of traction was water directed through a network of channels.² In the surroundings, there are certain family orchards and ancient orange groves that even today embody an important local heritage of agro-diversity. The oldest citation of these early grinding mechanisms is a 12th century allusion by the geographer al-Idrisi to the ‘mills of Calathamet’,³ a reference to the settlement succeeding the long line of mills. The reference by this author to Calatafimi, in turn, is limited to a brief mention of a few groves and a comment that little water runs in their surroundings.⁴

A series of mountains line up along the central-western zone in the area between Poggio Fegotto, Contrada Bosco, Monte Tre Croci, Contrada Roccazedda, the urban centre of Calatafimi, Pianto Romano and Monte Calemici. This prominent landscape is dominated by isolated but frequent limestone mountains, such as Monte Pispisa (513 m), Monte Barbaro (431 m), Monte Pelato (432 m), Monte Fontanelle (490 m) and Monte Bernardo (526 m) which, together with Monte Domingo (751 m), in the area of Salemi, seal a wide and fertile agricultural valley west of the municipality. This area is marked by extensive vineyards as well as cereals.

Many of these mountains are covered with forests of either native species such as *leccio* (holm oak), *roverella* (downy oak) or *orniello* (manna ash) or reforested pines, cypresses or eucalypti. The other lesser elevations are characterised by a mosaic of typical Mediterranean shrubbery and herbaceous plants. The most representative of this vegetation is the *Ampelodesmos mauritanicus*, locally known as *disa* (Arabic *dīs* or *dīsa*),⁵ associated with white asparagus and palmetto bushes called *jummara* (Arabic *jummāra*).⁶

² Accardo, Boní and Palmeri 1996.

³ Amari 1880: 80–81.

⁴ Amari 1880: 92.

⁵ Caracausi 1983: 211–212.

⁶ Caracausi 1983: 257.

Geology and hydrogeology

An understanding of certain of the technical choices linked to the historical management of water and soil in this territory, and therefore the reasons that have conditioned certain dynamics of the population, requires taking into account the area's geological and hydrogeological features.

The main element of the hydrography of Calatafimi is the Calemici-Kaggera-Caldo River cited above that today no longer serves for mills or agriculture in general but was once socioeconomically vital to the town. Its source is in the outcrops of Messinian evaporitic rocks (6 million years old) constituting the so-called gypsum sulphuric series,⁷ a formation that, although negatively conditioning the soil's productive capacity, is highly relevant from the hydrogeological point of view. There are numerous streams in this area whose origins correspond to non-soluble lands and that infiltrate the subsoil in contact with the gypsum, generating multiple closed valleys (drains such as small *poldjs*) and especially dolines, called *zubbie*. This term derives from the Arabic *zubyā*,⁸ tantamount to a locality where great volumes of water run or converge. Here, the basins are closed which leads water to infiltrate the subsoil, dissolving the rock and widening the fractures. *Zubbie* are found both in gypsum terrains and in upper calcareous areas, such as the Gorgo delle Sanguisughe almost 1.5 km southeast of the river's source.⁹ These factors are therefore behind the large karstic reserve capable of supplying a series of springs located mostly in the lower areas. Contrada Arancio and Ponte Patti, for example, are springs to the west of the inhabited area which are fed by several *zubbie* from Contrada San Giovanni, about two kilometres southwest of the town.

Another strategic reservoir is that of carbonate rock formations between Segesta and Montagna Grande, characterised by high permeability due to their fractured and karstic nature.¹⁰

Equally relevant are the reservoirs generated by clastic rocks which are widespread throughout a large part of the municipality. They are Terravecchia formations consisting of terrine and clastic-carbonaceous deposits compressed between the Upper Tortonian and Lower Messinian layers.¹¹ They possess a high average permeability corresponding to sandy and conglomeratic levels, while remaining hardly permeable in the clayey sectors of the aquifer's substrate. These features, due

to their nature, therefore generate numerous confined aquifers.¹²

A final type of abundant water source is the rainfall that is absorbed by a sandy or silty-sandy soil that caps a substratum of schists and/or marls. A superficial hydrographic network is, in fact, almost completely lacking here due to the great capacity of soil drainage (e.g., in Contrade Margi and Giovenco). In order to profit from this water, it was necessary to excavate horizontal or vertical galleries linked to a series of hydraulic structures that conducted the water to specific points.

Archaeological fieldwork: data collection and recording

The field work between 2014 and 2017 was carried out by means of unsystematic surveys focusing on certain particularly promising areas in relation to the research objectives. Special attention was afforded to environmental data, particularly those linked to water resources and use. This led to the design of a highly comprehensive map comprising all the hydraulic infrastructures. The method also yielded vast amounts of data on various systems for the catchment, storage, transport and channelling of water for agricultural and pastoral use, for energy and for human consumption.

An attempt was made to reconstruct the features that had been either erased or were only partially visible of the potential irrigated spaces around the sources and to record the position of all the dispersed pottery. The information as to the different plots forming part of the survey were recorded so as to design a map serving both current and future projects.

The data collected in the field were then recorded in a Geographic Information System (GIS) consisting of a complex relational geodatabase devised specifically for the needs of the project¹³ (fig. 2). This allowed the elements to be ordered in a catalogue in order to subsequently carry out statistical and spatial analyses and produce thematic maps to visualise the results.

An ethnographic study was carried out in parallel with the field work by means of semi-structured interviews with both elderly local residents and current farmers and shepherds (fig. 3). These interviews (150 people interviewed, 42 hours recorded) yielded fundamental information about the organisation of the territory, resource management, production and the changes that have taken place over the last century. The interviews likewise served to broaden new lines of research and

⁷ Basilone 2012: 82–85.

⁸ Aleppo and Calvaruso 1910: 438–439; Rohlf's 1977: 115.

⁹ Zanna 2011.

¹⁰ Piano di gestione del distretto idrografico della Sicilia, accessed January 30, 2020.

¹¹ Basilone 2012: 75–78.

¹² Pantaleo 2015: 10.

¹³ This digital recording methodology was developed and refined with the advice of Maurizio Toscano, a specialist in the digital management of archaeological data.

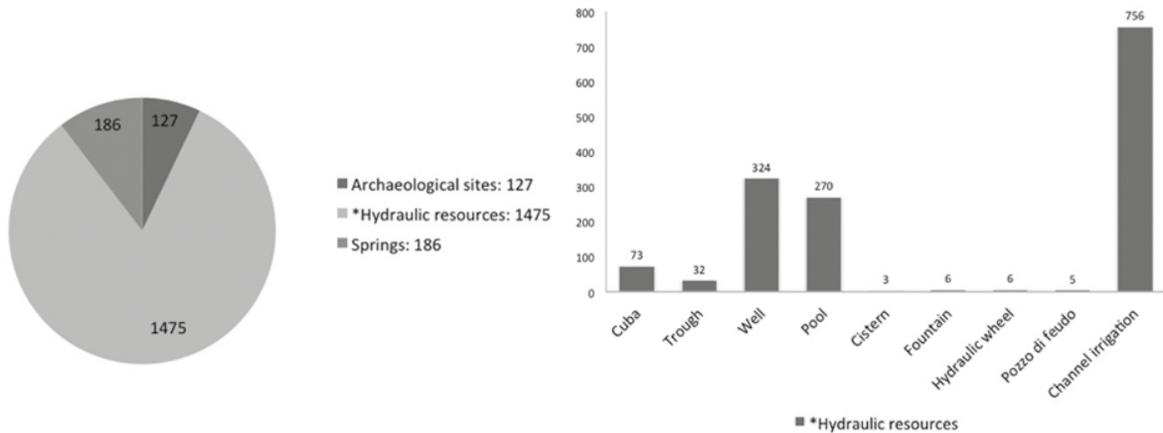


Figure 2 – Data collected during the fieldwork

focus the direction of research toward certain zones or areas.



Figure 3 – Interview with a local farmer in Contrada Pietralia

Hydraulic elements

The landscape contains numerous Arab-Berber place names and micro toponyms deriving from water and irrigated agriculture. These toponyms do not only refer to specific infrastructures but bear evidence of local ecological knowledge, techniques and practices with roots in productive forms imported by the Arabs in the 9th century.¹⁴

Certain of the names correspond to features such as *cuba* or *cubicella* (fig. 4), from *qubba*,¹⁵ that is, a well with a vaulted cover serving to collect water for irrigation or consumption; *senia*, from *sāniya*¹⁶ (hydraulic wheel), a mechanism driven by animals to raise water vertically

from a well; *cadduso*, from *qādūs*, a system for conducting water through ceramic pipes;¹⁷ *gebbia*, from the Arabic *jābiya*,¹⁸ a pool for accumulating water, most often intended for irrigation, with the variants *gibbitedda* or *gibbiuni* according to their physical dimensions (fig. 5); and channels called *zachie*, from *sāqiya*¹⁹ in Arabic, that guided the water, serving to drive the mills along the Calemici-Kaggera-Caldo River and which guaranteed irrigation of the plots downstream.

Following the results of the place name analysis and aided by the oral indications from interviews with several individuals, it was possible to identify and register a vast number of hydraulic structures that had once served a variety of irrigation systems, that is, agricultural spaces profiting from water by means of features of catchment and channelling.

Almost all of these systems originated from modest underground catchments, drainage galleries in the form of covered ditches called *barbacane* or *varvacane* (from the Persian-Arabic *barbakh-khāna*)²⁰ (fig. 6).

Many have a minimal slope (practically horizontal) and are filled with stones or covered with stone slabs, or are framed with dry stone walls, slab-covered galleries and bases usually left unpaved. The mechanism of water catchment and collection is always ‘passive’, that is, moved by gravity.²¹ These galleries or passages almost always lead to a *cuba*, a collection and decantation point to sanitise the water before passing to a *gebbia*. From this point, the spaces with lower levels were irrigated through ditches by gravity. Certain systems captured

¹⁷ Ruffino and Sottile 2015: 47.

¹⁸ Sottile 2017: 3.

¹⁹ Pizzuto Antinoro 2002: 103.

²⁰ Caracausi 1983: 122.

²¹ Cannella, Manitta, Nicita, Orifici, Pinto, Vraca and Pollina 2017: 69.

¹⁴ Martín Civantos 2015: 158.

¹⁵ Caracausi 1983: 195–196.

¹⁶ Caracausi 1983: 340.



Figure 4 – Hydraulic elements: *Cuba* in Contrada Pioppo and Calemici

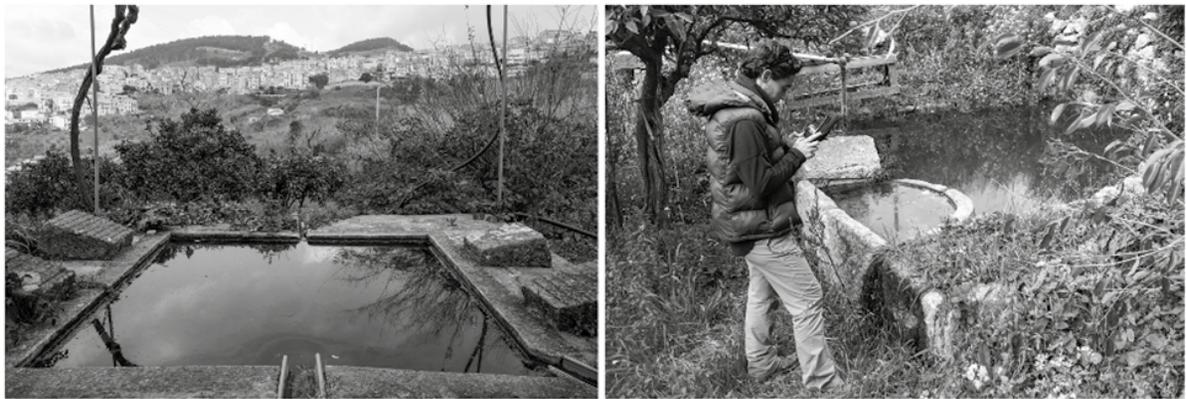


Figure 5 – Hydraulic elements: *Gebbia* in Contrada Mazzaforte and Aranceli



Figure 6 – Exterior and interior of a drainage gallery in Contrada Pietralia

and diverted water directly from the river or from a bordering ravine that, through ditches or masonry channels, led to the *gebbie* or directly to the plots. The main channels are designated *porta acqua mastru* while the secondary are *porta acqua* or *curritura*. The point where water was collected from the main or secondary channels is termed *purteddu* or *zappeddu*.

Fields in certain cases were irrigated by *gebbia* replenished by vertical *senia*, the mechanism cited above, while in other cases water was stored in troughs known locally as *abbrivature* serving over time for both agriculture and livestock. In the current case, priority was given to the animals while the adjacent cultivated plots were only entitled to the spill-over. Another

hydraulic agro-pastoral resource is the open, vertical water source called the *pozzo comune*, *pozzo de leva* or *pozzo de feudo* (communal well), generally accessible to a wide territory and almost always connected to watering holes for animals while also serving to irrigate the surrounding fields. These were at times connected to a rudimentary mechanism to extract the water deriving from the Egyptian *shādūf*, known since the second millennium BC,²² consisting of a long lever equipped at its ends with, respectively, a bucket and a counterweight. Watering holes and communal wells are almost always along main drover roads (*regie trazzere*), ancient transhumant trails interlacing the territory's main population nuclei.

Sites/settlements

Unfortunately, there are no written records as to the sites and settlements for the period under study. The few known documents appeared later, dating from the period of the Norman conquest (11th-12th centuries).²³ There is, nonetheless, ample archaeological evidence due to systematic excavations of certain dispersed sites and of a few of the territory's largest settlements: Segesta, Calathamet and the Castello Eufemio (Calatafimi).

The settlement of Calatafimi was first described by the geographer al-Idrisī toward the middle of the 12th century as a fortress (*hiṣn*) with an adjacent suburb (*rabād*).²⁴ The scant archaeological information from excavations of the mid-1990s in the castle, carried out both inside the fortress and on the eastern slope of the limestone hill, was recently integrated into our current, unpublished research. Work in this second area brought to light an organogenic limestone quarry near a series of late medieval dwellings. One trial trench uncovered difficult-to-interpret cylindrical pits excavated into the bedrock, linked to dwellings dated by layers containing Islamic pottery. Two other trial trenches were sunk inside the feudal castle: one at the southern tower and one in the central courtyard. The trench in the tower reached bedrock, and the artefacts do not appear to precede the 13th century. The trench in the courtyard, by contrast, did not reach bedrock but halted along the top of a series of undetermined walls that could correspond to the initial phases of construction of an Islamic fortification. There appears in this case to have been a regrowth and evening out of the level of circulation linked to new structures that apparently date to the 14th century.

The findings of prior surveys carried out by the University of Siena²⁵ between 1995 and 1997 were

fundamental for the current project, having identified more than 500 unknown archaeological sites spread over an area of about 80 km².

The present survey thus reviewed a series of sites dated between late antiquity and the Islamic-Norman period, focusing on the hydraulic features linked, or potentially linked, to them. The survey also covered areas that were not explored in the previous field work by the University of Siena, leading to identification of 135 new settlements ranging from the Archaic period to the late Middle Ages. Furthermore, six new Islamic sites (S10, S11, S47, S78, S81, S91), physically connected to springs and irrigated spaces, were recognised at a maximum distance of 5 km from Calatafimi's urban centre (fig. 7).

Overview of the hydraulic systems and settlements

The survey of hydraulic features was not strictly limited to rural and agricultural areas but was also carried out in urban Calatafimi, where it identified all the historical water resources, including those razed by urban development in the area stretching from the castle to the opposite hill coinciding with Contrada Santo Vito (fig. 8).

An analysis of the geological map of the area reveals a close link between specific lithostratigraphic units and a number of irrigation systems, in particular the gypsum-sulphuric series and the terrigenous units of clastic-carbonate rocks of the Terravecchia Formation. The smallest number of systems, by contrast, is recorded among the terrigenous deposits of sand and sandstone in the eastern area of the territory and among the carbonate rocks to the northwest.

This correspondence between water resources and settlements has stood out since Hellenistic times. Settlements were always near a watercourse or a spring and, in some manner, linked to the main thoroughfares. However, there is no evidence that the older settlements were linked to irrigation systems, and many of the springs currently visible did not even exist at that time. Many, in fact, had to be constructed, dug or simply enlarged from natural sources known since Islamic times in association with new settlements and farming practices.²⁶

The localities with concentrations of materials coinciding with water sources were generally repopulated in late antiquity and, in certain cases, occupied during the Islamic period. These open places, identified mainly by dispersions of small potsherds, are predominantly concentrated on slight slopes and on potentially productive land, although they do not

²² Gigliarelli and Cessari 2000: 30.

²³ Amari 1880: 80–81; Kohler 1899.

²⁴ Amari 1880: 92.

²⁵ Aproso, Cambi and Molinari 1997; Bernardini, Cambi, Molinari and

Neri 2000; Cambi 2003; Cambi 2004.

²⁶ Martín Civantos 2015: 158.

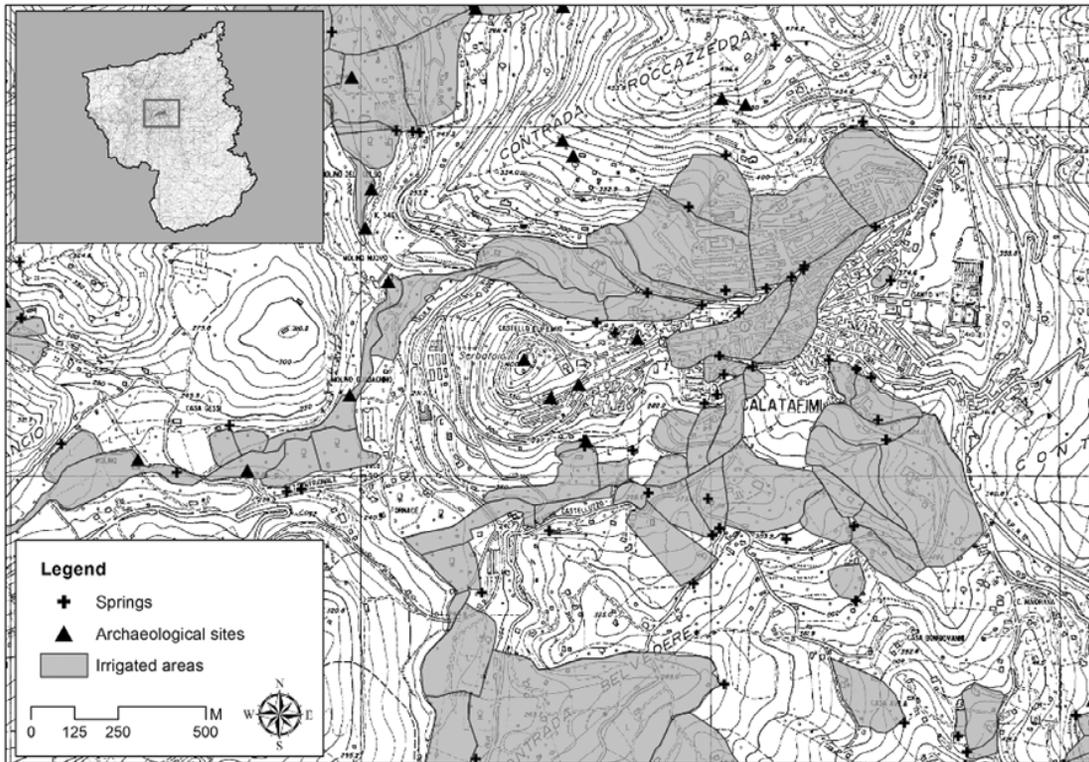


Figure 7 – Irrigated areas around Calatafimi’s urban centre and its relation with water sources and archaeological sites

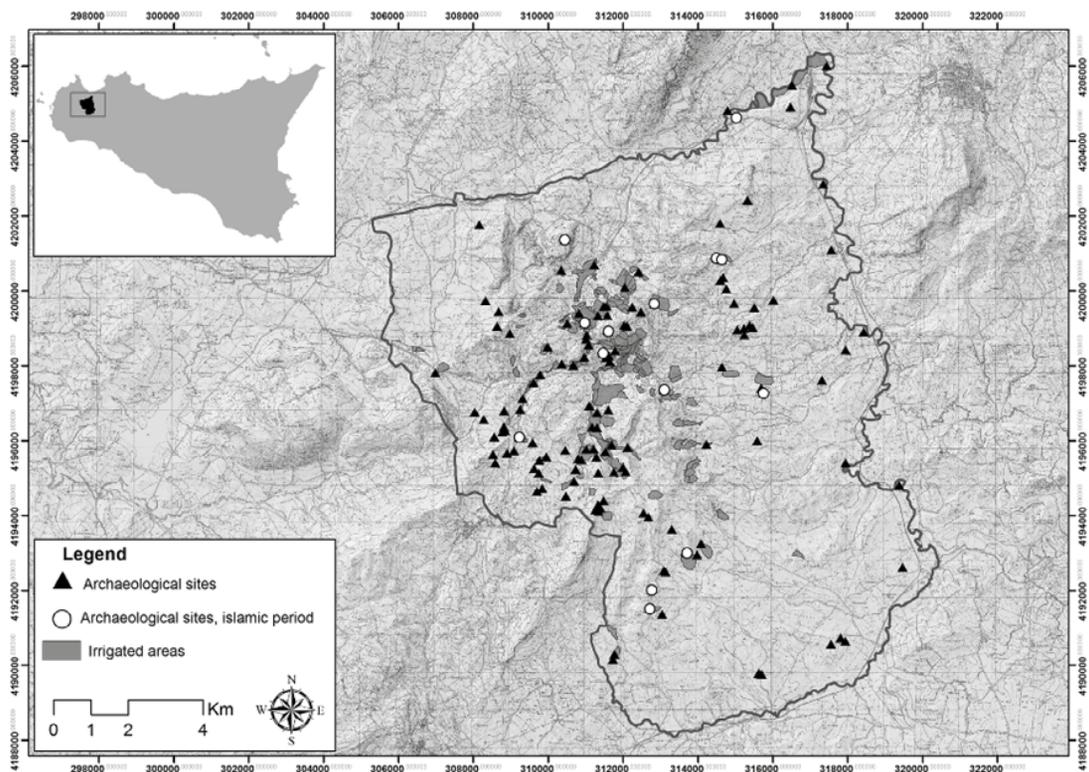


Figure 8 – Calatafimi’s territory, irrigation areas and archaeological sites

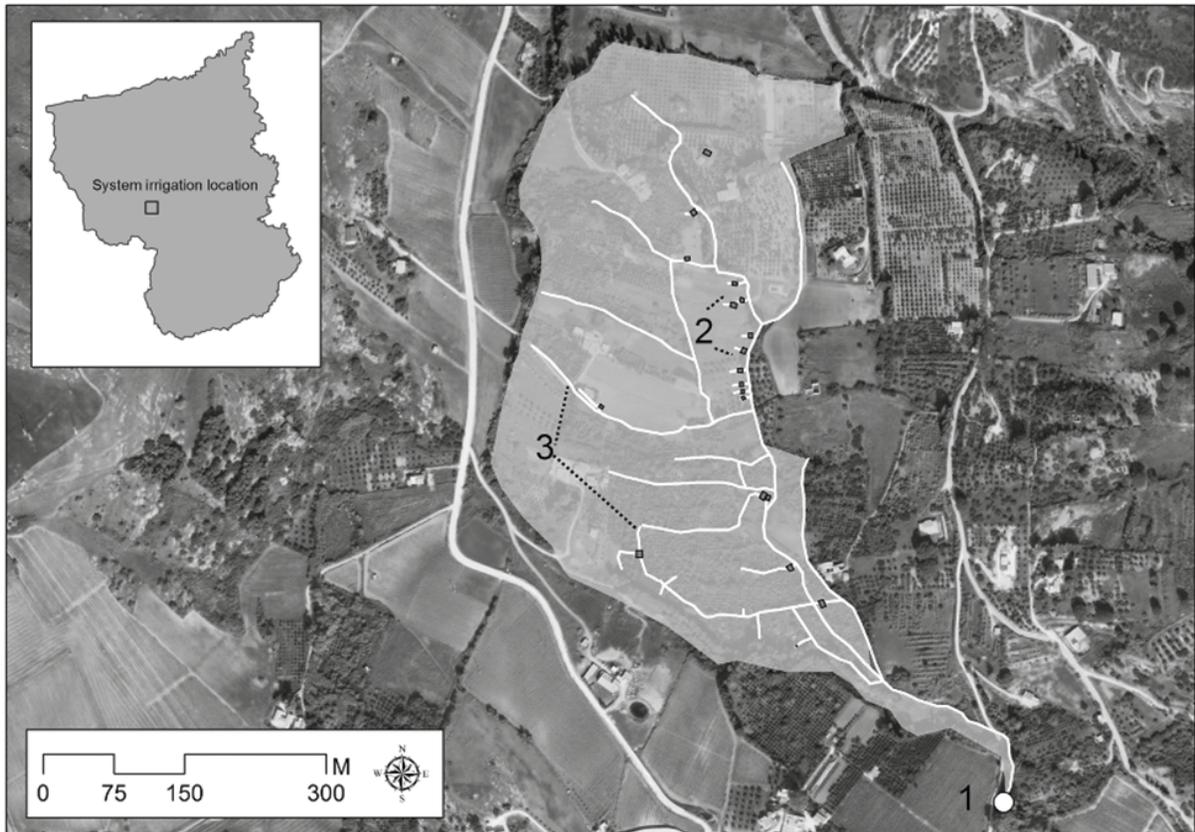


Figure 9 – Irrigation system of Passo di Cola: 1-*prisa* (dam); 2- *gebbie* (pools); 3- irrigation channels

appear to bear any special predilection for exposure to the sun. The hydraulic elements identified appear, in turn, to be linked to old irrigated areas. However, only in a few instances can they be linked to sites from the early Middle Ages. This could have to do with the role of Calatafimi in the territory.

All of the irrigation systems identified are quite simple and modest, and although at times covering several hectares, no single case or network extends beyond the whole area. Among them, of particular note is the so-called Passo di Cola in Contrada le Marge, called *màrgi-màrgiu*, deriving from the Arabic *marj* (meadow), locally indicative of a 'marshy land'²⁷ (fig. 9).

The system originates in a bordering ravine and covers a surface of almost 18 ha that still remains for the most part cultivated. It is currently broadly operational, although sections of modern pipe have replaced the ancient ditches and masonry channels. The pipes guide the water to pools (*gebbie*) from where it is distributed. Its design reveals a main or mother channel which collects water from the stream through a bypass dam and is subsequently divided into secondary branches

that allow it to reach all the fields. The channels are equipped with sluices (*purteddu* or *zappeddu*) that distribute the water to the different plots. Many of the structures were thus added and modified over time without affecting the system's operation, adapting, among other things, to changes in land ownership.

This agricultural space is described in a private notarial record in reference to the *Divisione dell'acqua del Pantano* (Water Division of the Swamp) dated to 1574. This appears to be the first written regulation concerning water shifts based on time, although the distribution took place nine years before the written act. The document is not original and probably dates to the end of the 18th century, based on certain attached comments and a reference to the loss of heirs by the earliest owners. Moreover, it is very likely that the water distribution was even older, regulated by oral tradition, and sanctioned in writing in the 16th century, motivated by changes in ownership or by conflicts or crises. The field work within this irrigated space identified four concentrations of potsherds dating to the Hellenistic period (S70, S62, S82, S64), with one, at the outset of the system, bearing evidence of a reoccupation from the Byzantine period (S70).

²⁷ Sottile 2017: 18.

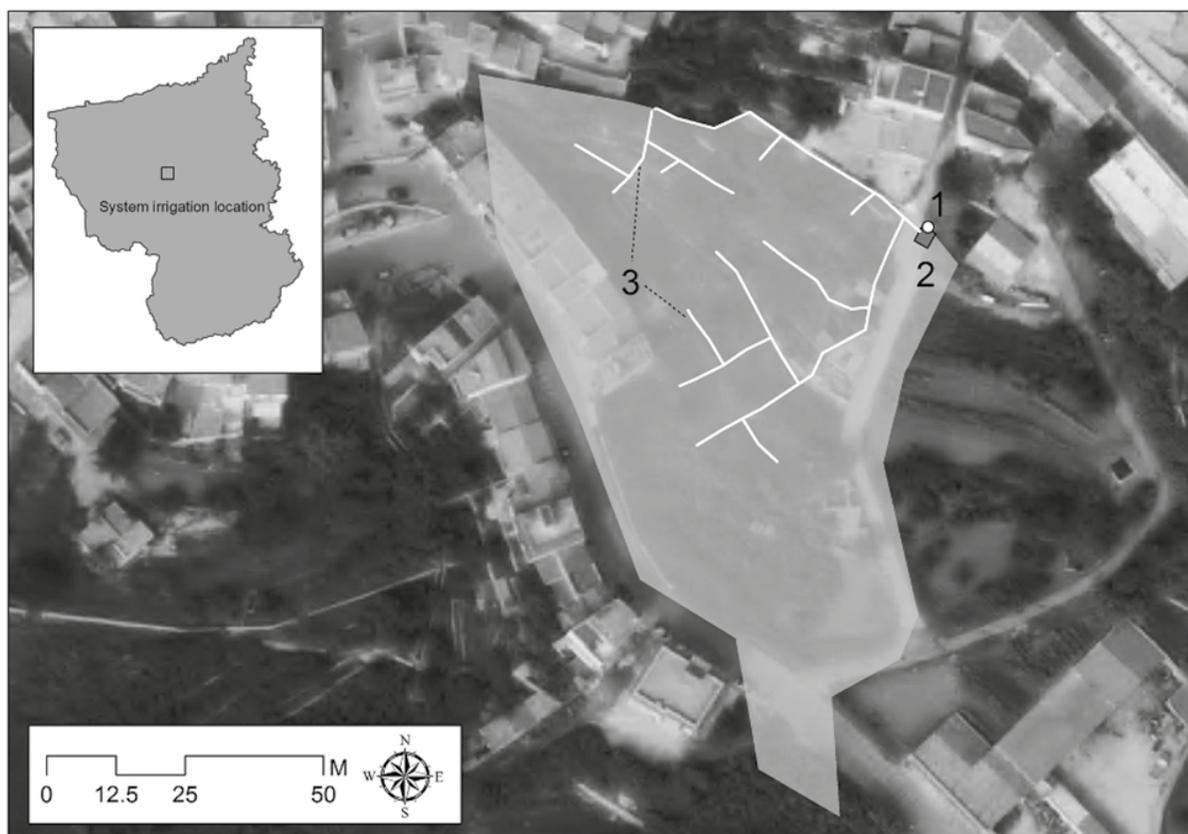


Figure 10 – Irrigation system of Giardino: 1- spring; 2- *gebbia* (pool); 3- irrigation channels

Another noteworthy system, despite its restricted extension (4 ha), is that of Contrada Angeli or Aranceli, names which could derive from the Arabic phytonym *nāranj*, that is, orange tree or orange.²⁸ Its centre is referred to as *Gebbia Granni*, marking the derivation point of several channels conducting water from the spring. Throughout its course there are floodgates that allow passage and distribute the water. A series of old and immovable rights based on the water distribution by time shifts are linked to both the spring and the pool. Modern notarial records sanction a regime of water distribution in weekly shifts among the various plots. The same documents also define certain obligations, such as allowing the water to flow freely between plots and the obligation to maintain the hydraulic infrastructures, as well as the common rights over certain features such as the *cuba* (Ri421) found under the Angeli esplanade and serving for human consumption. Toward the end of the system, along the boundaries of two other irrigated areas, there is a zone containing dispersed artefacts (S91) designating a Hellenistic-Roman site reoccupied in Islamic times. In the zone's centre is a well, formerly

a *senia* (Ri315), whose elements are currently scattered in the surroundings. The Cadastre of 1938 indicates that this waterwheel was still considered fiscal property at the time as it was marked on the map by a small square containing a circle.

Another noteworthy irrigation system is to the southeast of the city, in the area called Giardino, that is still irrigated and serves to grow vegetables and citrus fruits. Its network of ditches or masonry channels and gates and plots are spread along the slope (fig. 10). The system is set in motion by a shared *gebbia* (Gb002) whose water was regimented by weekly shifts.

The distribution of water by time, that is, in days and hours, was always proportional to the land surface. Moreover, there is no case of distribution based on the factor of volume. The right to water, generally sanctioned by official records, is indivisible from land possession because water, in fact, is a land right.

Several other irrigated spaces were presumably found in the central and eastern part of the populated nucleus, extending along the hillsides. They are no longer visible due to urban expansion but can be partially reconstructed through toponyms, archives,

²⁸ Caracausi 1983: 108–109.

contour line analyses, extant hydraulic elements and oral information.

Among these is 'Pisano 1', fed by four converging springs through underground ceramic pipes at the Quartiere Cadduso watering hole. Also of interest is 'Carmine 1', fed by a *cuba* (Ri105) and covering the space on which the Church of the Annunciation (Chiesa dell'Annunziata), part of the former Carmine convent, was raised before 1393.²⁹ It is also located on the eastern margin of the Quartiere Circiara, a name that could derive from the onomatopoeic Persian word *shārshār* denoting a spring.³⁰ The church has a peculiar architecture marked by a slender chapel crowned by a hemispherical dome (collapsed in 2001), an Arabic-style construction that has yielded various interpretations,³¹ including that of a mosque,³² despite a lack of evidence. Just below it is another irrigated area called 'Cubicella 1', also fed by a *cuba* called *Cubicella* or *Ascidditto*.

Also noteworthy are the 14 irrigation systems linked to a number of other hydraulic mills raised along the Calemici-Kaggera-Caldo River originating from the Capo del Fiume spring (literally the 'head' of the river). Several sites in this area stretch from the Hellenistic-Roman period to late antiquity. Among these is S103, dated between the Byzantine and Islamic periods, located in the vicinity of a *cuba* that collects water from a drainage gallery before guiding it into a *gebbia*. The significance of Capo di Fiume (the area's only spring) as a territorial reference point and for agricultural activity (also pastoral) is reflected in the Bourbon Cadastre drawn up toward the middle of the 19th century.³³

The systems with the mills take their water from the river through bypass dams (*prisa*) conducted through channels (*zachie*) of variable length serving to irrigate the fields between them and the river. The mills, in any case, were always given priority for the water, especially during drier periods or when grinding was at its height. It is still possible today to recognise many of these features along the river, from dams to pipes to vestiges of several mills and cultivation spaces primarily dedicated to citrus products.

Conclusions

The current analysis thus evidences a territorial reality founded on water management. It is difficult to identify, and although certainly fundamental to many areas of the Mediterranean, it is far removed from the monumental, complex picture offered by the numerous

features characteristic of the Roman era or of certain great centres of the Middle East.

It is a historical landscape marked by many modest but vital irrigation systems linked to intensive agricultural production and peasant communities that nurtured local ecological knowledge and practices for generations.³⁴ It is undoubtedly difficult to identify the precise chronology of these agro-systems and to distinguish between the spaces originally designed during Islamic times and those stemming from additions and subsequent refurbishments leading to their current state. It is reasonable to assume that most of the watermills predate the 12th century, when the geographer al-Idrisi alluded to them and the fact that they formed part of the spaces of cultivation along the river itself. This is inferred both from their topography and hydraulic mechanisms, and that they benefited from preferential water rights. There are also records dating to the outset of the modern age, in particular those of the Passo di Cola, which raise the issue of its possible construction either under Aragonese rule or earlier during the Swabian or Norman period. We are, nonetheless, inclined to believe they date to an earlier moment during the Islamic domination.

In fact, there must have also been other long-lasting irrigation systems in the territory that appear to have maintained a predesigned logic or topographic order. In spite of certain successive additions, we are convinced that there was a large-scale planning in the Islamic era representing the efforts of a cohesive peasant community with a great degree of autonomy capable of concentrating and organising vast amounts of collective work.

This, however, leads to several historical problems that remain at this point both compelling and difficult to resolve. The first is the role of the peasantry itself and its relationship with the Islamic authorities. In no case can it be said that these irrigation systems are representations of power, either from the standpoint of their structure or from their nature and dimensions. They are agricultural spaces forming part of a subsistence-oriented productive and property structure with infrastructures that are exclusively functional, requiring a minimal investment in capital and material. Secondly, this raises the question of the role of Calatafimi itself as it emerged as a settlement dating, for the most part, from Islamic times and with a largely defensive character, as suggested by its name (*qal'a*). Without delving in detail into the configuration of the remaining spaces of the settlement and territory, it is nonetheless clear that the surroundings of the neighbouring towns of Segesta (Calatabarbaro) and Calathamet do not bear the same concentration of

²⁹ Bonaiuto 1988b: 22.

³⁰ Khan 2016: 299–300.

³¹ Bonaiuto 1988a: 7; Pellegrino 1993: 92.

³² Corte 1989: 10; Terrana 2000.

³³ Patti 1847: 53.

³⁴ Martín Civantos 2015: 155.

hydraulic features, and those that were recorded are actually in the prolongation of the series of mills upstream from Calatafimi. This leads to the question of whether these irrigation systems could have sprung up after the abandonment of the two settlements in the feudal period, or if, on the contrary, their abandonment could have led to the disappearance of the productive spaces. Despite the dearth of data, it appears clear that Calatafimi can be related to the creation of these irrigation spaces, which explains its concentration at this location. The same can be said of Salemi and Alcamo, sites with research in its initial phase, where there is continuity of settlement and a concentration of similar irrigation spaces.

Each of the systems recorded, regardless of its dimensions, had its own technical complexity involving a design prior to its construction that included, first, the point and the type of water catchment, a calculation of the slope and the surface in need of irrigation, depending on the availability of water and its possible variation throughout the year. This also implies planning the distribution of water and determining the rights of each plot or owner.³⁵ The rights of use, inextricably linked to land ownership, and the technical conditions explained above, leave an almost indelible mark on the spaces, offering few possibilities of modification without jeopardising the system itself.³⁶

An analogy between the more articulated irrigation systems of the study area in Sicily and those identified in the southeast and east of the Iberian Peninsula is particularly compelling. Each of the two areas share practically identical agro-systems and similarities in terms of mindset and mechanisms. The differences in size of many of the Spanish irrigated areas appear to be more related to hydrographic, hydrogeological and topographic conditions than to cultural or social issues. In Iberia, there were also analogous systems of allocating and distributing water based on intervals of time and identical types of communal management. These systems were put in place primarily during the al-Andalus period following the Arab conquest of the 8th century and were fully consolidated as productive options at the moment of the proclamation of the Umayyad Caliphate in the 10th century. Many have survived to this day, managed by the peasant communities themselves through organisations such as *Comunidades de Regantes* (Irrigation Communities), legally recognised as entities responsible for maintaining the systems, water distribution and resolving potential conflicts. The terminology linked to them, as in the case of the current study, is also predominantly of Arab origin and coincides with that of Sicily.

Furthermore, they form part of the same socio-economic and cultural reality found in North Africa.

Water is thus managed collectively based on rights and distribution systems stemming, for the most part, from the time of the creation of the hydraulic systems themselves. It was the community that maintained the main infrastructures, that is, the catchment, the main channel and the communal reservoirs or waterholes. It was also the community that ordered and monitored the use and distribution of water and resolved the frequent conflicts among the participants. These practices not only favoured a greater cohesion of the peasant community itself but granted a higher degree of autonomy and a greater capacity of resilience in productive terms and adaptation when facing external changes.

Despite these characteristics and their enormous cultural and environmental values, a structural change is taking place today among traditional agricultural practices. This is in part due to a generalised agrarian crisis linked to a fall of prices and income in a strongly competitive globalised framework. This crisis also encompasses fundamental social and cultural changes, land abandonment, migration, ageing of the population and the loss of local know-how and ecological practices. These current changes also include public policies oriented almost exclusively toward processes of intensification and industrialisation, which in the case of irrigation lead to 'modernisation' of the historical systems, replacing them with more efficient pressurised techniques.

It is noteworthy that no large-scale research programme showing the scope of the Islamic irrigation systems has been carried out in Sicily. Nor has any research delved into the question of its degree of utilisation/continuity subsequent to the Norman conquest. The imperial repression of Muslims of 1246 by Frederick II led to their immediate forced departure, provoking a profound alteration in territorial settlement and organisation.³⁷ This crucial change, however, does not appear to have erased all the remains of the previous productive system in this part of Sicily, or at least the memory of the structural principles founding it. The place names and terminology deriving from Arabic serve as evidence that the political changes did not necessarily entail a radical eradication of the old agricultural models and that the long process of feudal conquest and subsequent territorial control requires analyses and interpretations that take into account various strategies of occupation, exploitation and reorganisation, including analyses of the precedents stemming from the Islamic era.

³⁵ Barceló 1989; Kirchner and Navarro 1993.

³⁶ Barceló 1995: 25; Kirchner 1995: 38.

³⁷ Metcalfe 2009; Nef 2011; Rotolo 2013: 882.

Another point worth highlighting is this study's social contribution to the local community, which has served as the main source of information on the historical management of water. The community's active participation during the process reached the point that certain individuals embarked on their own searches for information and hydraulic features. For the first time, the locals have viewed these systems as a whole with an important impact at the municipal level. This translates into the creation of a singular cultural landscape which has survived in part due to their geographical isolation. This cultural landscape continues to reveal the historical relationship between humans and nature in a setting where natural and cultural diversity is intertwined at all levels, from genetic wealth and a variety of biotopes to tangible and intangible heritage embodied by agricultural practices, dialectal culture and architectural heritage.³⁸

As a final note, identifying and conserving cultural values, diversity and their relationships within the landscape, as well as the large number of ecosystem services they offer (water regulation, replenishing aquifers and springs, soil fertilisation, protection against erosion and disasters, etc.), can favour the maintenance of socio-ecological resilience and the recovery of territorial identity.

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³⁸ Cancellieri, Schicchi, Bazan and Baiamonte 2017.

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Chapter 9

Late Antique and Early Medieval Settlement Patterns in the Inland Landscape of the Erei Upland (Enna, Central Sicily)

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Introduction: archaeological research in the Erei

The Erei upland is a hilly area located in the innermost part of Sicily. It has recently been the focus of intense archaeological research, producing a large amount of new data concerning the settlement patterns, material culture and social structures of the communities which occupied the area from the Neolithic up to the medieval and post-medieval periods (fig. 1). The long history of central Sicily is thus re-emerging, conveying the image of a space of ancient relations between the different parts of the island which, because of the richness of its natural resources, has always attracted human populations. The ancient Erei landscape must have been very different from that traditionally proposed by modern historiography, which has often been described as a depopulated heath destined only for extensive cereal monocultures.

The systematic surveys carried out in the different territories of the Erei¹ have yielded useful data for better understanding the complex human-nature dynamics, thanks to the very nature of such research, based on the capacity to read the diachronicity of the territorial transformations using updated methodologies of landscape archaeology.² The research has focused mainly along the many river valleys connecting the interior to the coasts, trying to follow the movements of people and goods in order to understand the consequent changes in the settlements and their functions. The Erei are characterised by high sandstone plateaus and steep limestone and Flysch outcrops, alternating with softer hilly systems, crossed by long seasonal waterways that flow into the Mediterranean. Therefore, it is an internal area that, however, must be understood in close connection with the coasts and trans-marine networks.

The eastern part of the Erei is connected to the Catania plain through the Simeto, Dittaino and Gornalunga rivers valleys: therefore, it can be considered historically

related to the population dynamics of the Ionian coastal region. In these eastern territories, important research was conducted by international teams: the University of Virginia in the *chora* of the ancient city of Morgantina,³ the University of Cambridge in the Troina di Sotto river valley,⁴ and the CNR-IBAM of Catania in the territory of Centuripe.⁵

The central and western Erei, instead, can be considered as a real 'internal' area, marked by the long course of the Imera Meridionale. It flows from the north, where it originates from the Madonie range, to the southern Sicilian coast, flowing into the Mediterranean near Licata. The Imera valley marks the geographical boundary between eastern and western Sicily. Rather than a barrier, however, the complex hydrographic basin of this river route has always constituted a meeting point and confrontation space for the various populations of the island: for this aspect, it has been correctly defined as an 'osmotic frontier'.⁶

In the last twenty-five years, the western part of the Erei upland has been the subject of interest of various archaeological projects carried out thanks to the impulse of Enrico Giannitrapani, who has coordinated various national and international scientific teams. This research has obtained an unexpected quantity of data related to the cultural dynamics and transformation of the settlement patterns for central Sicily, which can be interpreted within a long-term historical perspective, from prehistory to the medieval age.⁷

The research started in 1995 in the territory of Enna, with the exploration of the Torcicoda river valley, which springs from the southern slopes of the mountain where the ancient *polis* of *Henna* developed. This small valley connects the hill system surrounding Enna and the natural basin of the Lago di Pergusa with the Imera Meridionale, shortly after it has exited the

¹ Valbruzzi 2009; Valbruzzi 2012; Valbruzzi 2016a.

² Cambi 2003; Cambi 2009; Cambi 2011: 559–570; Cambi and Terranato 1994; Cambi and Salzanotti 2018.

³ Thompson 1999.

⁴ Fitzjohn and Ayala 2011.

⁵ Biondi 2000.

⁶ Albanese Procelli 2003.

⁷ Giannitrapani 2017.

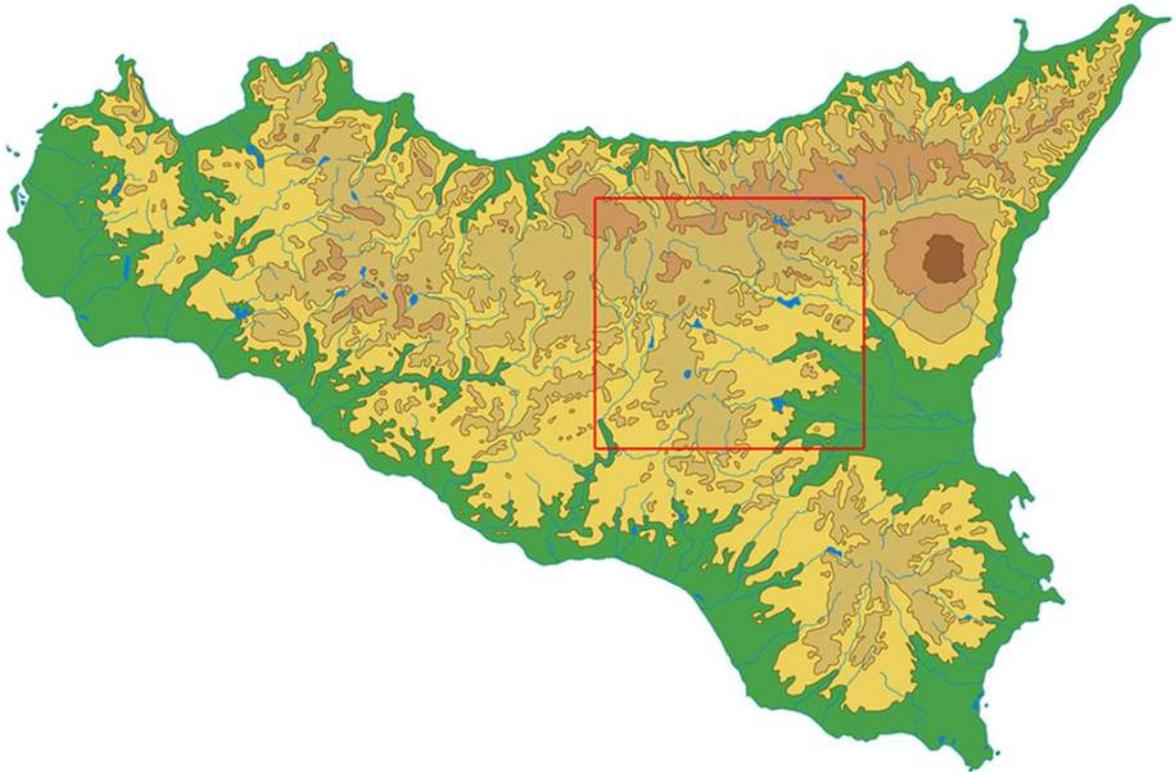


Figure 1 – Map of Sicily showing the position of the Erei upland (in the box)

narrow gorge formed by the massifs of Sabucina and Capodarso, home of important indigenous centres.⁸ The survey activity conducted for over a decade by the Centro Studi di Archeologia Mediterranea, directed by Enrico Giannitrapani, in collaboration with the research groups of the Universities of Wales and Leicester under the coordination of Mark Pluciennik,⁹ explored the entire Torcicoda course, extending the investigation to its emissaries and the area of Pergusa.¹⁰

Another area of the Imera Meridionale basin investigated through a systematic survey is the territory of Villarosa, bounded on the west by the Imera and on the east by the Morello River valley. The Morello springs from Monte Altesina, which rises to 1180 m a.s.l., dominating the landscape of central Sicily. It is connected to the north with the hydrographic system that branches off from the foothills of the southern Nebrodi range, in the area of Nicosia and Sperlinga. The river then crosses the central Erei plateau in a southwesterly direction to flow into the Imera below Capodarso, just north of the Torcicoda. The study of the

Imera Meridionale basin has also been integrated with a 2006 survey in the area of the prehistoric settlement of Tornambè, at Pietraperzia, and short-term research in the territory of Barrafranca, both located in the southern Erei.¹¹

The rural population and the late antique villas in the central and southern Erei upland

As a result of this research, a significant picture of the human occupation of this area emerged, both during late prehistory and the Iron Age. A polycentric settlement system has been identified, characterized by the development of fortified indigenous centers, placed on the hills surrounding Pergusa, Enna, Calascibetta and in the Imera Meridionale valley.¹² After the abandonment of the Archaic settlements in the mid-5th century BC, possibly caused by the synecism process that gave rise to the *polis* of *Henna*, a strong expansive phase of the rural population in the western Erei started during the Republican period (fig. 2).

Despite some signs of crisis in the age of Augustus, the expansion continued in the mid-imperial age, as

⁸ Valbruzzi 2014.

⁹ Our dear friend Mark, passionate and generous companion of many archaeological campaigns in the Enna territory, unfortunately passed away three years ago, due to a tragic illness.

¹⁰ Giannitrapani and Pluciennik 1998; Giannitrapani and Pluciennik 2004; Giannitrapani 2014.

¹¹ Giannitrapani, Pluciennik, Valbruzzi, Barberi, Ianni, Mientjes and Nicoletti 2016.

¹² Valbruzzi 2014.

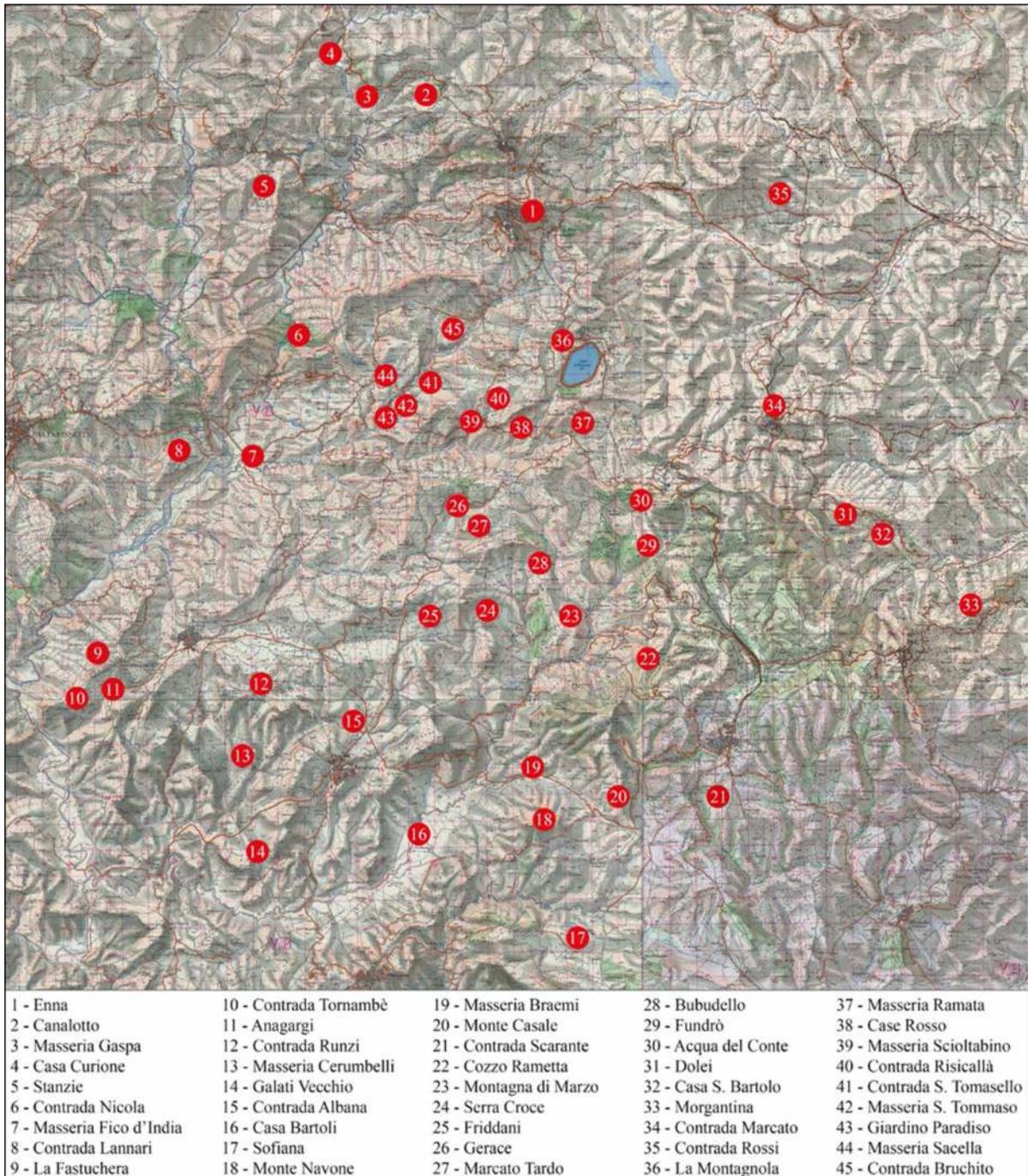


Figure 2 – Distribution map of settlements from the Hellenistic to mid-imperial age (3rd century BC-3rd century AD) in the western and southern Erei upland

documented by the widespread presence of ASR A and A/D and the early Byzacena C (fig. 3A).¹³

In the 4th century, this long phase of stability in the rural settlement system seems to have come to an end:

many settlements of the early and middle imperial age were abandoned. In many of these sites, in fact, the ASR D and late ASR C are not documented, such as Masseria Scioltabino, Contrada San Tomasello, Masseria S. Tommaso, Masseria Sacella, Masseria Fico d'India in the Torcicoda valley, Casa Curione and Contrada Stanzie in the Morello valley, and Anagargi, Masseria

¹³ Valbruzzi 2012; Valbruzzi 2016a.

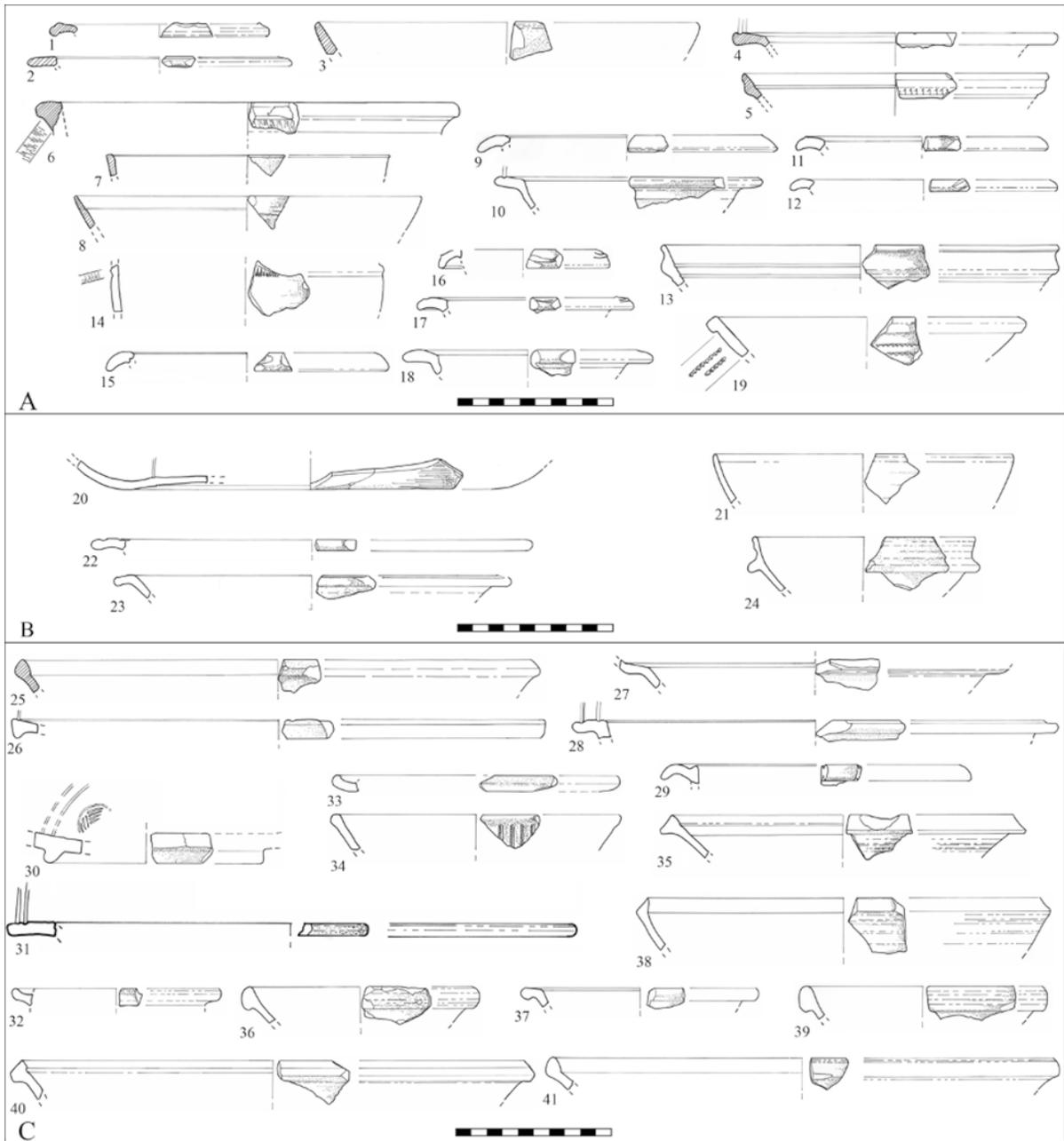


Figure 3 – Western and southern Erei ARS wares: A) ARS A (1st-3rd century AD) from Masseria Gaspa (1-3), Casa Curione (4-5), Stanzie (6-8), Masseria Scioltabino (9-10), Contrada Nicola (11), Contrada Tornambè (12-13), Anagargi (14), Masseria Cerumbelli (15-19); B) ARS C (3rd-5th century AD) from Contrada Gaspa (20), Masseria Ramata (21), Piano Cadarella (22-23), Serre di Mezzo (24); C) ARS D (4th-6th century AD) from Masseria Gaspa (25-26), Masseria Ramata (27-29), Rocche di Donna Ricca (30-35), Serre di Mezzo (36-37), Piano Cadarella (38-39), La Fastuchera (40), Contrada Tornambè (41) (adapted from Valbruzzi 2016a)

Cerumbelli, and Runzi – where a *villa rustica* dating to the 3rd century has been partially investigated¹⁴ – in the territory of Pietraperzia.

At the same time, however, some of the largest settlements located along the main roads connecting

central Sicily with the coasts survived, showing a good supply capacity of African pottery, even if the *Proconsularis* and *Byzacena* provinces had already fallen into the hands of the Vandals (fig. 4).

The persistence of these larger settlements can be explained by the tendency toward a concentration of

¹⁴ Cilia 1987.

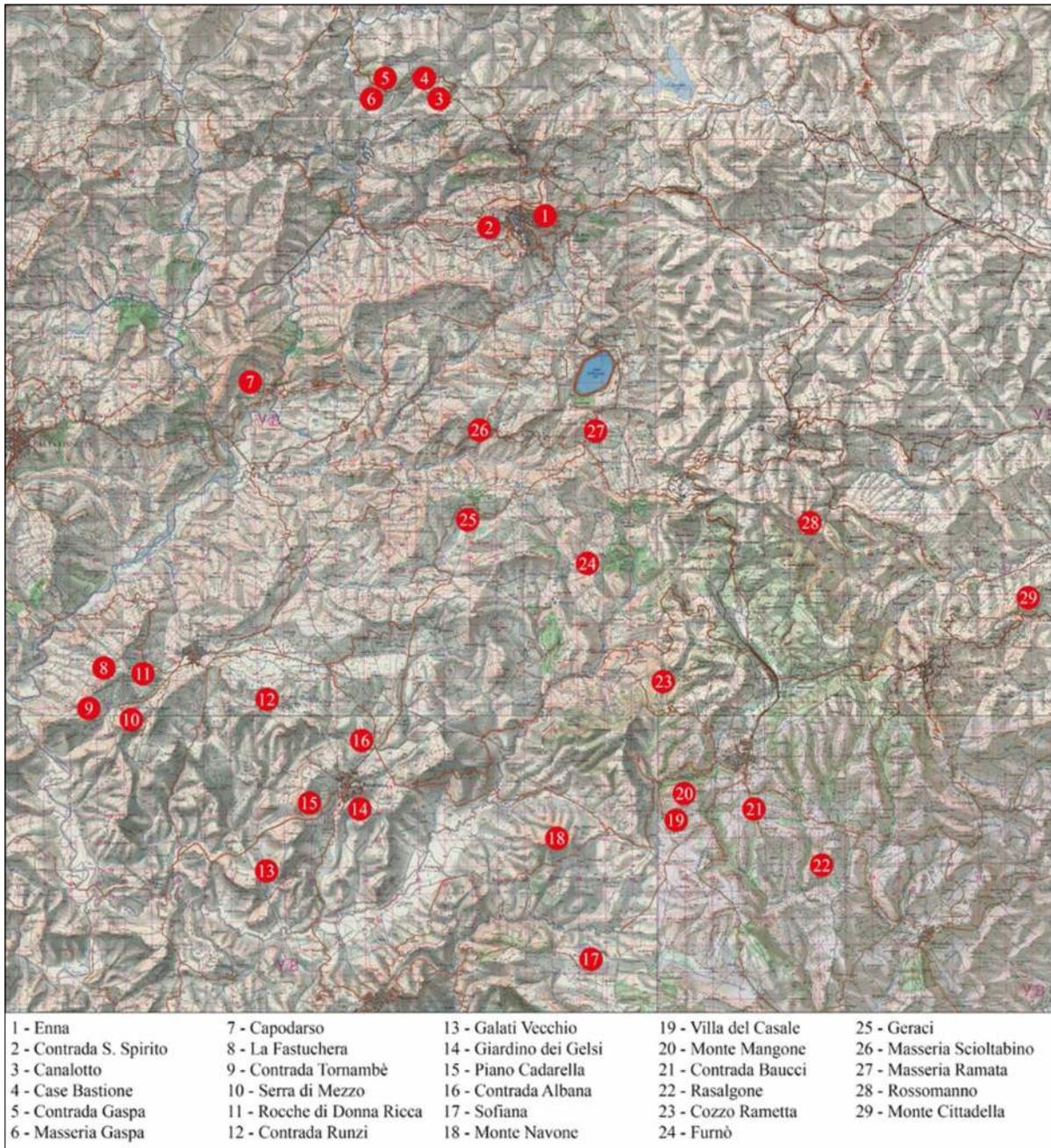


Figure 4 – Distribution map of late antique settlements (4th-7th century AD) in the western and southern Erei upland

the rural population in the late antiquity.¹⁵ ARS D dating to the 4th and 5th centuries have been found at Piano Cadarella and Contrada Albana (Barrafranca), Masseria Gaspa (Villarosa) and Masseria Ramata (Enna) (fig. 3C).¹⁶ These settlements show a long continuity, from the middle to the late imperial age. They probably represented the answer to the crisis of the rural settlement system, as evidenced by a different use of

agricultural resources in the western Erei. It is clearly documented by the abandonment of many small settlements between the late 3rd and 4th centuries, and it may have been caused by the rise of a new system for exploiting land ownership.

In other settlements, the presence of 5th century ARS, often from the second half of the century, is documented. In particular, it is possible to note a new phase of the rural occupation of the territory of Pietraperzia: the settlement of Rocche Donna Ricca experienced a new

¹⁵ Vaccaro 2013: 281.

¹⁶ Valbruzzi 2012; Valbruzzi 2016a.



Figure 5 – A) plan of the Roman villa of Gerace (after Wilson 2015, p. 179, fig. 4); B) plan of the Roman settlement of Sofiana (after Vaccaro 2017, p. 302, fig. 3)

phase between the late 5th and the 6th centuries, while sporadic 5th-century ARS pots sherds were collected at La Fastuchera and Casa Mendola; in Contrada Tornambè, at the foot of Serra di Mezzo, a settlement dating to the 6th century has returned materials related to the late production of ARS C and D (fig. 3B, C).¹⁷

The dynamics of the late antique rural settlements in the area of the Imera Meridionale valley can illuminate the long history of the Roman villas with mosaics which were discovered in the central and southern Erei. At Piazza Armerina, the imperial Roman settlement of Contrada Rasalgone arose not far from the monumental villa of the Casale: here, in 1997, part of a mosaic was brought to light, even though it was later re-buried and never investigated in depth.¹⁸

At Gerace (Enna), in a 17th-century rural village, conspicuous remains of a Roman villa decorated with geometric mosaics have emerged since 1994. The site has been systematically excavated over the last 20 years by the Soprintendenza of Enna and, since 2013, by a research team of the University of British Columbia, directed by Roger Wilson.¹⁹ The different excavation campaigns and geophysical prospection suggest a probable extension of the settlement over an area of about three hectares. Residential structures partially decorated with mosaics attributed to the *pars dominica* have been exposed (fig. 5A), together with a vast area occupied by thermal structures decorated with geometric mosaics, and a *pars fructuaria* with granaries, craft facilities and furnaces.

As for the chronology of the vast residential complex, preliminary analyses of the ceramics suggest that the villa was built in the middle Roman imperial age: ARS A is largely attested, associated with transport amphorae produced in Sicily in the 2nd and 3rd centuries.²⁰ The presence of these amphorae in the craft area suggests their production *in situ*, possibly to market local wine and oil. In this regard, the absence of the late imperial Sicilian amphorae at Gerace, attested in other villas and late antique rural settlements on the island, could indicate the decline of intensive agricultural production, with the consequent end of the manufacturing of oil or wine containers. In this sense, the construction of a large granary close to the residential area in the 4th century, possibly related to the decision to allocate the *praedia* to the extensive cultivation of wheat and abandon specialized crops, is significant. Furthermore, recent excavation campaigns in the craft area show how, above all, the furnaces produced building materials, such as roof tiles, with the factory stamp of the *Philippiani* domains.²¹

The prosperity of the owners of the agricultural estate is evidenced by the richness of the mosaics dating to the 4th century exposed in both the residential structures and the nearby thermal baths. In the *frigidarium*, the geometric mosaic is decorated with a dedication to the owners of the *Philippianorum Praedia*. Thus, two questions arise: where are the residential structures of the *domini* or *conductores* of the property in the 3rd and 4th centuries, when the granary was built? Wilson, in fact, points out the existence of three phases of the granary dating to the middle imperial age. Furthermore, why did the owners of the villa abandon the great

¹⁷ Valbruzzi 2016a; Valbruzzi 2016b: 120–125.

¹⁸ Guzzardi 2000.

¹⁹ Bonanno, Cabella, Capelli and Piazza 2010; Platamone 1996; Wilson 2018a.

²⁰ Bonanno Cabella, Capelli and Piazza 2010.

²¹ Wilson 2015.

granary in ruins (destroyed by an earthquake in 361-363 AD) at the moment of their maximum floridity?²²

At Gerace, various phases of building renovations have been documented, datable according to the ASR wares between the 4th and 5th centuries. The villa was then abandoned after a destructive event between the late-5th and early-6th centuries. Between the 8th and 9th centuries, a Byzantine village was settled on the collapsed layers of the granary, filled with large quantities of Roman roof tiles. During the 2013-2015 excavation campaigns, a long trench opened in an almond grove placed to the west of the villa, exposing a large burnt area. Here, numerous cooking pots decorated with reed impressions (*ceramica a stuoia*), common in the coeval settlements of central Sicily, were placed on various outdoor hearths.

The micro-history revealed from the systematic excavations at Gerace must be contextualized within the population dynamics of the Enna territory reconstructed through surface research for the period ranging from the 2nd to the 6th centuries. We have seen how the spread of rural settlements from the early imperial age to the 3rd century is well documented in this area. Many of these, however, were abandoned between the end of the 3rd and the 4th centuries. Only the largest settlements, often located in strategic positions along the roads, survived. This depopulation of the Enna countryside could have been determined by the imposition of a new system of land ownership exploitation. From the 4th century, there was a strong increase in senatorial ownership, justified by the new prospects of profit in the free grain market that opened for the Sicilian production, following the creation of the Cura Annona for Constantinople which redirected the Egyptian wheat which had previously been destined for Rome.²³

The establishment of vast extensively cultivated estates in Sicily was a process analogous to what is documented in the rest of Suburbicarian Italy between the 2nd and 3rd centuries. Here, too, the expansion of cereal cultivation put specialized production, such as wine and oil, at risk and brought the countryside to desertification.²⁴ The 4th century is commonly interpreted as a phase of strong economic development on the island, as well as of the rural settlements, which was documented by the rise of the monumental villas.²⁵ But the rise of villas with mosaics could have been determined by extensive cereal exploitation as well, provoking the impoverishment of the countryside with their consequent depopulation. The alleged prosperity

of the Sicilian countryside in the 4th century, then, could be an optical illusion derived from the splendour of the late antique mosaics of central Sicily.

It is true, however, that at the end of the century, the Gerace owners equipped the villa with luxuries, including thermal baths and adding precious mosaics and marble decorations to some rooms of their apartments. At the same time, in central Sicily, as well as in other territories,²⁶ a phase of expansion of the rural occupation of the countryside started, which was evident throughout the entire 5th century. The new development of the agricultural economy, with the spread of African productions in the rural settlements as the result of trans-marine trade, seems to contrast with the prevailing narrative describing the destruction carried out in that same century in Sicily by the Vandals.²⁷ However, it is possible to link the development of the Sicilian countryside in the 5th century with the role assumed by Sicily in the supply of Rome's Annona, precisely following the Vandal conquest of the African provinces between 429 and 439 AD. The island, after five centuries, eventually regained its function as the granary of Rome, also acquiring a key rear-guard role for any central power wishing to control Italy, maintaining this strategic function until the Islamic conquest.²⁸

Evidence of the crisis that affected the whole Roman Empire in this century can be read in the Roman villa of the Casale at Piazza Armerina. Recent archaeological research by the La Sapienza University of Rome document a gradual process of difunctionalization of the 4th-century structures. In the first half of the 5th century, the small southern thermal building was damaged; between the 5th and 6th centuries, the Basilica collapsed and was abandoned to become a burial place; even the great eastern Bath suffered damage and was restored, probably with a change in its function. It seems, therefore, to show the signs of a long crisis in this prominent settlement, which was transformed from a luxurious residence of the *domini* of the *Preadia Philosophiana* into a more modest rural village, where the *conductores* of the estate left a large part of the most magnificent rooms in ruins, replacing their housing and representational functions with craft workshops or burials.²⁹

The structural decomposition of the late antique villa of the Casale has been related to a widespread abandonment of rural settlements of the Sicilian

²² Wilson 2018a: 305.

²³ Manganaro 1982; Vera 1988; Vera 2013.

²⁴ Barker and Lloyd 1991; Giardina 1997: 233-280.

²⁵ Castrorao Barba 2016: 171; Vaccaro 2013: 265; Wilson 1990: 235; Wilson 1993.

²⁶ Fentress and Perkins 1988; Fentress, Fontana, Hitchner and Perkins 2004.

²⁷ Mazza 2000.

²⁸ Cracco Ruggini 1980; Cracco Ruggini 1997-98; Vera 1997-98.

²⁹ Pensabene 2016: 249; on the functions of the Roman villas in the broader context of Suburbicarian Italy from the 3rd to the 7th centuries, see Castrorao Barba 2014; Castrorao Barba 2016.

countryside, possibly caused by the devastation of the Vandals.³⁰ However, recent research in the Erei upland evidence, on the contrary, a new phase of rural occupation of the countryside occurring after the 5th century. These settlements are known only through surface surveys, and it is not possible to evaluate their real structural consistency and their economic and social functions yet: however, these data confirm the hypothesis of a revitalization of the agricultural economy of central Sicily.

Important data for the long history of the rural occupation of central Sicily in the Roman and Byzantine ages have been obtained by the archaeological investigations carried out at Sofiana. This settlement is located 6 km south of the Casale, and it is identified with the *mansio Philosophiana*, cited in the *Itinerarium Antonini*, along the road that crossed southern Sicily connecting Catania to Agrigento (fig. 5B). As summarized by Emanuele Vaccaro:

Drawing on the results of archaeological surveys, excavation and ceramic study, this paper looks at patterns of settlement and economic change at *Philosophiana* and in its hinterland between the 4th and the mid-9th centuries. It aims to show that, in spite of transformations in topography, building-type and scale, this case-study provides a formidable example of long-lasting economic prosperity and a suitable context for analysing how central places and countryside described parallel histories and for questioning the extent to which the latter engaged with the former in the *longue durée*.³¹

The intersection of the data obtained from the surface research with that of the stratigraphic investigations suggests an overall picture of the interrelations between the urban features of Sofiana and the surrounding smaller settlements functional to it, which tells 'another story characterised by a continuity and persistence of economic growth'.³² For the 4th and 5th centuries, the parallel development of this agro-town³³ and the spread of medium and small rural settlements in its hinterland is documented. In particular, a peak for the presence of ARS wares at Sofiana is reported in the first half of the 5th century. The constant supply of Tunisian ceramics also continued in the second half of the century, perhaps thanks to small cabotage routes, even in the period when the network of Rome's *Annona* with Carthage was interrupted following the Vandals' conquest.³⁴ In the 6th and 7th centuries, when the centre of Sofiana declined and shrunk, many rural settlements were also abandoned, leaving only a few smaller sites

placed close to the 'central place'. However, the arrival of African ceramics at Sofiana did not stop until the end of the 7th century when, after the Islamic conquest, Tunisian production ceased.³⁵

This 'long-lasting economic prosperity' in central Sicily, evidenced by the continuity of life, the extension and structural complexity of Sofiana from the early imperial to the Byzantine age, did not represent a simple process of historical continuity. The excavations, in fact, punctually document the abandonment of prestigious residential structures in the third quarter of the 3rd century, the transformation of the *frigidarium* of the bath into a Christian baptistery between the end of the 4th and the beginning of the 5th centuries, with the construction, therefore, of an early Christian basilica. Finally, between the 6th and 7th centuries, many parts of the former agro-town became a rubbish dump, similarly to what happened in other cities of the Roman Empire.

The concept of 'pseudomorphosis', as defined by Lelia Cracco Ruggini, can be usefully applied to the formal and functional discontinuities of a site that, however, maintains the role of central place over a long period within a productive rural context.³⁶ Enrico Zanini has, furthermore, defined the image of the late antique world as 'multilinear' since it is not possible to recompose it in a unitary framework because of its discontinuous appearance.³⁷ One of the distinctive traits of the changing face of antiquity in this long period of transition was the Christianization of cult and funerary architecture, both in urban and rural settings.

The early Christian rock-cut necropolises of the northern Erei upland

The development of rural occupation of the Erei upland between the 4th and 5th centuries was accompanied by the creation of early Christian rock-cut necropolises. In particular, these kinds of funerary architecture are well-documented in northern Erei, favoured by the diffused presence of *Flysch* outcrops.³⁸ Between 1995 and 1998, the Soprintendenza of Enna carried out surface research in the Nicosia and Sperlinga areas to identify archaeological sites to be included in the historical components of the *Piano Territoriale Paesaggistico* of Enna.³⁹ The results of this research revealed a complex framework of rock-cut settlements which had different functions during the long history of their use, up to the contemporary age.⁴⁰ Despite the difficulty of their historical interpretation due to continuous tampering

³⁰ Pensabene 2016: 249.

³¹ Vaccaro 2017: 301.

³² Vaccaro 2013: 286.

³³ Vaccaro 2013: 282.

³⁴ Vaccaro 2013: 292.

³⁵ Vaccaro 2013: 298.

³⁶ Cracco Ruggini 1993: XXVII-XXXIX.

³⁷ Zanini 2017.

³⁸ Valbruzzi 2017a; Valbruzzi 2017b.

³⁹ Valbruzzi 2009.

⁴⁰ Valbruzzi 1998.

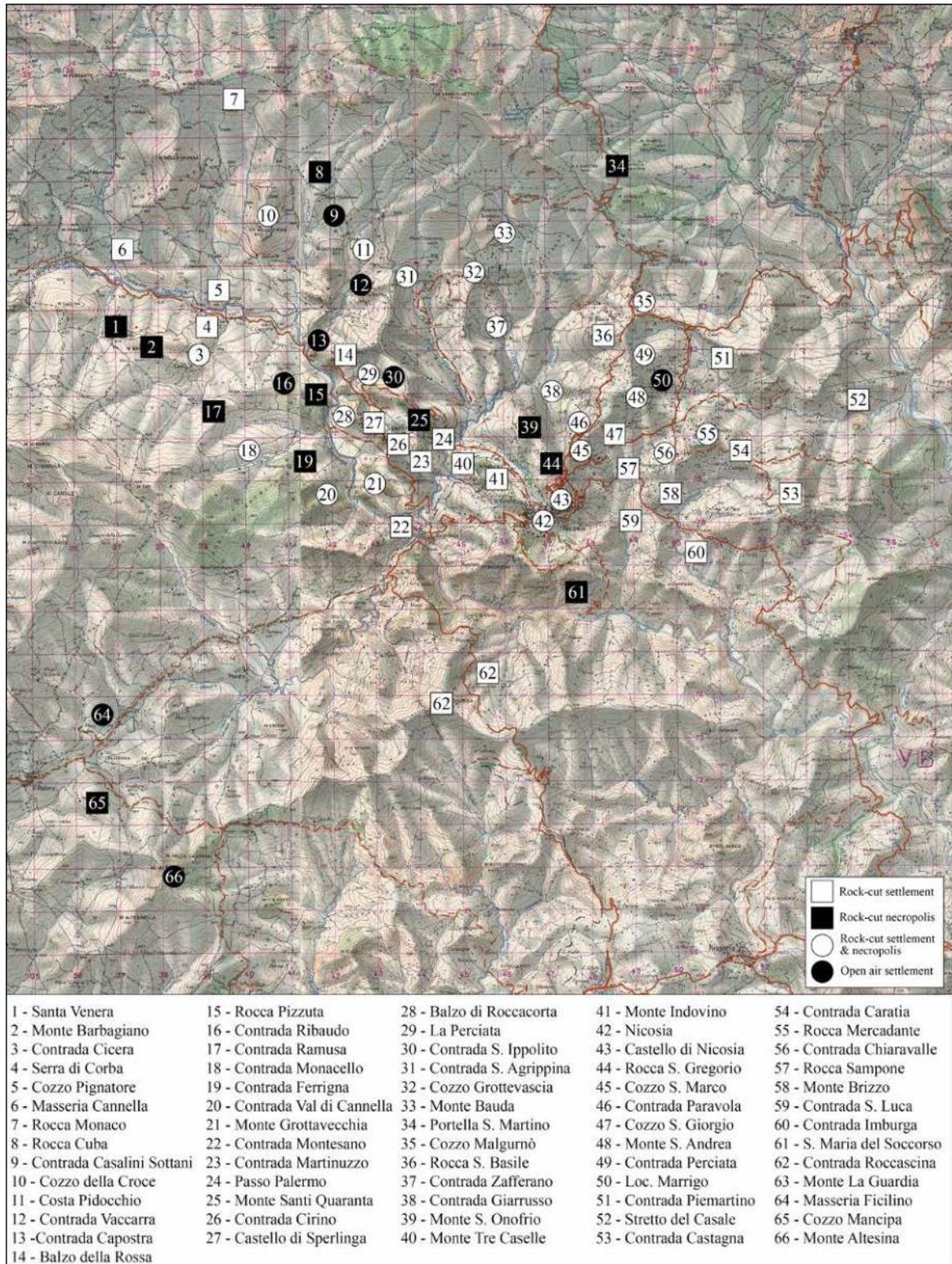


Figure 6 – Distribution map of Roman, late antique, and early medieval settlements in the Nicosia and Sperlinga areas (northwestern Erei)

and transformations, and for the lack of ancient deposits, it was possible in the end to identify different typologies of rock-cut structures realized in different ages (fig. 6).

In the river valleys branching off from the southern slopes of the Nebrodi range, there are large concentrations of late antique necropolises, such as at Monte S. Marco, Monte Indovino, Monte S. Onofrio, just north to Nicosia, and on the opposite bank of the Fiumetto River, on the precipitous sides of Monte Santi Quaranta and Balzo della Rossa, near Sperlinga. Numerous sites are also distributed within the natural amphitheatre that opens at the foot of the Sambughetto and Campanito heights, on the high rocky ridges of Costa Pidocchio and the Grotte della Lonfana. These are mainly hypogea with arcosolia and *a forma* burials, dating to the early Christian age. At Monte S. Onofrio, next to the small catacomb there is a large *columbarium* attributable to the early Roman imperial age (fig. 7.6); coeval *columbaria* have also been identified within the funerary complexes opened along the slopes of the Enna and Calascibetta plateaus.⁴¹ Numerous hypogea with arcosolia are preserved on the rocky cliff where the Castle of Nicosia rises (fig. 7.4).⁴² These have been dug along a terrace also characterised by Byzantine *subdivo* burials.

On the steep slopes of Monte Santi Quaranta, immediately to the north of Sperlinga, there is an evocative funerary complex partially preserved in its original form.⁴³ It is composed of four hypogea placed in succession along a rocky ridge. Access to the funerary chambers is granted by ladders and corridors cut into the rocky sides which, with their spectacular rising rocky pinnacles, monumentalise the front of the catacombs. Inside the largest one (fig. 8), at the eastern edge of the complex, the funerary space consists of two rooms connected by pillars and arches; the burials are arranged on its sides, with multiple niches surmounted by arcosolia, while *a forma* tombs are placed on the floor level.

The spatial arrangement of the tomb is quite peculiar: it is isolated within a niche dug into the wall opposite the entrance; on the top of the niche, decorated with an arched carving, a vertical duct opens to the outside on the upper terrace, within a quadrangular rock-cut enclosure with side benches. The peculiar architectural features of this hypogeum, together with its external connection to a structure probably built outdoors and the isolated burial can be interpreted in light of the *refrigerium*'s funeral rituals, evidenced also in other

late antique Sicilian cemeteries.⁴⁴ As for the particular toponym Santi Quaranta, it possibly refers to the Byzantine cult of the 'Forty Martyrs', attested in the St. Lucy catacombs at Syracuse in the first half of the 8th century.⁴⁵ The cult has also been documented in Catania,⁴⁶ in connection with the presence of military ruling classes in the late Byzantine age.

Some early Christian necropolises, with hypogea placed on overlapping levels, may later have acquired a defensive function, as evidenced by tunnels and walkways connecting the various levels, also through the use of removable ladders. Examples of this typology of fortified settlements, similar to the so-called Byzantine 'proto-castles',⁴⁷ are those of Contrada Cicera and Balzo della Rossa (fig. 7.1-3). In the latter site, Aldo Messina also suggested that, during the early medieval age, some graves were modified to create a rock-cut Islamic mosque.⁴⁸

The dense occupation of the Nicosia and Sperlinga territories can be explained in light of the role this inner area played as a strategic crossroads from ancient times to the Middle Ages. The dynamics of the occupation of the Erei upland in the Roman age and late antiquity have been interpreted, here as well as in other areas,⁴⁹ in connection with the road network, often linked to the natural routes of the southern Nebrodi. In this foothill region springs the Salso-Kyamosoros River, which flows into the *Symethus* after having crossed the territories of *Agyrion*, *Ameselon* and *Kentoripa*.

Giovanni Uggeri has reconstructed the track of an ancient road recalled by Byzantine historical sources that, starting from Tusa and passing through the territories of Mistretta and Nicosia, reached the Salso valley and, then, connected with the *Catina-Thermae* road at Agira. From here, proceeding westwards, it led first to Assoro, then to Henna. According to Uggeri, this would be a more official route, compared to the one mentioned by Cicero, along which cereal production from central Sicily was carried out to the Tyrrhenian town of *Halesa*, becoming thus part of the *Cursus Publicus*.⁵⁰ To understand the diachronic meaning of the settlement dynamics of the area, it is significant that this Roman road crossed, in the territory of Nicosia, the '*Via Messina per le montagne*' mentioned by the geographer al-Idrīsī in the Norman age.⁵¹ The early medieval route constituted an alternative to the ancient coastal road, the *Via Valeria*, now disrupted in many parts.

⁴⁴ Carra Bonacasa 2003.

⁴⁵ Sgarlata and Di Salvo 2006.

⁴⁶ Arcifa 2009.

⁴⁷ Maurici 1992: 32–36.

⁴⁸ Messina 2001: 111–113.

⁴⁹ Valbruzzi 2012.

⁵⁰ Uggeri 2004: 281.

⁵¹ Arcifa 2000: 98.

⁴¹ Valbruzzi 2016c.

⁴² Scibona 1993.

⁴³ Valbruzzi 2017a.



Figure 7 – 1) the rock-cut settlement of Grotta Vecchia in Contrada Montesano; 2) the fortified settlement (proto-castle) of Contrada Cicera; 3) the fortified settlement and necropolis of Balzo della Rossa; 4) arcosolia burials in the rock-cut castle of Nicosia; 5) the rock-cut castle of Sperlinga; 6) the columbaria of Monte S. Onofrio (photos by the Author)

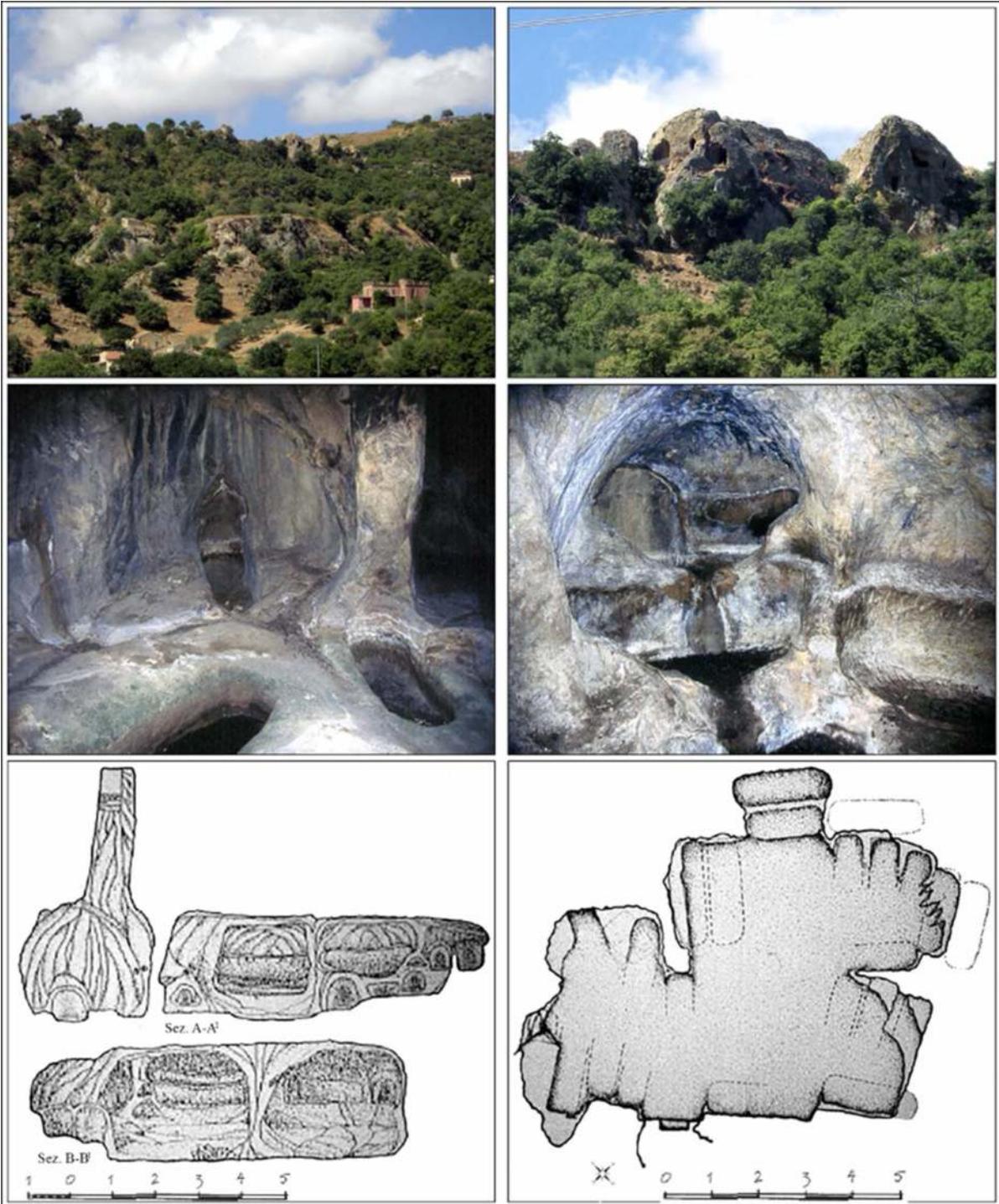


Figure 8 – General and detailed views, plan and sections of the Hypogeum A of the Monte Santi Quaranta necropolis (after Valbruzzi 2017b)

Starting from the Ionian coast and passing through the northern foothill of Etna, it crossed the entire southern ridge of the Nebrodi and the Madonie ranges, reaching the western Tyrrhenian coast just before Palermo. Along these roads, which connected central Sicily to the Madonie and the Tyrrhenian coast through the southern Nebrodi, numerous rural settlements had already developed in the early medieval age, together with their rock-cut necropolises. Studies on ancient roads have, in fact, recognised the close relationship between the Greek-Roman communication network, recognisable in the grid of late antique itineraries, and the main medieval routes.⁵²

The emergence of an early castellation process in the Byzantine and Islamic periods is a highly debated historical topic: based on recent topographic studies,⁵³ a continuity of open settlements after the end of late antiquity in Sicily has instead been suggested. The distribution of early Christian necropolises at Nicosia and Sperlinga suggests a continuity of settlement from late antiquity to the early medieval period, with rural settlements located in open positions along communication routes. The rock-cut structures, after a change of their funerary use, were often used as dwellings. Sometimes defensive systems were adopted, which seem to respond to occasional and temporary defensive needs, as documented also in other inland areas of the island. Only later did some of the more complex rock-cut settlements become places of attraction for the rural population, with the development of villages defended by rock-cut proto-castles, of which Sperlinga (fig. 7.5) and Gagliano are the most important examples.⁵⁴

The process of progressive castellation characterising northern Erei also took place in the southernmost territory of Calascibetta. This area was crossed by two main communication routes which have been partially identified through field research. The *trazzera* Calascibetta-Gangi-Tusa⁵⁵ was identified as the road that allowed the transport of loads of wheat from *Henna* to *Halaesa* in 'a single day'.⁵⁶ Shortly after Calascibetta, this road passed through Realmese, where a Byzantine settlement was located which exploited the numerous rock-cut tombs of the well-known Iron Age necropolis.⁵⁷

The second route is the *trazzera* Calascibetta-Alimena, identified as part of the *Catina-Thermae* road of the *Cursus Publicus*.⁵⁸ It crosses the Canalotto valley immediately after Calascibetta: here, a vast rock-

cut village was located, with domestic structures, agricultural production facilities and an underground water management system (*qanāt*), together with a small church or oratory. In the early medieval age, the settlement incorporated a series of *columbaria*, *arcosolia* and *sub divo* graves belonging to an earlier Roman and late antique necropolis.⁵⁹ The road then reached Monte Gaspa, on whose wooded slopes a large necropolis with *arcosolia* and *sub divo* graves dating to the 5th century developed. This necropolis is connected to a rural settlement identified in the nearby Masseria Gaspa, datable to the imperial age.⁶⁰ All these rock-cut settlements were probably abandoned when, in 1074, Count Roger ordered the construction of a *castrum* on the rocky height that faced Castrogiovanni (*Tali tantoque urgente desiderio, anno incarnati Verbi MLXXIII, in monte Calataxibet castrum firmavit, quod militibus et reliquis, quae necessaria erant, muniens, Castrum-Iohannis infestissimum redditur*).⁶¹

With the advance of research and studies dedicated to this complex phase,⁶² the settlement pattern dynamics for central Sicily between late antiquity and the Middle Ages are not easy to read and, at the same time, are not easily summarized in the pre-established schemes of continuity-crisis or evolution-decay.⁶³ One of the most debated issues in late antique historiography concerns the crisis of towns. To this regard, within the examined territory, it is possible to note how, in the *municipium* of *Henna*, there is an evident development of the early Christian necropolises, now displaced all along the rocky slopes that surround the plateau on which the ancient city developed.⁶⁴ These funerary structures evidence the social and economic vitality of this important urban centre in late antiquity, which still played a key role in agricultural production and trade.

Early medieval settlements in the Erei upland

The settlements documented in the Erei upland during the early Byzantine age rapidly disappeared in the 7th century, even though rural occupation shows a new recovery between the 8th and 9th centuries. This is evidenced by the widespread presence in the central and southern part of the area of kitchenware with a calcitic texture, baked in a reducing environment and with an impressed mat decoration, so-called Rocchicella ware, or *ceramica a stuoia*. This peculiar ceramic type is interpreted as a certain chronological indicator of the last phase of the Byzantine age in Sicily.⁶⁵ The distribution map of this ceramic class includes the

⁵² Arcifa 2000.

⁵³ Rizzo 2004: 229–246.

⁵⁴ Maurici 1992.

⁵⁵ Uggeri 2004: 280.

⁵⁶ Cicero 1916, *Verr.* II, 3, 192.

⁵⁷ Albanese Procelli 1982.

⁵⁸ Burgio 2000; Uggeri 2004: 239.

⁵⁹ Arcifa 2012; Giannitrapani 2012: 31–33.

⁶⁰ Valbruzzi 2012: 223.

⁶¹ Malaterra 1927: *lib.* III, § 7.

⁶² Wickham 2005; Molinari 2010.

⁶³ Cracco Ruggini 1993: 32.

⁶⁴ Valbruzzi 2016c.

⁶⁵ Arcifa 2010a; Arcifa 2010b.

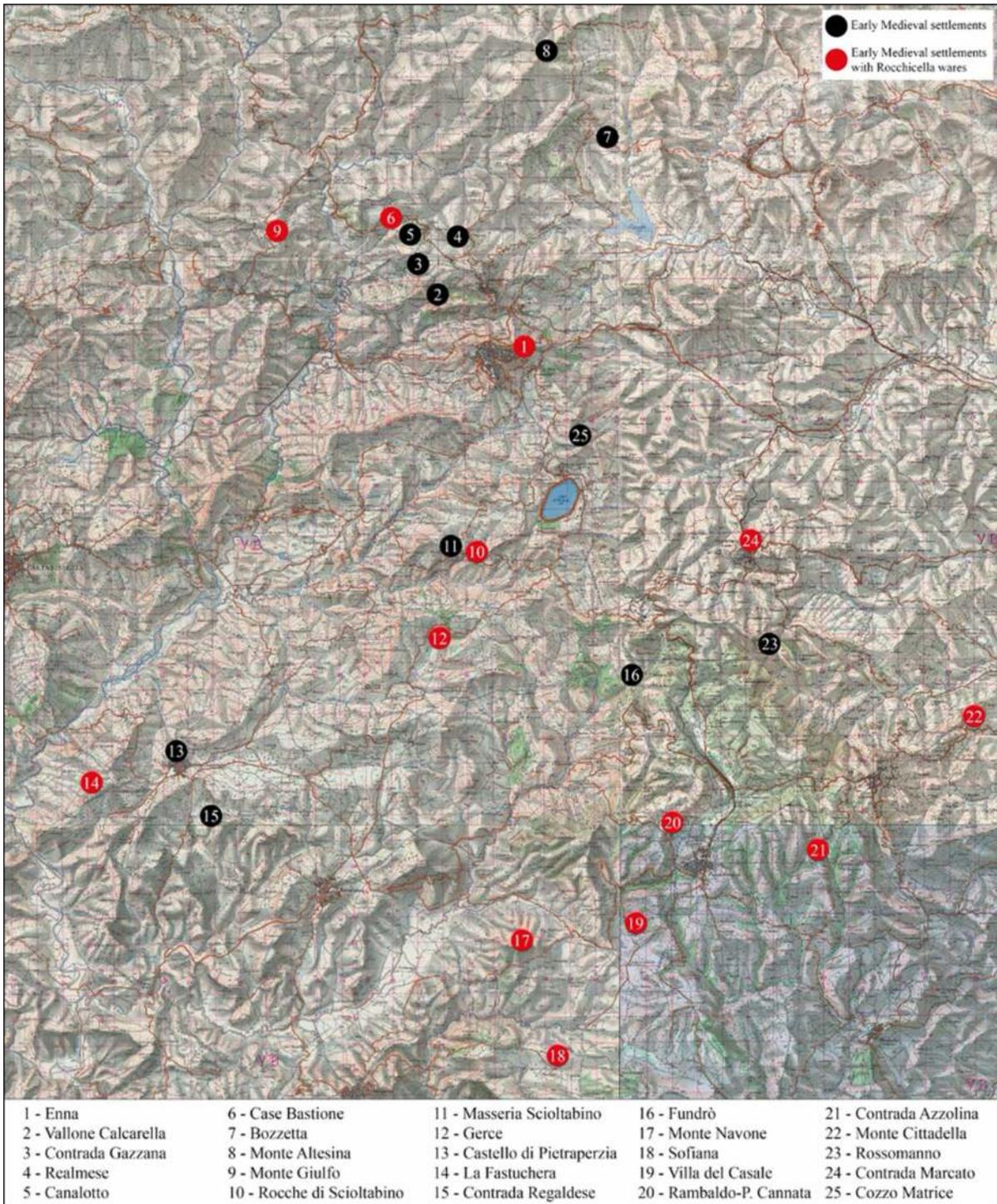


Figure 9 – Distribution map of early medieval settlements (7th-10th centuries AD) in the western and southern Erei upland

western Erei uplands along the Imera Meridionale valley and its tributaries.

The sites returning this peculiar pottery class have been identified mainly by surface research, while only in some cases have these been explored through stratigraphic excavations (fig. 9).

The southernmost site actually falls within Caltanissetta province at Mazzarino: the already-mentioned early medieval settlement of Sofiana.⁶⁶ Here, a craft production area has been exposed that dates to the 8th and 9th centuries. It was destined for the production of

⁶⁶ Vaccaro and La Torre 2015.

different ceramic types, such as tableware, kitchenware and transport containers. To the north of this area, at Piazza Armerina, fourteen sites have been identified by systematic surface research,⁶⁷ possibly destined for agricultural production. They are clustered around the early medieval settlement built on the ruins of the Roman villa of the Casale, where recent studies have identified the production of Rocchicella wares.⁶⁸ Recently, the Soprintendenza of Enna has identified the remains of another settlement near the villa, dating between the 8th and 9th centuries and also characterised by Rocchicella wares.⁶⁹

As also evidenced in other areas of the Erei upland, these small and medium-sized settlements were closely related to the communication network of central-southern Sicily. To these, a new settlement recently identified in Cozzo Azzolina can be added. The small site was found during preventive archaeology activities conducted by the Soprintendenza of Enna for the construction of an Enel power plant. The research carried out there by Anna Maria Barberi exposed a structure with a hearth and a Rocchicella type vase. To the northeast of this area, in the site of Cittadella at Morgantina, contexts dating from this phase, also characterised by Rocchicella wares, have been identified, dating the occupation of the site to the 6th century due to the presence of ARS and LRC ceramics.⁷⁰ For their perched position, Cozzo Azzolina and Cittadella could reveal a need to defend the villages in the last phase of the Byzantine dominion of Sicily. At La Fastuchera, a site with Rocchicella type potsherds identified in the territory of Pietraperzia, could have played a similar role in the control of communication routes, since it is placed on the top of a steep limestone ridge controlling the middle Imera Meridionale valley.⁷¹

In the hills to the south of Pergusa Lake there are two early medieval settlements connected to the road network that linked Henna to the southern Sicilian coast: Rocche di Scioltabino, within the Torcicoda River basin,⁷² is attributed to a period ranging from the Byzantine to the Norman ages for the presence of Rocchicella and glazed potsherds, and the already-mentioned Byzantine village built on the ruins of the Roman villa of Gerace.⁷³ Here, Rocchicella wares have been found in association with ARS dating to the 7th century, suggesting a possible backdate for the production and use of this pottery, traditionally attributed to the 8th and mid-9th centuries.⁷⁴

At Contrada Marcato, near Valguarnera, on a hill in control of the upper Dittaino valley, a Byzantine village was investigated by the Soprintendenza of Enna in 1992 and 1998.⁷⁵ The village is built on the ruins of residential structures of the early imperial age (1st-3rd centuries). Here, a phase dating to the 6th-7th centuries is evidenced by the presence of combed roof tiles, referring to a rectangular stone structure, and a large pit to store wheat. The phase dating to the 9th century is attested by Rocchicella pots and amphorae painted with bands and loop patterns. The site was then occupied in the Islamic age, between the second half of the 10th and the beginning of the 11th centuries, as evidenced by the presence of glazed ceramics and lamps with filters and open channels.

At Enna, recent research has allowed the investigation of the transformation of the urban structures in the Byzantine age, particularly at Santa Ninfa, a small valley located between the Castello di Lombardia and the Rocca di Cerere, where the Greek and Roman acropolis stood.⁷⁶ On the eastern access road to the acropolis, in close relation to the remains of Greek-Roman rock-cut cult structures, a small basilica has been exposed, decorated with painted plaster, probably built in the early Byzantine period. Later, it was demolished for the construction of an imposing defensive system which included a thick wall reinforced by circular towers running along the entire perimeter of the plateau where the ancient city stood. During the same period (late 8th century), it is possible to date the first military structures of the Castello di Lombardia.⁷⁷

At Santa Ninfa and inside the castle, large quantities of Rocchicella potsherds have been found, associated with painted amphorae (fig. 10A).

These wares continued to be used in the early Islamic age as they have been found in association with ceramics dating from the mid-9th to the 10th centuries in rock-cut huts, possibly employed to reinforce the defensive system, or placed above open-air hearths. From the 12th century, Santa Ninfa was transformed into a craft area, as documented by the presence of a developed hydric system formed by channels and cisterns dating to the Swabian age.

Another settlement that has recently returned evidence of late antique and early medieval occupation is Case Bastione.⁷⁸ Here, the levels attributable to these phases are placed above the remains of a vast prehistoric

⁶⁷ Alfano 2015.

⁶⁸ Fiorilla 2006; Alfano 2015.

⁶⁹ Bonanno 2020: 116.

⁷⁰ Arcifa 2013; Vaccaro 2013: 277–278.

⁷¹ Valbruzzi 2012; Valbruzzi 2016a.

⁷² Giannitrapani and Pluciennik 1998.

⁷³ Wilson 2015; Wilson 2017.

⁷⁴ Arcifa 2010a; Arcifa 2010b.

⁷⁵ Arcifa, Arena, Draïà, Di Carlo, Giannitrapani and Valbruzzi 2013.

⁷⁶ Giannitrapani, Nicoletti and Valbruzzi 2008; Giannitrapani, Nicoletti and Valbruzzi 2020; Valbruzzi and Giannitrapani 2015.

⁷⁷ Bonanno 2012; Bonanno, Guzzardi and Canzonieri 2020; Valbruzzi 2016c.

⁷⁸ Valbruzzi: in press.

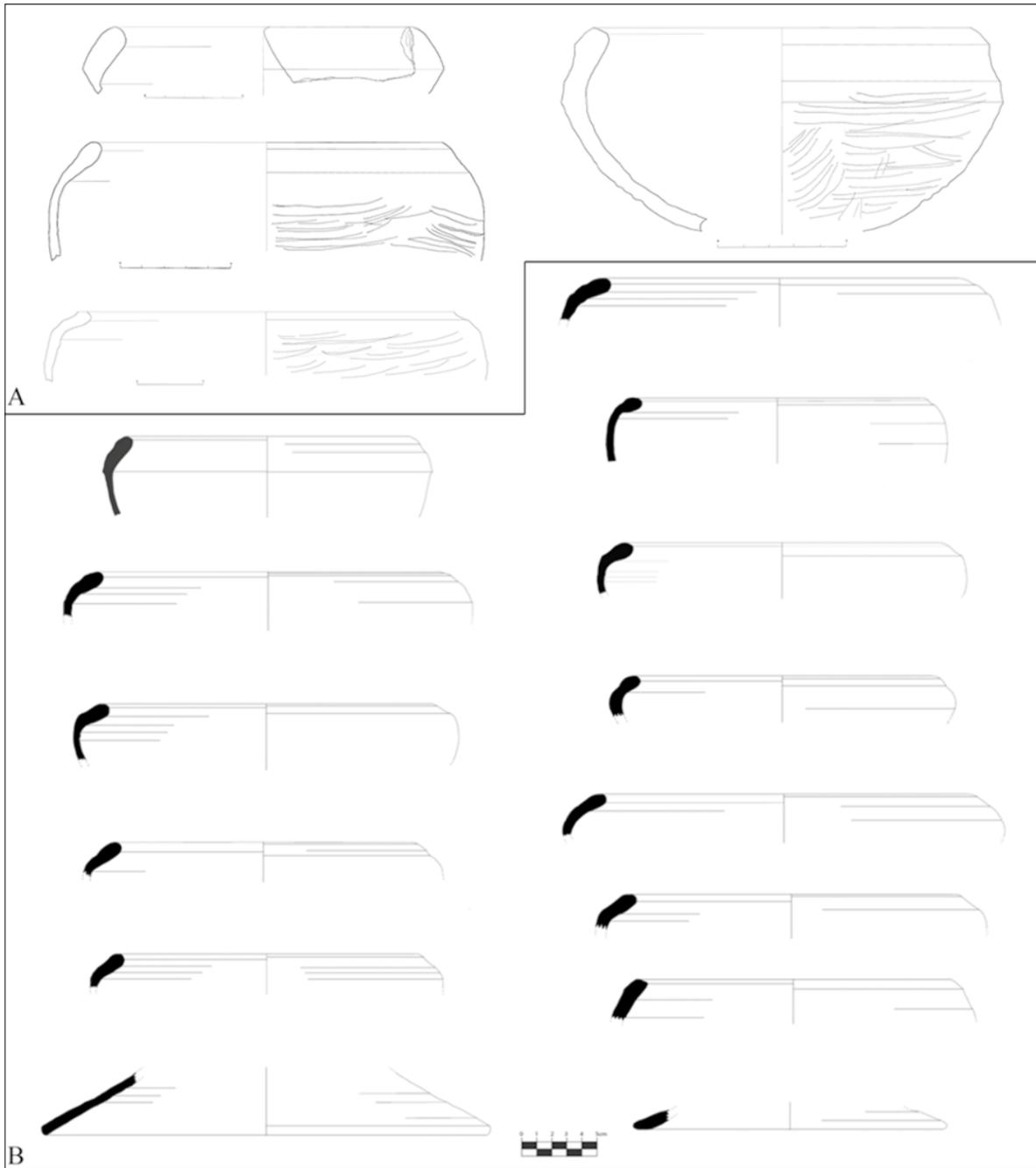


Figure 10 – Rocchicella wares in the central Erei upland: A) from Rocca di Cerere, Enna (after Giannitrapani *et al.* 2020, drawings by R. Nicoletti); B) from Case Bastione (adapted from Valbruzzi *in press*, drawings by M. Randazzo)

village.⁷⁹ The stratigraphic sequence and the analysis of the material culture related to these late stages suggest that the site was occupied from the 6th to the 10th centuries. In the upper layers, disturbed by recent mechanical ploughing, a few residual materials dating to the early Byzantine age have been collected, including ceramics imported from the eastern Mediterranean,

such as an ARS dish (Hayes 3C, 6th century), with a rouletted decoration on the rim.

In one of the trenches opened in the 2007 campaign, a deposit characterized by ceramics dating from the 8th to the first half of the 9th centuries, was investigated. Along with Rocchicella jars and cooking pots, globular amphorae with grooved handles were also found. The deposit is sealed by a collapsed layer made up of small

⁷⁹ Giannitrapani, Ianni, Chilardi and Anguilano 2014.

and medium-sized stones mixed with more regular blocks. The early medieval ceramics are associated with some classes comparable with materials found in Palermo dating from the 8th to the 10th centuries. Kitchenware, consisting mainly of Rocchicella casseroles, prevails (fig. 10B). Together with these, there are also firing pots dating to the 8th century, jars decorated with thick grooves, recorded at Palermo in the early Islamic phase, and a brazier at Castello S. Pietro dated to the 10th century. Both transport and storage vases were also found, including early medieval globular amphorae with horizontal handles, amphorae and jugs with grooved handles, vases decorated with large curvilinear bands painted in brown, and juglets with short necks comparable to types produced both during the 8th and the 9th centuries.⁸⁰ The same ceramic classes, also including some plain and slipped basins, have been found in a midden exposed in another trench, which has partly disturbed the lower prehistoric structures.

The rural settlement of Case Bastione, close to the urban centre of Enna, together with other Byzantine sites of the area such as Realmese and Canallo, is located along the Roman and late antique road system. Its strategic position suggests that, together with an agricultural function, it could have also assumed a defensive role for the transit of goods in the late Byzantine period. Certainly, a defensive function would have been played by the small village placed on Monte Giulfo, a few kilometres west of Case Bastione. In the layers above those related to a vast Archaic centre, some early medieval contexts have been identified which are currently under study and which has returned Rocchicella wares.⁸¹ It was, perhaps, a military outpost along the course of the Morello, in connection with the medieval settlement located in the upper part of the valley on Monte Altesina.⁸²

It is worthwhile to note how the area of the Erei upland is located at the centre of different distribution areas of the Rocchicella wares. A first area is represented by the eastern part of the island, from the Hyblaean plateau to the Catania plain.⁸³ It was connected to the Erei by the ancient communication system: from Catania, it led northwards to the Tyrrhenian coast, passing through Enna and, by another route, reached Agrigento through southern and central Sicily. The second area includes northwestern Sicily along the course of the Imera Settentrionale valley, together with the numerous settlements located on the Madonie range, up to the urban area of Palermo and into the valleys of the Jato and Belice rivers.⁸⁴ A third distribution area has been

identified along the Imera Meridionale valley, both in the Caltanissetta and Agrigento territories.⁸⁵

The wide territorial distribution of the *ceramica a stuoia* found in both eastern and western Sicily, the latter area of early Islamization, questions the hypothesis that links the appearance of Rocchicella wares to the allocation of soldiers coming from the eastern Byzantine domains.⁸⁶ This hypothesis has been advanced based on the typological analogies with the decorative syntax of the Eastern European Calcitic Ware. Many scholars, however, now suggest an autochthonous genesis of this type, which would have derived both its morphological and technological features from the last African productions. In this sense, Fabiola Ardizzone has proposed that there is 'a relevant continuity with the late antique formal repertoire' for the Cefalù productions of the 8th-9th centuries, which are very similar to the Rocchicella type, justified by 'the persistence of food habits and cooking methods'.⁸⁷ Others have also proposed a local genesis of the Rocchicella type on the basis of its similarities with productions diffused in northern Africa in the early Byzantine age.⁸⁸

The widespread presence of these particular ceramics in the Erei, showing a continuity from late antiquity to the early medieval age, could sustain the hypothesis of a local origin, possibly dating to the early Byzantine phases, as evidenced by associations with 7th century ARS at Gerace. As for the early medieval sites, it is worthwhile to stress their location, distributed mainly along the ancient communication routes that crossed central Sicily, both in a north-south and east-west direction, connecting this area with the coasts. These settlements were probably destined to diversified functions, such as agricultural production, or associated with craft activities, but also with the control of trade networks connected to larger regional and trans-marine networks. These 'external' links are well evidenced, for example, at Sofiana by the presence of transport amphorae imported from eastern Sicily and the Aegean, found together with those locally produced.⁸⁹

The development of rural centres in central Sicily in the 8th and 9th centuries, some of which also continued into the following centuries, seem surprising for this period. In the passage from late antiquity to the Middle Ages, in fact, the island was under pressure from Islamic

⁸⁰ Valbruzzi: in press.

⁸¹ Barberi pers. com.

⁸² Scibona 1993.

⁸³ Alfano 2015; Arcifa 2010b; Arcifa and Maniscalco 2016.

⁸⁴ For the Imera Settentrionale: Belvedere, Burgio and Cucco 2014;

for Palermo: Aleo Nero and Chiovaro 2016: 211–212; for the Jato and Belice rivers: Alfano and Sacco 2014.

⁸⁵ For Caltanissetta: Bergemann 2011: 210; for Agrigento: Rizzo, Danile and Zambito 2014.

⁸⁶ Arcifa 2010b.

⁸⁷ Ardizzone 2004: 383.

⁸⁸ Facella, Capelli and Piazza 2014: 55–56; Molinari 2009: 135; Rizzo, Danile and Zambito 2014: 362; Vaccaro and La Torre 2015: 87.

⁸⁹ Vaccaro 2017: 308.

incursions. The persistence of this settlement pattern could be explained by the strategic role assumed by these territories for their devotion to cereal production, compared to the grain supplies of the Byzantine Empire. During the Zachary papacy (741-752 AD), the possessions of the Church of Rome were expropriated by Constantinople⁹⁰ and taxation turned into payments with percentages of agricultural production.⁹¹ The complex settlement patterns of the Erei upland from the late antique to the early Middle Ages confirms the hypothesis advanced by Emanuele Vaccaro:

Philosophiana is unlikely to be an exception in late antique and early medieval Sicily. Further research on the long-lasting villages recently found in other areas of inland Sicily, and the discovery of new similar settlements - to be expected as fieldwork increases in the island's interior - will continue to reveal the persistence and complexity of the regional economy. This largely goes beyond the chronological limits of Late Antiquity and encompasses the 8th and 9th centuries.⁹²

The rural occupation of central Sicily is, today, documented by the surface and stratigraphic research conducted in the Erei upland. This complex story begins with the first and middle imperial ages and, interspersed with crises of short duration, continued throughout late antiquity until the last phase of the Byzantine dominion on the island. It is tightly connected to the complex historical and economic framework of the Mediterranean networks under the Western and the Eastern Roman Empire. The advance of the studies is now entrusted to the continuation of the research in the context of a 'global landscape archaeology' capable of adopting:

A multiscale perspective, that is to define the geographical space under study, combining the detailed analysis of the single site in relation to the social, economic and cultural interconnections of the cultural basin, the region, up to the macro area, to be equally contextually and stratigraphically investigated. The political, anthropological and phenomenological definition of the concept of landscape, and the relationship that this has with the development of human communities, therefore, implies the need to analyse the spatial dimension of the social production of the economic formations of the past using different geographical scales.⁹³

⁹⁰ Prigent 2004.

⁹¹ Wickham 2005: 260.

⁹² Vaccaro 2017: 311.

⁹³ Giannitrapani 2014: 79-80.

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III - Change in Rural Settlement Patterns

Chapter 10

Historical and Archaeological Data for the Ancient Road Network in Western Sicily from the Roman Period to the Norman Age

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Introduction

The issue of the continuous use of the Roman road network system from the early Middle Ages to the modern Age has, for some time now, been fixed within the main historical coordinates.¹ The studies find an old age pre-conception responsible for the lack of interest on behalf of scholars regarding the development of the road network system in Sicily following the collapse of the Western Roman Empire.

The idea that historians and archaeologists have of a backward and decadent road network arose during the Bourbon age, an idea which seems to have automatically continued over the following centuries. It has been dismantled only lately by scientific investigation, together with Amari's historical model of a conquered and divided medieval Sicily.²

The study of ancient roads can help us understand in a significant way the relationship between urban and rural cultures in the past centuries and to highlight the capability of a central power to extend its control over the inland territory. Nevertheless, archaeological research has mainly concentrated on the long-distance routes along the coasts or inland routes for military-strategic reasons (paying great attention to the itinerary and the estimated distances), leaving out the importance of shorter roads to the internal road network which were essential for connecting rural settlements and the coast.

Summing up the contributions made by the research to date regarding the inland road network in Sicily, we have the following:

- a lack of a documented legal system to regulate the road network in late antiquity and the Middle Ages is not proof of the lack of the road network itself and its own physical consistency. Actually, we could suppose that the customary use of an already-existing network had left implicit the application of certain rules and regulations;³
- as a matter of fact, in the medieval documentation, in particular in notary deeds regarding the selling and buying of houses and land, references to the road network are always the defining element of the border between the properties, which is evidence of its remote origin and longevity within the landscape. From these frequent references, it is also possible to extract the names used to describe the road network, from which we also have a systematic hierarchy;⁴
- from the early Middle Ages, the distribution of religious institutions along the internal N-S connecting routes shows the dynamics of a historical phase marked by new needs of military control in a moment when the internal road network and the territories it connected needed to be defended.⁵

Furthermore, as has been noted many times, the Roman postal system had not been totally abandoned even though it did lose its original military purpose and partially fall apart after the new socio-political development.⁶ An internal road network is, in any case, implicit to this larger network because the connections between the main roads along the coast in the Roman age could have truly been functional only with an organized transversal road network. In the mountains, this is evidently made up by those corridors which mother nature made people take since prehistory. It is a network of drover's roads which pre-existed the Roman period and was very much part of the latter,⁷ which

¹ Arcifa 1994. The research, carried out on a historical-documentary basis, points out the need to valorise this aspect of the landscape as a tool for analysing the dynamics of the inland population, from late antiquity onwards.

² Amari 1880. This precious work has remained little discussed for a very long time. For this reason, the research carried out by Annliese Nef, Vivien Prigent and Adalgisa De Simone is very important, clarifying and defining historical passages which are very often underestimated, simplified and grouped together (late antique-Byzantine-Islamic).

³ Arcifa 1997; Szabò 1992.

⁴ Arcifa and Militello 2005.

⁵ Arcifa and Militello 2005: 32.

⁶ Uggeri 1994.

⁷ Such as the *diverticula* of the *Itinerarium Antonini*.

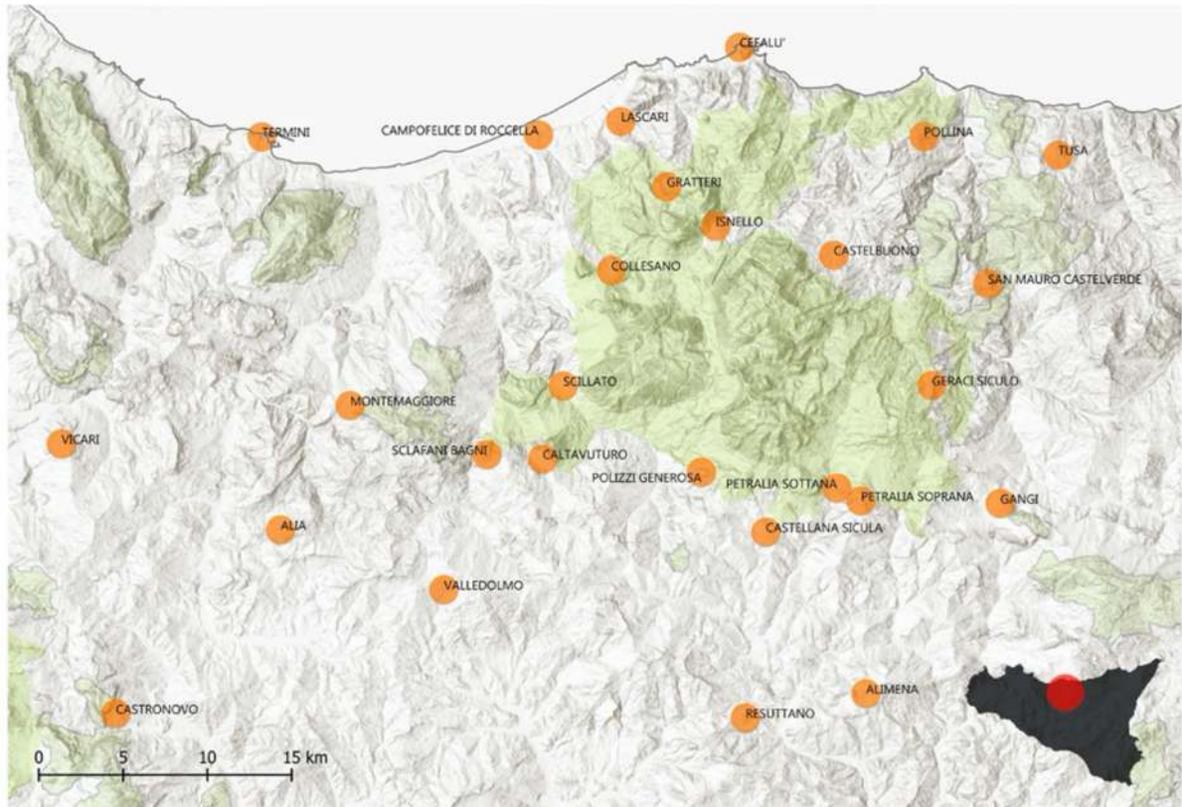


Figure 1 – General map of the study area

the socio-political changes of the early Middle Ages revitalized within new needs and, finally, which we find in the modern age documentation.⁸

Therefore, it is from these latest sources that we have to start in order to understand the development of the road network system and, through this, understand the population dynamics of the internal areas of Sicily.⁹

In this paper, we will examine the north-central part of Sicily, from the Madonie Mountains to the mountains going SW towards Vicari and Castronovo (fig. 1). It is a context, examined analytically and featuring tight analogies, which, with its high peaks – the Madonie are 2000 m a.s.l. while the others are about 1000 m a.s.l. – stands like a natural border of exchange rather than separation.¹⁰

Road network and settlements

The Palermo-Termini-Taormina route, known as the *via Messina per le montagne*, made it possible beginning

in the early Middle Ages to connect the fortified settlements of rural Sicily – in its new socio-political role as the border of the Byzantine Empire – and the northern and eastern coasts, becoming the internal backbone route which up to then had been carried out by the Roman *Catina-Thermae*.¹¹ Along this axis, within the area examined, there are three important junctions, in Polizzi Generosa, Petralia and Gangi.

The first one, Polizzi,¹² is directly connected to Cefalù,¹³ an important town on the Tyrrhenian coast from the Hellenistic to the Middle Ages (fig. 2).

al-Idrīsī¹⁴ gives us the earliest written account of this route, even though in his book the development of roads, *stricto sensu*, is only hinted at and therefore not always clear, nor is this account free from mistakes.¹⁵

⁸ Mainly at the Bourbon Registry office and in the documentation regarding the *regie trazzere* di Sicily (royal roads).

⁹ This work is part of the PhD research in Cultural Heritage Science – Archaeology, University of Palermo.

¹⁰ For this topic, see Franco 2011.

¹¹ Uggeri 2004; Burgio 2000.

¹² The origins of the town date back to the Hellenistic Age, even though earlier phases have emerged from excavations carried out in the medieval part of the town, in front of the main Church of the Norman age. Cucco 2018; Tullio 1997; Tullio 2009.

¹³ See, in particular, Tullio 2016: and previous bibliography; Cucco 2016a; Alfano 2016.

¹⁴ Peri 1955.

¹⁵ The route taken into consideration is the one described for *Regia Trazzera* n.115. In the report attached to the cartographic document, it is called '*montagne - marina*', a common definition for the drovers'

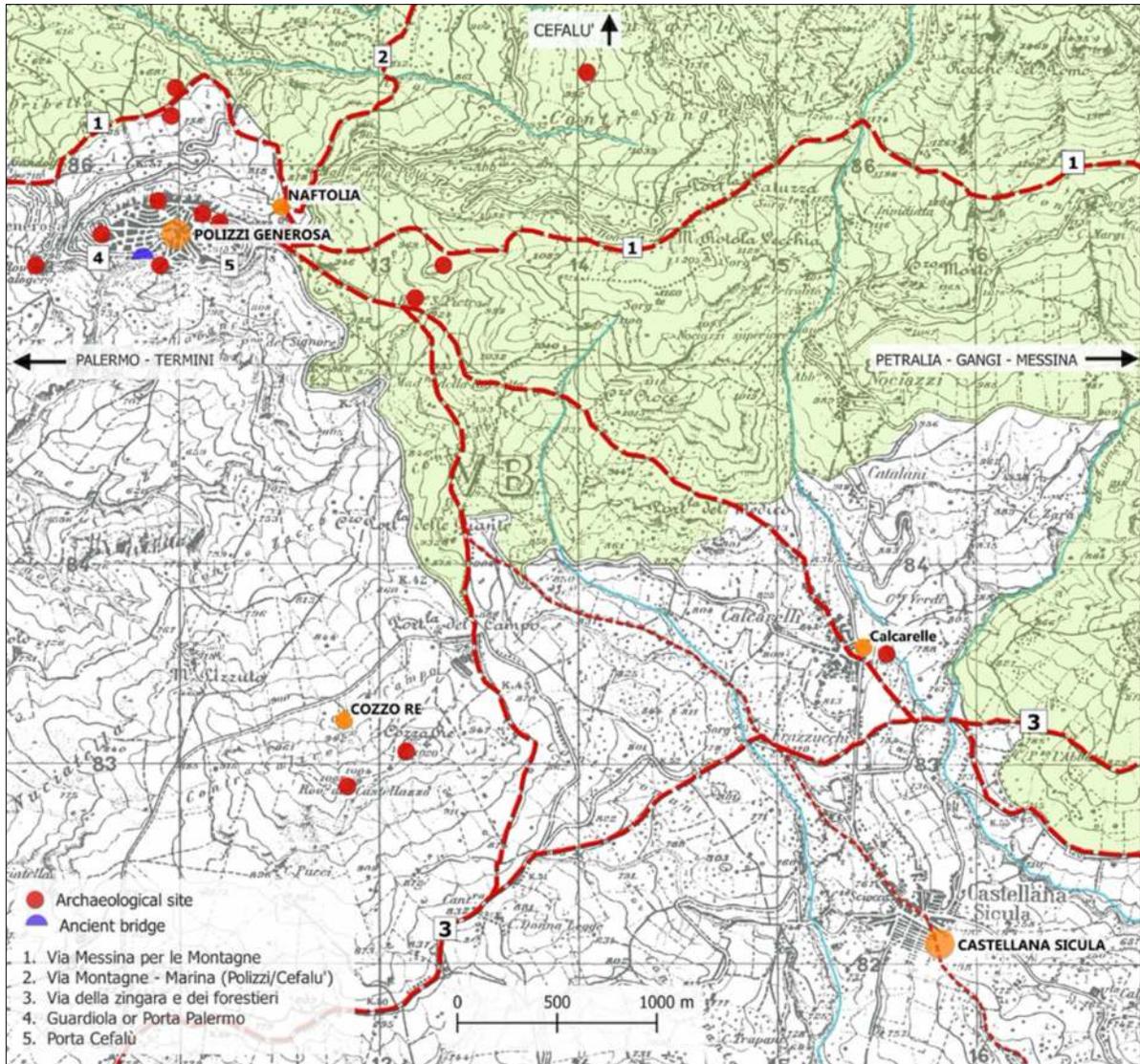


Figure 2 – Crossroads of Polizzi Generosa. Cartographic excerpt 1:25.000

Later on, in documentation from the Middle Ages, we find ‘[...] *contrada magne plate nel monte di Polizzi*’,¹⁶ which could be the road we are talking about.

Leaving from the town centre, paying particular attention to the toponyms, from the *Hospitale* of St. Nicola¹⁷ through Via Cefalù, one reaches Largo Porta Grande¹⁸ or Porta Cefalù. The toponym refers to one of the two historical gates of the town, painted in a 16th century painting by Giuseppe Salerno, and also

in a drawing of the same time.¹⁹ In this last drawing, another gate is clearly visible: the so-called Guardiola or Porta Palermo, located north of the town, was the exit gate to Palermo.²⁰

To the NE, outside Porta Cefalù and at the foot of the massif mountain Polizzi (fig. 3), the Naftolia spring marks the origin of the three roads (Palermo-Cefalù-Messina) in the place where the local collective memory locates a well-known but controversial triple-faced statue whose meaning and origin have been dealt with by many historians.²¹ Having been destroyed, it

roads running N-S.

¹⁶ Lo Cascio 2018.

¹⁷ Arlotta 2005: 842–843. It is one of the two *Hospitalia* founded in 1197 by Pietro da Tolosa. The one in Cefalù, *iuxta portam civitatis Cepheludi*, was located next to the ‘Porta d’Ossuna’ on the western side of the town, where nowadays the Church of San Nicola is located, having been restored several times since 1548.

¹⁸ Trans.: ‘The Big Gate Road’ and ‘The Cefalù Gate’.

¹⁹ Painting 300x20 cm. by Giuseppe Salerno, known as Zoppo di Gangi, 1620, kept at the Church of Collegio di Maria, Polizzi Generosa.

²⁰ Abbate 1997.

²¹ *Protests by the citizens of Polizzi Generosa after the loss of the ancient triple faced statue*, Cav. A. Gagliardo di Casal Pietra, 1775, re-published by the Associazione Naftolia di Polizzi Generosa.



Figure 3 – Polizzi Generosa and the Madonie Mountains, from the SE

is not possible to tackle the topic in a scientific way. Regardless, the identification with Hecate seems very likely, considering her function as protector of the three-way crossroads which the statue must have been.

Going along the road, which cuts through the central part of the Madonie mountains, and entering Cefalù by the Porta di Terra,²² the field survey investigation has recorded several settlements²³ which, in general, confirm the use of the highland territory since the late Neolithic age, probably due to the development of transhumance.

In the Greek period, this route was surely still in use because it is the shortest way between the two towns,²⁴ and also during the Roman age²⁵ and the early Middle Ages when, on the one hand, there was a need to protect the territory with defensive structures and, on the other, they laid down the basis for the development of the *latifundia*.

All this data is in contrast with an uninhabited landscape pictured by some historians²⁶ because of its poor accessibility, and the total lack of field studies and research to develop this topic. This is suggested by the medieval infrastructures, such as bridges, or the several parts of cobbled roads scattered along the drover's routes and now abandoned for ages, for which we are still not able to define a chronology.

The second junction is the modern crossroads of Portella Trinità, near the medieval town of Petralia Soprana²⁷ (fig. 4). From here we have: to the NW, the Sant'Ambrogio road (Cefalù) passing through Castelbuono;²⁸ the road heading south towards the Balza d'Areddula of Alimena²⁹ and Terravecchia di Cuti,³⁰ the so called *via della zingara e dei forestieri*³¹ an alternative in this area to the *via Messina per le montagne*. The already known Roman-Byzantine villa in Contrada

²² Trans: 'Gate of the land'.

²³ The methodology of the field research is based on the selection of sample areas investigated in a systematic way.

²⁴ The route connected Cefalù with the inland area and its resources, without which the town would not have been able to keep its important historical role throughout the ages.

²⁵ Above all, in the central area investigated (Isnello), where a large Roman settlement (4th century BC-3rd century AD) has been discovered and also a number of Byzantine and medieval settlements which have been added to the already-known surviving architectonic ones, which have not been properly investigated.

²⁶ Maurici 1998: 14.

²⁷ The medieval town has been for a long time at the centre of a complex debate regarding the identification of Petra mentioned in several sources, all of them after the first intervention of Rome in Sicily: Ptol., 3, 4, 14; Diod., XXIII, 18, 15; Sil. It., 14, 248; Cic., *Verr.*, 4, 90; Plin., *N. H.*, III, 91; Bejor in BTCGI XIII, s.v. *Entella*; Fazello 1992: 10, 211; Malaterra 2000: 84; Amari 1880: 317–318.

²⁸ On the historical development of the medieval town, see Cancila 2008: 26–62.

²⁹ Bejor: BTCGI III, s.v. *Alimena*.

³⁰ Burgio 2002; Epifanio Vanni 2011, in BTCGI XX, s.v. *Terravecchia di Cuti*.

³¹ Canale 2014. The route matches the *regia trazzera* n. 132, as it is called in the demonstrative report.

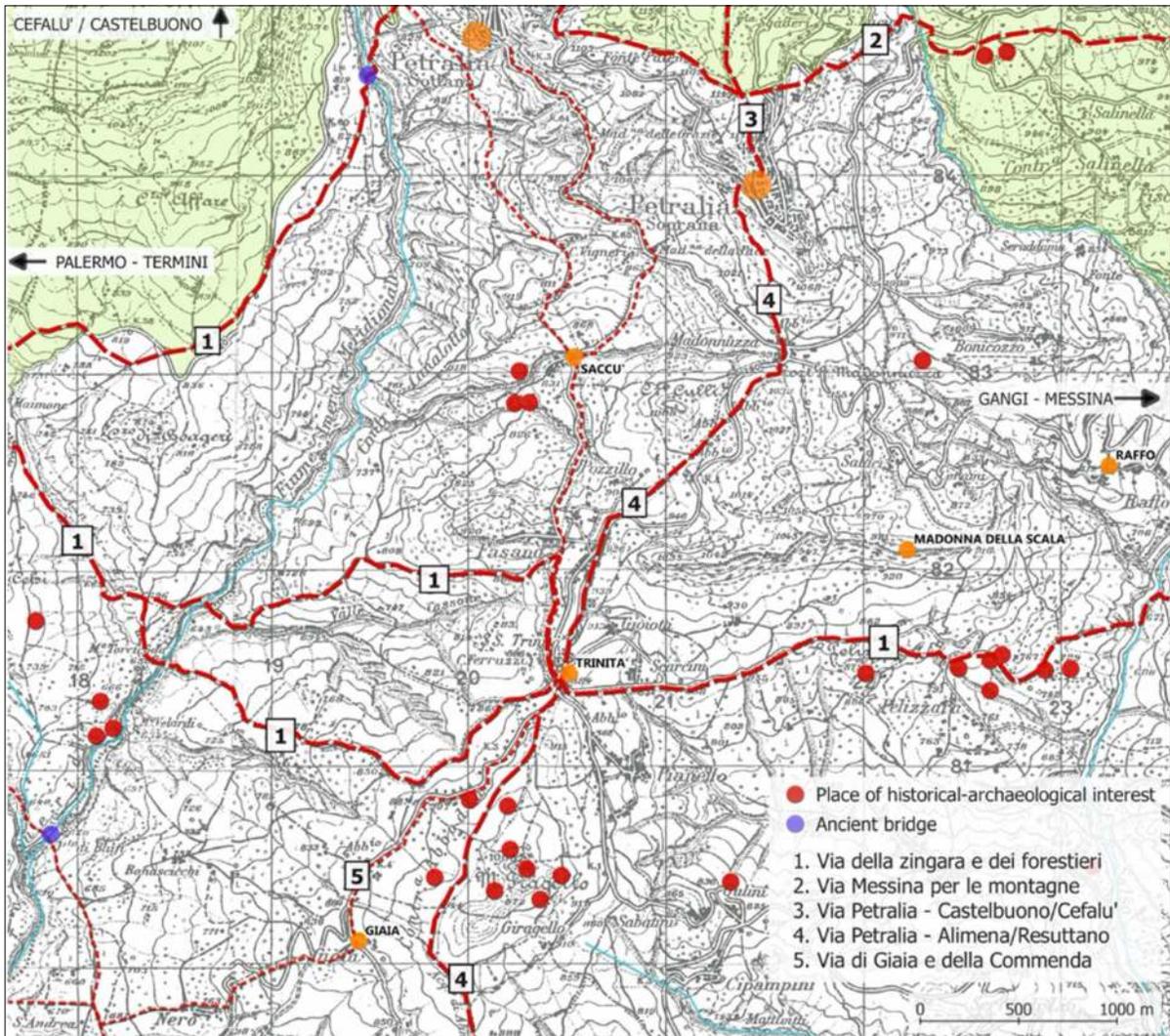


Figure 4 – Crossroads of Trinità and Petralia. Cartographic excerpt 1:25.000

Muratore (Castellana Sicula) is located along this route, half-way between Polizzi and Petralia.³²

The distribution of the sites along the fluvial system of the Imera Meridionale and Salso rivers, not far from the Blufi medieval bridge,³³ is evidence of a settlement strategy connected to the functioning of a road network articulated by land routes and river ways.

On the hydrographic left, the archaeological site of Contrada Saccù is rich in pottery, both local and imported (particularly African Red Slip ware, coarse and cooking wares, amphorae); terracotta tiles with comb decorations are quite numerous as well as the over-baked tiles which suggest the presence of a kiln.³⁴

³² Valentino and Vassallo 2016.

³³ Gaetani 1986.

³⁴ On this aspect, petrographic analyses of thin sections are being carried out.

Among the most significant finds are two Byzantine coins,³⁵ a potsherd of 'Rocchicella ware',³⁶ early medieval cooking ware from the southern regions of Italy³⁷ and tools for pottery production.

Further south, still on the hydrographic left of the Salso, rises Monte Gragello, where human settlements are distributed in several places along the hilltops, starting from the Iron Age, during the Greek period and at least to late antiquity. On the hydrographic right of the Salso – again in the area between the Blufi bridge and Portella Trinità – in Contrada Bonaschicchi,

³⁵ Follis, AE, Giustiniano I, 527-565 AD, Costantinopoli (for the type: Guzzetta 2010: 170, fig. 1); Pentanummo (?) – in very poor conditions.

³⁶ Arcifa 2010: 108–111, 120–121.

³⁷ They are potsherds of small amphoras with a high content of mica, therefore not a local product, but perhaps from the Monti Peloritani area (Messina) or even Calabria because of the widespread distribution of this lithical type in these areas.

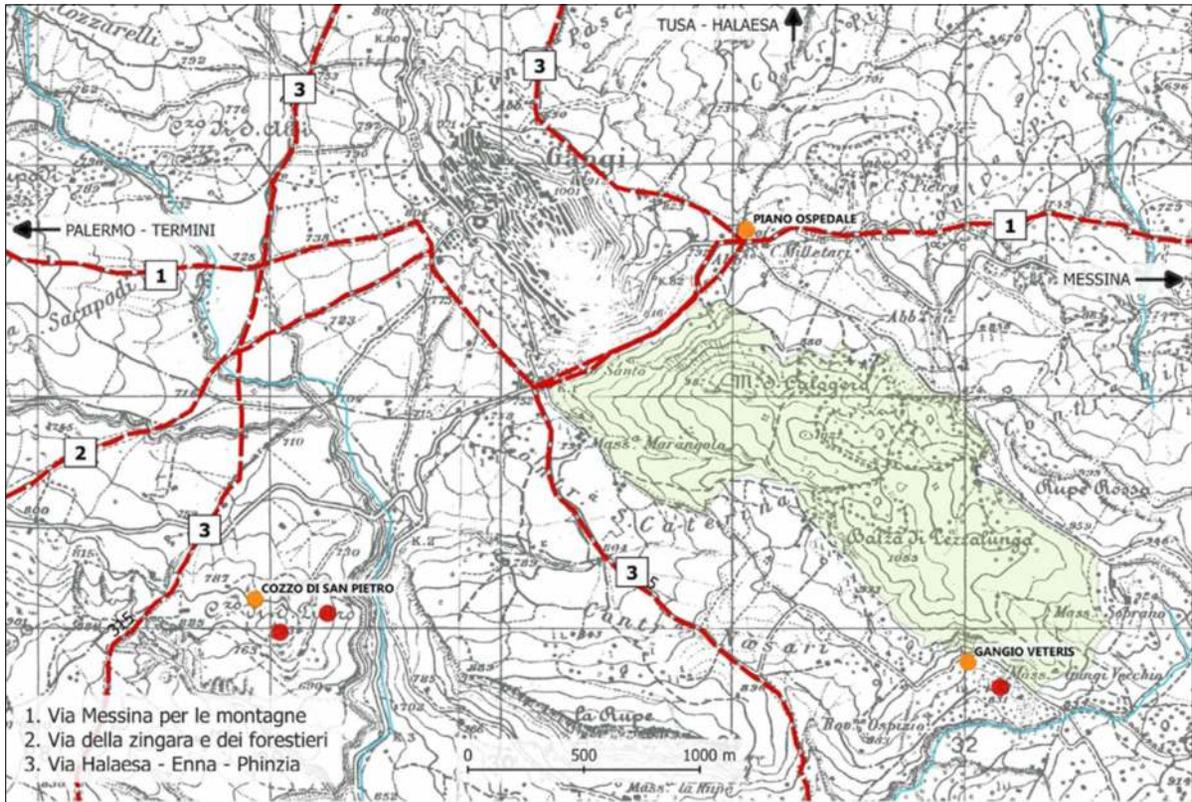


Figure 5 – Crossroads of Gangi. Cartographic excerpt 1:25.000

a bell-shaped silo (grain storage) dug into the bedrock is evidence of the ancient wheat vocation of the southern side of the Madonie on the border with the flat lands of central Sicily (region of Caltanissetta). It is not possible to date the phases of use of the silo for the lack of fill, but it is clear that the structure was dug out of a previous feature, probably a late Copper Age necropolis. This typology is well known in western Sicily with the exception of the flooring made of large slabs, which could indicate a later use of the structure. The total lack of wall covering/plaster on the inside could be a further element indicating the construction of the structure around the 9th-10th centuries. As a matter of fact, in this period a layer of mud and straw would have been laid out on the floor, and which had to be done again every time the silo was filled up. Even though there is no strong evidence, it is possible to hypothesize that the silo was no longer in use after the 13th century, when we have the building of *masserie* (modern farmhouses), and goods began to be stored in the warehouses of the farm.³⁸

Therefore, one can clearly see how the topographic development of the road network mirrors the need to connect the settlement to the natural resources used

for the growth of the economic activities. Such is the case of the *via della zingara*, which goes to the rock salt *madonita* quarry, already known to Vitruvius³⁹ and mentioned in a document dated 1302 as *via publica qua itur ad salenam*.⁴⁰ In 1399, nearly a century later, the King's commission 'Lord of the Salt Pans of Gurruffi' to Antonio Ventimiglia confirms without a doubt the importance of local economic activities.⁴¹ In support to the theory of short-distance exportation is the total lack of saltworks in the sectors closer to the Tyrrhenian coast, and also because of the characteristics of the Petralia rock salt itself, which is found on the surface and easily quarried.

Continuing to the east, along *via Messina per le montagne* or its alternative route *via della zingara*, one can reach the Piano Ospedale junction at the foot of the Gangi cliff (fig. 5). The investigation carried out within the *Gangio Veteris* Abbey and its surroundings,⁴² plus research at the Alburchia⁴³ site, have given input for new and

³⁹ Vitruvius, VIII, 3, 7. On this topic, see Canale 2014.

⁴⁰ Salamone Cristodaro 1990: 116.

⁴¹ Canale 2014: 453; Salamone Cristodaro 1990: 214. The '*saline de lu Gurruffi*' are the salt mines located at the current village of Raffo, frazione of Petralia Soprana.

⁴² Ardizzone and Manenti 2015; Beck, Maccari and Poisson 1975.

⁴³ Franco 2011.

³⁸ A thorough report on the topic is in Alfano and D'Amico 2017.

interesting questions, confirming the importance of these settlements related to the internal road network of Sicily.

A very reliable source⁴⁴ tells us that grain travelled from Henna to Halaesa and Phinzia in the territories around the modern town. Inherited from the Roman road network, the road is known through Cicero who accused Verre because he had the *frumentum Hennenses admetiantur vel Phintia vel Halaesam vel Cathinam*, through the Piano Ospedale junction and heading north to Halaesa, passing through the Contrada Portelle along the easiest route.⁴⁵

In the early Middle Ages, controlling the vast valley below was Cozzo di San Pietro⁴⁶ where there is a building made in dry stone with no mortar. It is a wall which enclosed two distinctive rooms, placed on a triangle-shaped flat area featuring steep slopes all around it. The wall, preserved only in two courses, has a marked breaking on the northern side, probably where the arched entrance was, which gives us the opportunity to look at the structure in cross-section. It is a double-faced wall with roughly hewn stones of different sizes and shapes placed in irregular rows. The interstices between the big stones are filled up with rubble and broken terracotta tiles rich with straw. On both sides of the wall, it is possible to see the rubble of the collapsed upper part of it mixed with potsherds, mainly terracotta roof tiles. On the inside, the layer of rubble shows evidence of looting; as a matter of fact, there is a big pit which was surely dug out with a machine by tomb looters, and there are also bone fragments. On the outside of the enclosure, there is further evidence of other walls emerging from the fields, all of them very much like the former one which exploited the natural inaccessibility of the hill closing it on the most exposed side. The pottery collected is mainly made up of terracotta tiles which have a high concentration of straw, some with a comb decoration, and by very few coarse wares.

The building, probably already in use at the end of the 8th/9th centuries, could have been a small monastery.⁴⁷ A document dated 1155 could be of great significance: among the listed donations to the monastery of San Giorgio in Gratteri is the church of San Pietro, located, the document says, 'in the region of Petralia near Gangi, provided with pastures, rough land and water'; the property is confirmed in a second document dated 1182⁴⁸ to be the same monastery of the church of San Pietro di Prate Gangi.

In the Middle Ages, the road network served the pilgrimage as a political-religious phenomenon which, at least along the internal roads of Sicily, was not only destined to reach *via Valeria* and the port of Messina. As a matter of fact, from documents, we can see the financial difficulty that people had when crossing to the Holy Land.

Therefore, a local sanctuary could have been a place for pilgrimage, only a few days or hours distant. In this way, the worship of San Calogero⁴⁹ might have marked the *itinerarium peregrinorum* through the central Madonie, particularly from Petralia Sottana (he remains the local Patron Saint) up to Cefalù, through Polizzi Generosa and Isnello. At the entrance of all the main stops on this road we find the ruins of a medieval church or a hermitage dedicated to the black-skinned saint. That this road was created for pilgrimage is confirmed by the two *Hospitalia* founded at the same time by Pietro di Tolosa in Cefalù and Polizzi Generosa, where the *Ospitalieri* stayed for a long time; the Abbey of Santa Croce (Holy Cross), founded around the 13th century five km from Polizzi, in the direction of Cefalù, where a fresco of the Madonna Odigitria⁵⁰ is kept; and the Gibilmanna sanctuary, of which we have no certain founding date, but which has been and remains a pilgrimage destination along the same road.⁵¹

The finding of a small medallion dating from the late 1800s, lost by a pilgrim along the ancient path near Isnello, is a reminder of such a practice, along with the presence of several votive chapels.

The spiritual exercise of pilgrimage involves several places of the landscape which have been meaningful in that sense since antiquity. At less than 2 km east from the Portella di Termini crossroads in Petralia Soprana, near Pellizzara, the *via della zingara* crosses the Calascibetta, one which runs along the large late imperial farm located in Santa Marina, very likely the nucleus of a very large *fundus*.⁵² The road is quite steep and rough and heads towards north, climbing the wall of rocky crag reaching the little church of the *Madonna della Scala*.⁵³ It is set at 920m and can be reached by going through a tight passage with steps cut right into the bedrock.

Leaving behind the two Petralias, one continues heading north towards Castelbuono along the Imera Meridionale River. Along the route there is the

⁴⁴ Cic., Verr. 3, 83, 192.

⁴⁵ Di Maggio 2008.

⁴⁶ Canale 2014.

⁴⁷ Arcifa 2010.

⁴⁸ Burgio 2017: 114; Townsend White 1984: 316–317.

⁴⁹ Verde 2009.

⁵⁰ Abbate 2016.

⁵¹ The Sanctuary is mentioned for the first time in the foundation deed of the Bishopric of Troina in 1087, see Bresc: 1985: 55–58. According to some scholars, the sanctuary could be one of the six sanctuaries founded by Pope Gregory the Great in Palermo, see, e.g., De Luca 1856: 12–19.

⁵² Belvedere, Burgio and Cucco 2016.

⁵³ Canale 2014: 456–457.



Figure 6 – Sant'Elia bridge (left) and San Pancrazio bridge (right)

Sant'Elia bridge (probably built in the 11th century) (fig. 6a) which crosses the Petrusa stream, and the San Pancrazio bridge⁵⁴ (fig. 6b) which crosses the Torrente Mandarinini. On the left-hand side of the path, at the locality of San Miceli, there are the ruins of the Monastery of St. Michael the Archangel, placed there to control the passage, whose events of the 12th century are well known from a Charter which has Roger II's seal.⁵⁵ Once past this last bridge, with a day's march the pilgrim could reach both the *hospitale* of Cefalù by re-joining the Polizzi-Cefalù road near the Portella Arena, or continue towards Sant'Ambrogio and reach the *via Valeria* and the *Hospital of Halaesa* through Castelbuono, controlled at the entrance by the Hermit of Liccia.

The centrality of Polizzi Generosa, the strategic importance of the junctions and the interior territories which they served, did not pass unobserved to the Teutonic Knights who, having been recruited to fight against the Muslims, took it over starting within 70 years. In Polizzi we have substantial evidence considering that it was one of its main seats in Sicily.⁵⁶ In Petralia and Gangi, it is the toponymy that re-designs the geography of the possessions.

At the foot of Monte Gragello (Petralia Soprana), from the road conjunction of Portella Trinità, the path *Giaia*

e della Commenda runs in Contrada Abbadia, abutting the mountain on the west side and reaching the Imera Meridionale River. Continuing east for another 4 km towards Gangi, at the junction Portella Massariazza, the *via della zingara* crosses the route named *della Maggione*.⁵⁷ On the southern side it goes around the fortified site of Alburchia⁵⁸ and, on the northern side, in the eponymous district, the site of Cozzo San Pietro, before reaching the *via Messina per le montagne* at the crossroads of Piano Ospedale and then heading north up to the *Hospitale of Halaesa*.

It is evident that the selection of the places was made in the context of a precise policy of control. Even though there are no precise topographical references in the documentation, the evidence that has emerged from the territory gives the impression that Gangi represents the eastern border of the Teutonic possessions in Val Demone.⁵⁹ How can we explain this 'lack' of information in the documentation considering the hard evidence found in the modern landscape? It could be useful to go back to the 1155 charter where, among the donations granted to the St. George's Monastery of Gratteri, is St. Peter's church located 'in the region of Petralia near Gangi', from which we can understand that Gangi was still juridically within the territory of Petralia. If the reasoning is confirmed, the Teutonic property,

⁵⁴ Canale 2014: 456; Maurici and Minnella 2006: 97–98 and fig. 65.

⁵⁵ Ferrara 2002: 64–79.

⁵⁶ Toomaspoeg 2003. The author deals with the question regarding the rise of Polizzi in the late Middle Ages in several parts of his vast work.

⁵⁷ Caracausi 1993.

⁵⁸ Cucco 2016b; Ferraro and Franco 2011; Cerami, Farinella and Ferraro 2004; Tusa 1983; Naselli 1951.

⁵⁹ This is one of the administrative districts of medieval Sicily, located in the NE of the island.

very likely the building on Cozzo San Pietro, should be sought in the charters and documents which refer to Petralia and not Gangi which, as a matter of fact, never shows up except indirectly.⁶⁰

As we have seen, Polizzi Generosa is the main city in the Madonie, and because of its centrality it attracted the interest of the Teutonic Knights. The importance of this town, and of the two Petralias, Sottana and Soprana, since the Middle Ages is also shown by the large extension of land of the current municipalities, which from the Madonie extend to the south and southeast, reaching the mountain ridge that is the watershed from the Imera Settentrionale, Imera Meridionale and Platani rivers. From Cozzo Re to Sella di Xireni (Cozzo Fra Giacomo and Monte S. Giuliano), and from Serra di Puccia, Fili di Paolazzo and Cozzo Puccia (nowadays Tre Monzelli), the waters of these rivers start their trip towards the Tyrrhenian Sea and the Strait of Sicily. From here there are several roads heading in different directions, which in the SE exploit the Imera Meridionale River, while to the south and west they follow the alignments of the highlands, all over 800m asl: Monte Catuso, Cozzo Tutusino, Cozzo Terravecchia and Monte Chibbò heading S; Rocca di Sciara (Caltavuturo), Cozzo Brignoli, Sclafani Bagni heading W; and further to the west, along the watershed of the Platani and Torto rivers is the Mountain of Alia and Monte Ragiura, beyond which are the towns of Vicari and Castronovo, another area – important for the road network in central-western Sicily – where the Teutonic Order managed vast estates.

Therefore, in this diverse landscape, there are mountains with great strategic features whose peaks are, for the majority, occupied by villages or small settlements, the latter probable look-out posts for each district, in a system characterized by tight relationships of inter-visibility.⁶¹ The places mentioned are little known places of inland Sicily yet were the important junctions of a district, fundamental for the communications along the N-S and E-W of the island.

Cozzo Terravecchia – containing the most important settlement of the district, Terravecchia di Cuti, which with two fortification walls was vital from the Archaic age to the beginning of the 4th century BC – looks down over the long-distance routes. In the 5th century BC, the Greeks from Agrigento reached this place by marching up the Platani River, in the Roman age the road network *Thermae-Catina* could even reach these mountains,⁶² and later the pilgrimage routes as well, as the toponym Chiesazza,⁶³ between Puccia and Catuso,

clearly suggests. Other important crossroads were the Masseria Varco⁶⁴ and the Passo di Landro, the latter a post station in the Bourbon age along the road from Palermo to Catania, and Noto-Syracuse,⁶⁵ where during WWII there was an important battle which also involved the nearby Recattivo.⁶⁶

The area examined here contains three distinctive districts: Sella Xireni-Cozzo Re; Serra di Puccia-Monte Catuso; quadrivium Brignoli-Portella di Granza. Further to the west there is the mountain ridge that separates the Imera Settentrionale and Meridionale rivers from the Platani River valley, over which rises – about 30 kms further west – the Castronovo cliff.⁶⁷

The Sella di Xireni (near the Rovine del Castellazzo)⁶⁸ is crossed by the NE-SW route that went from Polizzi down to Imera Meridionale (Passo di Mattina-Fondacazzi stream) and then up towards Monte Catuso bordering the Fosso San Giacinto (*Strada Comunale del Catuso*), touching the pluri-stratified site of San Giacinto (a large Hellenistic and Roman settlement, with some evidence of Byzantine and early medieval occupation)⁶⁹ (figs. 2, 7). In this area, some 14th-century evidence can be traced back to the property of Polizzi:⁷⁰ around 1330, a certain Orlandus de Milite from Polizzi owned the fiefs of Puccia and Catuso;⁷¹ Puccia is mentioned as a *Casale* in 1275 and as an uninhabited fief in 1330; in 1398, Tudia and Chircosa were also fiefs and hamlets, the former very likely located in the eponymous district,

Puccia-Verbumcaudo route, there is a building known as Chiesavecchia, where for the moment there is no archaeological evidence.

⁶⁴ Near Chiesavecchia, along the same route mentioned in the footnote above.

⁶⁵ Cucco and Maurici 2014: 26.

⁶⁶ Battle July 17th-19th 1943: Maltese 1981: 235-236, 247.

⁶⁷ These are a number of peaks which form a sort of arch which goes from the NE to the SW, joining the Valledolmo area to Alia and then to the Colle Madore site (Vassallo, *Madore*), and to the west with Castronovo di Sicilia, on the western branch of the upper Platani valley.

⁶⁸ It is a building, perhaps a tower (Belvedere: UT 116, 199-200), whose strategic meaning is connected to the town of Polizzi Generosa, where there is a castle (Regione Siciliana 2001); as a matter of fact, from the Castellazzo one can control the valleys of Imera Settentrionale and Meridionale. Although there is no written evidence, it is very likely that Castellazzo can be dated to the Middle Ages (it is believed that the Great Count Roger himself had some works carried out at the Castle, which already existed, and he also built a new one in Contrada Campo). Therefore, it is significant that Portella del Campo, an important road junction along the already mentioned *via della zingara*, is overlooked on the SE by Castellazzo and Cozzo Re, and to the NE by Cozzo Croce (m. 1116) and Monte Rotola Vecchia (m. 1205), mountain peaks with the same strategic position even if there is no archaeological evidence to date.

⁶⁹ Burgio 2002: UT 8-9, 53-58: only terracotta roof tiles rich in straw were found, probably a sign of a brief re-occupation between the 12th and the 14th centuries, or probably made up by a group of poor houses, because Arabic glazed pottery is totally absent.

⁷⁰ Bresc and D'Angelo 1972: 380, 402, figs. 1, 8; Burgio 2002: 169-170.

⁷¹ It is not in my intention to rebuild the extension and the borders of the fiefs, but it is quite significant that the eponymous districts are located in the watershed area between Serra and Puccia and Monte Catuso.

⁶⁰ Toomaspoeg 2003: 467, n. 82, n. 94. Several documents mention *Johannes de Gangio Teutonico*.

⁶¹ Vassallo 1990; Vassallo et al. 1999; Belvedere et al. 2002. Burgio 2002.

⁶² Burgio 2000.

⁶³ Burgio: UT 40, 94-97. Going a few kilometres along the S. Giacinto-

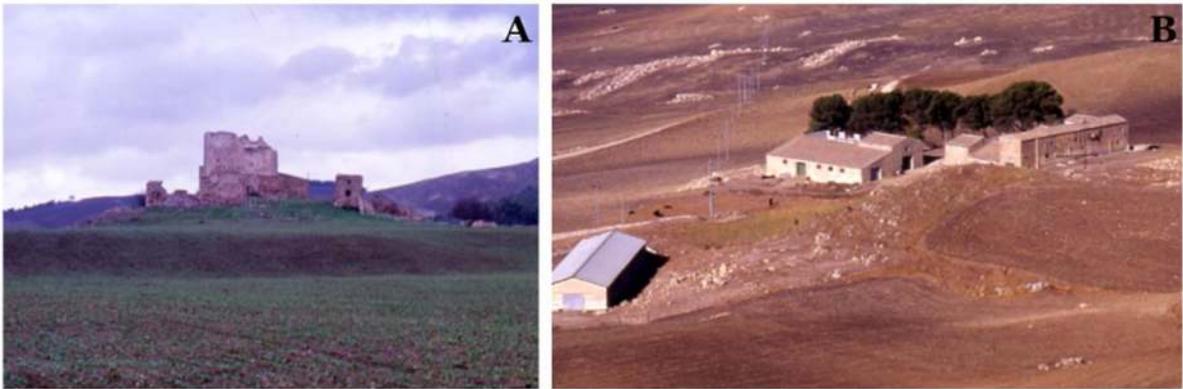


Figure 7 – A) Resuttano Castle; B) Chiesazza

NW of Cozzo Tutusino, the latter probably along the Imera Meridionale River where, nowadays, there is the toponym of Irosa and the eponymous *Masseria*.⁷²

At Xireni, the road described crosses the NW-SE one which, from the Tyrrhenian coast (along the Imera Settentrionale River valley), reaches the Imera Meridionale: the area is rich in meaningful toponyms, such as Fondacazzi,⁷³ Casale, Fondaco di Vanella, from where you head N-E uphill towards Trinità and the Madonie. The arrival place of this route is the Resuttano Castle (fig. 7a), set in a strategic position on a fluvial terrace,⁷⁴ overlooked by Terravecchia di Cuti and by the important Archaic and Classical age fortified settlement of Balza d'Areddula.⁷⁵ Resuttana is mentioned as a fief before 1337, as uninhabited by 1396, when the Resuttana Castle surely existed:⁷⁶ the few potsherds dated to the 11th and 13th centuries allow us to hypothesize the existence of a structure of control, a castle or a tower; as a matter of fact, a tower can still be clearly seen within the central part of the building, and the term *Torre* is mentioned in the documents dated 1373 and 1375, when they belonged to Manfredi Chiaramonte.

Along the axis of the Fondacazzi-Imera Meridionale river valley another possible route of the *Catina-Therme* Roman road could have been connected;⁷⁷ later, the changes in the paleographic assets of the Byzantine age and of the early Middle Ages influenced the organization of the road network, addressing it towards the southern part of the Madonie, as it turns out from al-Idrīsī's book⁷⁸ and, above all, from the medieval and modern road network (the Messina road through the mountains). Furthermore, it is important to note that the modern road network, in particular the *regia trazzera* which connected Palermo to Catania, followed the valley of the Imera Settentrionale in this area.⁷⁹

The second district, which opens up in the south on the Platani River basin, has its centre in the Puccia-Catuso system, the highest peaks (over 1.000 m) of the area (fig. 8).

The above road, which runs next to the Fosso San Giacinto, goes up to the passage which separates Monte Catuso from Cozzo Puccia: heading SW it goes down to the Chiesazza⁸⁰ place (fig. 7b), near the important road junction of Portella del Vento,⁸¹ and Contrada Susafa,⁸² Tudia and, a little to the SW, Verbumcaudo.

⁷² It is totally hypothetical that Irosa (from the Latin *glareosus*, gravelly, in Caracausi 1993) is the relic of Chircosa. The land survey did not find any archaeological evidence, probably because the area has been deeply changed by modern agricultural activities.

⁷³ Late-Classical and/or Hellenistic age evidence has been found, and also from the 12th to the 14th centuries, with interesting evidence from aerial photography and historical cartography (Burgio 2002: UT 21, 66–69). It is known that the toponym refers to the presence of buildings connected to the road network: Besc and Besc 1975: 95–106.

⁷⁴ Stretto del Castello, in IGM 260 III SO. Historical and bibliographical data in Regione Siciliana 2001 s.v. Resuttano; Burgio 2002: UT 29, 79–81.

⁷⁵ The *poleis* of eastern Sicily were interested in this area because the ancient settlement of Krastòs is very likely to be here, which the cities of Akragas, Gela and Himera fought over: Belvedere 2001: 732–733; Burgio 2002: 149.

⁷⁶ Burgio 2002: UT 29.

⁷⁷ Burgio 2000; Burgio 2002: 173–174.

⁷⁸ Santagati 2013.

⁷⁹ The evidence from aerial photography is significant, as is the presence of nearby rural settlements: Burgio 2002: 173–174.

⁸⁰ Burgio 2002: UT 40, 94–97 (most of the pottery is dated between the 12th and the 14th centuries); nearby there is very little archaeological evidence in the districts of Ciaramito and Susafa (Burgio 2002: UT 45, 55, 99, 110–111).

⁸¹ Burgio 2002: 176–177. Going south from Portella del Vento, you reach the Passo di Landro and Recattivo, as already mentioned, key places for the road network system of central Sicily, in antiquity and modern times. See also Arcifa 1997: 183 and fig. 2, who, based on topographic evidence that the toponym Chiesazza does not exist, traces a road that reaches Portella del Vento itself from Gurfa and Verbumcaudo.

⁸² The eponymous *casale* could be in the locality of Case Vecchie Susafa, along the *regia trazzera* which links Chiesazza and Chiesavecchia (Besc Bautier and Besc 1988: 66: anyhow, there is no medieval pottery). As I have already mentioned (Burgio 2002: UT 49,

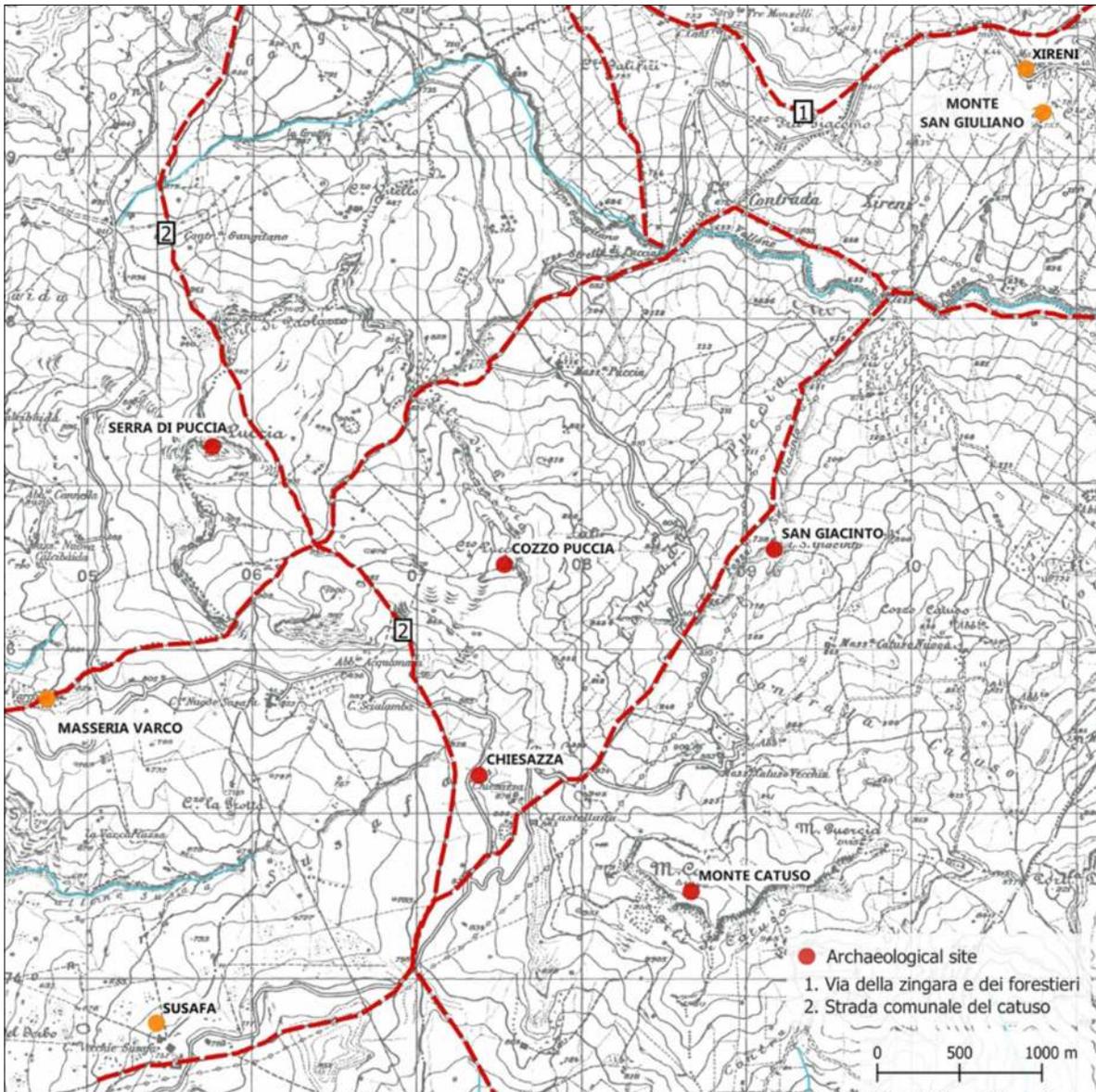


Figure 8 – Crossroads of Xireni and Puccia. Cartographic excerpt 1:25.000

The Chiesazza could be the most important junction of the district, at least regarding the late Middle Ages.

As is known, the toponym Chiesazza could be a consequence of the policy of control of the territory, referring to a Norman structure,⁸³ part of the process of the conversion of the Muslims, a religious and political process which saw the reinforcement of royal power

in areas like the upper Platani River where Islamic communities still lived and which passed there for the control of important places of the road network.

The central role of this district, whose highest peaks were previously occupied by small hamlets and controlling structures of the Archaic and Classical ages, was maintained throughout the centuries and consolidated in the Middle Ages thanks to the presence of the Teutonic Order. *Verbumcaudo* is one of them. From here, passing through the districts of Regaleali, Fontana Murata and Regalmici, you reach the Torto River and the fief of the Gurfa, another very important property of the Teutonic Knights, near the modern town of Alia. Going west, a network of roads and natural

102), it seems to me quite plausible that the *casale* Susafa should be sought in Chiesazza.

⁸³ Chiesa di San Michele in Campogrosso (Chiesazza, in IGM 250 III SO), near Altavilla Milicia, on the Tyrrhenian coast between Termini Imerese and Palermo. Cfr. also Regione Siciliana 2001 s.v. San Michele di Campogrosso; Moździoch, Baranowski and Stanislawski 2017; Vassallo *et al.* 2018.

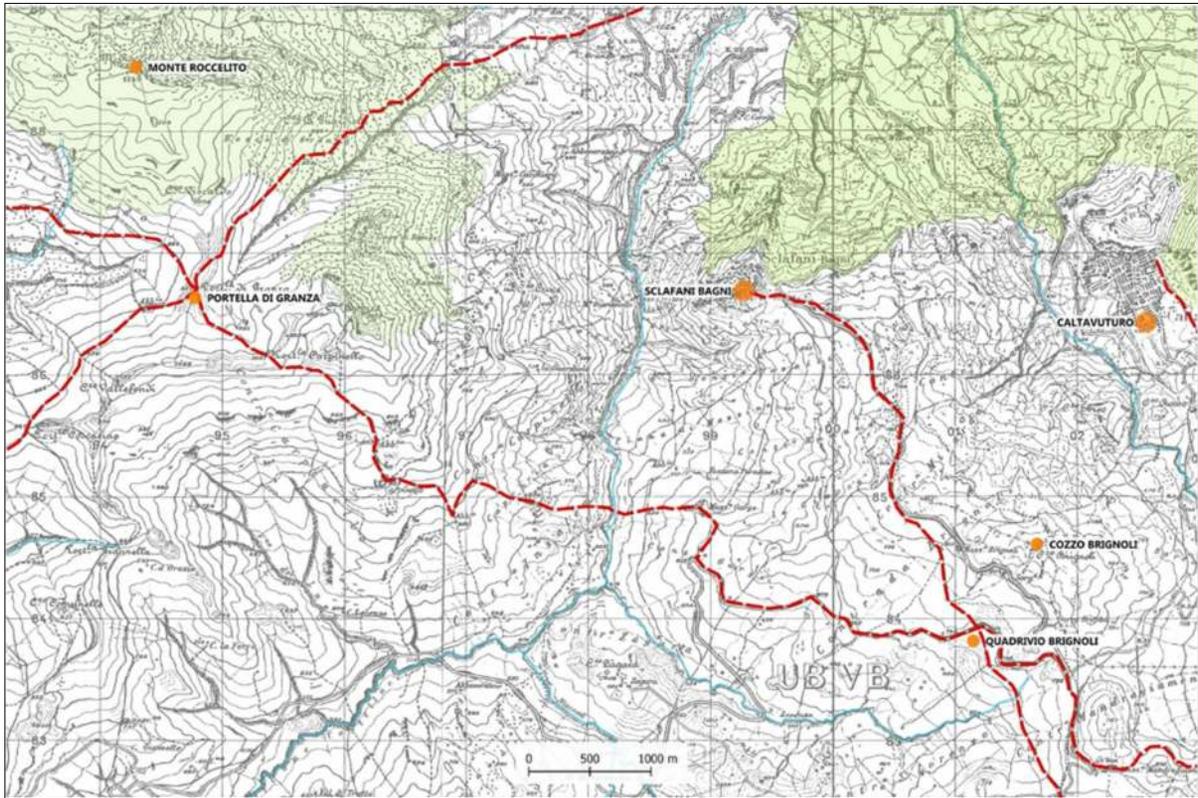


Figure 9 – Crossroads of Granza and Brignoli. Cartographic excerpt 1:25.000

paths, among which are the one retraced by the Ragiura stream and the modern road SS 121, link up in the area where the Roccapalumba-Alia train station is and at the watershed of the Torto.

The fief of the Gurfa – the most western sector of the area here dealt with – can also be reached by another road coming from Petralia and Polizzi, crossing the territory of Caltavuturo, an important fortified village in the Byzantine and Islamic ages,⁸⁴ touching the Brignoli quadrivium, perhaps the *quadrivium unde procedit via que ducit Petraliam et Castronovum et Bicarum et Panormum* reported in a document dated 1132⁸⁵ (fig. 9).

After Brignoli quadrivium, one reaches Portella di Granza and Portella Legnaioli. Portella di Granza⁸⁶ is

⁸⁴ The ruins of the castle placed on Terravecchia overlook the current town: Regione Siciliana 2001 s.v. Caltavuturo: 302; Vassallo: 6-7.

⁸⁵ Arlotta 2005: 866, note 115.

⁸⁶ I wonder if the toponym might come from *Gancia*, which could indicate a 'hospice for religious people', a 'non-autonomous church or convent' but also a 'warehouse for crops': Caracausi, *Dizionario*, s.v. *Gancia*, *Grangi*, *Granza*. If so, it could be connected to a religious property and give further importance to the location of Portella in relation to the places of worship mentioned above, and to the proposed itinerary. See what has been highlighted (Arcifa 1994: 100–111) regarding the control over the roads by the monasteries, in the 12th century in the Nebrodi and Etna area, by building small places of worship which contribute to the creation of a proper road network.

another important crossroads: to the NE one can reach the Salito stream, that is the Imera Settentrionale River (area of Portella dei Sette Frati and Ponte Vecchio Diruto), then the Roman road that linked *Thermae* to *Catina*;⁸⁷ to the west one reaches Monte Roccelito (1145m), a natural massif barrier – where there was a *castellum* in the second half of the 13th century⁸⁸ – nowadays characterized by a wooded area which from the Portella di Granza (S. Maria and Cardellino woods) stretches out to the town of Montemaggiore Belsito. It is very likely, even though there is no objective data, that even the ancient woods covered vast areas of Roccelito, and it was wise to go around it to the north by a road probably not very different from the modern one.⁸⁹ An interesting alternative – regarding the identification of the places and important districts from a point of view of the sacred signs – is the southern road of the Roccelito, along which are the country churches of Madonna del Carmine and Madonna degli Angeli; further west along the same road, beyond the Vaccaro bridge (the easiest ford in this part of the Torto River, near the Montemaggiore train station) there are a number of very significant toponyms, probably the heritage of

⁸⁷ At the Ponte Vecchio flow the waters of Vallone Fondachello, which reaches Caltavuturo: Burgio 2000: 190.

⁸⁸ Maurici 1992: 331; Regione Siciliana 2001 s.v. Montemaggiore; Cucco 2017: 9–10.

⁸⁹ It links Cerda, Aliminusa and Montemaggiore.

pilgrimage routes, such as Passo della Madonna, the San Giacomo district,⁹⁰ and Giacometta stream. From there we can reach an area rich in settlements of the Norman age, of which the most important are Cozzo Balatelli, Cozzo Casale, Sambuchi and Pizzo Pipitone.⁹¹

The latter is on the peak of a rocky mountain overlooking the San Leonardo River, and the Piani di Vicari and on the other peak of Vicari, looking west one can reach the Margana Castle. Located a few kilometres to the NW of Castronovo, it was one of the largest and most important properties of the Teutonic Order:⁹² nearby we have the meaningful toponyms of San Nicola and Cozzo Trinità, the latter at the confluence of the Margana and Mendola rivers. It is the road that, going further west, reaches Corleone, yet another district where there were Teutonic properties, crossing Zuccarrone, well known for the milestone found along the *via Aurelia* from Palermo to Agrigento.⁹³ The vast area between Vicari, Castronovo and Corleone is the most western sector of the territory examined. Here, in the Norman age, a number of routes were created, among which the so called *vie Francigene*, an expression used by the end of the 11th century in two documents, one referring to Castronovo⁹⁴ itself, from where, going west, a *via quae tendit Corniglon* (Corleone) starts. Along this road were located several *xenodochia* and *hospitalia*, to welcome the pilgrims at the end of each day of walking. The *hospitalia*⁹⁵ were sometimes inside the towns but also far from them, like the *stations* of the roman *cursus publicus*. Some of the above are mentioned in the 12th and 13th century documentation of the main roads, such as the *hospitale iuxta portam civitati* in Cefalù, and that of San Nicola in Polizzi.

In the 12th century, in the eastern suburbs of Castronovo there was a *hospitale* attached to the Church of Madonna dei Miracoli (or Odigitria, protector of the crossroads and wayfarers), and another was probably attached to the church of Casale San Pietro,⁹⁶ located down in the valley below the town near the Platani River. It is in this period that, in the district of Castronovo, the property of the Teutonic Knights of the Magione church became more substantial and came to be among the features of the landscape that enable us to grasp the essential

aspects of the road network connected, or referable to the *vie Francigene*.⁹⁷

Conclusion

In conclusion, examining a landscape in a diachronic perspective as it changes over time, observing how it was tightly linked to the needs and perceptions of the communities who lived off the land and its resources, is the right approach for a productive study of the road network. One must not fall into the temptation of looking at the settlement landscape and the road network system as a single model, valid for all antiquity, therefore running the risk by building systems with a deterministic character. As a matter of fact, there is no doubt that the different communities had different perceptions of the landscape, or that the road network landscape in each historical phase would have been unique. In the Archaic and Classical ages, in the Hellenistic age and again in the late Middle Ages, the defensive needs needed the communities to be located on naturally fortified peaks, which did not include all the settlement typologies.

On the contrary, in the Roman age (but also in the Islamic period) there are several rural sites, farms and hamlets, even quite large, in flat and open areas, often at the confluence of streams, and yet there are also settlements and flourishing cities located on the mountain peaks.

As regards the area examined, there are a number of potential sites which should be checked, starting from a more accurate documentary research. The road network system highlights, over time, forms of persistence and of transformation which become – as elsewhere⁹⁸ – a system of directions, of parallel routes potentially usable during the same historical phase, to which a political feature was often associated in the Middle Ages, which manifested physically in resting places or in places of control, such as towers and castles, hamlets and feuds, *hospitalia* and rural churches. Some of them are known through written sources, others are identifiable through topographic field research (surveys), others still remain suggestions for starting new archaeological, topographic and archival research, which induces us to move along those itineraries which humans have walked, and still walk, every day.

⁹⁰ It is known that the Cult of St. James spread in Sicily with the Norman conquest, and that it is linked to the road network: about this topic, Arlotta 2004. *Guida alla Sicilia jacoepa*. Pomigliano d'Arco, and, for the area taken into exam, Burgio 2017.

⁹¹ Lauro 2009, *passim* (some were inhabited before, and probably continuously from late antiquity). Even Regione Siciliana 2001 s.v. Petherana.

⁹² Regione Siciliana 2001 s.v. Margana; Toomaspoeg 2003: 281.

⁹³ Uggeri 2004: 70–71; Prag 2006.

⁹⁴ For the data regarding the roads near Castronovo, see Arlotta 2005: 866–868; Burgio 2017.

⁹⁵ Arlotta 2005: 849–850.

⁹⁶ Carver and Molinari 2017.

⁹⁷ Arcifa 1994; Arcifa 1995; Toomaspoeg 2003.

⁹⁸ See the alternative paths regarding the Roman *via Catina-Agrigentum mansionibus nunc institutis* in the *Itinerarium Antonini* (Uggeri 2004: 251–266) and the *via Catina-Thermae* from Thermae to Henna (Burgio 2000).

Author contributions

'Introduction': A. Canale; 'Road network and settlements': A. Canale (142-149), A. Burgio (149-153); 'Conclusion': A. Burgio.

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Chapter 11

The End of Antiquity and the New Point of Departure in the Medieval Settlement System of Southern and Central Sicily

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Chronology and Ceramic Classes

In the Middle Ages, on the basis of archaeological findings, two historical phases can be roughly distinguished in the southern Sicilian countryside around Gela¹ and in the hinterland of Agrigento: first, the 10th – 12th centuries AD and, second, the 13th century and after. Combed ceramic with red and brown painted lines roughly indicates an Arab-Norman phase,² while medieval glaze ware and proto majolica starts in the 13th century AD and indicates the Hohenstaufen and subsequent periods.

According to most recent studies, Rocchicella cooking ware gives evidence of the latest Byzantine period in the late 8th and 9th centuries AD.³ Lucia Arcifa mapped the sites of the Rocchicella ceramics in eastern and southeastern Sicily, while it seems to be completely missing west of the Platani valley.⁴ The Gela Survey focused on this area. There, 271 fragments of Rocchicella ceramics appeared at 17 decentralized sites in the area around Gela and Butera.⁵ In the Monti Sicani Survey, only 7 sites (fig. 1)⁶ yielded a total of 75 fragments (fig. 2). This evidence makes clear that Rocchicella ceramics are scattered to the east and west of the Platani, albeit in a decreasing concentration to the west.

¹ Bergemann 2010; Bergemann 2020.

² Arcifa and Ardizzone 2009; Arcifa 2010: 121–123 fig. 18. Lucia Arcifa in the end suggests a later dating of this group to at least the 9th century AD: Arcifa and Ardizzone 2009: 172–175; Arcifa 2016: 17–27; Longo 2016: 39–44 pl. 4–5. In the Gela Survey we based the chronology of this material on the earlier indications given by Arcifa from the excavations in Rocchicella-Palike back in 2004: Arcifa 2004: fig. 3. Later she changed her mind to an earlier chronology due to new evidence (see above).

³ Fiorilla 1996; Aleo Nero 2018.

⁴ Arcifa 2016: 26, fig. 10.

⁵ Bergemann 2014: 373–379.

⁶ Bergemann 2020: Monte Castelluccio (cat.n. 16 pl. 21–25), Contrada Ferraria (cat.n. 32 pl. 55–56), Pizzo Ferraria (cat.n. 40 pl. 69–74), Urra – Zotti 1 (cat.n. 52 pl. 89–94), Castelluzzo (cat.n. 119 pl. 190–191); Piano dell’Apa (cat.n. 126 pl. 200–202), Pizzo San Matteo (cat.n. 144 pl. 223).

The Problem

To date, no conclusive interpretation of the settlement systems of the later Arab-Norman and Hohenstaufen periods in Sicily is available. Most publications publish and interpret findings from individual regions and areas. These will allow an overall picture to be developed later.⁷ As an initial step, I am trying here to interpret the data collected by the survey projects in Gela⁸ and in the Monti Sicani in the hinterland of Agrigento⁹ in order to contribute to this research process.

The Surveys

The Gela Survey examined an area of about 180 square km, which extends about 20 km inland from the coast to the northwest of the ancient city. In addition to the coastal plain, we explored the hilly countryside and the valleys of the neighbouring hinterland (above note 8).

In the Monti Sicani Survey, we investigated an area of 274 square km in the hinterland of the coastline. The area extends from the bottom of the lower Platani valley, at around 30 m above sea level, to the peaks of the Monti Sicani, the divide between the north and south sides of the island, culminating at 1500 m above sea level (see note 9). The hills and valleys of central Sicily have a widely varying hydrology as well as salt-bearing rivers such as the Platani, minor volcanic phenomena like the Maccalube of Bissana, and finally sulfur deposits, some of which even reach the surface.¹⁰

⁷ See for example Bonanno 2018; Malfitana 2018: 337; Maurici 1993; Ardizzone and Nef 2014; Rizzo 2004.

⁸ Bergemann 2010: Text passim, in particular 177–179; Bergemann 2011.

⁹ Bergemann 2012: fig. 1. 2 pl. 7–9, 1; Bergemann 2013: fig. 3. 4; Bergemann 2014: fig. 3–5; Bergemann 2015: 341, fig. 19, 4–7; Bergemann 2018; Bergemann 2017; Blasetti Fantauzzi 2017; Klug 2020; Bergemann 2020.

¹⁰ Cultraro 2006.

The Settlement Dynamics

In Gela, combed ware painted with brown-red lines was recorded at only 5 sites (fig. 3),¹¹ Proto majolica and medieval glaze at 12,¹² glaze in total at 45 sites (fig. 4).¹³

The density of sites thus increases significantly from the Arab-Norman to the Hohenstaufen and later phases.

The same dynamic appears in the Monti Sicani. The older combed and painted fragments yielded 15 sites and 1 sporadic find (fig. 5),¹⁴ 65 sites and 23 sporadic

finds¹⁵ yielded medieval glaze ware (fig. 6). Thus, in the area around Gela, as in the Monti Sicani, a significant increase in settlement intensity is visible from the 13th century onwards (fig. 7).

4 out of 5 Arab-Norman sites near Gela have a settlement tradition going back to late antiquity (80 %),¹⁶ compared to 8 out of 13 in the Monti Sicani (61.5 %).¹⁷ Of 5 Arab-Norman sites at Gela, 4 continued into the Hohenstaufen period (80 %),¹⁸ compared to 13 out of 13 in the Monti

¹¹ Bergemann 2010: S. Cusumano 3: 120–122 Nr. 117 pl. 118, 1. 3; 122; Suor Marchesa: 193–198 Nr. 193 pl. 170, 3; 172. 181, Milingiana Ost 1: 231 f. Nr. 225 pl. 183. 201, 2; 203, Poggio Tondo: 240 s. Nr. 232 pl. 183. 209, 5–6; 212, Guallarà: 282–284 Nr. 271 pl. 223, 243, 5, 245.

¹² Bergemann 2010: Manfria, Lo Stallone: 46–49 Nr. 49 pl. 28. 42. 44, 3–4; 46, Manfria, Costa del Sole, Orlandini excavation: 41 f. Nr. 41 pl. 28. 32. 38, Perciata Ost: 106–109 Nr. 104 pl. 42. 99, 4–7, here fig. 4a, Cusumano 2: 119 s. Nr. 116 pl. 118, 2; 119. 120, 1.3, here fig. 4b, Cusumano 3: 120–122 Nr. 117 pl. 118, 1. 3.; 119. 120, Cusumano 8: 126 s. Nr. 122 pl. 118, 3, 119. 124. 130, Torrente Comunelli 3: 131 s. Nr. 126 pl. 125, 1–2. 5–6; 129, 4; 130; Suor Marchesa: 19–198 Nr. 193 pl. 170, 3; 172. 181; Milingiana Ost 1: 231 f. Nr. 225 pl. 183. 201, 2; 203, Saraceno West: 246–248 Nr. 238 pl. 130. 214, 1–8; 218, Monte Saraceno Ost 3: 249 Nr. 241 pl. 130. 219, 3, Guallarà: 282–284 Nr. 271 pl. 223, 243, 5; 245.

¹³ Bergemann 2010: Monte Lungo 1: 9 f. Nr. 2 pl. 1–3, Amato 3/4: 14–16 Nr. 8 pl. 5, 1; 6. 7, 2, Graziola 1: 16 f. Nr. 9 pl. 1. 8, 1; 7, 3, C. San Antonio 1: 19 f. Nr. 12 pl. 1. 11, 1–2; 12 here fig. 4a, C. San Antonio 2: 21 f. Nr. 13 pl. 1. 11, 1. 3–4, 13, 1, C. San Antonio 3: 22 f. Nr. 14 pl. 1. 11, 5; 13, 2, La Cascinella 1: 26 f. Nr. 22 pl. 1. 16, 1–2, La Cascinella 2: 28 Nr. 28 pl. 1. 16, 4–5, Rabbito: 29–31 Nr. 27 pl. 1. 18, 1–2; 20, Roccazzelle 4: 34 f. Nr. 31 pl. 1. 21, 2; 26, 4; 27, Manfria Höhe 105: 38 f. Nr. 37 pl. 28. 30, 3; 36, Manfria Lo Stallone: 45–49 Nr. 49 pl. 28. 42. 44, 3–6; 46, Manfria, Orlandinigrabung: 41 f. Nr. 41 pl. 28. 32. 38, Casa Nova: 66 f. Nr. 67 pl. 42. 68. 70, 1; 71, 3, Ponte Carruba 3: 72 f. Nr. 73 pl. 42. 68. 73, 5, Contrada Tenutella 2: 76–79 Nr. 75 pl. 42. 68 77, 2–3, Costa Rabbito West 1: 81 f. Nr. 78 pl. 42. 84, 2; 85, 1, Perciata Süd 1: 97 f. Nr. 94 pl. 42. 96, 4, Monte Perciata Ost: 106–109 Nr. 104 pl. 42. 99, 4–7, here fig. 4a, Mandra Pagliarazzi West 1: 103 f. Nr. 100 pl. 42. 100, 6. 7, Santo Nicola 1: 111–113 Nr. 111 pl. 130. 109. 110. 111, 1, here fig. 4b, Santo Nicola 2: 113–116 Nr. 112 pl. 130. 111, 2, 114, 3 here fig. 4b, San Cusumano 1: 118 f. Nr. 115 pl. 118, 1–2; 119. 120, 1–2; 130, San Cusumano 2: 119 s. Nr. 116 pl. 118, 2; 119. 120, 1.3, here fig. 4b, San Cusumano 3: 120–122 Nr. 117 pl. 118, 1. 3.; 119. 120 here fig. 4c, San Cusumano 6: 124 f. Nr. 120 pl. 118, 1; 119. 120. 121, 1, 130 here fig. 4d, San Cusumano 8: 126 s. Nr. 122 pl. 118, 3, 119. 124. 130, Torrente Comunelli 1: 128 f. Nr. 123 pl. 125, 1–3, 127. 128, 130; Torrente Comunelli 2: 129 f. Nr. 124 pl. 125, 1–2. 4; 127. 129, 1; 128, Torrente Comunelli 3: 131 f. Nr. 126 pl. 125, 1–2. 5–6; 127. 129, 4, 130; Butera, Maria dell'Alto: 137 f. Nr. 133 pl. 130. 131, 6. 8; 134, 1, Fiume di Mallo: 143–145 Nr. 146 pl. 130. 135, 1–6; 136, San Pietro Südhang 5: 162–164 Nr. 167 pl. 144, 2–3; 145–16; 155, 1, San Pietro Südhang 9: 169–171 Nr. 172 pl. 144, 3–4, 145–146; 150, 7; 156, 3; 158, San Pietro H262 Osthang: 177–179 Nr. 180 pl. 145. 163. 164, 5; 169, 3, Suor Marchesa: 193–198 Nr. 193 pl. 170, 3; 172. 181, Suor Marchesa H338: 186–188 Nr. 189 pl. 170, 4; 172 here fig. 4e, Suor Marchesa H344: 188 f. Nr. 190 pl. 170, 4–5; 174, 4, Piano di Cullura: 189–191 Nr. 191 pl. 170, 7; 172; 174, 2, Monte Milingiana 214–216 Nr. 212 pl. 183. 188, 4; 191, Milingiana Ost 1: 231 f. Nr. 225 pl. 183. 201, 2; 203, Contrada Castelluccio 7: 266 f. Nr. 259 pl. 223. 224, 6; 230, Monte Saraceno West: 246–248 Nr. 238 pl. 130. 214, 1–8; 217. 218. 219, 1, Sorgente di Castagnelle: 275–282 Nr. 269 pl. 223. 242, Monte Saraceno Ost 3: 249 Nr. 241 pl. 130. 219, Guallarà: 282–284 Nr. 271 pl. 223, 243, 5, 245.

¹⁴ Bergemann 2020: Bissana (cat.n. 6), Millaga 3 (cat.n. 14), Pietre Cadute 1 (cat.n. 19), Pietre Cadute 2 (cat.n. 20), Monte Castelluccio (cat.n. 16), Segnale Ferrara (cat.n. 38), Casa Bonifacio 1 (cat.n. 29), Nanno (cat.n. 49), Greco Morto südlich H381 (cat.n. 41), A122 Campanaro 1 (cat.n. 62), Monte Taffaro (cat.n. 81), Ceragolo 22 (cat.n. 99), Ceragolo 23 = Ceragolo 4 (cat.n. 98), Lordichella (cat.n. 91), Casa Inglese (cat.n. 93), Sporadisch: Lordichella Nordhang Gräber (cat.n. 91): ED50 UTM zone 33N 365209/4156288; Bergemann 2014: 373–379, Abb. 4–5.

¹⁵ Bergemann 2020: Fossato Cavaliere (Lamantia) (cat.n. 2), Bissana (cat.n. 6), Pizzo Santa Anastasia, Hang (cat.n. 9), Millaga 3 (cat.n. 14), Casa Vecchia Millaga (cat.n. 15), Monte Castelluccio (cat.n. 16), Pietre Cadute oberhalb (cat.n. 17), Pietre Cadute 2 (cat.n. 20), Serra di Cuti (cat.n. 21), Povero 2 (cat.n. 26), Bonifacio 1 (cat.n. 29), Bonifacio 2 (cat.n. 30), Contrada Ferrara (cat.n. 32), Bagascia (cat.n. 33), Balata (cat.n. 34), Pizzo Ferrara (cat.n. 40), Cianciana (cat.n. 42), Sportplatz (campo sportivo) (cat.n. 45), Contrada Nanno (cat.n. 49), Urra-Zotti, Ölmühle (cat.n. 52), Urra-Zotti 2 (cat.n. 53), Vitellaccio 1 (cat.n. 56), Savarini (cat.n. 59), Carubia (cat.n. 61), Campanaro 1 (cat.n. 62), Campanaro 2 (cat.n. 63), Ciniè Höhe 318 (cat.n. 64), A243 oberhalb Ciniè (cat.n. 66), Cozzo Taffaro (cat.n. 81), Casa Carlino (cat.n. 85), Contrada Ciceroni (cat.n. 86), Cipollazzo (cat.n. 87), Rizzo 1 (cat.n. 88), Lordichella (cat.n. 91), Chinesi (cat.n. 92), Casa Inglese (cat.n. 93), Casa Inglese unterhalb (cat.n. 95), Inglese Süd 1 (cat.n. 96), Casa Inglese Süd 2–3 (cat.n. 97), Ceragolo 4–23 (cat.n. 98), Ceragolo 22 (cat.n. 99), Ceragolo 7 und 8 (cat.n. 100), Ceragolo 9 und 12 (cat.n. 102), Zambito 1 (cat.n. 103), Vallone Inferno/Fratta (cat.n. 106), Donna Caterina 1 (cat.n. 112), Donna Caterina 2 (cat.n. 113), Casa Cordova (cat.n. 116), Castelluzzo (cat.n. 119), Voltano 3 (cat.n. 124), Mulino di Mulinazzo (cat.n. 125), Piano dell'Apa (cat.n. 126); La Turri (cat.n. 130), Magazzolo-Tal (zwischen La Turri und Diga Castello) (cat.n. 131), Cattiva (cat.n. 134), Cozzo Scibè (cat.n. 135), Casa Cocchiara (cat.n. 137), Casino (cat.n. 138), Serra Mezzocanale (cat.n. 141), il Ponte (cat.n. 143), D034 Dilisi (cat.n. 147), D032 Contr. Paratore (cat.n. 148), Santo Stefano Quisiquina (cat.n. 149), Altavilla 1 (cat.n. 150), Altavilla 4 (cat.n. 153), Sporadic: A219-A220 Cirriè, Höhe westlich der Casa (cat.n. 36): ED50 UTM zone 33N 356685/4155507; A097 Intronata 3: ED50 UTM zone 33N 360297/4152204; Chinesi - Grundstück Ferraro (April 2011) (cat.n. 92), Pizzo Ferrara A232, A233: ED50 UTM zone 33N; A243 Ciniè Höhe 318 (cat.n. 64): ED50 UTM zone 33N 364058/4154235; D020 unterh. Dilisi (cat.n. 147), ED50 UTM zone 33N 363781/4164678; La Turri 500 m SW (cat.n. 130), A016 Vallone Valcaldo: ED50 UTM zone 33N 361796/4160906, A098 Intronata 4: ED50 UTM zone 33N360838/4158056, Chinesi 4 (cat.n. 92), ED50 UTM zone 33N 365919/4156329; A105 Vitellaccio 4 (cat.n. 57): ED50 UTM zone 33N 360946/4153716, A170 oberh. Testasecca (cat.n. 107): ED50 UTM zone 33N 366958/4157423; Diga Castello, kurz vor: ED50 UTM zone 33N 364928/4160481; A042 Casa Gangi 1: ED50 UTM zone 33N 35956374162957; C130 Ceragolo 17: ED50 UTM zone 33N 366101/4156800; C279-C280 Zambito 2: ED50 UTM zone 33N 366076/4157838; B068-B070 Ceragolo 19=Chinesi (cat.n. 92): ED50 UTM zone 33N 366280/4155848; A002 Fretti (La Turri) (cat.n. 130): ED50 UTM zone 33N 362071/4159696; B241 Casa Carubia unterhalb vermeintliches Grab (cat.n. 61); A129 Casa Fastuchera: ED50 UTM zone 33N 363942/4157056; D031 westl. Santo S. Quisiquina (cat.n. 149); Urra-Zotti 1 unter Ölmühle (Süd) (cat.n. 52): ED50 UTM zone 33N 363222/4153271; Urra-Zotti 1 Terrassierung: ED50 UTM zone 33N 363145/4153285; A007-A008 Casa Gentile 4, Osthang (cat.n. 46): ED50 UTM zone 33N 360827/4152833.

¹⁶ Bergemann 2010: S. Cusumano 3: 120–122 Nr. 117 pl. 118, 1. 3.; 119. 120, Suor Marchesa: 193–198 Nr. 193 pl. 170, 3; 172. 181, Milingiana Ost 1: 231 f. Nr. 225 pl. 183. 201, 2; 203, Guallarà: 282–284 Nr. 271 pl. 223, 243, 5; 245.

¹⁷ Bergemann 2020: Bissana (cat.n. 6 pl. 11, 2; 12, 1; 13. 14. 15, 1), Monte Castelluccio (cat.n. 16 pl. 20, 1; 21–25), Pietre Cadute 1 (cat.n. 19 pl. 2, 1; 21, 1; 29–31), Pietre Cadute 2 (cat.n. 20 pl. 20, 1; 21, 1; 32), Campanaro 1 (cat.n. 62 pl. 105, 6–8; 106–107), Cozzo Taffaro (cat.n. 81 pl. 132, 2–134), Lordichella (cat.n. 91 pl. 142, 3; 143–154), Ceragolo 4–23 (cat.n. 98 pl. 168, 1; 169; 170, 1).

¹⁸ S. Cusumano 3: 120–122 Nr. 117 pl. 118, 1. 3; 122; Suor Marchesa: 193–198 Nr. 193 pl. 170, 3; 172. 181; Milingiana Ost 1: 231 f. Nr. 225 pl. 183. 201, 2; 203; Guallarà: 282–284 Nr. 271 pl. 223, 243, 5; 245.

Sicani (100 %).¹⁹ During the Hohenstaufen period, 41 new sites developed in the Gela area²⁰ and 55 new sites plus 4 sporadic find spots in the Monti Sicani.²¹ While

the settlement system seems to have been largely stable from late antiquity through Arab-Norman times, a deep restructuring of the settlement topography appears in the 13th century.

¹⁹ Bergemann 2020: Bissana (cat.n. 6 pl. 11 ,2; 12, 1; 13. 14. 15,1), Monte Castelluccio (cat.n. 16 pl. 20, 1; 21–25), Pietre Cadute 2 (cat.n. 20 pl. 20, 1; 21, 1; 32), Casa Bonifacio 1 (cat.n. 29 pl. 49, 2–3; 50–52), Campanaro 1 (cat.n. 62 pl. 105, 6–8; 106–107), Cozzo Taffaro (cat.n. 81 pl. 132, 2–134), Lordichella (cat.n. 91 pl. 142, 3; 143–154), Casa Inglese (cat.n. 93), Ceragolo 4 = Ceragolo 23 (cat.n. 98 pl. 168, 1; 169; 170, 1), Ceragolo 22 (cat.n. 99 pl. 168, 1; 170), Millaga 3 (cat.n. 14 pl. 20, 1. 5).

²⁰ Bergemann 2010: Monte Lungo 1: 9 f. Nr. 2 pl. 1–3; Amato 3/4: 14–16 Nr. 8 pl. 5, 1; 6, 7, 2, Graziola 1: 16 f. Nr. 9 pl. 1. 8,1; 7, 3, C. San Antonio 1: 19 f. Nr. 12 pl. 1. 11, 1–2; 12 here fig. 4a, C. San Antonio 2: 21 f. Nr. 13 pl. 1. 11, 1. 3–4, 13, 1, C. San Antonio 3: 22 f. Nr. 14 pl. 1. 11, 5, 13, 2, La Cascinella 1: 26 f. Nr. 22 pl. 1. 16, 1–2, La Cascinella 2: 28 Nr. 28 pl. 1. 16, 4–5, Rabbito: 29–31 Nr. 27 pl. 1. 18, 1–2; 20, Roccazzelle 4: 34 f. Nr. 31 pl. 1. 21, 2; 26, 4; 27, Manfria Höhe 105: 38 f. Nr. 37 pl. 28. 30,3; 36, Manfria Lo Stallone: 45–49 Nr. 49 pl. 28. 42. 44, 3–6; 46, Manfria, Orlandinigrabung: 41 f. Nr. 41 pl. 28. 32. 38, Casa Nova: 66 f. Nr. 67 pl. 42. 68. 70, 1; 71, 3, Ponte Carruba 3: 72 f. Nr. 73 pl. 42. 68. 73, 5, Contrada Tenutella 2: 76–79 Nr. 75 pl. 42. 68 77, 2–3, Costa Rabbito West 1: 81 f. Nr. 78 pl. 42. 84, 2; 85, 1, Perciata Süd 1: 97 f. Nr. 94 pl. 42. 96, 4, Monte Perciata Ost: 106–109 Nr. 104 pl. 42. 99, 4–7; here fig. 4a, Mandra Pagliarazzi West 1: 103 f. Nr. 100 pl. 42. 100, 6, 7, Santo Nicola 1: 111–113 Nr. 111 pl. 130. 109. 110. 111, 1, here fig. 4b, Santo Nicola 2: 113–116 Nr. 112 pl. 130. 111, 2; 114,3 here fig. 4b, San Cusumano 1: 118 f. Nr. 115 pl. 118, 1–2, 119. 120, 1–2, 130, San Cusumano 2: 119 s. Nr. 116 pl. 118,2; 119. 120, 1,3, here fig. 4 b, San Cusumano 6: 124 f. Nr. 120 pl. 118, 1, 119. 120. 121, 1, 130 here fig. 4d, San Cusumano 8: 126 s. Nr. 122 pl. 118, 3, 119. 124. 130, Torrente Comunelli 1: 128 f. Nr. 123 pl. 125, 1–3, 127. 128. 130, Torrente Comunelli 2: 129 f. Nr. 124 pl. 125, 1–2, 4; 127. 129, 1; 130, Torrente Comunelli 3: 131 f. Nr. 126 pl. 125, 1–2. 5–6; 127. 129, 4; 130, Butera, Maria dell'Alto: 137 f. Nr. 133 pl. 130. 131, 6, 8; 134, 1, Fiume di Mallo: 143–145 Nr. 146 pl. 130. 135, 1–6, 136; San Pietro Südhang 5: 162–164 Nr. 167 pl. 144, 2–3; 145–16; 155, 1; San Pietro Südhang 9: 169–171 Nr. 172 pl. 144, 3–4; 145–146; 150, 7; 156, 3; 158; San Pietro H262 Osthang: 177–179 Nr. 180 pl. 145. 163. 164, 5; 169, 3; Suor Marchesa H338: 186–188 Nr. 189 pl. 170, 4; 172 here fig. 4 e; Suor Marchesa H344: 188 f. Nr. 190 pl. 170, 4–5; 174, 4; Piano di Cullura: 189–191 Nr. 191 pl. 170, 7; 172; 174, 2; Monte Milingiana 214–216 Nr. 212 pl. 183. 188, 4; 191; Contrada Castelluccio 7: 266 f. Nr. 259 pl. 223. 224, 6; 230; Monte Saraceno West: 246–248 Nr. 238 pl. 130. 214, 1–8; 217. 218. 219, 1; Sorgente di Castagnelle: 275–282 Nr. 269 pl. 223. 242; Monte Saraceno Ost 3: 249 Nr. 241 pl. 130. 219, 3.

²¹ Bergemann 2020: Fossato Cavaliere (Lamantia) (cat.n. 2 pl. 2, 1. 3. 4), Pizzo di Minico (cat.n. 8 pl. 16–17), Pizzo Santa Anastasia (cat.n. 9 pl. 18), Casa Vecchia Millaga (cat.n. 15 pl. 20, 1. 2. 6), Pietre Cadute Nekropole oberhalb (cat.n. 17 pl. 20, 1; 21, 1; 26, 1; 28, 2), Serra di Cuti (cat.n. 21 pl. 34–36), Povero 2 (cat.n. 26 pl. 39, 1; 41–47, 1), Casa Bonifacio 2 (cat.n. 30 pl. 49, 4. 53), Contrada Ferraria (cat.n. 32 pl. 55, 1–3. 56), Bagascia (cat.n. 33 pl. 55, 1. 4), Balata (cat.n. 34 pl. 57–58), Pizzo Ferraria (cat.n. 40 pl. 69–74), Cianciana (cat.n. 42 pl. 76–83), Sportplatz (cat.n. 45 pl. 84, 3. 4), Casa Gentile Osthang (cat.n. 46 pl. 85, 1. 2; 86), Urra-Zotti Ölmühle (cat.n. 52 pl. 89–94), Urra-Zotti 2 (cat.n. 53 pl. 95, 1–3), Vitellaccio 3 (cat.n. 56 pl. 101, 1–2; 102, 1); Vitellaccio 4 (cat.n. 57 pl. 101, 1. 3; 102, 3); Miniera Savarini (cat.n. 59 pl. 103, 1; 104, 1–5), Carubia (cat.n. 61 pl. 105, 1–4), Campanaro 2 (cat.n. 63 pl. 107, 2–108), Ciniè Höhe 318 (cat.n. 64 pl. 110–114), A243 oberhalb Ciniè Höhe 318 (cat.n. 66 pl. 115, 2), Casa Carlino (cat.n. 85 pl. 138), Contrada Ciceroni (cat.n. 86 pl. 139, 1; 140, 1–2), Cipollazzo (cat.n. 87 pl. 139, 2; 140, 3–4), Rizzo 1 (cat.n. 88 pl. 141. 142, 1), Chinesi (cat.n. 92 pl. 155–161), Casa Inglese unterhalb (cat.n. 95 pl. 162, 1; 166, 1; 167, 1–2), Inglese Süd 1 (cat.n. 96 pl. 162, 1; 166, 2; 167, 3), Casa Inglese Süd 2–3 (cat.n. 97 pl. 162, 1; 166, 2; 167, 4), Ceragolo 7 und 8 (cat.n. 100 pl. 171, 1; 172), Zambito 1 (cat.n. 103 pl. 168, 1; 173, 1–3), C283 Vallone Inferno (cat.n. 106 pl. 168, 1; 174, 1–2), Donna Caterina 1 (cat.n. 112 pl. 180. 181, 1–2), Donna Caterina 2 (cat.n. 113 pl. 180. 181, 1. 3), Casa Cordova (cat.n. 116 pl. 183), zwischen Casa Cordova und Inglese (cat.n. 116), Castelluzzo (cat.n. 119 pl. 187, 1; 190. 191, 1), Voltano 3 (cat.n. 124 pl. 198, 1. 3. 4), Mulino di Mulinazzo (cat.n. 125 pl. 199), Piano dell'Apa (cat.n. 126 pl. 200–202), La Turri (cat.n. 130 pl. 296–209), Magazzolo-Tal (zwischen La Turri und Diga Castello) (cat.n. 131 pl. 210, 1; 211, 5), Cattiva (cat.n. 134 pl. 213, 1–2; 214–215), Cozzo Scibè (cat.n. 135 pl. 213, 2–4; 216), Casa Cocchiara (cat.n. 137 pl. 217, 4–6), Casino (cat.n. 138 pl. 218, 7–8; 219), Serra Mezzocanale (cat.n. 141 pl. 220. 221, 1), Il Ponte (cat.n. 143 pl. 222), Contr. Paratore (cat.n. 148 pl. 227, 2–228, 1), Santo

The main difference between the two areas is the varying intensity of settlements. The Monti Sicani in central western Sicily offer a short transition from the coast of the African side to the Tyrrhenian Sea. Here, the settlement intensity was higher after the Arab-Norman phase than in the areas near the southern coastline at Gela. However, King Frederik II founded Terranova di Sicilia there in 1233 AD, on the site of Greek Gela. After the abandonment of Gela in the 3rd century BC, there was no dense occupation of the hill along the coast, but villas occupied it loosely. Urban life resumed only in the Hohenstaufen period after the rural settlement system had thinned out after late antiquity.²²

The Settlement System

In the 180 square km section covered by the Gela Survey (fig. 8), there was a concentration of inland settlements around Butera in the Arab-Norman phase. Sites have been identified around Monte Milingiana, in Guallarà and at Suor Marchesa in the west, on the edge of the territory above the Salso valley. Butera was the dominant centre of the area up to the foundation of Terranova di Sicilia (1233 AD). 3 large settlement areas of over one hectare²³ are almost as numerous as 2 smaller ones of less than one hectare,²⁴ while sporadic sites are missing.

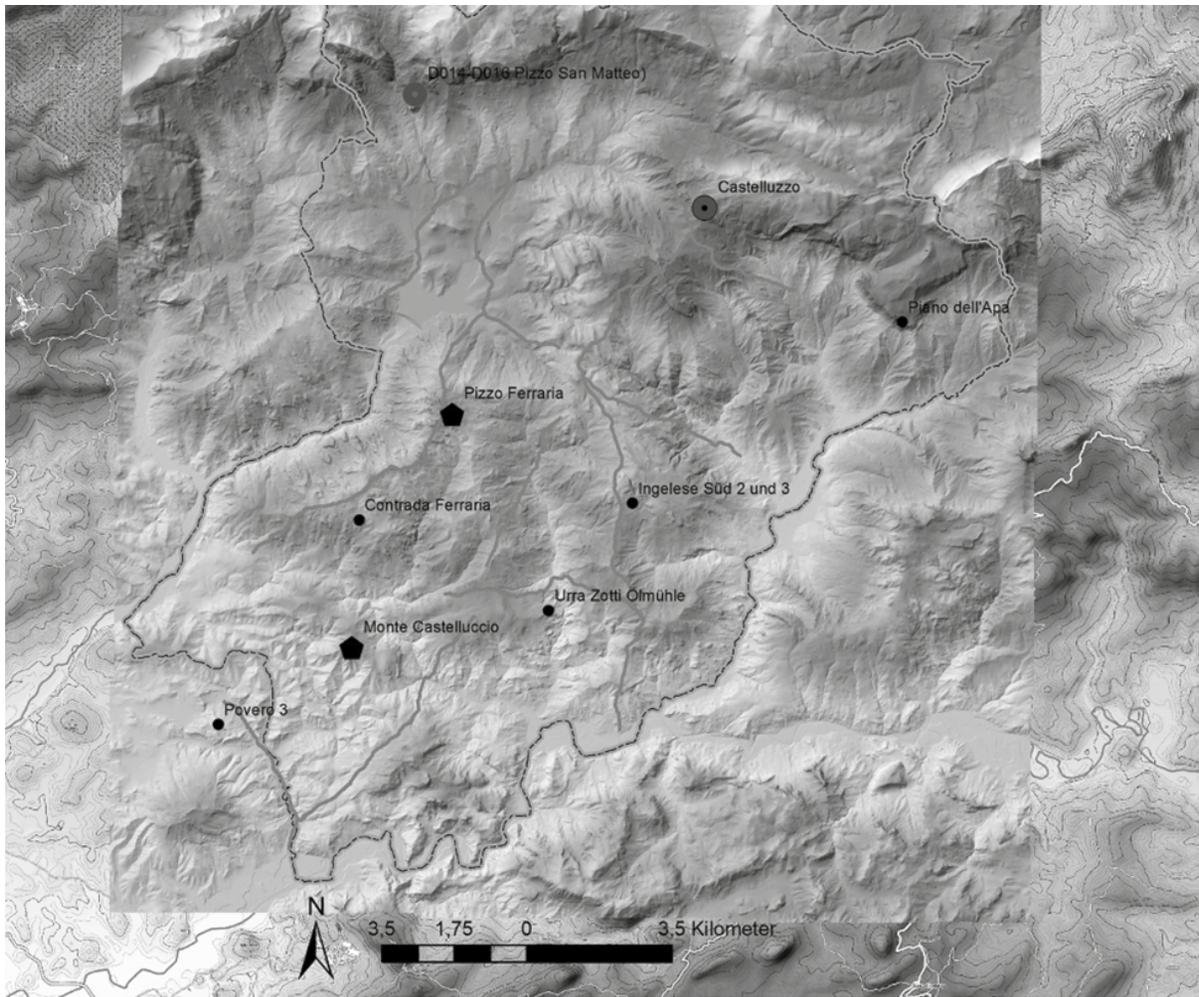
In the Monti Sicani (274 square km), during the Arab-Norman phase (fig. 9), there were focal points of larger settlements near the Platani valley, on top of Monte Lordichella in the centre of the area and in the Ceragolo district further north. Sporadic sites are scattered in between, covering large parts of the area. They appear close to the Platani valley in the south as at the crossing to the northern coast of the island across the Monti Sicani at Santo Stefano Quisquina. Settlement activity spread along the two historical connecting paths crossing the area. Early medieval settlements are missing in the Magazzolo basin below Bivona and in the Turvoli valley (fig. 9). In the whole Monti Sicani survey area, there are 9 large settlement sites of over

Stefano Quisquina (cat.n. 149 pl. 227, 2; 228, 2–3), Altavilla 1 (cat.n. 150 pl. 230), Altavilla 4 (cat.n. 153 pl. 231, 1; 232, 6), Sporadic: C130 Ceragolo 17: ED50 UTM zone 33N 366101/4156800, Chinesi-Grundstück Ferraro (April 2011) (cat.n. 92): ED50 UTM zone 33N 366171/4155834; Chinesi 4 (cat.n. 92); ED50 UTM zone N33 365910/4161006; Fretti (La Turri) (cat.n. 130): ED50 UTM zone 33N 362071/4159696.

²² Congiu 2012: 132–140.

²³ Bergemann 2010: S. Cusumano 3: 120–122 Nr. 117 pl. 118, 1. 3, 119. 120, Suor Marchesa: 193–198 Nr. 193 pl. 170, 3; 172. 181, Poggio Tondo: 240 s. Nr. 232 pl. 183. 209, 5–6; 212.

²⁴ Bergemann 2010: Milingiana Ost 1: 231 f. Nr. 225 pl. 183. 201, 2; 203; Guallarà: 282–284 Nr. 271 pl. 223, 243, 5; 245.



Monti Sicani: Agrigent-Hinterland-Survey

● Rocchicella: big and small site ● Rocchicella: Fortress

Figure 1 – Monti Sicani: mapping of Rocchicella ceramics (by the Author)

one hectare²⁵ compared to 2 smaller ones under one hectare²⁶ and 4 sporadic finds.²⁷

In the hinterland of Gela (180 square km), there are 45 sites from the Hohenstaufen period. They are scattered from the coastal plain over the heights of Manfria, developing a focal point in and around Butera (fig. 8). At the same time, the western part around Monte Milingiana and the valley of San Pietro was less densely populated. A certain concentration of medieval sites

appears at Suor Marchesa in the west above the Salso Valley. Most of the settlement areas are located beside the historic roads that run through the area.²⁸ The average size of the sites is about 1.2 hectares, ranging from 0.2 to 6.3 hectares.

In the Monti Sicani, after the Hohenstaufen period, there are 65 settlement sites (fig. 9) and 23 sporadic finds, thus a total of 88. This is about twice the number in an area about one and a half times as large (274 square km) as the Gela Survey (180 square km). As in antiquity, the Magazzolo basin below Bivona remains relatively sparsely populated. Only Casa Cocchiara²⁹ in flat land, Casino³⁰ on the western slope and Cozzo Scibè³¹ have

²⁵ Bergemann 2020: Bissana (cat.n. 6 pl. 12–15), Monte Castelluccio (cat.n. 16 pl. 21–25), Pietre Cadute 1 (cat.n. 19 pl. 29–31), Pietre Cadute 2 (cat.n. 20 pl. 32), Casa Bonifacio 1 (cat.n. 29 pl. 49–52), Campanaro 1 (cat.n. 62 pl. 105–102), Lordichella (cat.n. 91 pl. 142–154), Casa Inglese (cat.n. 93 pl. 162–165), Ceragolo 22 (cat.n. 99 pl. 168, 1; 170).

²⁶ Bergemann 2020: Ceragolo 4 = Ceragolo 23 (cat.n. 98 pl. 168–170), Cozzo Taffaro (cat.n. 81 pl. 132–134).

²⁷ Bergemann 2020: Millaga 3 (cat.n. 14 pl. 20, 1. 5); D068 Segnale Ferrara (cat.n. 38 pl. 64. 66–68); Greco Morto südlich H381 (cat.n. 41 pl. 75); Lordichella Nordhang Gräber (cat.n. 91 pl. 142–154).

²⁸ Congiu 2012: 179–190 with Gesamtplan.

²⁹ Bergemann 2020: cat.n. 137 pl. 217, 4–6.

³⁰ Bergemann 2020: cat.n. 138 pl. 218–219.

³¹ Bergemann 2020: cat.n. 135 pl. 213, 2. 4; 216.

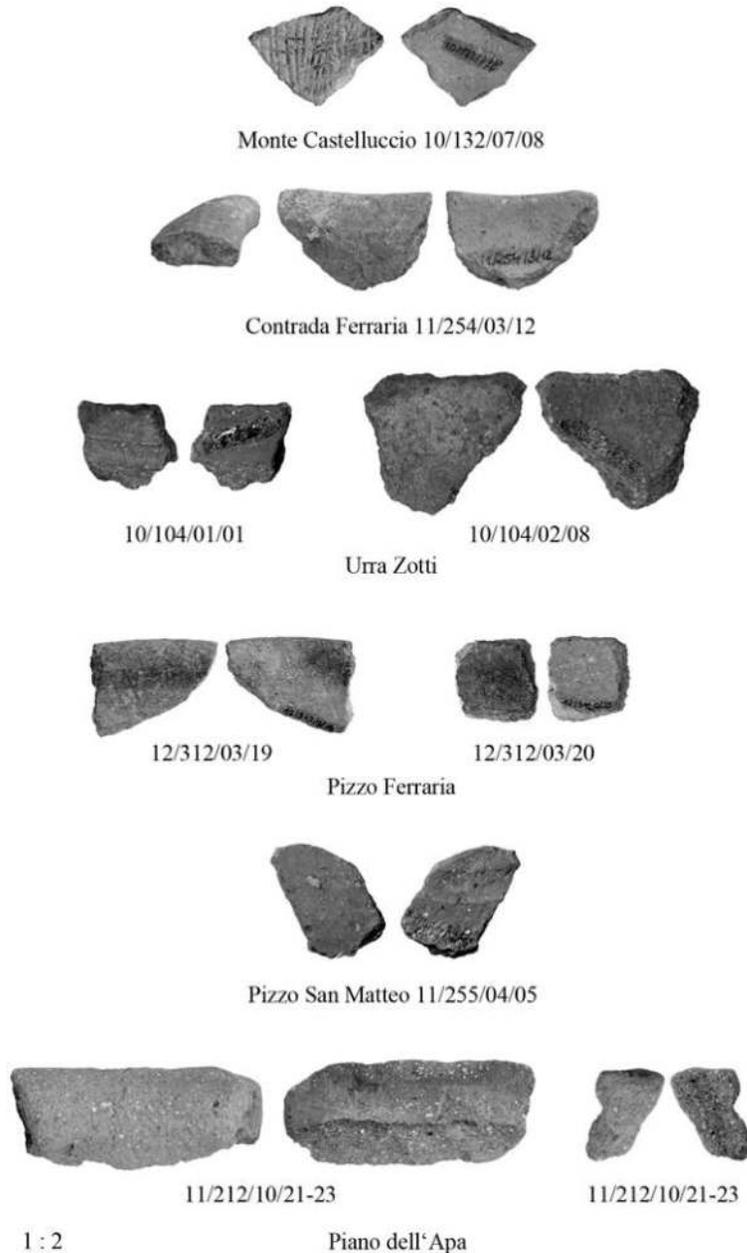


Figure 2 – Monti Sicani: Rocchicella type pottery
(Archives of the Goettingen Survey Projects)

smaller settlements. There is also a fortification in the southern part of the basin with the Castello della Pietra D'Amico,³² and possibly a sacred place with the octagonal building of La Turri.³³ Above Bivona at Pizzo San Matteo,³⁴ a small fortification secured the way to the north side of the Monti Sicani.

The area of Cianciana (founded in 1640) also remained largely empty in the Middle Ages. Apparently, sulphur extraction was not relevant during this period. Written sources give evidence of a Casal Chincana, Salina di Chincana and casale e feudo di Bissana in the area. While Bissana is archeologically well-attested from antiquity onwards even by the remains of a large farmhouse,³⁵ on the site of ancient Cianciana there is only very limited

³² Below note 65.

³³ Bergemann 2020: cat.n. 130 pl. 206–209; Associazione culturale Alessandria nel Mondo 2002: 40 s.

³⁴ Bergemann 2020: cat.n. 144 pl. 223.

³⁵ Sanzeri 2006: 114–130; Marrone 1987; Bergemann 2020: cat.n. 6 pl. 113–115, 1.

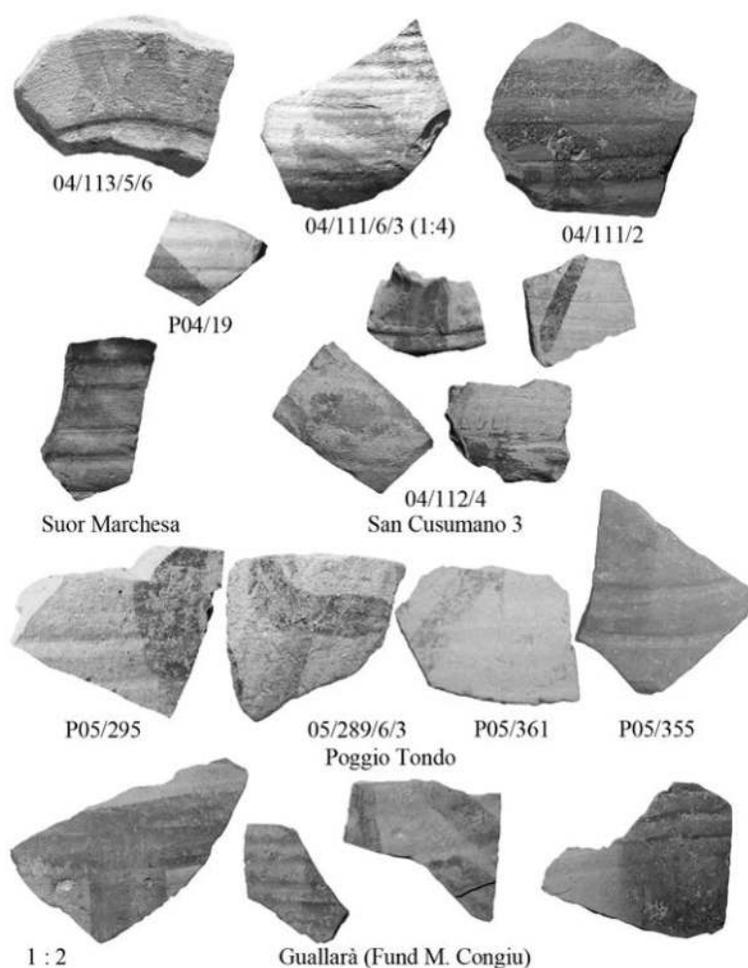


Figure 3 – Gela Survey: combed and painted ceramics
(Archives of the Goettingen Survey Projects)

evidence for medieval glazed ware. According to the survey finds at Pizzo Ferraria,³⁶ north of Cianciana and in the zone of Campanaro 2,³⁷ on the road from the north through the Vallone di Ciniè valley into the area of Cianciana, there was settlement activity at this time.

In contrast, the areas of Ceragolo and Lordichella west of Alessandria della Rocca (founded in 1570) remained densely populated. There are five settlement sites and several small sites. The same applies to the Millaga – Bissana area to the south, where the medieval Casale Bissana had its place.³⁸ There are four settlement centres in this area. Towards the Platani valley, several fortresses secured the area: Pizzo Sant’Anastasia³⁹ and Pizzo di Minico.⁴⁰

The high valley of Turvoli at the foot of Monte Cammarata has a certain number of medieval sites, Voltano 3,⁴¹ Misita⁴² and especially the high Piano dell’Apa.⁴³ The high valley of Altavilla on the upper reaches of the Platani River was also inhabited. There the royal Feudum Realtavilla⁴⁴ left some sherds and a marvelous sculpted doorway from Norman times (fig. 10).

Saint Rosalia was venerated in a cloister from the 17th century.⁴⁵ Finally, on the lower reaches of the Magazzolo there are the settlement areas of Balata⁴⁶ on flat ground and Bonifacio 1,⁴⁷ which revived an Iron Age elevated settlement.

³⁶ Bergemann 2020: cat.n. 40 pl. 69–74.

³⁷ Bergemann 2020: cat.n. 63 pl. 107, 2–108.

³⁸ Sanzeri 2006: 119–125; Bergemann 2020: cat.n. 6 pl. 113–115, 1.

³⁹ Bergemann 2020: Pizzo Sant’Anastasia (cat.n. 9 pl. 18); Modeo and Cutaia 2013: 101 f.

⁴⁰ Bergemann 2020: Pizzo di Minico (cat.n. 8 pl. 16–17); Modeo and Cutaia 2013: 102–104 fig. 6–9.

⁴¹ Bergemann 2020: cat.n. 124 pl. 198, 1. 3–4.

⁴² Bergemann 2020: cat.n. 118 pl. 187–189.

⁴³ Bergemann 2020: cat.n. 126 pl. 200–202.

⁴⁴ Marrone 1987; Bergemann 2020: cat.n. 154 pl. 232–234.

⁴⁵ Alajmo 1953; Guggino 2002.

⁴⁶ Bergemann 2020: cat.n. 34 pl. 57–58.

⁴⁷ Bergemann 2020: cat.n. 28 pl. 49–52.

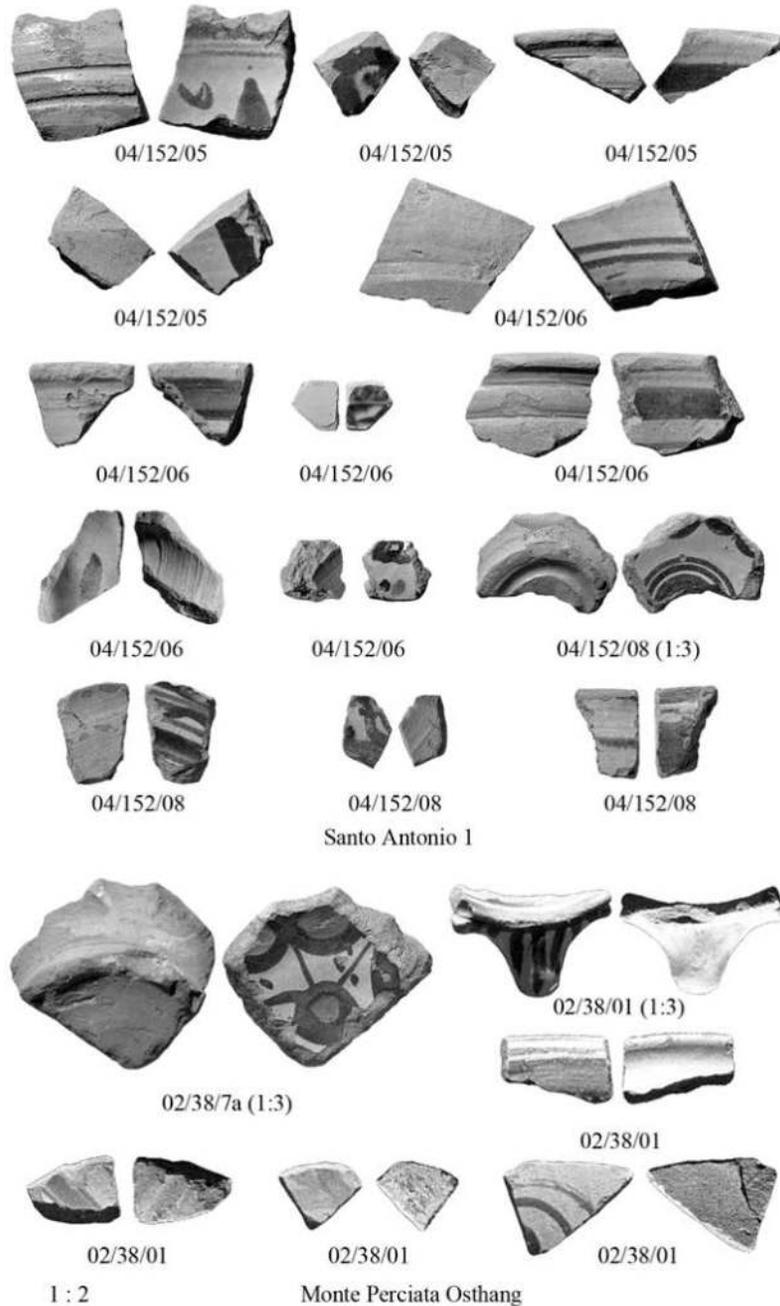


Figure 4 – Gela Survey: glazed ceramics (Archives of the Goettingen Survey Projects)

The extent of settlement sites varies in the Monti Sicani between just 0.4 hectares and almost 10 hectares, with an average of 2.2 hectares. It should be borne in mind that the larger sites are mainly located on older settlements, which suggests a longer duration than can be assumed for the medieval sites. The settlement of Piano dell'Apa⁴⁸ is predominantly medieval. Here, a large medieval settlement type of 4.2 hectares can

be found. Voltano 3,⁴⁹ with 2.5 hectares, and Altavilla 1,⁵⁰ with 1.8 hectares, represent a minor settlement type, while Casa Vecchia Millaga,⁵¹ with 0.7 hectares, Mulino di Mulinazzo⁵² and Cipollazzo,⁵³ each with 0.76 hectares, indicate smaller sites. There was a hierarchy of settlements. In contrast, the fortifications had very

⁴⁸ Bergemann 2020: cat.n. 126 pl. 200–202.

⁴⁹ Bergemann 2020: cat.n. 124 pl. 198, 1. 3–4.

⁵⁰ Bergemann 2020: cat.n. 150 pl. 230.

⁵¹ Bergemann 2020: cat.n. 15 pl. 20, 1. 2. 6.

⁵² Bergemann 2020: cat.n. 125 pl. 199.

⁵³ Bergemann 2020: cat.n. 8 pl. 139, 2; 140, 3. 4.

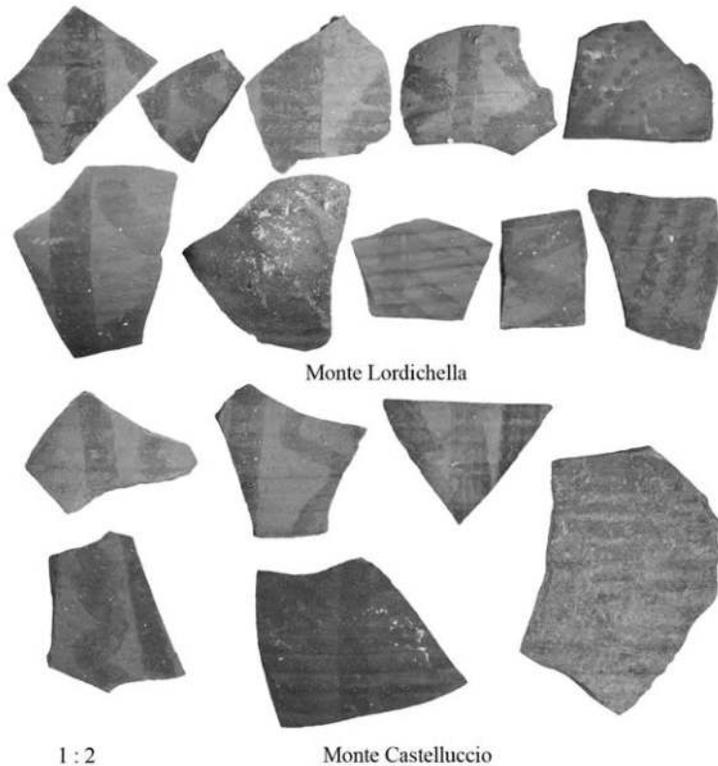


Figure 5 – Monti Sicani: combed and painted ceramics (Archives of the Goettingen Survey Projects)

small footprints, e.g., Pizzo di Minico⁵⁴ covering just 0.1 hectares.

As in the older times, the medieval settlements were located along the historical roads that remained in use after the end of the Roman period. The arteries of Santo Stefano Quisquina towards Castelluzzo, Lordichella and Cozzo Turco (*Reggia trazzera* 156), and from Cianciana towards the Platani valley, are particularly noteworthy.⁵⁵

Sulphur extraction appears to have been less important in the area in medieval times. At Cianciana, the hot spot for sulphur mining in the 19th and 20th centuries, there was no settlement in the Middle Ages. Therefore, in addition to salt extraction, agriculture was the most important economic base of the medieval settlement system in the area.

When comparing the settlements in the Monti Sicani of the Arab-Norman phase with those of the Hohenstaufen phase (fig. 11), it becomes clear that the number of sites increases from 16 to 63 plus 25 sporadic finds, thus adding up to a total of 88 sites.

In addition to this increase in the settlement intensity during the Hohenstaufen period, the number of large settlement sites with ceramic scattering on 1 hectare

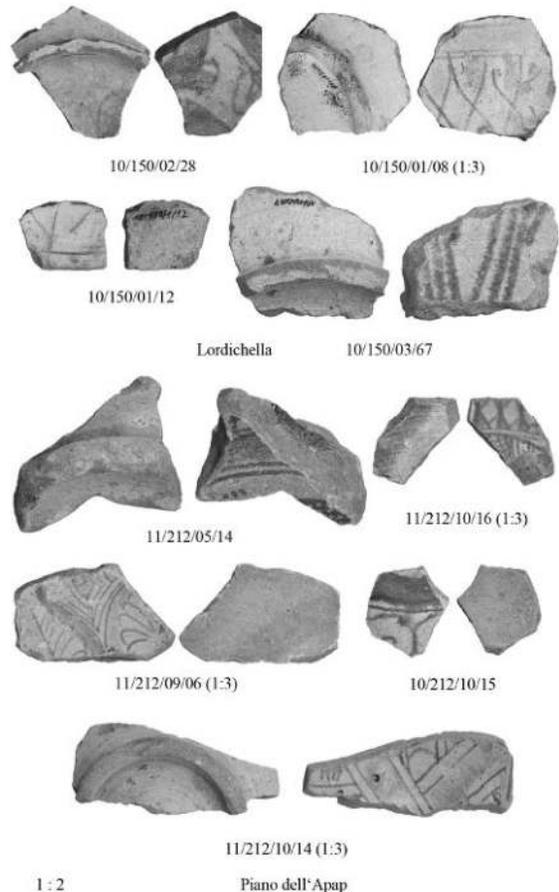


Figure 6 – Monti Sicani: glazed ceramics (Archives of the Goettingen Survey Projects)

⁵⁴ Bergemann 2020: Pizzo di Minico (cat.n. 8 pl. 16–17); Modeo and Cutaia 2013: 102–104 fig. 6–9.

⁵⁵ Bergemann 2020: 99–101 Beil 1. 14.

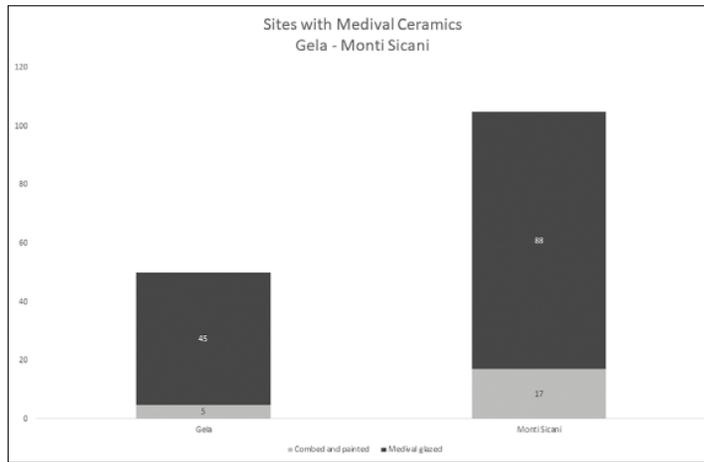


Figure 7 – Sites with medieval pottery: Gela – Monti Sicani (by the Author)

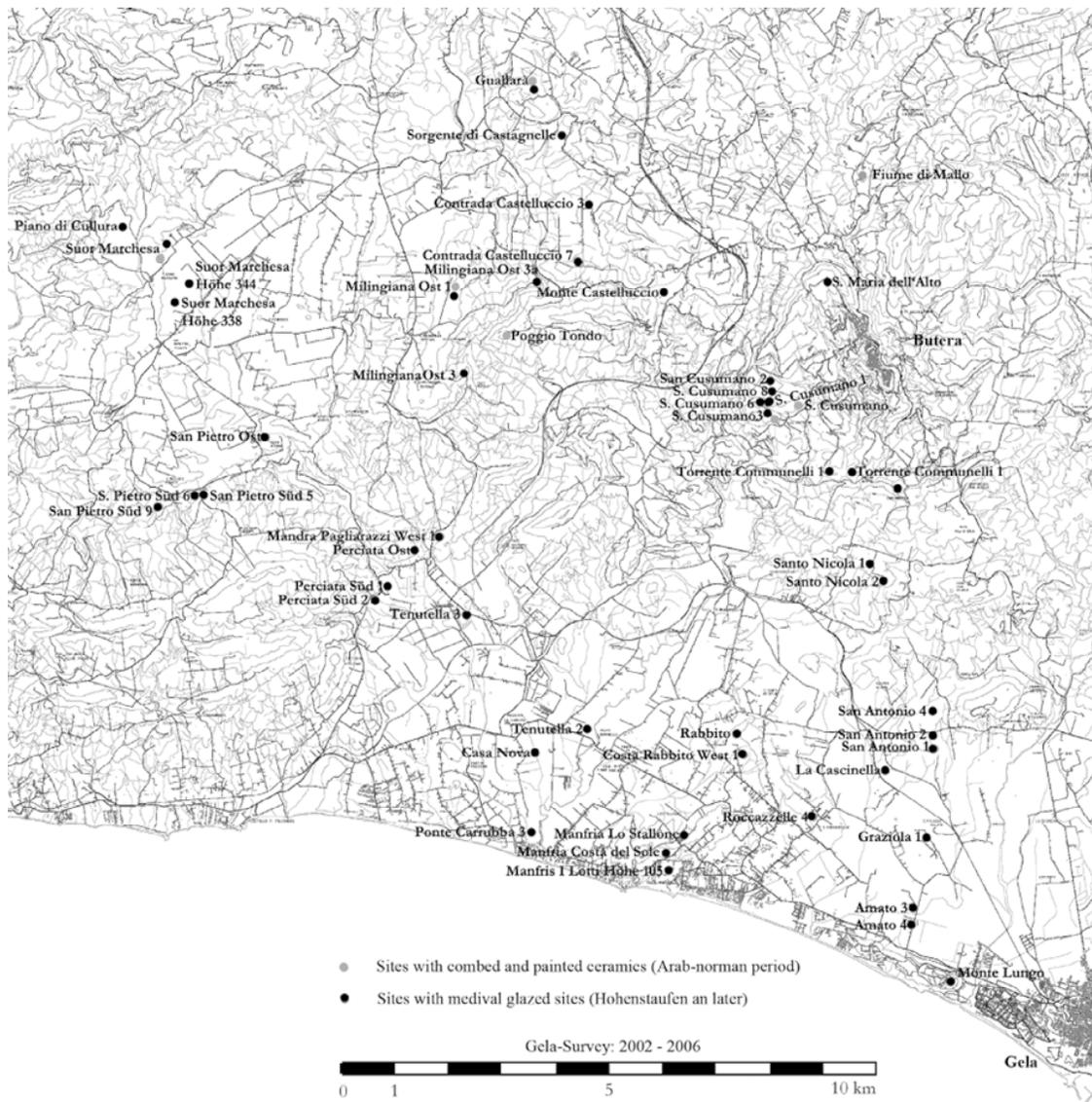


Figure 8 – Gela Survey: Mapping combed painted and glazed ceramics (by the Author)

of land increased from 9 to 32.⁵⁶ However, the number of smaller sites under 1 hectare, 17⁵⁷ instead of 2 in the earlier period, increased even more, as did the sporadic sites, which increased from 4 to 39.⁵⁸ As a result, the

⁵⁶ Bergemann 2020: Bissana (cat.n. 6 pl. 13–15, 1); Monte Castelluccio (cat.n. 16 pl. 21–25); Povero 2 (cat.n. 26 pl. 41–47, 1); Pietre Cadute 2 (cat.n. 20 pl. 20, 1; 21, 1; 32); Casa Bonifacio 1 (cat.n. 29 pl. 49–52); Casa Bonifacio 2 (cat.n. 30 pl. 49, 4; 53); Balata (cat.n. 34 pl. 57–58); Pizzo Ferrara (cat.n. 40 pl. 69–74); Cianciana (cat.n. 42 pl. 76–83); Vitellaccio 3 (cat.n. 50 pl. 101, 1–2; 102, 1); Carubia (cat.n. 61 pl. 105, 1–4); Campanaro 1 (cat.n. 62 pl. 105, 6–8; 106, 107); Campanaro 2 (cat.n. 63 pl. 107, 2 – 108); Casa Carlino (cat.n. 85 pl. 138); Lordichella (cat.n. 91 pl. 143–154); Chinesi (cat.n. 92 pl. 155–161); Casa Inglese (cat.n. 93 pl. 162; 163, 1; 164; 165, 1); Ceragolo 4=23 (cat.n. 98 pl. 168, 1; 169; 170, 1); Ceragolo 9 und 12 (cat.n. 102 pl. 168, 1; 171; 173, 2–3); Zambito 1 (cat.n. 103 pl. 168, 1; 173, 1–3); Donna Caterina 2 (cat.n. 113 pl. 180, 181, 1, 3); Casa Cordova (cat.n. 116 pl. 183); Castelluzzo (cat.n. 119 pl. 187, 1; 190, 191, 1); Voltano 3 (cat.n. 124 pl. 198, 1. 3–4); Piano dell’Apa (cat.n. 126 pl. 200–202); Cattiva (cat.n. 134 pl. 213, 1 – 2; 214–215); Cozzo Scibè (cat.n. 135 pl. 213, 2–4; 216); Casa Cocchiara (cat.n. 137 pl. 217, 4–6); Casino (cat.n. 138 pl. 218, 7–8; 219); Serra Mezzocanale (cat.n. 141 pl. 220, 221, 1); Il Ponte (cat.n. 143 pl. 222); Altavilla 1 (cat.n. 150 pl. 230).

⁵⁷ Bergemann, J., *Der Agrigent-Hinterland-Survey: Fossato Cavaliere (Lamantia)* (cat.n. 2 pl. 2, 1; 3, 4); Casa Vecchia Millaga (cat.n. 15 pl. 20, 1. 2. 6); Contrada Ferraria (cat.n. 32 pl. 55, 1–3; 56); Contrada Nanno (cat.n. 49 pl. 87, 1–6; 88); Urra-Zotti 2 (cat.n. 53 pl. 95, 1–3); Albano (cat.n. 55 pl. 98–100); Vitellaccio 4 (cat.n. 57 pl. 101, 1. 3; 102, 3); Miniera Savarini (cat.n. 59 pl. 103, 1; 104, 1–5); Cozzo Taffaro (cat.n. 81 pl. 132, 2 – 134); Rizzo 1 (cat.n. 88 pl. 141–142, 1); Casa Inglese unterhalb (cat.n. 95 pl. 162, 1; 166, 1; 167, 1–2); Ceragolo 22 (cat.n. 99 pl. 168, 1; 170); Casa Inglese Süd 2-3 (cat.n. 97 pl. 162, 1; 166, 2; 167, 4); Testasecca (cat.n. 107 pl. 168, 1; 175–177); Donna Caterina 1 (cat.n. 112 pl. 180, 181, 1–2); Mulino di Mulinazzo (cat.n. 125 pl. 199); Altavilla 4 (cat.n. 153 pl. 231, 1; 232, 6).

⁵⁸ Bergemann 2020: Pizzo Santa Anastasia, Hang (cat.n. 9): ED50 UTM zone 33N 361102/4148322; Cirriè, Höhe westlich der Casa (cat.n. 36): ED50 UTM zone 33N 356685/4155507; B116 Bagascia (cat.n. 33): ED50 UTM zone 33N 357829/4154825; A146 Pietre Cadute oberhalb (cat.n. 17): ED50 UTM zone 33N 358369/4152963; Millaga 3 (cat.n. 14): ED50 UTM zone 33N 359103/4152448; Pizzo Ferrara A232; A233 (cat.n. 40): ED50 UTM zone 33N; Sportplatz (campo sportivo) (cat.n. 45): ED50 UTM zone 33N 361100/4153313; A007-A008 Casa Gentile 4, Osthang (cat.n. 46): ED50 UTM zone 33N 360827/4152833; A097 Intronata 3; ED50 UTM zone 33N 360297/4152204; A098 Intronata 4; ED50 UTM zone 33N 360355/4152380; Urra - Zotti 1 Abhang unter Ölmühle (Süd) (cat.n. 52): ED50 UTM zone 33N 363222/4153271; Urra - Zotti 1 Terrassierung (cat.n. 52): ED50 UTM zone 33N 363145/4153285; B241 Casa Carubia unterhalb vermeintliches Grab; ED50 UTM zone 33N 362410/4155934; A243 Ciniè Höhe 318 (cat.n. 66): ED50 UTM zone 33N 364058/4154235; C279-C280 Zambito 2: ED50 UTM zone 33N 366076/4157838; A170 oberh. Testasecca (cat.n. 107): ED50 UTM zone 33N 367016/4157621; C130 Ceragolo 17; ED50 UTM zone 33N 366101/4156800; C282 Vallone Inferno/Fratta; ED50 UTM zone 33N 366707/4157708; A034 Contrada Ciceroni (cat.n. 86): ED50 UTM zone 33N 364629/4156154; C575 Cipollazzo (cat.n. 87): ED50 UTM zone 33N 364485/4155255; B068-B070 Ceragolo 19 Chinesi (cat.n. 92): ED50 UTM zone 33N 366280/4155848; Chinesi 4: ED50 UTM zone 33N 365919/4156329; Chinesi - Grundstück Ferraro (April 2011) (cat.n. 92): ED50 UTM zone 33N 366171/4155834; B138 Fontanarossa (cat.n. 115) : ED50 UTM zone 33N 364788/4161423; A056 Casa Cordova Weg zum Cozzo Menita; ED50 UTM zone 33N 364928/4160481; A002 Fretti (La Turri); ED50 UTM zone 33N 362071/4159696; La Turri (cat.n. 130): ED50 UTM zone 33N 362295/4160150; La Turri 500 m SW; Magazzolo-Tal (zwischen La Turri und Diga Castello) (cat.n. 131): ED50 UTM zone 33N 361101/4160260; B125-B155 Castello; ED50 UTM zone 33N 363061/4157528; Diga Castello (kurz vor) (cat.n. 131): ED50 UTM zone 33N 364928/4160481; C291 Contr. Castello; ED50 UTM zone 33N 360268/4159233; A016 Vallone Vallecaldò; ED50 UTM zone 33N 361796/4160906; A042 Casa Gangi 1: ED50 UTM zone 33N 3595637/4162957; D034 Dilisi (cat.n. 147): ED50 UTM zone 33N 363781/4164678; D020 unterh. Dilisi (cat.n. 147): ED50 UTM zone 33N 363730/4164254; D016 Tinchinella, östlich Magazzolo (cat.n. 142): ED50 UTM zone 33N 362522/4163012; D032 Contr. Paratore (cat.n. 148); A129 Casa Fastuchera; ED50 UTM zone 33N 363942/4157056; D031 westl. Santo S. Quisquina (cat.n. 149): ED50 UTM zone 33N 366010/4164985.

mean expansion of the settlements remained fairly unchanged, rising only slightly from 1.9 to 2.2 hectares in the Hohenstaufen period.

In Gela, when comparing the Arab-Norman and Hohenstaufen sites with those from the Monti Sicani (fig. 12), the lower settlement density in both epochs is confirmed: there were 5 settlement sites in the Arab-Norman and 45 in the Hohenstaufen and subsequent periods.

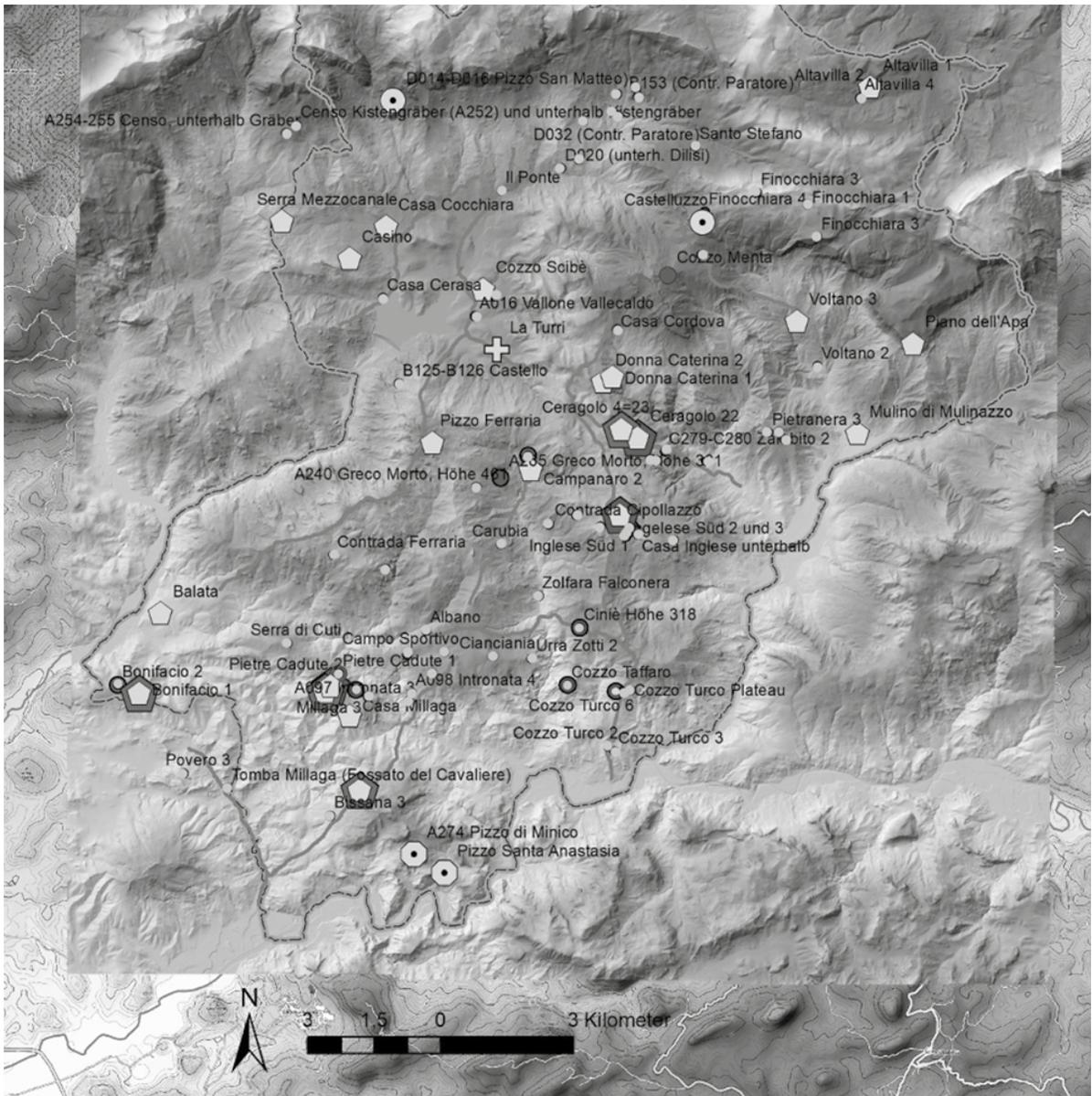
In the Arab-Norman period, the settlements were, on average, 2.3 hectares and therefore slightly larger than in the Monti Sicani sites. In the Hohenstaufen and subsequent epochs they were, on average, 1.2 hectares, which is only half the size of the contemporary settlements in the Monti Sicani. In the Hinterland of Gela, there were 21 sites larger than one hectare⁵⁹ and 24 smaller than one hectare.⁶⁰ Since there were hardly any sporadic sites, it becomes clear that the settlement structure at Gela in the Middle Ages was based on smaller and less articulated units than in the Monti Sicani.

The New Need for Security: Hilltop Settlements and Fortresses

As a new type of settlement in the Monti Sicani, fortified places along the gorge of the lower Platani

⁵⁹ Bergemann 2010: Monte Lungo 1: 9 f. Nr. 2 pl. 1–3; C. San Antonio 1: 19 f. Nr. 12 pl. 1, 11, 1–2; 12; C. San Antonio 3: 22 f. Nr. 14 pl. 1, 11, 5; 13, 2; La Cascinella 1: 26 f. Nr. 22 pl. 1, 16, 1–2; Rabbito: 29–31 Nr. 27 pl. 1, 18, 1–2; 20; Roccazzelle 4: 34 f. Nr. 31 pl. 1, 21, 2; 26, 4; 27; Ponte Carruba 3: 72 f. Nr. 73 pl. 42, 68, 73, 5; Contrada Tenutella 2: 76–79 Nr. 75 pl. 42, 68 77, 2–3; Perciata Süd 1: 97 f. Nr. 94 pl. 42, 96, 4; Santo Nicola 2: 113 – 116 Nr. 112 pl. 130, 111, 2; 114, 3; San Cusumano 3: 120–122 Nr. 117 pl. 118, 1, 3; 119, 120; San Cusumano 6: 124 f. Nr. 120 pl. 118, 1; 119, 120, 121, 1; 130; San Cusumano 8: 126 s. Nr. 122 pl. 118, 3, 119, 124, 130; Torrente Comunelli 1: 128 f. Nr. 123 pl. 125, 1–3, 127, 128, 130; Torrente Comunelli 2: 129 f. Nr. 124 pl. 125, 1–2, 4; 127, 129, 1; 130; Torrente Comunelli 3: 131 f. Nr. 126 pl. 125, 1–2, 5–6; 127, 129, 4; 130; San Pietro H262 Osthang: 177–179 Nr. 180 pl. 145, 163, 164, 5; 169, 3; Suor Marchesa: 193–198 Nr. 193 pl. 170, 3; 172, 181; Piano di Cullura: 189–191 Nr. 191 pl. 170, 7; 172; 174, 2; Monte Milingiana Soprana: 214 – 216 Nr. 212 pl. 183, 188, 4; 191; Monte Saraceno West: 246–248 Nr. 238 pl. 130, 214, 1–8; 217, 218, 219, 1.

⁶⁰ Bergemann 2010: Amato 3/4: 14–16 Nr. 8 pl. 5, 1; 6, 7, 2; Graziola 1: 16 f. Nr. 9 pl. 1, 8, 1; 7, 3; C. San Antonio 2: 21 f. Nr. 13 pl. 1, 11, 1, 3–4; 13, 1; La Cascinella 2: 28 Nr. 28 pl. 1, 16, 4–5; Manfria Höhe 105: 38 f. Nr. 37 pl. 28, 30, 3; 36; Manfria Lo Stallone: 45–49 Nr. 49 pl. 28, 42, 44, 3–6; 46; Manfria, Orlandinigrabung: 41 f. Nr. 41 pl. 28, 32, 38; Costa Rabbito West 1: 81 f. Nr. 78 pl. 42, 84, 2; 85, 1; Monte Perciata Ost: 106–109 Nr. 104 pl. 42, 99, 4–7; Mandra Pagliarazzi West 1: 103 f. Nr. 100 pl. 42, 100, 6, 7; Santo Nicola 1: 111–113 Nr. 111 pl. 130, 109, 110, 111, 1; San Cusumano 1: 118 f. Nr. 115 pl. 118, 1–2; 119, 120, 1–2; 130; San Cusumano 2: 119 s. Nr. 116 pl. 118, 2; 119, 120, 1, 3; Butera, Maria dell’Alto: 137 f. Nr. 133 pl. 130, 131, 6, 8; 134, 1; Fiume di Mallo: 143 – 145 Nr. 146 pl. 130, 135, 1–6; 136; San Pietro Südhang 5: 162–164 Nr. 167 pl. 144, 2–3; 145 – 16; 155, 1; San Pietro Südhang 9: 169–171 Nr. 172 pl. 144, 3–4; 145–146; 150, 7; 156, 3; 158; Suor Marchesa H338: 186–188 Nr. 189 pl. 170, 4; 172; Suor Marchesa H344: 188 f. Nr. 190 pl. 170, 4–5; 174, 4; Milingiana Ost 1: 231 f. Nr. 225 pl. 183, 201, 2; 203; Contrada Castelluccio 7: 266 f. Nr. 259 pl. 223, 224, 6; 230; Sorgente di Castagnelle: 275–282 Nr. 269 pl. 223, 242; Monte Saraceno Ost 3: 249 Nr. 241 pl. 130, 219, 3; Guallarà: 282–284 Nr. 271 pl. 223, 243, 5; 245.



Monti Sicani: Agrigent-Hinterland-Survey

- Fortress
- Sites with combed and painted ceramics (Arab-Norman)
- ⊕ Sites with medieval glazed ceramics (Hohenstaufen and later)

Figure 9 – Monti Sicani: Mapping combed painted and glazed ceramics (by the Author)

valley began to appear: on Pizzo di Minico⁶¹ and Pizzo Santa Anastasia,⁶² as well as on Monte Castelluzzo⁶³ near the highest point of the path connecting the south and north coast of Sicily. Combed roof tiles from all three

sites date from the last quarter of the 5th century⁶⁴ through the 8th century AD. In this way, a late antique or Byzantine dating of these fortified sites becomes clear. They show the increasing need for security from late antiquity. Among the fortified places of the Middle Ages, the Castello della Pietra D’Amico on the edge of the today’s Castello reservoir below Alessandria della

⁶¹ Bergemann 2020: Pizzo di Minico (cat.n. 8 pl. 16–17); Modeo and Cutaia 2013: 102–104 fig. 6–9.

⁶² Bergemann 2020: Pizzo Sant’Anastasia (cat.n. 9 pl. 18); Modeo and Cutaia 2013: 101 f.

⁶³ Bergemann 2020: Monte Castelluzzo (cat.n. 119 pl. 190–191); Maurici (ed.) 2001: 126; Modeo and Cutaia 2013: 102–104, fig. 6–9.

⁶⁴ Arcifa 2010: 108–111, fig. 1–3; Branciforti, Pagano and Rizza 2006: 154 n. 15; Branciforti 2005: 205–207; Malfitana 2018: 337.



Figure 10 – Altavilla: Arch of the Norman Feudum
(by the Author)

Rocca, whose foundation dates back to the 14th century, should also be mentioned.⁶⁵

In the hinterland of Gela, the fortress of Castelluccio di Gela⁶⁶ and the fortification on the hill of ancient Gela – dating to post 1233, when Frederick II founded Terranova di Sicilia – are worth mentioning.⁶⁷ The Castello di Falconara was built in the 14th century.⁶⁸ In contrast, the Castello di Garsigliato in the area

of Mazzarino dates back to the 11th century.⁶⁹ The stronghold of Butera yielded archaeological material back to the 11th century BC, but it may date back until the 8th and 9th centuries.⁷⁰

A new settlement pattern starting from the Middle Ages was the hill-top settlement. Many settlement places retreated to high-lying sites, where settlements had last existed in the Iron Age. In the hinterland of Gela, this is particularly evident in Butera, which has an Iron

⁶⁵ Maurici 2001: 130; Bergemann 2020: cat.n. 133 pl. 210, 2; 211, 1. 3.

⁶⁶ Di Stefano and Cadei (eds.) 1995: 502–515, fig. 1–8; Fiorilla 1989; Fiorilla and Scuto 2001; Maurici 2001: 144.

⁶⁷ Di Stefano and Cadei 1995: 516–527 figs. 1–10.

⁶⁸ Maurici 2001: 141 f.

⁶⁹ Maurici (ed.) 2001: 142 f; Santagati 2010: 130, 132, 136.

⁷⁰ Maurici (ed.) 2001: 138, 142–145; Santagati 2010: 68, 70, 128, 130; Panvini (ed.) 2003.

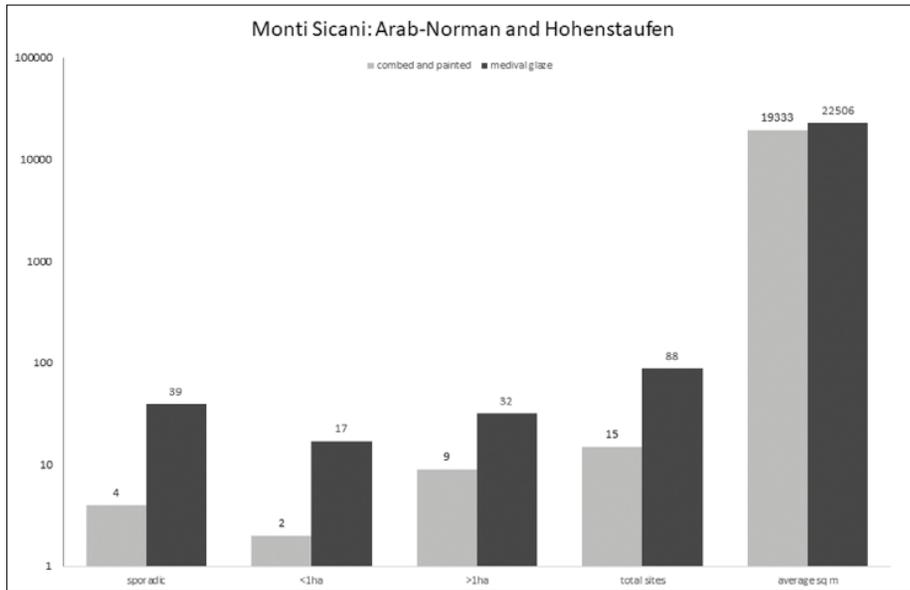


Figure 11 – Monti Sicani: Arab-Norman and Hohenstaufen phases (by the Author)

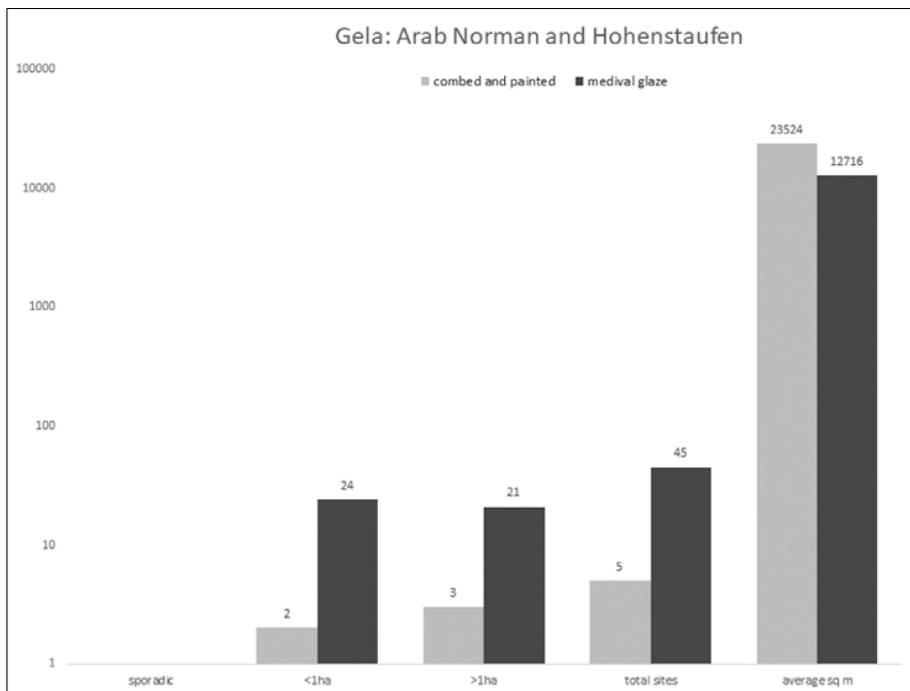


Figure 12 – Gela: Arab-Norman and Hohenstaufen phases (by the Author)

Age and Greek settlement, but an interruption in the Roman phase, and was only established in the Middle Ages.⁷¹ A new high-altitude settlement was Poggio Tondo, located in a valley behind the coastal plain, but without a view of the coast.⁷² In the survey in the Monti Sicani, the same phenomenon appeared in three

places, namely Bonifacio 1,⁷³ Monte Castelluccio⁷⁴ and Lordichella.⁷⁵ In the preceding Roman and late antique phases, in contrast, low-lying settlement areas in flat terrain near farmland were preferred, e.g., Chinesi in the Monti Sicani.⁷⁶

⁷¹ Bergemann 2010: Text 133, 177; 134–136, n. 130 Beil. 37.

⁷² Bergemann 2010: Text 170, 240 f.; cat.n. 232 pl. 209, 5–6; 212; 213, 3.

⁷³ Bergemann 2020: Casa Bonifacio 1 (cat.n. 29 pl. 49–52).

⁷⁴ Bergemann 2020: Monte Castelluccio (cat.n. 16 pl. 21–25).

⁷⁵ Bergemann 2020: Lordichella (cat.n. 91 pl. 143–154).

⁷⁶ Bergemann 2020: Chinesi (cat.n. 92 pl. 155–161).

Conclusion

In the Arab-Norman phase, a lower settlement density is extant in respect to earlier late antique and later medieval times. There are some sites with continuity to the late antique settlement system and some with continuity to the Hohenstaufen period. Numerous new settlements developed on new sites. Since the Arab-Norman period, the Monti Sicani had a tighter settlement system than the surroundings of Gela and Butera. The new need for security led to the return to hill-top settlements. They declined after the Iron Age, while in the Roman period flat areas were preferred. The need for security required a new type of settlement with the rise of fortresses in the Middle Ages. They appeared along the gorge of the Platani River and on the heights of the Monti Sicani along the roads running across the island from the north to the south coast. Fortresses also spread in the hinterland of Gela, responding to a new need for security.

Acknowledgements

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Chapter 12

After the Late Roman Villa of Piazza Armerina: the Islamic Settlement and its Pits

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Introduction: archaeological studies on medieval Sicily and the contribution of the Piazza Armerina excavations

Recently, studies on medieval Sicily have shown a strong interest towards the Islamic phase. The reinterpretation of written sources and archaeological documentation tells us that most of the economic and social phenomena that caused changes to the rural population's ways of life and production in the late medieval age date back to this period. The local rural population was still the majority in Islamic Sicily with respect to North-African immigrants, whose role was not that of becoming a new urban aristocracy or to control the rural territory under the new political-religious order, but rather as a new active population introducing improvements to the lives of such populations.

The most recent studies on ceramics of Islamic Sicily presuppose a strong change, underlining the importance of the cultural integration of the island in *dār al-Islām*. A clear sign of this change is the presence of glazed Raqqada ceramics, imported from the Maghreb or made locally,¹ first by African and then by local potters, but according to the new forms imported from North Africa.² Similar innovations were the new coins circulating throughout *dār al-Islām*, and the production of glazed monetary tokens. Moreover, there were also innovations in agriculture in Islamic Sicily, such as water mills and new forms of cultivation, and in the adhesion to the social and cultural Islamic world as well, regardless of the number of conversions to the new religion.

Our contribution, based on ten years of research on the Islamic and Norman dwelling built on the late-Roman Villa del Casale at Piazza Armerina, aims first to present a totally new vision of the Islamic settlement, taking into account the results of all excavations done

there: by Gino Vinicio Gentili in the 1950s,³ by the Sapienza University of Rome and the Kore University of Enna between 2004 and 2014,⁴ and by the Regional 'Soprintendenza ai Beni Culturali e Ambientali' of Enna in 2013.⁵

All these data have shown a large extension of this settlement (fig. 1) that can be considered the largest excavated Islamic dwelling in inland Sicily.

A well-documented continuity of occupation goes from the late Roman to Byzantine, Islamic and Norman periods. In the late Roman period, the villa, as it was built and decorated in the Constantinian age, was the main inhabited sector. A period of neglect followed around the middle of the 5th century A.D., when large parts of the great building began to fall into disuse and the baths (the western one, already dug by Gino V. Gentili, and the southern one, found in 2009 to the south of the villa) had been reused, probably as the home of *subconductores* and peasants from *fundi* still belonging to the *massa*.⁶

A settlement spread between Contrada Colla and halfway up the Monte Mangone hill belongs to the Byzantine period, while many Byzantine findings come from the villa: glass tokens, coins, ceramics up to 8th century, two tombs on top of the collapsed remains of the *basilica*, two ceramic kilns from the 6th century.⁷ Since the late 5th century, craft activities took place in the transformed southern bath building which, after the mid-6th century, was submerged by alluvial soils from Mount Mangone. The same flood sands covered part of the abandoned villa, such as the *basilica*, the *ambulacrum* and part of the peristyle.⁸

After the 9th century, a period of scarce archaeological evidence, in the 10th-11th centuries the whole area

¹ Aleo Nero 2018: 23; Sacco 2017 for Palermo; for an example found at Piazza Armerina, see below.

² A large part of reflection on Islamization in Sicily has been the chronological redefinition of glazed and non-glazed ceramics, cfr. Ardizzone 2004; Pensabene and Barresi 2014-15.

³ Gentili 1999.

⁴ For a summary and bibliography, see Pensabene 2016.

⁵ Bonanno 2019.

⁶ Pensabene 2016: 255.

⁷ Pensabene 2016: 250-260.

⁸ Alfano, Arrabito and Muratore 2014.

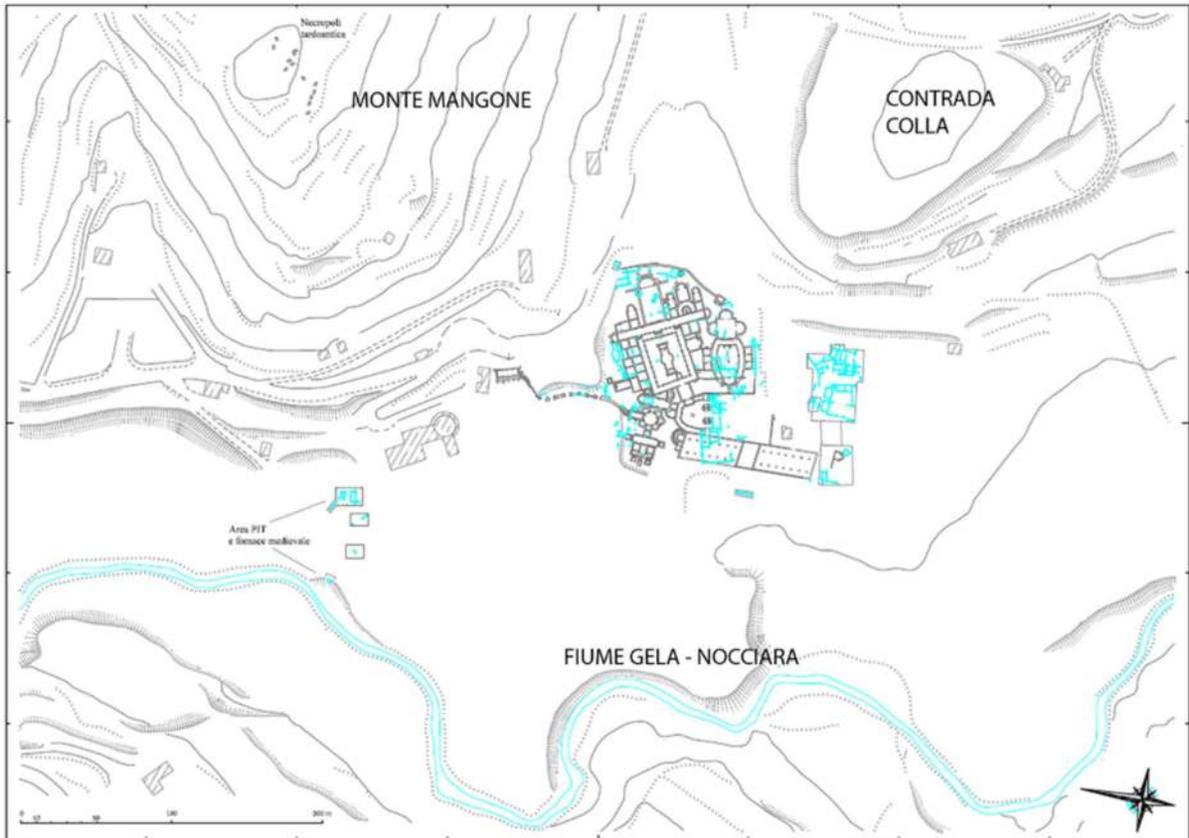


Figure 1 – Piazza Armerina: plan of the extended area of the medieval settlement on and around the late Roman villa (reworked from Pensabene, “Villa del Casale,” fig. 1)

of the Roman villa was occupied by a large Islamic settlement, with walls and ceramics of the Islamic and Norman periods (fig. 2).

Some structures were based upon ancient walls, but others were built anew, like those found to the south of the late Roman building, including the southern bath, inside the ruins of which a ceramic kiln was built in the late Islamic age, while other houses were built to the north of the villa. These sectors could house most of the population, but the central area overlooking it had to be the one on top of the former Byzantine nucleus at ‘Contrada Colla’, which is still unexcavated. Other useful information will be given by the presence of pits/circular silos for the conservation of foodstuffs.

The medieval village built over the Villa del Casale, and the surrounding area to the north and south of the late Roman building, covered an area of at least 5,000 square metres as a whole.⁹ The evidence collected by

⁹ Such a dimension of our settlement puts it within the largest ones in Islamic Sicily, except the towns of Roman and Byzantine origin. However, in many other excavations, the partial excavation of medieval layers does not allow us to assess the dimension of Islamic occupation; at the villa of Gerace, near Barrafranca (Provincia di Enna), for example, where medieval structures appeared on the

G.V. Gentili, basically materials of the medieval period coming from the top layers excavated in the villa area,¹⁰ can be combined with those from the excavation in the southern area since 2004, and in another medieval area to the north of the villa by the Soprintendenza di Enna in 2013.

As we will see, an important contribution to the reconsideration of Gentili’s medieval excavations came from the discovery of about 38 pits and underground cavities that emerged during restoration works in 2007-2012, in excavations made for the creation of a drainage system.¹¹

The Islamic village area of Piazza Armerina: structure and functions

The medieval settlement on the Villa del Casale area was continuously inhabited thanks to its position, close to large extensions of arable land, to the Gela River, a permanent waterway, as well as to many water sources:

villa. The medieval dwellings at Monte Navone, Montagna di Marzo, Russomanno may also have been rather large: cf. Pensabene 2010: 21–28.

¹⁰ Cf. Gentili 1999: 1–2.

¹¹ Gallochio and Gasparini 2010-11: 265–273.

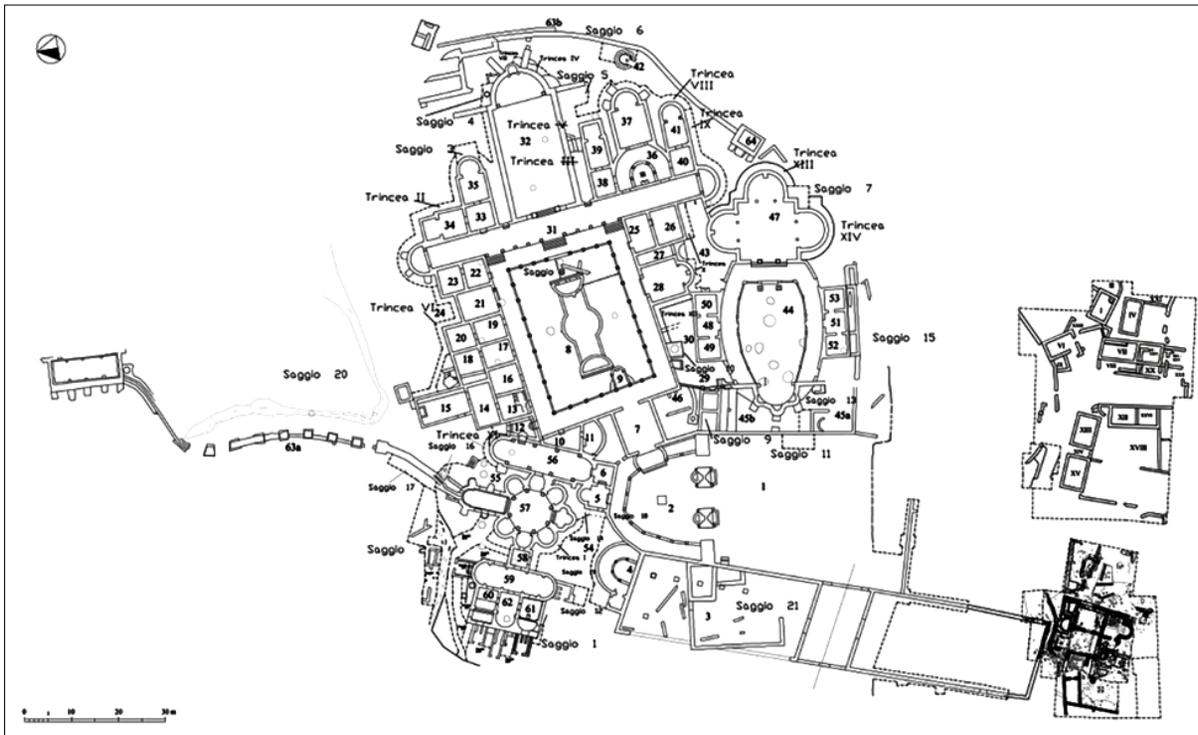


Figure 2 – Piazza Armerina, Villa del Casale, plan of the late antique building, showing the medieval village area and the second late Roman bath to the south (Plan by Giulia Di Dio, Emanuele Gallotta, Enrico Gallochio and Sebastiano Muratore)

favourable conditions for agricultural production and for the transport of agricultural products. Another important advantage was the existence on site of ancient Roman buildings (the Roman villa), constituting an excellent quarry and a base for new constructions.

The medieval village on the site of the Villa del Casale, therefore, can be considered as one of the few sites of this period in Sicily relatively well preserved, but it should be noted that the three large sectors currently visible (one built over the late-Roman villa, one to the north and one to the south of the villa itself) have been excavated at different times and by various archaeologists and show evidence of continuity due to the history of the excavation itself.¹² However, we believe that they originally constituted one settlement, as the new findings along the slopes of the Monte Mangone hill show. Some excavation tests performed there in 2013 by the Soprintendenza of Enna, and in the ‘Colla’ district behind the villa,¹³ found buildings dated from the Byzantine to Norman periods,¹⁴ following the

chronology of the occupation phases of the villa until its definitive abandonment.

Archaeological data show that there were various specializations among the settlement areas.

1. The settlement developing on the villa seems to have been the main residential district in the Islamic period, perhaps equipped with a tower between the apse of the basilica hall and the eastern aqueduct, with a more noble house adjoining the tower, given the preservation of part of its brick paving when floors were generally made of compacted earth.¹⁵

The villa plan after the Gentili excavations (fig. 2) shows new medieval structures mainly in the oval peristyle (*xystus*), or in the open area in front of the entrance triple arch, near the double northern warehouses of the villa.¹⁶ Ancient walls were also used as a base for large medieval constructions: around the basilica apse, the aqueduct wall and the north apse, for example, buttresses were used as sides for a tower. At the western bath, layers between the Byzantine and medieval phases

¹² Soprintendenza per la Sicilia Orientale for the villa, in the years 1950-55; The Sapienza University of Rome for the sector of the town to the south in the years 2004-06, and the southwestern sector in the years 2007-14; Soprintendenza di Enna for the northern sector and Monte Mangone hill in 2013.

¹³ Bonanno and Canzonieri 2016; Bonanno 2019.

¹⁴ Cf. Bonanno 2019: 116–118.

¹⁵ The medieval occupation phases on the remains of the villa have been published in Pensabene 2008; Pensabene 2010: 15–21; Pensabene 2013: 71–89.

¹⁶ Carandini, Ampolo, Pucci and Pensabene 1971: fig. A. There are still some remains of a late medieval farm inside the walls of the northern warehouse: cf. Pensabene 2016: 242–244.

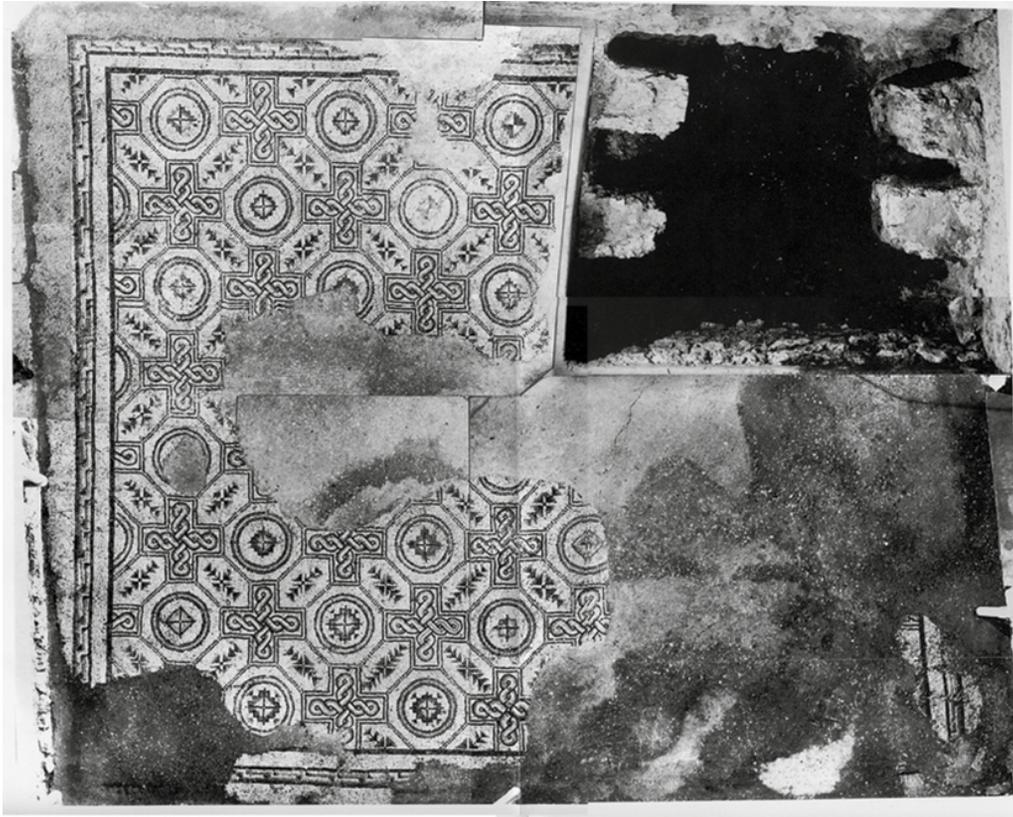


Figure 3 – Piazza Armerina, Villa del Casale, room 13: Byzantine kiln cutting the mosaic floor. From Andrea Carandini, Andreina Ricci, Mariette De Vos, *Filosofiana. La villa romana di Piazza Armerina* (Palermo 1982), foglio XVIII

are missing, according to the descriptions by Gentili: medieval ceramic finds, together with late antique materials, have been reported directly in contact with the floor, which could also have been used in later periods. Structures of the medieval village were seen by Gentili above the collapsed *frigidarium* dome, which almost certainly occurred after the 7th century because it covered the filling of the *natatio* to the north, where many oil lamps had been found, dating between the 5th and the 7th centuries. In the same building, two walls of the Islamic period were built in the so-called ‘*palestra*’ (room with Circus mosaic). In room 13, on the northern side of peristyle, the mosaic floor was cut to insert a ceramic kiln in the Byzantine age¹⁷ (fig. 3). Moreover, three treasures of golden ‘*tari*’ dating back to the first period of the Norman presence in Sicily (1072 - 1130), but with coins mostly dating between 1130 and 1189 that were found in the area to the south of the villa.¹⁸

2. The sector of the town to the south and southeast of the villa in the Islamic period (fig. 4) seems to have been reserved for peasants (see the finding of ploughs and

sickles),¹⁹ and handicraft production. In the medieval settlement, two main and one minor phase can be defined:²⁰ the first, between the 10th and the 11th centuries, was characterized by rectangular houses with an accurate construction technique using double curtain walls made of large river pebbles or elongated blocks, with fragments of Byzantine striated and vacuolated tiles to fill the gaps, filled up with rubble and earthy lime as a binding agent (fig. 5).

The second phase, above the first, probably dated to the 11th – 12th centuries, shows a less regular technique, with walls in sandstone blocks coming from the Villa, with frequent lumps of mortar, again from the Villa, and many fragments of vacuolated tiles tucked in. The last sub-phase is dated to the late 12th – 13th centuries when dry stone walls lean on some of the second phase buildings, most of which were deserted.

There were at least two large domestic complexes consisting of a central courtyard with rooms around it, but without wells for water, it seems; moreover, to the

¹⁷ Randazzo 2019: 346-347.

¹⁸ Gentili 1999: 130-138, tavv. A-G.

¹⁹ Barresi 2006: cat. n. 39. Some bronze surgical instruments from the medieval age were found here: Barresi 2010.

²⁰ Barresi 2008.

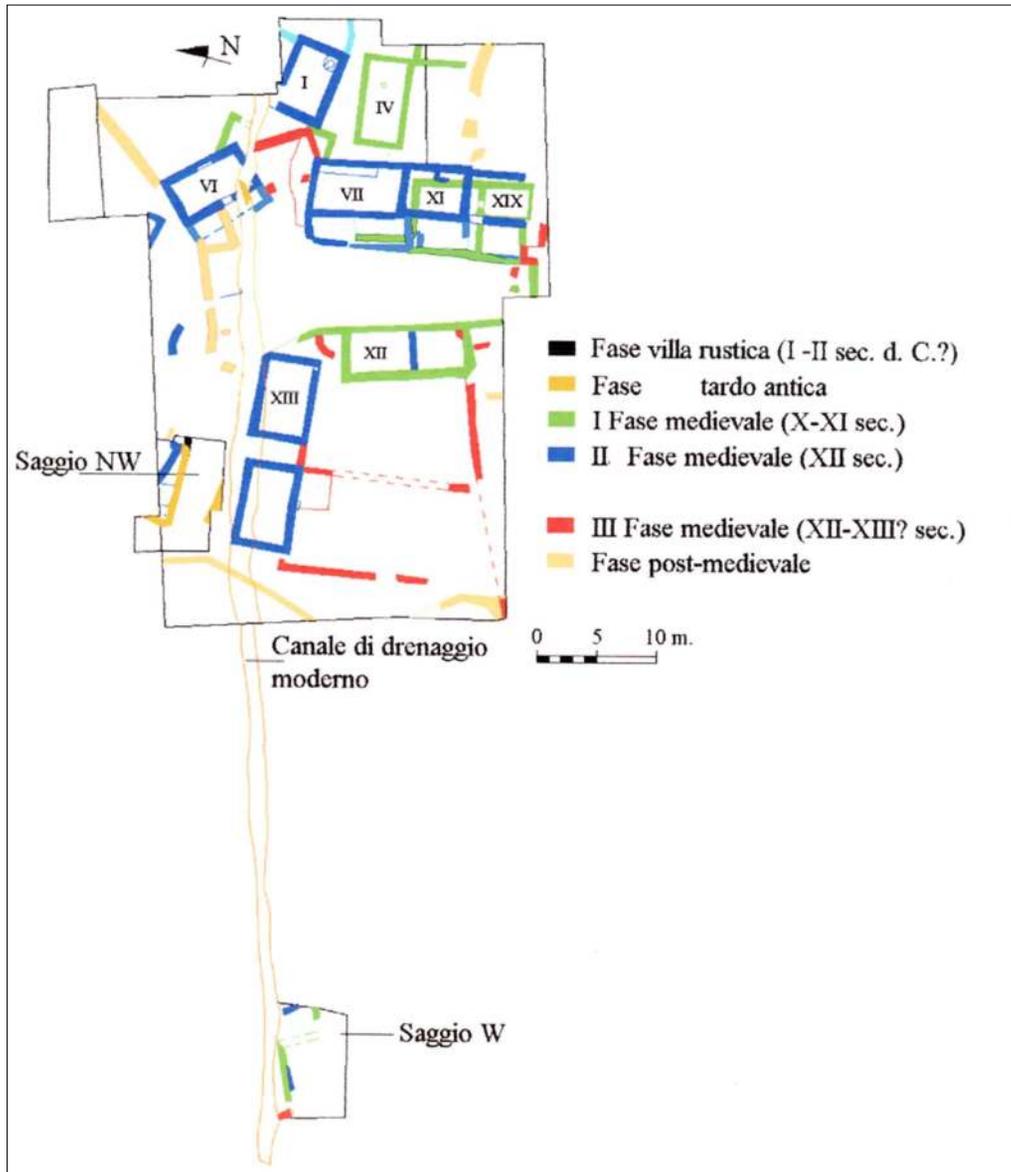


Figure 4 – Piazza Armerina, medieval village to the south of the Roman villa: general plan from excavations 2004 – 2005. From Barresi, “I risultati”, fig. 1

west of this sector, a district destined for craftsmanship has come to light, in particular a ceramic kiln installed in two rooms of the late-antique southern bath building²¹ (fig. 6), and a small furnace for metalworking.²² This complex was built at the end of the Islamic period, but it was completely buried under a new building phase of the 11th–12th centuries, which was abandoned at the end of the 12th century.

3. The area of the town to the north and northeast of the villa, a total area of about 1,600 square meters, was

excavated in 2013 by Carmela Bonanno and Emanuele Canzonieri,²³ finding at least three major phases plus a few secondary phases²⁴ (fig. 7). Phase II was particularly important: it focused on a straight road, running north-south parallel to the river bed, almost 47 m long and 2.89/3.19 m wide, paved with cobblestones, in two successive phases, was part of a roughly orthogonal raster;²⁵ perhaps the road ran above a pre-existing road

²¹ Carloni, Puzzo and Ventura 2014.

²² Alaimo, Gasparini, Maggiore and Pensabene 2010: 41–42; Gasparini, Scarponi and Paternicò 2013: 1290–1291.

²³ Canzonieri 2019: 17.

²⁴ The site was located in 2007, when the outcropping ridges of some structures were excavated: it was not possible, then, to carry out a systematic exploration of the area, which was put off to 2013: Bonanno 2019: 13–15.

²⁵ Canzonieri 2019: 36.



Figure 5 – Piazza Armerina, medieval village to the south of the Roman villa: room IV, Islamic phase, from the northeast (photo by Paolo Barresi)

network.²⁶ Along this road there was the main part of the settlement, composed of rectangular residential rooms around a courtyard,²⁷ paved with calcarenite slabs, where a *cannamele* (cane sugar) production kiln was found.²⁸ Ceramic finds give a chronology between the 10th and 11th centuries, but some walls seem to have been built before the first half of the 10th century.²⁹ In the southwestern corner of a rectangular room there was a silo³⁰ for the probable storage of foodstuffs or grains, probably inserted in an open space accessible from the road.

On the river area there was a ceramic handicraft district.³¹ A ceramic kiln was found halved on the east

bank of the Gela – Nocciara River, some 40 m from the settlement, while a pit full of ceramic kiln waste was found nearby, with entire deformed vessels dating to the end of the 10th – beginning of the 11th centuries. Glazed basin fragments, including three with pseudo-inscriptions in Kufic characters, and fragments of terracotta suspension bars with glaze drops, came from the ceramic dump in the pit, too, confirming the existence of a local glazed production of ceramics, including amphorae, lamps, basins, filter vases.³² From the lowest layers of the road, at the north end, come some glazed ware fragments assigned to the Raqqada ware from the first half of the 10th century.³³ This is one of the largest areas pertaining to an Islamic settlement ever dug in inland Sicily. The abandonment of this area, at the end of the 11th century, could be associated with flood and accumulation layers, sealing the collapsed walls. After this period of abandonment, new buildings with new plans were built on ancient ones in about the second half of the 11th century, lasting until the 13th century, when they were eventually abandoned.

4. Carmela Bonanno and Emanuele Canzonieri were also able to explore the southern slopes of the Monte

²⁶ Canzonieri 2019: 37–39.

²⁷ It is the usual planimetric type of Islamic house, with a quadrangular central courtyard surrounded by elongated rectangular rooms, which was also found in the village excavated in the area south of the villa: Barresi 2008: 150–152.

²⁸ The production of cane sugar in western Sicily is attested in a later period, but with similar types, cfr. Tullio 1997; Canzonieri and Vassallo 2014: 275, Tav. 1/D.

²⁹ On the ceramic materials mainly attested in the layers related to the early Islamic age phase of life, see the most recent acquisitions in Arcifa 2012: 23–25; Ardizzone, D'Angelo, Pezzini and Sacco 2012: 167–172; first Islamic North-African productions: Louhichi 2000.

³⁰ Canzonieri 2019: 19–20.

³¹ In 2008, during the work of settling the margins of the Nocciara stream for the villa car park, a furnace was highlighted, of which only half had been visible in section (the other half had already been sectioned during previous works of settling the course of the same stream). For lack of funds it was not possible to explore the furnace and, therefore, at present, it is not possible to date it (Alaimo, Gasparini, Maggiore and Pensabene 2010: 56–57); however, for the purposes of our research, it is very significant that, in October 2008, during the work to refurbish the Nocciara stream, it was possible to

explore its dump, a short distance from the kiln, where numerous fragments of furnace waste were found, as well as some partially deformed whole forms, datable to the end of the 10th century, which are very similar to those found in the coeval levels of the town dug in 2013 (Canzonieri 2019: 21–22).

³² Similar objects were found also in the area to the south of the villa: Alaimo, Gasparini, Maggiore and Pensabene 2010.

³³ Canzonieri 2019: 41.



Figure 6 – Piazza Armerina, late Roman bath to the south of the Roman villa, from excavations 2009-2014 (plan by Giulia Di Dio and Emanuele Gallotta).

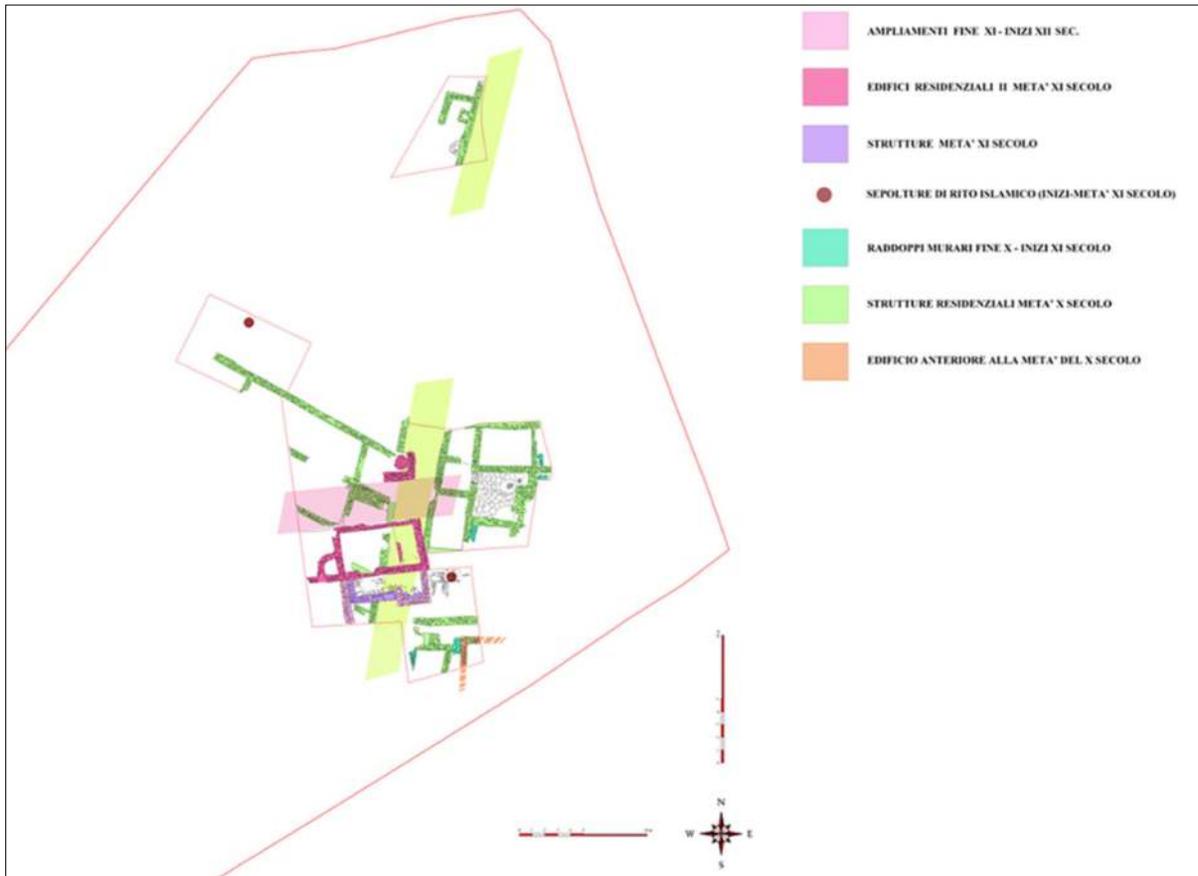


Figure 7 – Piazza Armerina, medieval village to the north of the Roman villa: plan from excavations in 2013 (reworked from Canzonieri, “Scavi”, tav. I)

Mangone hill, to the southeast of the villa, discovering a structure with walls in earth-bonded stones of a presumably rural character (with a buried *dolium* of late Byzantine age), probably related to the Byzantine necropolis on the top of the hill.³⁴ In the ‘Colla’ district, southeast of the villa, a stratigraphic test detected wall structures in two phases: a deeper one of late Byzantine age, and another of the 10th century, with the sporadic presence of worked marble materials, perhaps from the villa.³⁵

While the northern sector of the Islamic town, along the river, finished at the end of the 11th century and was replaced by a new settlement some years after, a different situation is shown in the settlement on the

hillside (‘Colla’ district) and on the southern slopes near Monte Mangone, documented by the excavations of 2013 where it is possible to see on-going settlement from the first phase of construction of the houses to their definitive abandonment (mid-11th-end of 12th or early 13th centuries).³⁶ This late ancient and early medieval settlement seems to have been of a considerable extension, then;³⁷ but while the settlement on the hillside, given its dominant position on the river, probably continued its life, the lower northern settlement along the river came to a sudden end, even though it was replaced by a new Norman building phase. Monte Mangone also had a stone boundary wall, not very visible now, on the northern side, along the top of the plateau, where some remains of buildings could be identified.³⁸ It is not clear yet whether it was a fortification or a retaining wall, but it certainly did distinguish this sector of the town, on the top of the hill, as a place reserved for the élite; in the valley, instead, there was the craft district for productive activities (ceramics, glass, sugar cane) and the dwelling areas.

³⁴ Roughly 100 extensively plundered Byzantine age tombs, covered with stone slabs, were found on the northern slope of Monte Mangone by Paolo Orsi: a flask in ARS (form 180 Hayes), datable perhaps to the 5th century, with stylized animals in relief and a cross, clay reproduction of a metallic model with embedded gems, which was published by Orsi as coming from this necropolis: Gentili 1950: 292–294; Pensabene 2016: 257–258. See Pensabene 2010: 14–15 (plan of one of the tombs); Alfano, Arrabito and Muratore 2014, with the publication of a fragmentary Byzantine sepulchral inscription on a covering slab.

³⁵ Bonanno and Canzonieri 2016.

³⁶ Canzonieri 2019: 32–33.

³⁷ Bonanno 2019: 121.

³⁸ Canzonieri 2019: 33–34, figs. 27, 36.



Figure 8 – Piazza Armerina, Villa del Casale, plan of the late antique building showing the location of medieval pits (reworked from Gallochio, Gasparini, “Nuovi contesti,” fig. 1)

After the conquest of Sicily, the Normans probably took the place of the Islamic élite, but we cannot say whether all the Islamic population was driven away, replaced by new immigrants, or whether some did actually remain. The persisting building methods seem to demonstrate that the same human groups living there before the conquest did, in fact, remain.

Medieval age pits in the Roman villa: data from osteological and carpological findings

During recent restoration work on the Roman villa (2008-2012), excavations were carried out on its outer perimeter and in some open-air areas inside, finding 38 circular pits (fig. 8), on average 1-1.20 m in diameter.³⁹

A small number of them could be explained as wells, because they reach the deep groundwater level below the villa, 3-4 metres below the surface; but others, being

only between 1-2 m deep, could have been deposits for foodstuffs, mainly those in the xystus area (fig. 9), where none of them reaches the level of underground water and they are 2 m deep at most⁴⁰ (fig. 10). Some of those pits were covered internally with stones, others with clay, but the upper part of them is always lost, having been carried away during the Gentili excavation. In all of them, a filling of clay-sandy matrix was found, mixed with abundant ceramics, tile, and osteological fragments, generally datable between the end of the 10th and the beginning of the 11th centuries and up to the early 12th century,⁴¹ at the latest; see also the fragments of Byzantine imported *sgraffito* ware which were found in well n. 17.⁴²

The southern area of the settlement, outside of the villa, lacked deep water wells like the xystus area inside the villa; in the artisanal zone, where a ceramic kiln had been built in the 10th – 11th centuries inside the

³⁹ Gallochio and Gasparini 2010-11: 264–269. Some of them had been already excavated: in 1950 Gino Vinicio Gentili, found a pit in each of three rooms facing to the north side of the peristyle (Gentili 1999: 99), and in 1970, Andrea Carandini and his team excavated another pit in the peristyle area (Carandini, Ampolo, Pucci and Pensabene 1971: 165–167).

⁴⁰ Gallochio and Gasparini 2010-11: 264.

⁴¹ A hemispherical fragmentary glazed basin (36 cm in diameter), painted with brown, green and yellow ribbons, belongs to one of the most common forms in medieval Sicily, dated between the 11th and 12th centuries (Gallochio and Gasparini 2010-11).

⁴² Gallochio and Gasparini 2010-11: 273, 12th century.



Figure 9 – Piazza Armerina, Villa del Casale: the xystus area seen from above on the north, during the excavation in 2008, showing the medieval pits (photo by Enrico Gallochio)

abandoned hypocaust of the southern bath of the villa, eight circular pits were found around the southern bath building, between 1 and 2 m deep, ascribed to the 10th – 11th century phase by ceramics marking their abandonment.⁴³ Such pits had no inner wall covering, but they were dug into the ground, again like those in the xystus area, according to a practice well-known in the Muslim world.

Regarding the filling of these pits, biological analysis was carried out, first (2005-2006) by the Institute of Restoration of the Region of Sicily, with the collection of vegetable macro-remains, especially including seeds, and later (2009-2010) by the Universities of Modena and Reggio Emilia, with the taking of soil samples to calculate their pollen content in order to identify the plant species used in the land cultures of the medieval town. These samples were taken in the medieval village areas south of the villa, and in some of the medieval pits



Figure 10 – Piazza Armerina, Villa del Casale, xystus area: a pit after excavation (photo by Enrico Gallochio)

⁴³ The glazed carinated cups or basins have yellow engobe, brown and green decoration with phytomorphic motifs, spread directly on the engobe: Alaimo, Gasparini, Maggiore and Pensabene 2010: 47.

inside the perimeter of the villa: they therefore can tell us about the food practices of the resident population, perhaps even of the ornamental plants in pots.

The Laboratory of Bioarchaeological Investigations of the Restoration Centre of the Region of Sicily studied some carpological remains from the first phase (10th – 11th centuries) of room XXVI in the medieval village to the south of the villa. They especially observed the remains of caryopses of *hordeum vulgare* (barley), common wheat and spelt, as well as various legume seeds: above all peas, but also vetch, broad beans, chickling vetch and lentils, preserved in a small deposit dug in the earth, probably for conservation.⁴⁴

The Universities of Modena and Reggio Emilia⁴⁵ took 40 soil samples for the identification of pollens, for carpological analysis concerning the medieval and post-medieval phases. Only four of those samples can be related with certainty to the Islamic phase of the 10th-11th centuries, while 18 were linked to the Norman phase of the late 11th-12th centuries. This kind of analysis demonstrated the presence of wood trees (ash, pine, willow, alder, tamerice, juniper), Mediterranean plants like grapevine, graminaceae, olive trees, herbs or vegetables (betatype, chicory, spinach, plantain, cauliflower) and legumes (beans, carobs, chickpeas, lentils, fava beans): all are types of plants still existing in this area, with the exception of papyrus (attested in the Norman period only), possibly introduced from Egypt. These carpological remains show the consumption in the Islamic and Norman village of common wheat, spelt and legumes, but also grapes.⁴⁶

Grape pollen is absent, however, in samples from the pits inside the villa.⁴⁷ Pollen from olives, walnuts and chestnuts from these pits should show a tendency to use the land surrounding the built-up area for sheep farming and olive growing, not for the extensive cultivation of cereals.⁴⁸ It should be noted that wheat and spelt, which have different periods of sowing and harvesting, could have been residues of stocks for consumption. They should therefore be seen mainly in the context of local food needs, not necessarily as a testimony of cereal growing as the main genus cultivated in the agricultural territory depending on the Villa del Casale.

However, cereal cultivation in Sicily would not seem to have been subject to downsizing during the Middle Ages, as happened in other areas of Italy during the same period.⁴⁹ The Arab geographer al-Idrīsī, writing in

the time of King Roger II Altavilla, observed that Piazza, then called *Iblāṣa*, controlled ‘a vast countryside, with sowing lands’.⁵⁰

As for animal bones, Rossana Scavone, who analysed all 1418 osteological fragments from the excavation, was able to identify a prevailing presence of ovine and caprine animals, with 1207 bone fragments, followed by horses, cattle, pigs, cats and dogs, and some fowl, ducks, geese and pigeons. The low number of pig bone fragments reveals little interest in pork meat (which may have been related to Islamic food practices). The slaughter took place on site; cattle were killed by beheading, and they were slaughtered mostly in adult and old age, probably because they were used for agricultural chores as young animals.⁵¹ Almost one-quarter (402) of the animal bone fragments, mostly ovine and caprine animals, comes from the villa pits and wells. Inside a deep well, to the north of the villa’s western bath building, a skeleton of a stallion between 5 and 7 years of age was found: its lumbar vertebrae showed pathological signs, perhaps caused by plough pulling. At the bottom of another well, behind the three-apsed room of the villa, cut in the sandy bank, an almost complete skeleton of a young man was found, together with fragments of 12th-century ceramics.⁵²

Wells, pits or granaries?

To sum up the central issue, while the deepest pits can be certainly considered as water wells, spread throughout the dwelling area to arrive at the underground water level, mainly near the villa peristyle following the natural ground slope along an east – west line,⁵³ the shallower pits, always without inner revetment, that could not have given water, still remain an unsolved problem: one has to think of a different use for them. The analysis of materials used as a filling inside the pits, seen above, could persuade us to introduce a new hypothesis about the character of these pits: they could have been simply used for dumping waste, as such ‘dump pits’ were often dug near houses in medieval settlements.⁵⁴

However, even if this explanation cannot be excluded, it is not plausible for two reasons. Firstly, animal bones usually were given to dogs or recycled, not buried in

⁴⁴ Terranova and Pensabene 2010: 77–78.

⁴⁵ Mercuri and Montecchi 2018.

⁴⁶ Terranova and Pensabene 2010: 77.

⁴⁷ Mercuri and Montecchi 2018: 12.

⁴⁸ Mercuri and Montecchi 2018: 10.

⁴⁹ Montanari 2008.

⁵⁰ Amari 1880: 102.

⁵¹ Scavone 2019.

⁵² Gallochio and Gasparini 2010-11: 268.

⁵³ Gallochio and Gasparini 2010-11: 266.

⁵⁴ The pit published by Carandini, Ampolo, Pucci and Pensabene 1971: 165, for example, had been explained as a dump for the waste of the ceramic kiln, attributed to the Islamic age, in the western room of the north side of the peristyle. This kiln, though, is now dated to the Byzantine period (Randazzo 2019: 346), and it seems more probable that the pit, near the east side of peristyle, was instead dug for another aim, even though it was later filled mostly with ceramic dump material of the 10th – 11th centuries.

such large numbers; secondly, digging those pits, relatively shallow perhaps but large enough for a man to stand inside, would have taken a long time and a lot of work. It is unlikely that they would have been used simply to throw away rubbish.

The more plausible explanation is, rather, that these pits were used as anaerobic grain stores.⁵⁵ Recently, two contributions about grain store facilities in medieval Sicily⁵⁶ have underlined how the use of grain conservation in underground pits had come to Sicily from the Maghreb already in the Byzantine age, and in some cases when the bonds with Rome were already loosening, before becoming more widespread in the Islamic and Norman periods. In the Byzantine age, the use of pithoi interred in private houses prevailed,⁵⁷ while in the Islamic age it seems that there were larger, communally owned pits dug in two main forms: cylindrical (found at Milazzo and Piazza Armerina) and bell-shape, being narrow on the top and broad at the bottom, like the Maghreb examples⁵⁸ (at Jato valley and elsewhere).

In the late 13th century, a written source described the division of the rural village (*casale*) of Milocca, near Agrigento, into two parts, except for 'the place where the foodstuff pits are dug' (*loco ubi consuetum est facere fossas*), which remained communal: it seems, therefore, that every inhabitant of the village could dig a pit there to preserve his grain stock.⁵⁹ In the village around the castle of Milazzo, near Messina, a group of pits dug in the ground, dated to the end of the 12th century, and interpreted as grain silos, shows similarity with those at Piazza Armerina, on the basis of their cylindrical shape, and dimensions of 1 m in diameter and 1.5 m in depth.⁶⁰

If, therefore, the shallower pits at the medieval settlement at Villa del Casale can be understood as food storage cavities, they seem to be numerous in all sectors of the settlement: the area of the villa, the southern and the northern parts,⁶¹ which is a significant factor: since the peasant communities of Sicily were collectively subject to taxation on wheat, both in the Islamic and Norman periods, a similar placement of storage pits could correspond to the need for control among the peasant families of the same community, or as a sign

of strengthened control over peasants by owners or administrators.

Alessandra Molinari has recently observed that systems for grain storage constitute a very promising line of research in the study of the medieval rural world, and the differences in food pit construction, or in the form of their digging (in the earth or rock, bell-shaped or cylindrical), or their location (on the dwelling site or in a different place), can provide useful indications for understanding local methods in storing surplus farming production.⁶² In Islamic Andalusia (Spain), some have tried to reconstruct terracotta pithoi inside some of the shallower pits used for conservation of foodstuffs.⁶³

The operation of filling in those pits and wells can be dated after the end of the 12th century, maybe in relation to an event that brought a sudden abandonment of the area. This event may have had a partially violent character, inasmuch as the skeletons of a horse and of an adult man found in two of the deepest pits (see above) can indeed be considered as acts carried out on purpose to poison the water and drive away the population.⁶⁴ A different explanation has been proposed, however, on the basis of a comparison with a similar situation in medieval Spain: the deposition of animal and human remains has been seen as accidental, considering all the pits as grain silos no longer in use, then to be filled as quickly as possible with any kind of material.⁶⁵ The deepest pits at Piazza certainly seem to have been wells, reaching, as they did, the underground water: definitely not, therefore, to be taken for simple cavities to fill. Even in the case of the other, shallower pits, as pointed out above, there is a noteworthy concentration of ceramics dating to the 10th – 11th centuries that prevents us from seeing those fillings as occurrences taking place over a long time, but rather as having taken place rapidly due to some important event.

Conclusions

The problem of continuity between the end of the Byzantine period and the beginning of the Islamic period again arises. While until recent years it was believed that the Byzantine settlement on the villa did not exceed the 7th century, today we can say, according to the discovery of some fragments of 'Rocchicella' ware in the southern area, that this settlement continued, though in reduced forms, until the 8th – 9th centuries.⁶⁶

⁵⁵ Closed pits partially filled with grain produced an inner anaerobic environment that prevented both the germination and the presence of parasites: Alfano and D'Amico 2016: 46.

⁵⁶ Arcifa 2008; Alfano and D'Amico 2016.

⁵⁷ See the Byzantine house in the 'saggio 3' at 'Monte Mangone' hill: Bonanno 2019: 116–117, fig. 6, tav. IX b.

⁵⁸ Arcifa 2008: 51, for the shape of grain pits in the Maghreb; Alfano and D'Amico 2016: 49–57, with the examples of the Jato valley.

⁵⁹ *Facere fossa et victualia reponere*: Collura 1960: 234–238, n. 103; cf. Arcifa 2008: 48.

⁶⁰ Arcifa 2008: 49.

⁶¹ See Canzonieri 2019: 19–20.

⁶² Molinari 2015: 205.

⁶³ Malalana Ureña, Marin de Pablos and Barroso 2013. This model, or the use of almost perishable containers, could perhaps be hypothesized also at the Islamic settlement on the villa of Piazza Armerina.

⁶⁴ Gallochio and Gasparini 2010–11: 268, who also mentions one of the pits dug by Gentili 1999: 236–237, where he had found some coins of King William II Altavilla, dated to 1169–1189.

⁶⁵ Alfano and D'Amico 2016: 58.

⁶⁶ Pensabene, Alfano, Carloni and Ventura 2014: 307.

The above-mentioned excavations to the north of the Roman villa show that the Islamic settlement probably began some years after the Muslim conquest of Enna (859 AD), even though, until now, archaeological findings do demonstrate an Islamic presence only since the beginning of the 10th century.

The ruins of the Roman villa and of the Byzantine settlement were presumably covered, then, by landslides and floods from the slopes of the nearby Monte Mangone. These alluvial soils reached in some points 5 m in height, mainly at the foot of the hill, to the east. The level of Islamic settlement is preserved in an almost unexcavated sector between the north aqueduct and the road at the foot of Monte Mangone, where coins and glazed tokens dating to the late 10th century have been found. The problem of how the villa was then occupied still, however, remains.

A consolidated tradition of studies acknowledges the medieval settlement built on the late Roman villa of Piazza Armerina as the place of the Norman site called *Platia*, *Placia* or *Iblāṭsa*, destroyed in 1161 by William I Altavilla to punish the ‘Lombard’ rebels living there.⁶⁷ The remains of the medieval settlement on the villa were then identified with the ‘Lombard’ town of *Placia*, while only in 1163 could the new town of Piazza (Armerina) be rebuilt in the current location. In this view, a small village of Byzantine age could have been called by the hypothetical name of *Palātia*, from the remains of the villa on which it stood. In the Islamic age, the name of the village, now a small town (*ḥiṣn*), could have become *Iblāṭsa*, as it is mentioned before 1142 by the Arab writer al-Idrīsī,⁶⁸ and with the name *Placia* it could have become the ‘*nobilissimum oppidum Lombardorum*’ (‘noblest town of the Lombard’) known thanks to Hugo Falcandus.

The often-claimed hypothesis that the medieval Villa settlement should be considered a Muslim village (*raḥl*), later destroyed by ‘Lombard’ rebels, is not supported by the complete lack of evidence suggesting violent destruction. The lack of inscriptions also prevents us from ascribing the inhabitants to Islamic or Norman culture, while the low number of pig bones, in comparison to the ovine and caprine animal bones observed in excavations (see above), is not necessarily to be connected to a difference of culture, but simply, perhaps, to economic and practical reasons.

According to Gentili, the abandonment layers of Norman age in the Roman villa are characterized by collapses of walls and fragments of tiles and ceramics contemporary to the collapses; but this abandonment can well be dated to the years of King William II Altavilla

(1166-1189), thanks to three coin hoards found by Gentili near the villa, including mainly golden coins of William II. Copper coins of William II were also found in the collapsed layers of the latest houses of the settlement to the south of the Roman villa. The abandonment of the medieval settlement could also be attributed to a depopulation throughout the entire region as amply recorded in Sicily at the end of the 12th century, due to demographic depression and an economic policy that favoured overseas trade.⁶⁹

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⁶⁷ Siragusa 1897.

⁶⁸ Amari 1880: 102.

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Chapter 13

Etna's Northwestern Slopes between Late Antiquity and the Middle Ages

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*In loving memory of Prof. Mariarita Sgarlata

... through the ancient and recent lava flows we return into the desert over which Etna looms alone and naked and then the plain of the Duchy, where the three tributaries of the Simeto rise – Martello, Cuté and Saraceno – and the desolate mountains with the shadows of the clouds running over them. In the foothills of the mountains you can see tiny, the *pagliari*, small cone-shaped constructions of straw, each with a low door in which the peasants of the mountain live randomly. We descend quickly to the Castello di Maniace, the castle of Admiral Nelson and his heirs. There is a very old church with a Byzantine Madonna, a courtyard with stone walls reminiscent of a barracks and prison ...

(from *Words Are Stones*, Carlo Levi, 1955)

Introduction

Over the course of recent years landscape has returned to be one of the central themes of archaeological research. The significant increase in 'environmental archaeology' research is to be put in relation with the development of disciplines such as archaeobotanics and paleoecology as well as the extraordinary accessibility of low-cost geomatic research techniques.¹ Given the lack of agreement on the founding characteristics of this discipline, the many studies carried out in Italy too have produced very varied results since their basic presuppositions were (and are) different.

Following several decades during which the call of the city and its archaeological problems was very strong and appealing, above all for medieval and post-classical archaeology, there has been substantial academic production on the topic of marginality. The many and recent invitations to practice an 'archaeology of complexity',² deriving directly from the spirit of Tiziano Mannoni's global archaeology,³ should be read as an attempt to move beyond a site-centric and chronologically fragmented archaeology, pushing, instead, towards an archaeology capable of analysing and reading all the possible traces of the presence (or absence) of mankind. The topic of marginality, therefore, has become central to the present-day academic debate; considering marginal territories with the objective of reconstructing the complexity

of the ancient landscape also means analysing in-depth and, perhaps above all, analysing mountain areas, places traditionally in the realm of prehistoric and protohistoric studies. As a consequence, academic bibliographies on high altitude areas have, in recent years, become considerably enriched,⁴ demonstrating, in this case too, a variety of possible approaches: from wide-ranging research, present above all in the European context,⁵ to studies centred on the analysis of very chronologically precise contexts and moments.⁶

The work that we present here falls under this last category, although with some important specificities. The object of this study is, indeed, the northwestern slopes of Etna, and in particular a small portion of the territory that sits between the towns of Bronte, Maletto and Maniace (fig. 1).

There is no doubt that modern perceptions and the current economic situation contribute to altering our perception of the past; the risk, indeed, consists in believing that, in the wake of the antinomy between internal/external, mountain/sea, this area has always been 'marginal', especially with regard to the Sicilian coastal areas. This view pays the price of a fundamental error since the very concept of marginality is, naturally,

¹ Gennaro, Candiano, Fargione, Mussumeci and Mangiameli 2019.

² Volpe and Goffredo 2014.

³ Mannoni 1997.

⁴ For the post-classical era, see: Stagno and Montanari 2015.

⁵ Tzorzis and Delestre 2010. See also the results of the International Workshop on Landscape Archaeology of European Mountain Areas: Tarragona 2008, Toulouse 2009, Borzonasca 2011. See also: Galop and Catto 2014.

⁶ For examples of high-quality works that follow this approach, see: Magnani 2013. See, in general: Brogiolo, Angelucci, Colecchia and Remondino 2011.

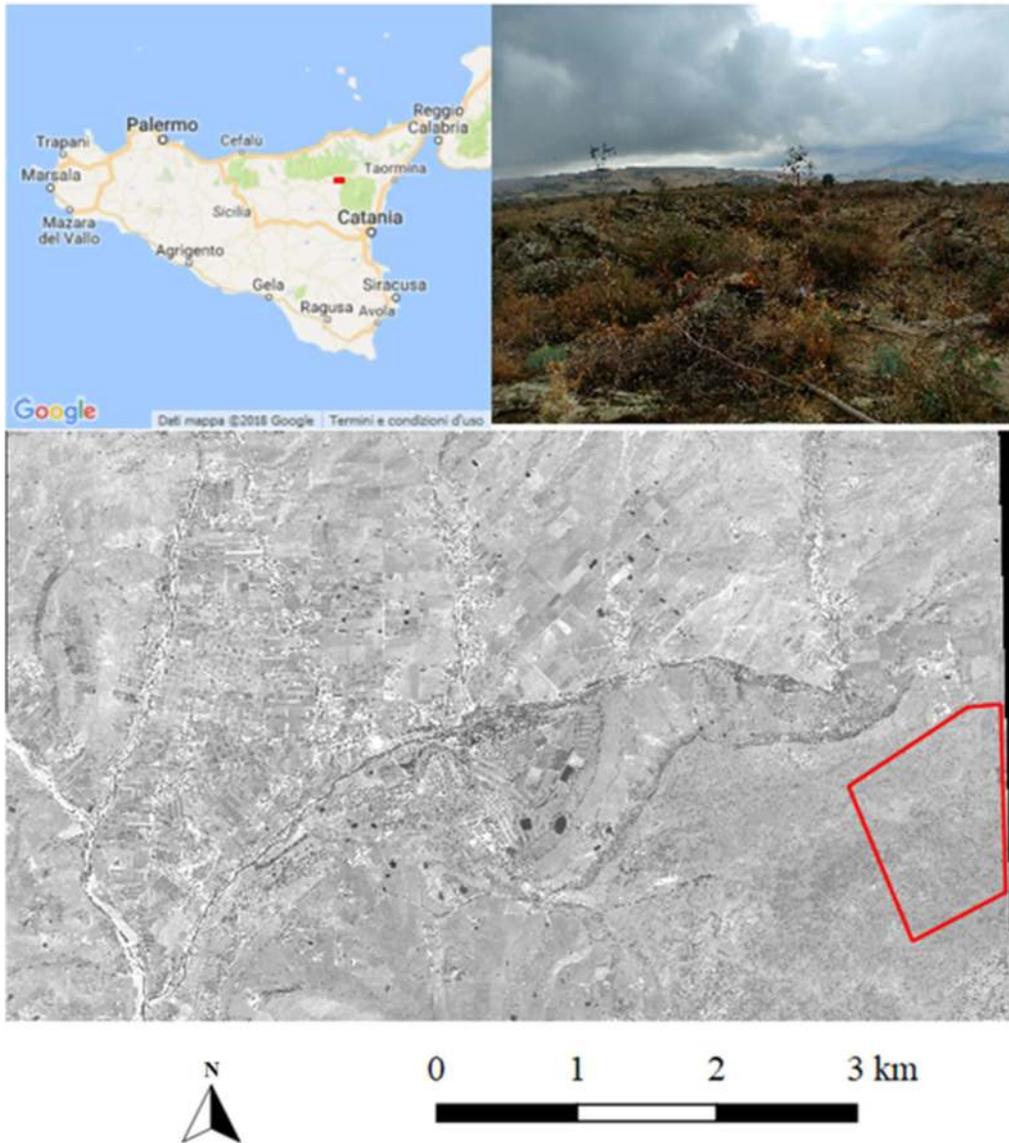


Figure 1 – Location map of the study area: Sicily, Etna’s western flank. On the right, in the box: Santa Venera, Balze Soprane and Balze Sottane districts (photo by the Author)

a child of its time and, in particular, of the dominant economic model in any given period. All this is above and beyond the perception of mountain sites as marginal places, which was already inherent to Latin culture,⁷

Etna’s volcanic landscape stands out due to its uniqueness, the product of the co-existence of highly symbolic elements and geomorphological characteristics, all factors that have naturally contributed to making Etna a UNESCO site since June 2013.⁸ Our intention is twofold, because the objective

is to combine methodological innovation, specifically the identification of new research strategies thought up precisely for this special territory, with a historical reading of the landscape aimed at understanding the most significant changes experienced between late antiquity and the medieval period on the northwestern slopes. This ambitious objective can only be reached through dialogue between various types of data (archaeological, geological, historical, geographical, climatic) that come from research devised and

best-studied and monitored volcanoes in the world, and continues to influence volcanology, geophysics and other earth science disciplines. Mount Etna’s notoriety, scientific importance, and cultural and educational value are of global significance’.

⁷ Tarpin 2015.

⁸ The scientific committee describes ‘Mount Etna (as) one of the

developed with differing timescales and means. It is clear how, at the moment, the archaeological evidence is still limited, being the product of limited systematic excavations and occasional discoveries, and that such evidence is, unfortunately, in jeopardy due to recent territorial management policies. Despite these evident difficulties, we hope, albeit in light of the limitations in this case, that our work can form a solid basis for wide-ranging future research.

This long introduction seemed necessary because we feel it is important to outline from the outset the limits, objectives and methodology of our research. In the first part of the work, through an approach influenced by the most recent theoretical developments deriving from post-processing, we will analyse characteristics and peculiarities of Etna's volcanic landscape; subsequently, we will look at some problems related to remote sensing techniques and instruments applicable in this context. Then we will present the true archaeological data coming from the area that is the object of our research and we will make some final considerations.

Etna's volcanic landscape: its perception in time and space

Although we can certainly state that the genesis of archaeology as a modern discipline is strictly connected with volcanic landscapes,⁹ it is only in recent decades that we have witnessed a paradigm shift in lines of research. Indeed, the archaeologists' gaze has often been limited to seeing, in the wake of the famous examples of Pompei and Thira, the volcano as a destructive agent able to provide, through its terrible eruptions, impressive and precise chronological indications. Furthermore, this destruction contributed to sealing the archaeological contexts involved, guaranteeing extraordinary and otherwise unachievable levels of conservation for the archaeological artefacts.

The relationship between volcanism and archaeology is, in truth, more complex and covers a wide spectrum of academic and scientific knowledge, from ethnology to philosophy to geo-mythology.¹⁰ The volcano, after all, possesses a multi-dimensionality that simultaneously exalts a material dimension, made up of explosions, ash, basalt and volcanic rock also used as building material, together with an immaterial dimension, in which the volcano sublimates itself, becoming not only the protagonist of mythical stories and legends but also an actor able to exercise influence on the economic and socio-cultural context it affects. Thus, according to Simonides,¹¹ Etna, in its double guise as mountain and divine being, was the arbiter of the conflict between

Demeter and Hephaestus.¹² It is evident that reading the volcanic archaeological landscape in a binary and dichotomic manner is a sterile process, but, at the same time, it is precisely the ash that is deposited on the foothills and on the Plain of Catania that is the agent that renders the soil fertile. The phenomenon of the co-presence of opposites is well exemplified by the disquieting coupling between fire and snow, a very frequent contrast on Etna and which has provided poetic inspiration for many writers.

The continuous shaping of the physical landscape and the inexorable flow of time are further fundamental factors in an attempt at a historical-archaeological reconstruction of the volcanic landscape, a landscape where the lines of nature and the lines of man appear completely inextricable and are often superimposed. The most striking example of this is provided by the numerous lava flow caves which represent, at one and the same time, a physical and mental space. They have been inhabited since prehistory and up until just a few decades ago were also used as shelters by shepherds and peasants; contemporaneously, these rocky caves have also inspired many myths,¹³ from the celebrated episode of Odysseus in Polyphemus's grotto to the many apparitions of demons and saints in the Christian tradition.

Naturally, archaeological documentation alone cannot answer all of our questions and provide us with all the evidence we need; as compensation for this, the abundant literary tradition centred on Etna can come to our aid, a tradition that provides many points of interest that we might define as anthropological, if not ethnographical and didascalical.¹⁴ From this point of view the material evidence acquires a phenomenological (or post-phenomenological) dimension, integrating itself with archaeological theory and the physicality of the archaeological evidence itself. After all, especially in the American context, within the plentiful academic literature dedicated to the study of natural catastrophes of the past and the present, the theme of vulnerability¹⁵ and of the capacity of local populations for resilience in the face of the destruction that accompanies great volcanic events, often preceded or accompanied by earthquakes and/or tsunamis, has received much attention. In this perspective, the historical and archaeological documentation can be used almost as a dataset for predictive models, providing useful elements drawn from the past in order to develop plans and solutions usable in our times. At the same time, however, as has already been

⁹ Harris 2000.

¹⁰ Vitaliano 2007: 1–7.

¹¹ Schol. Theokr. 1, 65/66a.

¹² Caruso 2007.

¹³ An overall vision is in: Santi 1999.

¹⁴ Regarding the *Pii Fratres* legend, see: Giampiccolo 2010.

¹⁵ A wide-ranging bibliography is in: Cashman and Giordano 2008: 325–329.

underlined by Grattan and Torrence,¹⁶ it is a good idea not to fall into determinism by giving rise to dubious, almost automatic correlations between destructive events and changes in the structure of human societies. In this sense, analysis of still-extant oral traditions or the complex mythology that has the volcano at its heart, be it the subject or the place of the action, acquires yet more importance in the complex historical reconstruction. The volcano often awakes suddenly, and it is not rare for the phenomena linked to it to expand themselves in just a few hours or a few days. For this reason, preserving the memory of past eruptions through the re-proposal of myths and legends or of simple oral tales can be vital. Without having to arrive at the almost paradoxical case, already cited by Blong¹⁷ and picked up on by Grattan and Torrence, in which the dormant period had been so long that the inhabitants had forgotten the volcanic nature of the mountain, there are many and very significant similar cases that can be deduced from literary sources, even regarding Etna. The great eruption of March–April 1536,¹⁸ with intense simultaneous activity on all the slopes, caused serious damage and destruction even in the Taormina and Calatabiano areas, while the ash fell over much of Sicily, in Calabria as far as Cosenza, even reaching Crete (Candia), and truly terrified the inhabitants of Etna's hamlets and the city of Catania itself. This happened because almost forty years had passed since any previous eruption and almost a century since a more serious one: the loss of historical or direct memory, clearly perceived in the written sources of the time, strongly exacerbated the population's sense of terror and vulnerability. Countermeasures were limited to solemn processions, led by the veil of Saint Agatha and organized very quickly – a clear sign of the perception of the imminent danger represented by the lava flow. Furthermore, the lack of familiarity with the volcano's activity also complicated the work of the chroniclers of the time, forcing them to invent a new language and to use similes taken from features and moments of daily life to describe the event; to be specific, the most appropriate, albeit relatively banal, comparison was that established between molten metal and the progress of the incandescent lava,¹⁹ although there was also no lack of reference to the explosions caused by powerful artillery fire to describe the strong explosions that accompanied the eruption, strong enough to disturb the population's conversations. Perception of the exceptional nature of the event was not limited

exclusively to the reporters' lexical difficulties, but also involved a precise understanding of the volcanic activity. The Catanese, indeed, perceived a considerable risk (much greater than the real risk) to their very lives because they had no faith in the historical texts that described similar events. It was also for this reason that legends regarding the presence of demons and shadows of the deceased on Etna began to circulate again²⁰ – re-proposals of truly ancient beliefs, widespread in medieval times, but even traceable back to the classical epoch.²¹ After all, we must thank Pope Gregory the Great (AD 540–604) for having given hell a volcanic location,²² indeed granting the Sicilian volcanoes a prime role. Hellish volcanology²³ would, in fact, become a highly successful topos throughout the entire Middle Ages. It was a common conviction that the site of the gates of hell was indeed on the Sicilian volcano. Thus, at least up to the 15th century, medieval sources provide us, on the one hand, with a flourishing series of hagiographic Christian legends, partly connected with exposure to natural phenomena, and, on the other, a series of descriptions of volcanic activity created with the intent of amazing the reader. Etna is, therefore, a source of curious anecdotes, of miraculous coincidences and details, as in the occurrence of eruptions in coincidence with great battles²⁴ or with the deaths of sovereigns.²⁵

A different view of and a different relationship with Mt. Etna emerges from a reading of the first Arabic texts written by Arab authors from the Orient, such as al-Mas'ūdī.²⁶ An initial problem here concerns the textual difficulties in identifying Sicilian volcanoes, which are defined using expressions that often create confusion; some seem to indicate Etna more specifically, defined as 'the mountain of fire' or 'the mountain of the fire that flows', while others seem to indicate Vulcano, in the Aeolian Islands, known as 'the crater of Sicily' or, more generically, as 'the volcano'.

From a cartographic point of view, the most notable image of Muslim Sicily is the triangular-shaped one by al-Idrīsī, in which Etna is clearly visible and distinguishable in the northeastern corner. Completely different, however, is the graphical representation in

¹⁶ Torrence and Grattan 2002.

¹⁷ Blong 1982.

¹⁸ Guidoboni, Cicarelli, Mariotti, Comastri and Bianchi 2014.

¹⁹ Florence, State Archives, Carte Stroziane, serie I, file 253, 33, Relazione sull'eruzione dell'Etna del 1536: 'una quantità eccessiva di uno liquore ad uxo metallo strutto fochoso...' ['An excessive quantity of a liquor ad uxo molten fiery metal...']. The source is widely discussed in Guidoboni Cicarelli, Mariotti, Comastri and Bianchi 2014: 273. Even more poetic was the comparison made by Fazello between the slow progress of the lava and the advance of a turtle.

²⁰ Maurolico 1862: 83–84: 'faxit Deus ne quid mali portendat novum hoc Aetnae incendium, quod per annos XXXX aut paulo pauciores desierat. Varias sunt circa hoc vulgi fabulae. Tradunt aliqui malos daemones ab insula Vulcani migrasse in Aetnam Alij referunt vidisse se defunctorum umbras igni destinatas eodem catervatim properantes, inter quos agnovisse quosdam tyrannos ac latrones'.

²¹ As can also be deduced from the anecdote regarding the death of the philosopher Empedocles, for the Greeks, the creator of Etna constituted one of the entrances to Tartarus.

²² Pricoco and Simonetti 2006: 306–307.

²³ *Locus not amoenus but horribilis*, see: Garbini 2009–10.

²⁴ This conviction is reported by Ludolfo di Sudheim, a German monk who wrote one of the most celebrated pieces of travel writing of the 1300s. For more, see record card 47.

²⁵ We refer to that of Charles of Anjou.

²⁶ Amari 1880–81, I: 1–4.

The Book of Curiosities,²⁷ a work by an anonymous Arab author that can be dated to the first half of the 11th century. Not only is it the north and not the south that finds itself at the top of the image as the conventions of Arabic cartography envisage, but Sicily is represented on its own, without the point of the Italian peninsula's 'boot' being visible, and the island assumes the form of a stretched rectangle. The presence of some 140 toponyms in this book is very interesting, many of which are difficult to identify and are otherwise unknown (roughly 70 of them). Etna appears, with a crown of fire, to the southeast and is defined in the caption as *Jabal al-talla* or *Jabal al-Atna*, instead of the traditional expression *Jabal al-nār* ('the mountain of Fire'). It has quite rightly been observed that if the second of the two possible readings of the caption are correct, then it would be the first medieval occurrence of a hypothetical Arabic version of the Greek toponym Αἴτνη.²⁸

A final, brief note on the heritage of the Arab domination of the island. Traditionally, the introduction and spread of pistachio cultivation on the island, so important to the Etnean agricultural landscape, has been attributed to the Arabs. This hypothesis is supported almost exclusively by the possible derivation of the dialect term *fastuca* to a corruption of the Arabic term *fustuq*. But it must be pointed out that the very concept of the 'Arab agricultural revolution', so present in academic writing, has recently been questioned,²⁹ above all regarding the attribution of the invention and application of particular hydraulic and irrigation technologies (*sāniya* and *qanāt*) and the introduction of some plants into the Mediterranean context. Regarding the specific Sicilian situation,³⁰ the Arab conquerors should be granted the merit of a greater biodiversity with the beginning of the cultivation, among the most significant crops, of sugar cane, papyrus and henna. However, the debate among historians regarding the division of land ownership into a plurality of lots as well as the effective consequences of the rescript of Fatimid caliph al-Mu'izz of 967 and his attempt to restructure settlement schemes by putting a brake on random rural settlement,³¹ remains very much alive.

As far as the Etnean area is concerned, we can only infer, on the basis of the scarce data available, the persistence of the great importance of cereal cultivation. al-Idrīsī remarks on the presence of many water-powered mills near Maniace, defining a cave complex known today as *Grotte dei giganti* [Giants' Caves] or *Grotte dei saraceni* [Saracens' Caves] as the Caves of Flour. The same author, writing about nearby Randazzo, underlines the

importance of the area for the exploitation of the woods and the production of timber. It has also been suggested in the past that, behind the Muslim invasion, there was the objective of taking control of the considerable timber resources in Sicily, a fundamental raw material for the naval requirements of the Islamic world.³²

Below we will have occasion to return to the topic of the fertility of the plain on which Maniace stands and its agricultural production.

The northwestern slope

The entire northwestern side of Etna rotates around two central pivots: the valley of the Simeto and the volcano Etna to the east. From a morphological point of view, the area is characterized by a variety of forms and lithologies, with a prevalence of hilly morphology in alternation with sedimentary, alluvial terrain, like the Plain of Maniace, and volcanic terrain. Furthermore, the territory studied here occupies an area that we might define as being strategic, both in terms of its geo-morphological characteristics and the history of its human settlements. The area, indeed, marks the passage of the mountain range of the Nebrodi, with its final buttresses coming into the administrative boundaries of the municipality of Maniace, at the Simeto valley. Towards the east, instead, is the limit of the fluvial basin of the Alcantara, the course of which separates the piedmont area from the Ionian area.

The most extensive and populated town of Etna's western (and northern) is Bronte, the birth of which, despite the classical roots of the name, dates to an act of synecism from Emperor Charles V in 1520. In that year, he decided to unite the twenty or so hamlets and structures that existed around the Benedictine monastery of Maniace into one settlement.

The area that is the object of this study falls within the municipalities of Bronte, Maletto and Maniace and, from a morphological and geological point of view, encompasses a great variety of landscapes and geological formations.

The entire area can be divided into two macro-zones: the lava plain enclosed by the hamlets of Edera, Santa Venera, Balze Soprane and Sottone (with a surface area of just less than two km²) and the alluvial deposits of the Saracena River valley. The former, within the territory of the municipality of Bronte, is characterized by the fact that it belongs to the Concazze system (a formation

²⁷ Johns and Savage-Smith 2003.

²⁸ Johns 2004: 440, note n. 13.

²⁹ Decker 2009.

³⁰ Barbera 2000.

³¹ Molinari 1995; Molinari 2010.

³² Lombard 1958. It was precisely the need to acquire large quantities of timber that led John I Tzimiskes to prohibit the exportation of wood and iron from the Byzantine regions and Calabria during the 10th century, in order to strike at the Arab forces. Regarding the presence of chestnuts and nut trees on the Etnean slopes see: Corrao 1989: 145–146.

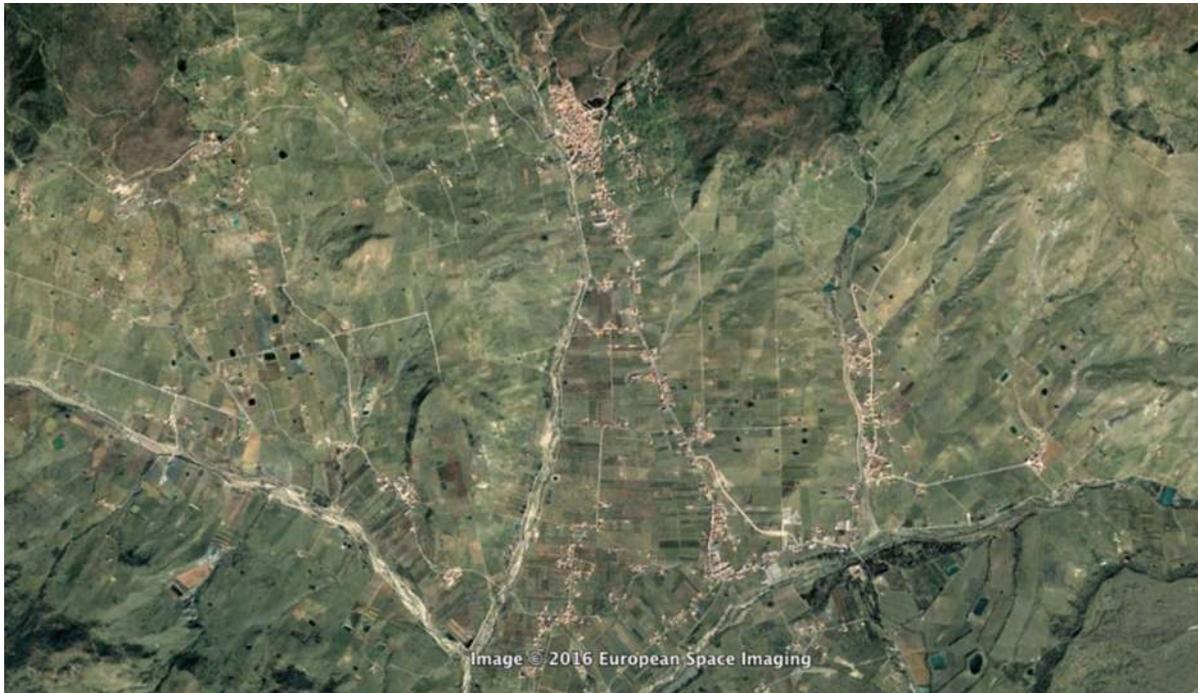


Figure 2 – Galatese district

at Piano Provenzana), composed of lava flows, cones of volcanic clinker and pyroclastic deposits.³³ The lithology of the area on which the urban centre of Maniace stands is very different, belonging to Troina-Tusa flysch with some expressions of varicoloured scaly clay, and recent alluvial deposits over which the Cutrò and Martello torrents and the Saracena River flow. The geological difference between the two macro-areas is of fundamental importance because it lies at the foundation of the existing landscape and botanical diversity; this aspect, naturally, involves obvious repercussions on the ways in which archaeological research has been carried out, since the obstacles met along the way are different. In particular, for the Balze Soprane or Edera districts, we refer to the difficulties in orientation that exist in crossing volcanic 'lunar landscapes' such as those mentioned above. The Galatese area (fig. 2), on the other hand, presents another difficulty. With this being one of the rare flat areas in the Etnean territory, it is intensively cultivated and has many trees, with groves planted on numerous small fenced lots; the use of satellite images or drones is, therefore, quite limited, while the presence of gates, fences and inaccessible areas impedes archaeological survey work.

Despite these difficulties, in recent years archaeological research has taken significant strides forward thanks to the direct involvement of several universities and

the superintendency of Catania. Indeed, as Paolo Orsi cogently outlined it:

'If the Etnean region, from the archaeological point of view, is almost an unknown..., the northwestern slopes have never, as far as I know, been the object of study and publications. And yet there is no lack of relics from the Bronte and Maniace area in late Roman and Byzantine times, but yet more from the Normans, which ought to be better known than they have been up to present times',³⁴

In truth, the northwestern slope of Etna constitutes a rarity in that the area was never involve in an organic way in the febrile exploratory activity of the archaeologist from Trento. The most striking fact, indeed, is the absence, with the exception of two brief papers,³⁵ of academic articles dedicated to the territories of Bronte, Maletto and Maniace in Orsi's very extensive bibliography.³⁶ Orsi's only academic legacy is the accurate description of the structure identified in 1905 in land belonging to a certain Luigi Schillirò. The archaeologist, having received news of the first finds, suggested that work should be stopped and, upon arriving at the site, he identified the remains as belonging to a small thermal complex, datable by

³⁴ Author's translation of Orsi 1989: 445.

³⁵ Orsi 1898: 497.

³⁶ On Paolo Orsi's writings, see: Marchese and Marchese 2000. For some reflections on his Sicilian activity, see: La Rosa 1978; La Rosa 1985.

³³ Caffo 2015: 36.

means of the mosaics to the time of the fall of Rome.³⁷ The following year, his able assistant Rosario Carta was sent there with the task of producing graphic documentation³⁸ (a survey of the structures and the mosaic decoration) necessary for undertaking an excavation 'to better know the temperament and the age of the mysterious town of Maniace',³⁹ an excavation that was never begun. It was Benedetto Radice,⁴⁰ not an archaeologist but a jurist, who inherited this demanding legacy in this corner of Sicily. Radice dedicated the second half of his life to the study and the history of his town, publishing scores of works that were the product of patient archival work. The most important result of this activity is the two-volume *Memorie storiche di Bronte* [*Historical Memories of Bronte*], published between 1928 and 1936. Despite the excessive space granted to the topic of the original colonization of Sicily by the Cyclops, the work has several merits and is particularly important in our eyes because it notes many finds, for the most part numismatic, of which we would otherwise know nothing. The author, indeed, with great precision provides reports that indicate the names of the landowners and the locations in which these chance finds came about. The certainty that comes to us from reading Radice's work is an awareness of the fact that we have lost, in an essentially definitive manner, an inestimable archaeological heritage. This consideration is sadly confirmed by the predatory activity of the many tomb robbers who, making the most of the town's marginality, its distance from the Catanese centre of gravity, infested the area over a period of several decades, concentrating their work in particular on the many lava flow caves.⁴¹

An initial change in this situation came about only near the end of the 1980s when the superintendency undertook some rapid explorations that were concentrated along state road 120, where in the past numerous archaeological remains had been reported. Unfortunately, this research did not succeed in dating

with any certainty the grand walled structure to which we will return below.

The first sizeable attempt at providing a systematic framework for the Etnean volcanic landscape was the Upper Simeto Valley Project, born out of an agreement between the Superintendency of Catania and the University of Durham, led by Prof. Leone and conducted over the summers of 2006 and 2007. Unfortunately, despite the promising results published preliminarily in 2007,⁴² the project was interrupted and the information remains, for the most part, unpublished. Thanks to the generosity of the two institutions, I have been given the possibility of working on this information, and here I will present some of the most interesting elements. The research had as its objective an understanding of the dynamics of the transformation of the landscape and settlement processes through a diachronic and synchronic reading, capable of contextualizing the data obtained within the more general Mediterranean context. For this reason, compared with other similar projects carried out in Sicily,⁴³ and in particular in nearby Troina⁴⁴ where the research focused on the prehistoric era, the Upper Simeto Valley Project chose to embrace a diachronic perspective that did not focus on a particular historical period but rather turned its attention to several chronological phases. From a territorial point of view, something that the Upper Simeto Valley Project shared with the Troina Project was the choice of researching a mountain context. In particular, the Troina Project, through geomorphological and pedological research, had also fixed as its objective an understanding of the effects of erosive phenomena on the visible elements of the land, especially for those lands at the bottoms of hills.

The area studied by the Upper Simeto Valley Projects covers some 350 km², between the hamlets of Galatese, Vaccheria, Balze Soprane and Sottane, Edera, Casitta and Santa Venera (fig. 3).

The quality of the research is uneven and is negatively affected by several factors, including the accessibility of the locations, the morphology of the terrain and the incidence of post-sediment factors. From a methodological point of view, during the first year a sampling of the very diverse landscapes and terrains was carried out, from the fluvial terraces to the old lava flows [*sciare*], while in the second year the researchers, on the basis of the promising results that had emerged previously, concentrated on the Galatese area alone. In this hamlet, irregular-shaped cross sections were selected which adapted to the morphology of the terrain and the land lots that had been created. As a

³⁷ Despite the terms used, Orsi was very taken by the line of research on Christian, late antique and medieval Sicily, to the point where he sought to illustrate its importance to (with, as far as we can read, very modest results) his friend Count Mario Tommaso Gargallo, a grand Sicilian intellectual as well as the founder of INDA (Istituto Nazionale Dramma Antico).

³⁸ Carta's drawing and Orsi's brief description are all that remain of the archaeological complex of the Erranteria hamlet.

³⁹ Orsi 1898: 497. It should be noted how he provides news, in the two previous pages of the results of the third excavation campaign in the necropolis of Santa Anastasia near Randazzo. As is known, the necropolis was initially excavated by Paolo Vagliasindi, and the first studies were entrusted to Giulio Emanuele Rizzo.

⁴⁰ The erudite son of Bronte is known for his historical reading of the massacre at Bronte carried out by General Nino Bixio and the Garibaldini in 1860, a work from which Florestano Vancini drew inspiration for his narration of these events in his 1971 film, *Bronte: cronaca di un massacro che i libri di storia non hanno raccontato* [*Bronte: chronicle of a massacre not found in the history books*].

⁴¹ On the lava flow caves on Etna in general, see: Privitera 2007; Privitera 2014. On the Maniace, a veritable symbol of the catastrophic activity of the tomb robbers, see: Privitera 2015a: 61–62.

⁴² Leone, Witcher, Privitera and Spigo 2007.

⁴³ Burgio 2017.

⁴⁴ Ayala and French 2005; Malone and Stoddart 2000.

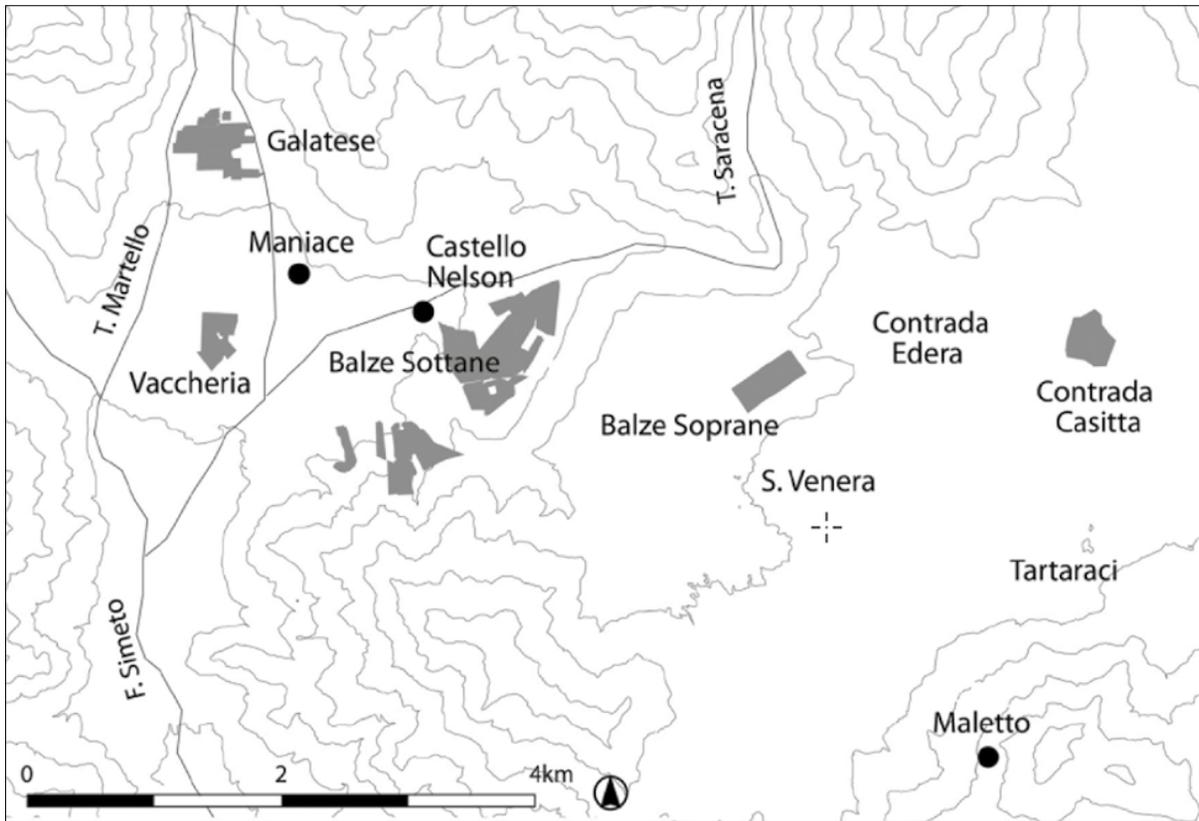


Figure 3 – Upper Simeto Valley Project: location map of areas surveyed (reworked from Anna Leone 2007, p. 54)

general line, the team of surveyors was subdivided into groups of four or five people with a constant spacing of five metres; in the presence of a greater density in finds, the spacing was reduced or halved.⁴⁵ As for intra-site gathering, it was decided to opt for total gathering of the artefacts, even making use of sieves. The finds were then washed, rapidly classified and positioned on maps using GPS. This use of GPS allowed for the positioning of particular artefacts or walled structures as well as the tracing of the boundaries of the Topographical Units (TU). It is important to clarify, in this regard, that in this research project the TUs indicate the individual fields under investigation and, consequently, eventual concentrations of surface finds can fall within several TUs. The methodology briefly described here was relatively functional for the cultivated areas with boundaries that were often fenced but was of difficult application in the landscape contexts with lava flow *sciare*. Here, indeed, the geomorphological characteristics of the terrain and other factors, such as steppe-like vegetation, constituted a serious limitation on archaeological visibility; it was very easy to lose orientation and almost impossible to move through these spaces in parallel lines. In general, the cartography

used included Istituto Geografico Militare [IGM] maps, regional government maps and municipality maps, which were fundamental above all for understanding the extent of each land lot.

The mass of data from the Upper Simeto Valley Project was complemented by the first large-scale and systematic campaign of excavations, promoted by the Superintendency of Catania. The archaeological interventions were concentrated in the hamlets of Balze Soprane and Edera, where some ten or so lava stone buildings were brought to light, circular or rectangular in design and partially investigated back in 1992. 'At the conclusion of this campaign, the conclusion was reached that there were at least two main phases to the historical occupation of the hamlet, in part distinguishable topographically, while the wall types, given the use of slabs and blocks of lava stone naturally available on the site, are not always indicative of the epoch of construction.'⁴⁶ The first of these phases can be traced to the Greek epoch and, in particular, on the basis of the ceramic materials found, to the 6th and 5th centuries BC;⁴⁷ a series of buildings, on the other hand, are ascribable to the early medieval

⁴⁵ For the spacing values recorded at Troina, see: Ayala and French 2005: 152.

⁴⁶ Privitera 2015b.

⁴⁷ Conti 2015: 100.

period, for the most part circular hut-like structures located close to state road 120. According to the most recent interpretation offered by Lucia Arcifa, this was a settlement with a strong foreign component, but cultured in the Byzantine sense, that was born out of the new thematic organization of Sicily. We will return below to a reading of the entire archaeological complex.

From a geographical point of view, the archaeological evidence datable to late antiquity and the early medieval period are located in only a few hamlets: Balze Soprane/Sottane and Edera, Vaccheria and Galatese. Given this limited distribution, the wealth of the archaeological data allows the recognition of a specific differentiation of the spaces with a functional subdivision into artisanal and productive areas, funerary and habitational areas. The data that emerge from the survey carried out by the University of Durham seem to suggest that this organization of the territory was very much in continuity with the previous settlement schemes of the Classical period and, above all, the Roman era. Indeed, of the 23 TUs with evidence from the late-antique and Proto-Byzantine periods, all of them present evidence of settlement, more or less marked, from the previous era. Contrary to this, with the advent of the early-medieval epoch, although it must be borne in mind that here we are dealing with a historical period with archaeological markers that are often difficult to identify, there seems to have been a change in the settlement models. Again, on the basis of the data from the survey, only 5⁴⁸ TUs present continuity in their habitation extending up to the 7th-10th centuries AD. This is a fact that is substantially in line with what occurred elsewhere in Sicily where, as Uggeri has already underlined with regard to continuity, or lack thereof, in rural sites, 'the traumatic moment comes with the Arab invasion.'⁴⁹

One of the coins found during the survey work at Galatese can be attributed to the mid-Byzantine era. It is a legible specimen, in a relatively good state of conservation; in more detail, the coin, still unpublished along with all the other artefacts, has been identified as a *follis*, minted in Syracuse, and bears the image of Byzantine emperor Constantine V together with his son Leo IV on the obverse, with the facing bust of Leo III, founder of the Isaurian dynasty, on the reverse.⁵⁰ This is currently one of the extremely rare pieces of evidence certainly datable to the 8th century AD.⁵¹ (fig. 4).



Figure 4 – Half-length facing busts of Constantine V, bearded, and Leo IV, beardless, both wearing crown and chlamys, holding akakia; facing bust of Leo III, wearing crown and chlamys, holding cross potent. *Follis*; Syracuse mint, 751-775 AD

The hamlet of Galatese and the lost city of Tissa

Contrada Galatese (or Galatesa) is a fertile valley delimited to the west by the banks of the Martello River, one of the tributaries of the Saracena, which in turn is a tributary of the Simeto, while some small hills and the only main road (corso Margherito) of Maniace constitute the eastern limit.

Galatese can be defined as a fluvial terrace and sits at the foot of Mount Soro, one of the rare uncontaminated complexes in Sicily, as can be testified by the cerro [Turkey oak or Austrian oak] woods that extend almost to the edges of the town. The entire hamlet has a surface area of 120 hectares, and its identity is that of the true agricultural heart of Maniace.

This territory has revealed great potential in terms of archaeological information (from prehistoric artefacts to ceramics datable to early-antiquity), to the point of 'forcing' the English team to dedicate their second research campaign, carried out in the summer of 2007, almost exclusively to the exploration of Galatese (fig. 5).

⁴⁸ Of these five, three are at Balze Soprane: UT 1001= S. 117; UT 1001-1002= S. 118; two in Galatese: UT 1065= S. 109; UT 1066 = S. 115.

⁴⁹ Uggeri 1996: 45. A similar position can be found in Vera 2005.

⁵⁰ On the monetary circulation during the Byzantine era in general, see Guzzetta 2010.

⁵¹ Despite the fact that some ten or so Byzantine huts in Santa Venera have been brought to light, no phase datable to the 8th century AD has been documented: Arcifa ANNO?: 152.

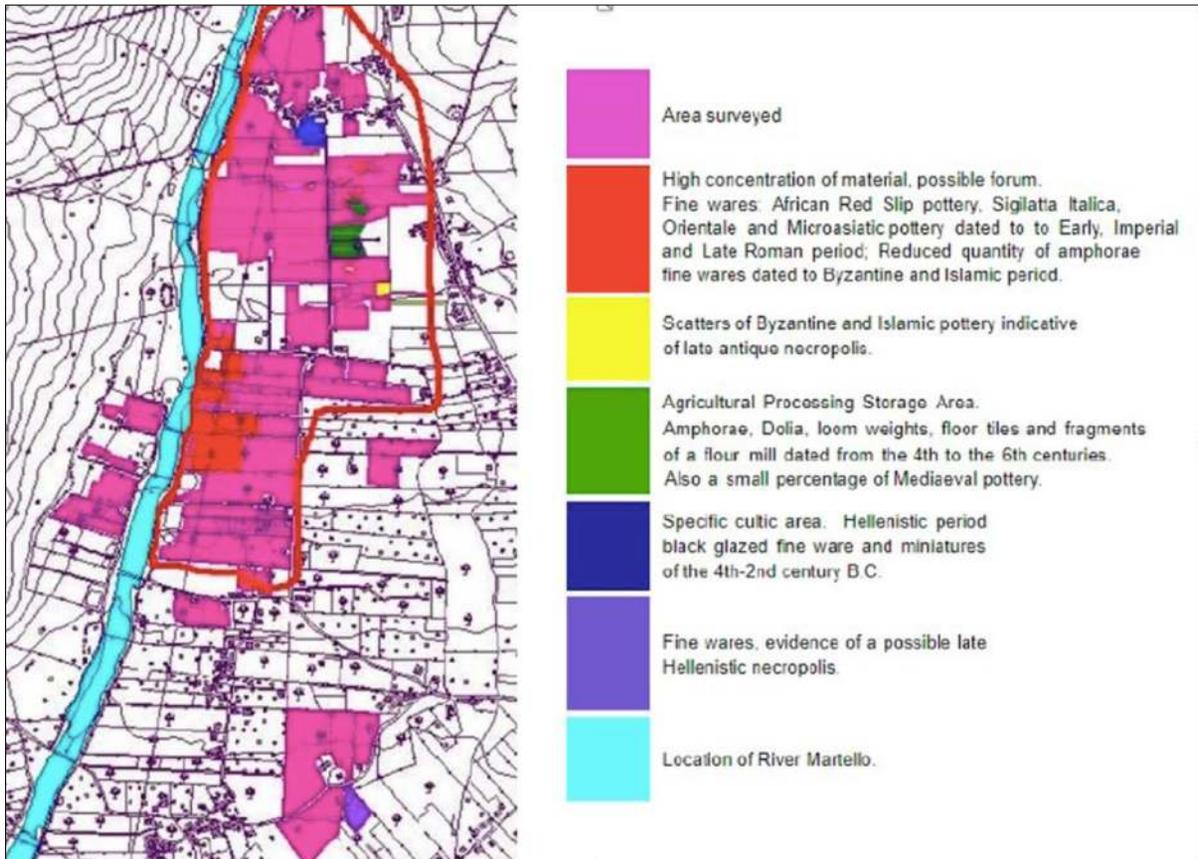


Figure 5 – Upper Simeto Valley Project: areas of intervention and findings of 2007, Contrada Galatese (University of Durham team's elaboration)

The survey work led to the identification of 39 TUs,⁵² in which for the most part fictile artefacts and sometimes metal artefacts were found, ascribable to the Roman, Greek and late-antique epochs, with a slight predominance of the Roman epoch. In this case too, variations in the density and the quality of the archaeological data lead us to suppose the existence of an internal hierarchy and a functional division of the different zones. In the central-northern area, the English team located an area dedicated to the production and storage of agricultural produce.⁵³ Indeed, from TUs 1063, 1064 and 1065, all topographically continuous, there comes so much evidence as to leave no doubt: a great number of amphorae, *dolia*, fragments of a millstone datable to between the 4th and 6th centuries AD, and traces of the paving of some rooms dating to the same historical period. The area must have had a very extended continuity in habitation because the material found covers a wide chronological arc that,

from the Hellenistic, reaches to the imperial and late-antique ages. Among imported ceramics, the most represented is African Red Slip Ware (ARSW), especially in its later production. To be noted in particular is the presence of three fragments from the body of an ARSW D dish from TU 1063, and, from TU 1065, five specimens of African A datable, however, to the imperial age (three between 90 AD and the 2nd century, two to the 3rd century); because of the fragmentary nature and the poor state of preservation of the other finds, it has not been possible to make a good identification of five fragments of ARSW D,⁵⁴ but they date, roughly, to the 4th and late-5th centuries AD. These are, it is worth remembering, the first examples of African ceramics from this particular area of Sicily; a recent volume on the distribution of ARSW in Sicily mentions among the Catanese archaeological contexts only Catania, Favarotta and Rocchicella (both at Mineo), and for the nearby Tyrrhenian coast Capo d'Orlando and Tindari.⁵⁵ Then, as well as the above-mentioned ceramic finds, the survey activity also allowed for the gathering and

⁵² Traces of prehistoric habitation are extremely rare: lithic fragments, especially of oxidian and a small axe in jadeite, which together with a specimen from the nearby Tartaraci cave constitutes rare evidence of a highly rarefied presence.

⁵³ Leone 2007: 55.

⁵⁴ With the exception of a fragment of a carenated rim, comparable with an Atlante form XLV 5, 8, dated to the end of the 5th century ad.

⁵⁵ Bonifazi and Malfitana 2016: 59–99 for the sites mentioned.

cataloguing of monetary finds, among which there is a coin, minted between 330 and 335 AD, with the image of Costantius II on the obverse and two soldiers on the reverse (fig. 6).

The finds from TU 1060 are also worthy of mention; this was one of the most interesting contexts and was defined as site number 106. Despite being located a short distance from a modern artisanal-agricultural productive area on which a large building was erected just after the year 2000, this sector of Galatese, also because of the favourable conditions there, saw an increased intensity in the survey work, which reached two and a half metres. Furthermore, according to the owner of the land, it was partially levelled for the construction of the foundations of the artisanal area and, during these works, many archaeological artefacts were noted, including many roof tiles.

Within the field, over 90% of which was surveyed, a well with a depth of approximately one and a half metres from the level of the plain was noted, and through the sections some bone remains were noted, clues to a possible burial area, but no evidence of a covering was found. The close proximity of the tombs excavated by the Superintendency⁵⁶ seems, in any case, to support identification of the area as a large funerary context from late antiquity. The most significant find, in this sense, is a lead tablet (fig. 7) of great interest, already granted a preliminary presentation in the report published in 2007.

This is a very rare find in the Etnean area, in contrast to the southeastern corner of Sicily where such objects have already been brought to light in various Hyblean towns and have been widely studied.⁵⁷ The only metal tablet found in the province of Catania comes (perhaps it would be better to say came) from San Giovanni Galermo, a northwestern suburb of the city; unfortunately, the specimen was lost and only the text of its inscription survives thanks to the volume edited by G. Libertini.⁵⁸ In general, this class of epigraphic document relates to a very interesting type of religiosity since, to our eyes, it appears sincere and composite; as well as devotion to Christ, indeed, there is no lack of references to angels (and demons) with variegated names of either biblical or pagan origin, invoked at some moments as a cure for illness,⁵⁹ at others for the protection of crops in the cultivated fields, such as vines or olives that were often destroyed by hailstorms, winds or locusts. Indeed, the other fundamental element in understanding the nature of these texts, be they prayers or invocations or of any other nature, is the rural context in which



Figure 6 – Bust of Costantius II Caesar, laureate, draped and cuirassed; GLORIA EXERCITUS, two soldiers standing facing each other, each holding an inverted spear; between them, two signa; bronze, 330-335 AD



Figure 7 – Galatese lead tablet

they sit. *Defixiones* and *phylakteria* constitute a most precious source for understanding a silent world that was, for the most part, ignored by coeval literary works, in which the link between the presence of evil spirits and physical and economic well-being was very strong. ‘The definition of these documents as ‘magic-religious’

⁵⁶ Privitera 2009: 525.

⁵⁷ Cordano 1997-98; Cracco Ruggini 1997-98: 259.

⁵⁸ Libertini 1927.

⁵⁹ Del Monaco 2013. On amulets against headaches. In general, see Giannobile 2006.

seems, therefore, to be the most appropriate, given the equal measure of superstition and a type of Judeo-Christian religiosity found within them, expressions of a mentality destined to remain in a cultural context such as that of the peasantry.⁶⁰ We reference the imminent publication of the complete Etnean phylactery for a complete analysis; here we limit ourselves to pointing out how the 'quasi-Christian' inscription should be read as the request of a woman to God, in the Greek language, to be with child. The dating proposed in line with an epigraphic criterion cannot be any more precise than a chronological arc between the 4th and 6th centuries AD, a chronology, after all, that is in line with the nearby tombs excavated by the Superintendency in 2000.⁶¹

Regarding the other archaeological finds from the same site, the ratio of roof tiles compared to ceramic fragments gathered is approximately 10:3. The most represented type of fine ceramic is, once again ARSW D, with four forms identified, two⁶² dating from between the end of the 6th and the first half of the 7th centuries AD, one⁶³ between the 4th and 5th centuries. Among the amphorae, estimated to be represented by approximately ten specimens, it has been possible to distinguish and recognize, through some body fragments, generic late Aegean amphorae.

Then, along the course of the Martello River, an area with dimensions of 350m N-S and 250m E-W was identified as the possible centre (*forum?*) of a true urban settlement. The information from the material culture shows a continuity in habitation that extends from the late Hellenistic era⁶⁴ to at least the 7th century AD. In particular, from my own analysis of the ceramic material, there emerges a most significant fact, i.e., the clear prevalence of artefacts datable to the late Republican era and the early and mid-imperial era. Indeed, fragments of Italic, Oriental⁶⁵ and Microasiatic ware have come from this sector, fragments not found in other areas of Galatese and which are, in general, not widespread in other Sicilian centres. Similar data also emerge from the study of the African productions, in that out of some 50 finds catalogued as coming from this area, more than half fall under the ARSW A category, with chronology from the 1st to 2nd centuries AD.

Therefore, if on the one hand the possibility of the existence of a bias deriving from the ways of collecting the data should anyway be borne in mind, on the other hand the evidence in our possession seems to emphasize the specificity represented by Galatese and the area close to the Martello River. Consequently, if the interpretation that sees the Galatese site as an urban settlement with a long continuity in habitation were to be correct, this would open up a further cascade of important questions, above all linked to the identification of the possible city involved.

The working hypothesis is founded on the possible identification of the centre of the Galatese hamlet with the urban settlement of Tissa, cited by Cicero as being among the Sicilian cities raided by Verres. This proposal, substantially put forward by the English team, has received a very lukewarm reception⁶⁶ in the literature based, however, in our opinion, on some considerations that do not appear to be completely acceptable. The famous passage in *In Verrem*⁶⁷ has always guided the quest to find Tissa somewhere on the northwestern side of Etna and has often located it near Randazzo. In truth, despite the archaeological campaigns of the end of the 20th century led by Salinas and the flourishing of monographic studies on the rich finds from the nearby necropolis of Santa Anastasia, there is no specific element that can link Tissa to the Randazzo area and neither, even more so, to the indigenous centre of Monte Bolo.⁶⁸

Among the few certain indications that guide this research is the clear agricultural character of the city, as Cicero recalls its abundant cereal production. From this perspective, it is interesting to note how the fertility of the Plain of Maniace, the only alluvial plain present on the Etna volcano, was already well known in antiquity; the geographer al-Idrīsī defined Maniace (*Manyāj*) as a 'village on a plain, well populated, [with] a market, rich in merchants; a feracious territory and abundant in every way.'⁶⁹ The suggestion has also been put forward

⁶⁰ Bevilacqua and Giannobile 2000.

⁶¹ Privitera 2009: 524.

⁶² Comparable with the form Hayes 105 = Atl. XLIV 1-2, 96. This is one of the latest productions of the 6th century AD; the other fragment is the rim of a bowl, comparable with Atl. XLII 4: 96.

⁶³ Bottom of a plate Hayes 1972: 30, figs. 59, 58 b. For the decoration of the leaf, Atl. LXIX, 29; for the impressed decoration 'a rotella', Atl. LXVIIII: 141.

⁶⁴ These are, for the most part, black painted and miniature ceramics, a point already highlighted by the English team in their preliminary record.

⁶⁵ On the distribution of fine oriental table-ware pottery in Sicily see Malfitana 2004.

⁶⁶ Privitera 2015a: 64: 'I responsabili del progetto hanno ipotizzato una identificazione con la piccola città di Tissa, citata da Cicerone, la quale però dovrebbe aver avuto una maggiore importanza in epoca ellenistica e repubblicana, mentre i ritrovamenti di quest'epoca occupano un'area abbastanza ristretta'.

⁶⁷ Cicero 1916: II, 3, 86. 'Quid vero? A Tissensibus, perparva ac tenui civitate, sed aratoribus laboriosissimis frugalissimisque hominibus, nonne plus lucri nomine eripitur quam quantum omnino frumenti exararant?'.

⁶⁸ Galvagno 2006: 39-40: 'the centre has always been sought in the northern region of Etna and mostly identified with the Imbisch hamlet near Randazzo. But Cicero's description of Tissa as a grain-producing city makes it difficult to imagine a link with this locality [...] not in any way appropriate for grain production [...] Tissa should be sought in a northern area of Etna able to offer considerable grain production. It is very likely that the territory of Bronte that looks out over Cesarò and Maniace belonged to the city located at Monte Bolo and which very probably can be identified with Tissa, a name that then disappeared after the successful military campaign of the Byzantine commander Maniace who defeated the Arabs at the place that takes its name from him, in 1040.

⁶⁹ Amari 1880-81, I: 115: 'Returning to our discourse, let us say that,

that the very site identified in the Galatese hamlet might be the farm described by al-Idrisi,⁷⁰ although at the moment no evidence that is datable with certainty to the medieval epoch has emerged.

In addition, a reading of the archival documents from the nearby monastery of San Filippo di Fragalà is very useful for a reflection on the theme of its (presumed) marginality; the church of Santa Maria di Maniace⁷¹ was virtually an antagonist with this monastery for long periods until they became a single institution at the end of the 15th century. The parchments testify how the Benedictine abbey of Maniace, of which only two apses remain within Nelson's Castle, 'annually received 464 ounces of gold (480 of wheat and 100 of barley) from the feuds of Sant'Andrea, Samperi, Petrosino, Fioritta and from half of the Ilichito feud.'⁷² The documents describe the medieval landscape of the area around Maniace as a plain characterised by many water mills⁷³ used for agricultural purposes and which disappeared, we would add, only over the course of the 1900s. Naturally, this is a much later source than the Roman or late-antique epochs, which while providing strong clues requires, as will all evidence, further archaeological and literary confirmation.

Given the lack of systematic excavations at Galtase, we have tried to find answers to our questions through remote sensing; in particular, we have combined data from multispectral satellite data, specifically chosen and acquired, with true archaeological data.

The multispectral images used in our research come from the Worldview-2 satellite and were provided by the Planetek Italia company. The acquired frames cover an area of 35 km², which includes the areas studied in this work. Regarding the spectral resolution, images are acquired as eight different spectral bands plus a further Panchromatic channel; the geometric resolution at ground level is 0.5m in Panchromatic and 2m in Multispectral. Application of pan-sharpening techniques has, however, made the use of multispectral images with eight bands and a resolution of 0.5m possible. As for the use of an Unmanned Aerial Vehicle (UAV), a Phantom 4 was used both as an instrument for aerial photography, to generate rapid and

precise orthophotos,⁷⁴ and as an instrument for the topographical survey. Furthermore, the photographs taken from above allowed us to identify some alignments of stones, boulders and blocks that were complex to interpret. It must be remembered that the context under study is a pluri-stratified landscape that has evidently transformed over the course of the centuries as the result of natural (above all through the succession of lava flows) and anthropic factors.

In particular, as mentioned above, we sought to obtain valid answers regarding the possible identification of an area located along the Martello River as the 'forum of Tissa'. The area has an alternation of cultivated lands (trees), even intensively cultivated, with other lands left substantially uncultivated. Unfortunately, the identification and reading of possible archaeological features in the terrain in question proved to be seriously hampered by the thick tops of the trees present. In this specific case, it would have been useful to have had a thermal sensor mounted on the UAV, also due to the fact that the spatial resolution of 60m of the thermal channel on the Landsat 6 is not suitable for the case under consideration. On widening the field of research by a few metres, the images we took using the Phantom 4 showed some irregularities in the fabric of the vegetation cover that were evident both through the application of the vegetation indices (SAVI, NDVI and MSR) and in Red Edge and RGB. The features perceived, initially, were linear; the use of MSR and SAVI emphasized the presence of a structure with a circular form, located almost at the limit of the area. The complexity of the reading of the images we obtained, together with the lack of data from the thermal sensors, did not allow us to be absolutely certain that the traces identified belong to the class of archaeological features. The area, in any case, was the object of a photographic reconnaissance that could be very useful for possible future developments.

More satisfactory archaeological results arrived instead from the Santa Venera and Balze Soprane hamlets, where a particular wall structure stretches for some two kilometres. This has a double facing and, in some tracts, rises above half a metre, while in other tracts agricultural interventions have meant that almost all traces of it have been lost (fig. 8).

The progression of the wall, although at some points tortuous, seems to trace a semi circumference as it

from the above-mentioned Traina to *Manyāj* (once the castle of Maniaci), there are twenty miles. This, which is also known as *Ghīrān al-daḡīq* ('the caves of flour') is a village on a plain, well populated, and has a market and merchants; a ferocious [territory] and abundant in every manner. Maniaci stands at the northern corner of the mountain called *Jabal al-nār* (Mt. Etna), five miles distant [from the slopes of the mountain]. [The territory has] a river that rises at a distance of three miles, more or less, and which moves the millstones'.

⁷⁰ Privitera 2015a: 64.

⁷¹ Radice 1909.

⁷² Pirrotti 2008: 91. This information refers to the end of the 15th century.

⁷³ Bresc 1997; Bresc and Di Salvo 2001.

⁷⁴ Among the most recurrent problems in the field of photographic surveying are the calibration of the radial distortion of the lenses, the level of spatial and spectral resolution, the loss of clarity due to the vibrations caused and transmitted by the propellers. During the capturing process, a frequent weak point is instead the quality of the control points on the ground. On the procedures advised for the composition of maps for geographical or archaeological purposes, there is a very rich bibliography; at the general level, see: Calvo 2016; Verhoeven and Sevara 2016: 11–16.



Figure 8 – Wall-structure (survey of 31 Aug. 2017) highly visible after a terrible fire (photo by Author)

follows the orography of the terrain. Indeed, thanks to the contribution of the satellite images,⁷⁵ it was possible to trace the northeastern portion of the wall structure, which was difficult to distinguish and recognize at ground level because of the thick vegetation and the presence of modern structures (fig. 9).

The interpretation and dating of the entire wall structure remains under debate, given that not even the small archaeological operations carried out towards the end of the 1980s⁷⁶ have helped produce any elements useful for dating. Therefore, the hypothesis has also been put forward that this may be a modern structure, a sort of pathway designed and constructed by shepherds in order to cross the hamlets more easily and thus facilitate the transhumance of their flocks. There are several arguments against this hypothesis, however – above all, by applying a logistical-energy approach, the considerable working energy expended for the construction of a double wall of over two kilometres, made up of dressed blocks of lava stone of considerable size, fails to square with a project realized for simple shepherding needs; furthermore, it is difficult to maintain that the same semicircular progression (SW–NE) of the structure constitutes the most efficient and effective choice for those seeking to cross the territory in question; in fact, after having

walked for over two kilometres, whoever used it would, at the end of the pathway, find themselves just a few hundred metres from their point of departure – a situation more fitting to a game of snakes and ladders. Lastly, the photos taken by the drone have allowed us not only to appreciate the impressiveness of the extent of the structure, but to also observe some significant alignments, certainly anthropic and worthy of future investigation; in some cases, these are actually on the large wall, in other cases, they completely invade its space (fig. 10). Clearly, relying purely on the data we have at hand, dating these structures proves to be highly complicated.

Overall, the interpretation that seems preferable⁷⁷ is the one that sees in this wall structure an enclosure wall, with the purpose of circumscribing and delimiting that specific area. The fence-refuge constitutes a defensive typology that has various examples in southern Italy between the 6th, 7th and 11th centuries, from the Calabrian sites of Sassone (Morano Calabro municipality) and, above all, Sant’Aniceto,⁷⁸ to the settlement in the Scorpo hamlet of Supersano.⁷⁹ This last case is of particular interest since, in addition to the existence of a wall-enclosure, the structures excavated constitute the only example of a *Grubenhäuser*⁸⁰ in Puglia. Here, too, the

⁷⁵ The result obtained from analysis of the multispectral image is very encouraging; the feature is clearly readable, as a micro-relief trace, especially with NIR. For more, see Candiano, Fargione, Mussumeci and Mangiameli 2019.

⁷⁶ Consoli 1988-89.

⁷⁷ Arcifa 2015: 144.

⁷⁸ Zinzi 1991.

⁷⁹ Arthur, Fiorentino and Leo Imperiale 2008.

⁸⁰ The Salento examples have been dated, thanks to C14 and finds of banded and kitchen ceramics, to a period between the 7th and 9th centuries.

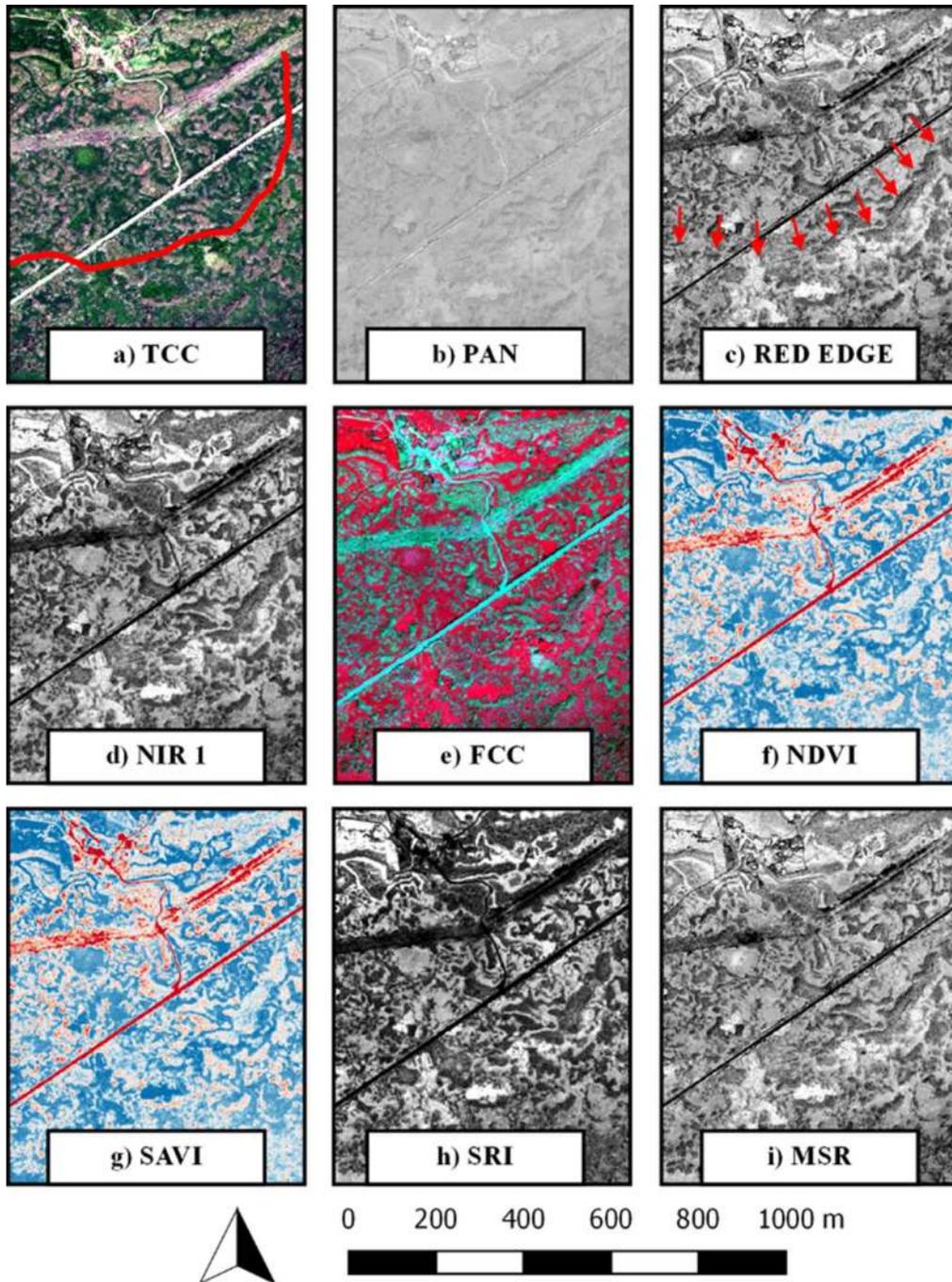


Figure 9 – Wall-structure in Santa Venera district seen from the channels of the WV-2 and through the calculated indices: a) TCC; b) PAN; c) Red Edge; d) NIR 1; e) FCC; f) NDVI; g) SAVI; h) SRI; i) MSR

interpretations put forward regarding this particular type of building are discordant and essentially dichotomic, oscillating between positions that propose a derivation from foreign models (Longobard or Slav) and others that read the evidence and turn to forms of environmental determinism.⁸¹

⁸¹ Attolico 2012.

The proposed interpretation for the wall structure in Edera hamlet raises the need for new questions regarding our understanding of the existing relationship between the area that it lies within and the group of Byzantine huts, dating to between the 8th and 9th centuries, that are outside the circuit of the wall. At the moment, the identification and localization of towers or bastions along or close to the wall structure



Figure 10 – The part of the wall-structure in the Santa Venera district and the alignments of a possible structure

eludes us; such elements would allow us to determine, with certainty, the defensive nature of the structure. Despite this, the military nature of the settlement has never been questioned and, rather, represents a fixed point of reference for interpretation of the site. It is known by the toponym *Catuna Maniaci*, which appears in various documents of the Norman epoch,⁸² indicating the presence of a military barracks near Maniace, a settlement that takes its name from the celebrated Byzantine *protospatharios* who defeated the Arabs here. Tradition locates the site of the clash very close to what are known as the ‘Saracens’ Caves’,⁸³ probably the same hypogea that al-Idrīsī called the ‘Caves of Flour’ due to the presence of several water mills along the banks of the Saracena torrent. The caves in question dominate the plain of the Balze onto which, in essence, they face. Unfortunately, in the past, this area has been the object

of interest for tomb robbers, with the result of seriously compromising the possibility of understanding the archaeological complex⁸⁴ and its relationship with the archaeological structures that emerged in the adjacent hamlets of Edera and Balze. In commemoration of the crushing victory achieved, the Byzantine commander had an *ex voto* place of worship constructed, dedicated to Saint Luke, which subsequently became the religious complex of Santa Maria di Maniace (today known as the Duchy of Nelson). The monastery was then dedicated, probably following a period of ruin during the Arab domination, by Roger I⁸⁵ to General Maniakes himself and, through various vicissitudes, survived up until the earthquake of 1693.

The presence of so many archaeological finds concentrated in just a few square kilometres leads to a reflection, albeit a rapid one, on the fundamental topic of roadways. It is evident that the Plain of Maniace,

⁸² Robert Guiscard, landing at Messina in 1061, also crossed the plain of Maniace in his travels, *a Fraxinis ad Maniaci pratium*. See Malaterra 2000: 60.

⁸³ Radice 1928 (repr. Adrano, 1984): ‘Also notable are the caves of Maniace, which the Horsemen call the Giants’ Caves, and the people call the Saracens’ Caves. The Horsemen had already given news of these caves, one kilometre from the Abbey on the right-hand bank of the Simeto, to the Duke of Lugues, and he believed them to be very important’.

⁸⁴ Among the material stolen, it seems, there was also a fine bronze encolpion.

⁸⁵ The Great Count, in the act founding the seat of Mazara, recalled having found the *loca sanctuarii destructa et devastata eni invenimus*, the reason why he hurried to *erigere, restaurare et regere* nuove and ancient *ecclesie sancte*. See Fonseca 1975: 51–52, n. 33.

in a strategic position between the Etnean area, the Tyrrhenian Ridge and the real interior of Sicily, and sitting at the confluence of some of the most important water courses in eastern Sicily, was an ideal point for the passage of important lines of communication.

The studies carried out by Lucia Arcifa⁸⁶ have hypothesised a reconstruction of the Byzantine and Norman road system founded on the existence of some single and/or parallel routes (for example Randazzo–Patti; Troina–San Marco D'Alunzio; Cerami–Caronia; Gangi–Tusa), strongly tied to the presence of Byzantine monastic structures. Indeed, within a complex stratification in which there were existing elements from the Classical epoch, Arcifa identifies the road system as being Byzantine in origin, having arisen from the need to link the monastic settlements present in the territory (Sant'Angelo di Brolo, San Barbaro di Demenna, San Filippo di Fragalà, among others). However, historical and lexical evidence, well illustrated by Shara Pirrotti,⁸⁷ push for a different interpretation. It seems more realistic to hypothesise, indeed, that it was precisely the deficiencies in the road system that had an important role, aiding the Byzantine resistance, slowing down the Arab advance and rendering it more difficult. After all, although this argument is *ex silentio* and, as such, should be taken with some hesitation, it is certain that if these routes had existed previously, then the Arabs would have certainly made the most of them to bring the violent conquest of the Sicilian *pars orientalis* to a more rapid conclusion; furthermore, the silence of the coeval sources, interrupted only by al-Idrisī, but only in the 12th century, seems to push towards such a reading. In conclusion, it is possible to hypothesise that the route that linked⁸⁸ the monastery of Frazzanò to Maniace, passing through the present-day hamlet of Petrosino and touching, shortly afterwards, the Duchy of Nelson (the old complex of Santa Maria di Maniace), may be of Norman rather than Byzantine origin.

Conclusions

While not providing many firm conclusions, the thinking behind this work is a desire to shed some light on a territory that has been neglected for too long by academic research despite the great potential for information it carries and the evidently special features of its landscape context. As we have sought to show in the first part, analysing a landscape such as that of Mount Etna involves slight modifications to our traditional work-flow. Understanding the symbolic value assumed by Etna⁸⁹ also from an anthropological

point of view is absolutely necessary for a better framing of the relationship between man and environment. Etna, indeed, is not a simple mountain but a 'rocky outcrop that oozes fire'⁹⁰ and, as such, possesses a multi-dimensionality, a double guise that has made it the protagonist of many mythical tales. It is not by chance, for example, that in Greek culture Etna was thought to be the daughter of the sky and the earth because of its extraordinary height and its eruptive activity,⁹¹ coming even before the birth of the Olympic gods. The mythopoetic force of Etna is also expressed in the bowels of the earth, as testified by the numerous legends set in the caves of the mountain, where the eternal struggle between Good and Evil is fought; above and beyond the powerful symbology inherent to cave environments, these spaces also lent themselves to being refuges and dwellings for the many monks and hermits who populated these lands during the early Middle Ages. We recall, among the many, the case of San Lorenzo da Frazzanò, who lived around the first half of the 12th century and who retired for six long years in a cave on Etna, probably located near Bronte, a town in which the tradition of the same saint as saviour intervening to stop a disastrous lava flow is still alive. The symbolism that pervades the volcano, together with the purely physical and geological characteristics of the environment has, therefore, strongly influenced the settlement schemes of human occupation of the Etnean area.

Some reflection on the strictly archaeological aspect of the areas under consideration in this work. The research and reconstructions of historians on the large land estates of the Roman and late-antique eras⁹² have led to the elaboration of a model for the Sicilian situation characterized by *latifundia* and settlements defined as 'agro-towns'. Furthermore, from a re-reading of the letters of Gregory the Great, it seems that the jigsaw puzzle of the Sicilian rural landscape was made up of churches, villages and isolated houses, to which should be added the many villas, very evident from an archaeological point of view. Naturally, necropolises must be added to these categories. In light of this scheme, in the territory under examination it is possible to identify with certainty the Galatese site, with its long continuity in habitation and its functional subdivision of its spaces, the Edera hamlet site, probably dating to just after, the remains of the necropolis at Errantera and the *domus* described by Paolo Orsi and the Galatese district necropolis, partially investigated by the Superintendency of Catania and from which the lead tablet comes. Regarding the presence of farms, more or less isolated with regard to the main settlements,

⁸⁶ Arcifa 2015.

⁸⁷ Pirrotti 2013.

⁸⁸ The road is still in the list of routes recommended for trekking within Nebrodi Park.

⁸⁹ Paradigmatic is the story narrated by Strabo, who witnessed the spectacular execution of the brigand Seleuro in Rome, *Aitnes uios*. The

prisoner, leader of a small Sicilian revolt, was thrown into a mountain that, through fumes and explosions, directly evoked Etna.

⁹⁰ Euripides, *Cycl.*, v. 298.

⁹¹ Etna was the son of Uranus and Gaia.

⁹² Vera 1999; Vera 2006; Wilson 1990.

the research did not lead to the identification of any sites if we exclude, in a very hypothetical manner and limiting ourselves to the Roman era, the Vaccheria hamlet. Regarding the churches, the only one we have information on and some partial archaeological testimony is the Benedictine monastery of Santa Maria di Maniace, the birth of which probably dates back to the small monastery constructed *ex-voto* by Giorgio Maniace in the 11th century.

Returning to the sites identified, something that remains elusive is an organic understanding of the relationship that must have existed, in the transitional phase between the Roman and late-antique eras, between the centre identified in the Galatese district and the articulation of the surrounding territory. Certainly, as in other areas of Italy and in Sicily itself, the formation of the *latifundia* must have deeply influenced the growth of the road network, given the need of the *conductores* or the *domini* to visit all the lots of land, which were not necessarily contiguous. The theme of the presence of a *massa fundorum*⁹³ in late-antiquity is interwoven, therefore, with the road network that must have connected Maniace and Maletto with the centres on the Ionian coast, the settlements in the Nebrodi Mountains and the other settlements along the Valley of the Simeto. Unfortunately, the written sources from the Etnean area have left clues that are too faint⁹⁴ to allow the precise identification of *massae*, estates and holdings. In compensation, we have the good fortune to possess a document such as the lead tablet that is able to give voice, albeit in a limited way, to the peasant society that is often silent and neglected and, at the same time, sheds light on the topic of the Christianization of the rural world.

In general, from the overall analysis of the evidence gathered, there emerges the substantial continuity of habitation and the overall good integrity of the sites, both in quantitative and qualitative terms, from the late-antique to the early and middle Byzantine eras. The Galatese site, for example, has not provided material ascribable to the Arab or Norman phases, so it is possible to infer that it was previously abandoned, probably following a natural disaster (landslides or changes in the course of the Saracena?).

It is clear that any future line of research will have to focus on understanding the existing relationship between the urban centre of Galatese and the settlement at the Santa Venera hamlet. Was the life of the two large settlements overlapping, or was there a change in the settlement schemes with the rise of the Santa Venera

settlement as a consequence of the abandonment of Galatese? Future excavations will also be able to clarify the functional and topographic organization of the Santa Venera settlement, as well as its relationship with the impressive wall structure.

From this point of view, the contribution of new technologies will be fundamental. These will have to be inserted within a specific work-flow that is purposefully calibrated, as we have sought to explain briefly, to the particularity of the Etnean volcanic context.

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⁹³ Belvedere 2018.

⁹⁴ We refer specifically to the toponyms *Mascalas*, referable with all probability to Mascalì, and *Flaccius*, the Roman name of the Flascio River which runs between the Saracena and the Alcantara. See Uggeri 1996; Uggeri 2006: 335–336.

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IV – Defence and Control

Chapter 14

The Making of the Frontier in the 9th Century. Rocchicella di Mineo (CT) and Rural Landscapes in Eastern Sicily

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New archaeological research on early medieval Sicily

The last fifteen years have represented a significant turning point for archaeological research on the early Middle Ages in Sicily. In fact, the centrality of the island in the clash between Arab-Muslims and Byzantines for control and supremacy in the central Mediterranean has become increasingly evident.¹ Therefore, the process of forming early medieval society within the transitional passage between Byzantium and Islam must be specifically delineated.

In the context of this new phase of research, surveying the processes of territorial diversification has acquired a new importance as a specific key for investigating the formation of landscapes in the early Middle Ages and their evolution over time.

The first systematic research on medieval settlement in Sicily began in the 1970s and was initially characterised by the attention that historians and archaeologists paid to the later phases of the Islamic presence and to changes in the habitat during the Norman and Swabian periods. In that phase, the scarce knowledge of the archaeological markers relative to the middle-Byzantine phase (8th-9th centuries), as well as those of the early Islamic phase (9th-early 10th centuries) has made the reconstruction of the transformation of the urban centres and countryside in the early Middle Ages ineffective and often generic.

The contextual presence, in the same sites, of the last production of African red slip ware (6th-7th centuries) and Islamic glazed ware (10th-11th centuries) in many of the surveyed settlements in western Sicily had endorsed an overall reconstruction of the settlement choices in the name of continuity between the Byzantine phase and the Islamic age.²

The application of the themes of the Italian high Middle Ages (rupture/continuity; rural settlement/castellation) has not always produced lines of research appropriate to the peculiar historical context and the specificity of early medieval Sicilian society. It is not by chance that the conferences and seminars since the 1990s that have marked important stages in the definition of historiographical problems on the Italian early Middle Ages³ have recorded an episodic and not incisive presence of Sicily. At the same time, studies that have addressed, in more recent years, the formation of early medieval Europe have pointed out the absence of a less episodic and more interpretative archaeological approach to research.⁴

In 2006, the contribution of Annliese Nef and Vivien Prigent⁵ was an important stimulus for archaeological reflection on the early Middle Ages in Sicily as it prompted a joint analysis of the Byzantine and Islamic phases in order to arrive at a more convincing reconstruction of the transformation process.

This work made it clear that the paradigm of the island's marginality in the early Middle Ages, as outlined by historians during the 1980s, needed to be reviewed⁶ and, on the contrary, highlighted its relevance for the understanding of the dynamics of the central Mediterranean in the context of imperial Byzantine and Islamic policies.⁷ Vivien Prigent's numismatic and sigillographic analysis has clearly shown the role played by the island, as the main cereal province of the empire until the Islamic conquest, still supplying Constantinople between the 6th and 7th centuries, and then for its strategic and military commitment to the empire's defence.⁸

¹ See, in particular, the meetings organised in 2002 in Rome: Molinari and Nef (eds) 2004; in 2012 in Palermo: Nef and Ardicione (eds) 2014. For a general framework, see also Arcifa 2018b.

² See, for instance, Molinari 1994.

³ See the meetings organised in Siena in 1992: Francovich and Noyé (eds) 1994; and in Ravenna in 2004: Augenti 2006.

⁴ See, in particular, the remarks of Wickham 2005: 126: 'Archaeology for Sicily in this period is, however, sketchy, so its material prosperity cannot be effectively tested as yet'.

⁵ Nef and Prigent 2006.

⁶ Cracco Ruggini 1980: 3-96.

⁷ See the general framework in Molinari 2009; Molinari 2013.

⁸ Prigent 2006a; Prigent 2010.

Further, thanks to a deeper knowledge of the markers for the 8th-10th centuries,⁹ archaeological research can delineate the existence of strongly articulated situations that cannot be encompassed within a unitary model.¹⁰ On the contrary, their understanding is closely related to the barycentric position of Sicily in the competition between the two empires that made it extremely sensitive to the change of geopolitical balances in the Mediterranean.¹¹

In particular, at the beginning of the 9th century, a strong differentiation between the eastern and the western part of the island began to emerge, with a greater stability of the rural settlements of the eastern region. This contrast will reappear in reverse during the course of the Islamic expansion starting in the 10th century. The understanding of these dynamics requires the refinement of specific interpretations: the theme of the frontier appears particularly useful in this context to understand the formation of a peculiar landscape strongly influenced initially by the demographic and economic policies of the middle Byzantine age and articulated in a specific way during the long period of conflict between Arab-Muslims and Byzantines.¹²

This new way of considering at the Sicilian situation in the 9th-10th centuries implies the need to put it in relation to the frontier studies which were developed a few decades ago and which have been renewed recently. Without going into detail, it involves thinking of Sicily as a field of confrontation for two imperial pretensions and powers, as well as a zone of intense exchanges and circulations, on the model of the Taurus or of the northern part of al-Andalus. Such an ambivalence, well-known in other contemporary regions, has a political and diplomatic dimension, as well as an economic and material dimension.¹³

This is a subject that, until now, has been neglected in the archaeological agenda of the island and on which reflection has only just begun. Historical analysis over the last decade has led to a review of the Islamic

conquest, its various phases and its characterization through the mode of guerrilla warfare.¹⁴

Leaving behind the idea of a progressive conquest of Sicily from west to east and from south to north by the Aghlabids first (from 827) and by the Fatimids afterwards (from 916), Sicily is now seen as a frontier zone between Byzantium and the Islamic empire from 827 until 976, when Messina was taken for the second time by Islamic armies (fig. 1).

The long clash of forces on the island was the result of very precise policies and strategic choices. On the one hand, the continuity of the Byzantine commitment to the defence of the island during the 10th century emerges.¹⁵ On the other hand, on the Islamic side, it is evident that a clear distinction must be made between the Aghlabid phase, characterized by a strategy of conquest aimed at consolidating positions in western Sicily, and the military commitment of Ibrahim II, which promoted a more decisive action of expansion towards eastern Sicily and the control of the Strait.¹⁶

The recognition of the sources highlights the conception of Sicily as a *thaghr*: within this specific dimension, most places were taken and re-taken, time after time, with an impact on the activities of the inhabitants, on the resources of the Sicilian emirate which came in large part from booty or *gizya*, understood as a tribute following a post-bellum pact.¹⁷

The material implications of this dimension are still largely unknown, but the ongoing investigations clearly show the importance of the theme for a specific reading of the processes of transformation of the society and landscapes of early medieval Sicily.

At present, the current revision has focused on the early archaeological contexts of the Aghlabid age. The analysis has allowed new reflections to be elaborated on the process of Islamization and on the archaeological modalities of its recognition.¹⁸ Further, the distribution of early markers in the territory south of Palermo has made it possible to trace the main directions of Islamic expansion from the late 9th century in the countryside of western Sicily.¹⁹

⁹ Arcifa 2018b; Arcifa and Bagnera 2014; Arcifa and Bagnera 2018; Ardizzone, Pezzini and Sacco 2014; Sacco 2014; Sacco 2017; Sacco 2018.

¹⁰ See the picture drawn by Fabiola Ardizzone in 2000 concerning the reconstruction of the exchange networks of western Sicily during the 8th century: Ardizzone 2000; as well as the separate frames between eastern and western Sicily proposed in Arcifa 2010b, and Ardizzone 2010.

¹¹ Arcifa and Messina 2018.

¹² Arcifa 2013; Arcifa 2018b.

¹³ The theme of the Byzantine-Islamic frontier was already addressed in 1980 in Haldon and Kennedy 1980. For an overview and comparison between documentary and archaeological sources see, in particular, the work of Eger 2015. As regards the specific role of the islands of the eastern Mediterranean in this context, see also Arthur 2019; Zavagno 2016; Zavagno 2018. Lastly, see the meeting *The Islamic-Byzantine Border: From the Rise of Islam to the Fall of Constantinople* (Notre Dame 29-30 April 2019) organised by Deborah Tor and Alexander Beihammer, University of Notre Dame.

¹⁴ Nef 2018: 80; Nef and Prigent 2013.

¹⁵ Prigent 2010.

¹⁶ Nef 2015; Nef 2018.

¹⁷ See, in this regard, the analysis in Nef 2018: 79, of Ibn al-Athīr's text relating to the events between 860 and 880: 'He speaks of *sariyas* (expeditions) or *ghazawāt* (raids, attacks), and evokes the accomplishments of the Aghlabid troops: they take booty (*ghanīma*) and they burn (*aḥraqa*), kill (*qatala*), and destroy (*harraba*), he often evaluates the success of an intervention in terms of booty'.

¹⁸ See, in particular, the contribution of Nef 2015; as well as the various contributions relating to the archaeological contexts of Palermo in the same volume, cited here in note 9.

¹⁹ Alfano 2015.

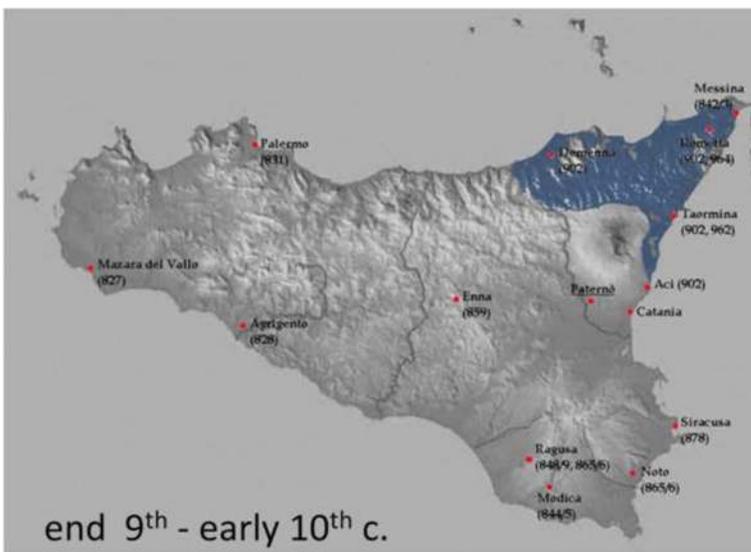
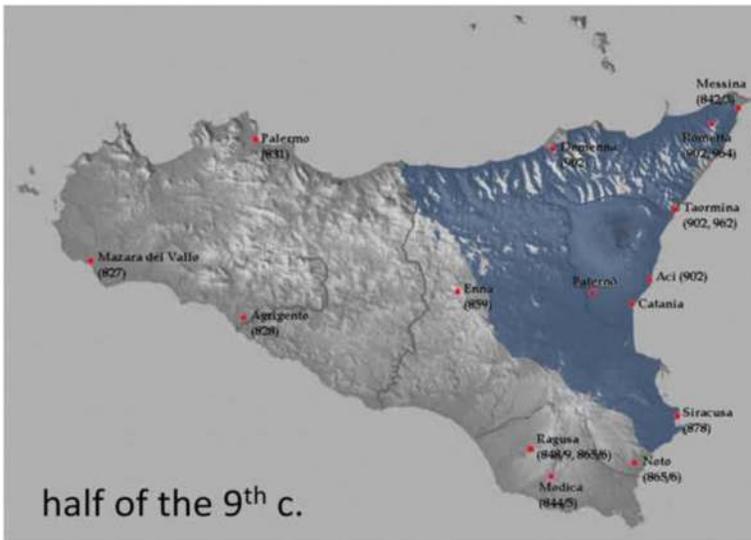
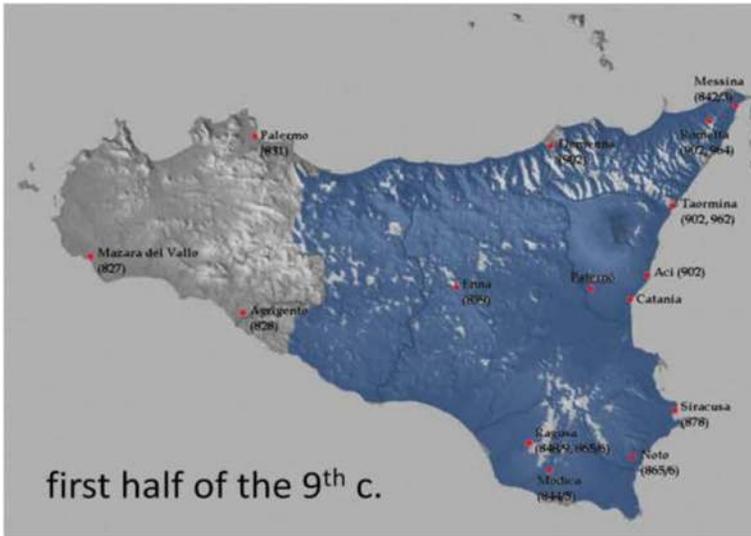


Figure 1 – Principal phases of the Muslim conquest of Sicily (827-964)

The picture of settlements and their socio-economic dynamics in Sicily of the thematic age, especially in the western part, is less well known. However, understanding the possible demographic policy actions and economic revival of the island after the crisis of the mid-eighth century, in the decades preceding the landing of 827, would be of great importance also to understanding the possible consequences on the strategy pursued by the Arab-Muslims.

The tradition of an important fortification action undertaken by the Byzantines in the mid-8th century is attested on several occasions by analysts and compilers who, between the 12th and 13th centuries, wrote about the conquest of Sicily. To exemplify, Ibn al-Athir stated in respect to the years 752/753: 'i Rūm ristorarono ogni luogo dell'isola; munirono le castella e i fortalizi e incominciarono a far girare ogni anno intorno alla Sicilia delle navi che la difendevano'.²⁰ Similarly, al-Nuwayri wrote, concerning the years 747/748: 'il paese fu restaurato d'ogni parte dai Rūm, i quali vi edificarono fortalizi e castella né lasciarono monte che non v'ergeressero una rocca'.²¹

If we exclude the emblematic case of the fortress of Castronuovo, built at the beginning of the 8th century in strict correspondence with the institution of the *thema*, the icastic vision of a fortifying action of the island during the 8th century has not been confirmed in the archaeological research. In fact, at present, with regard to the 9th century, urban archaeology starts to reveal the increased strategic military dimension of the centres of eastern Sicily, such as Enna, Catania, Syracuse, Ragusa, Messina, Taormina.²² Nevertheless, the archaeological data must, at the moment, be reconciled with the numismatic and sphragistic documentation that, already from the second half of the 8th century, allows us to reconstruct more articulated

²⁰ Amari 1880-81: I, 363.

²¹ Amari 1880-81: II, 113.

²² See the framework proposed by Arcifa 2016b.

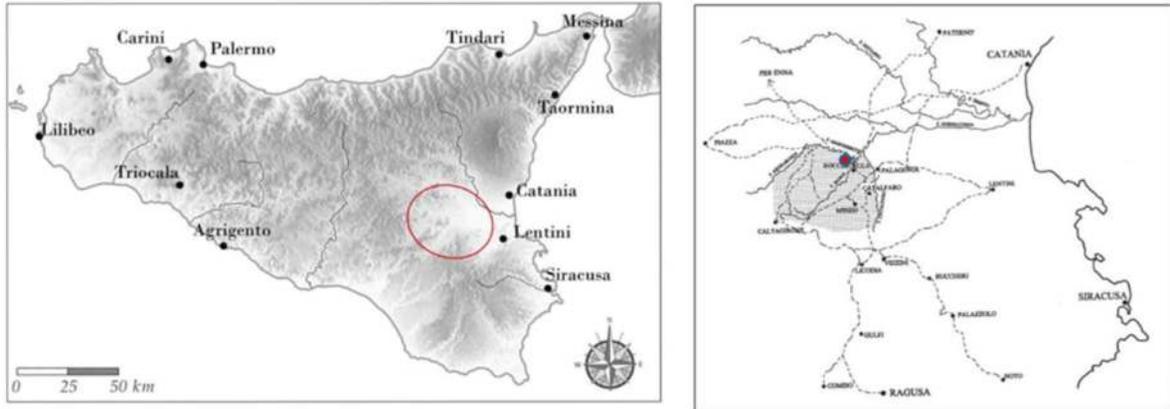


Figure 2 – Localisation of Rocchicella - Mineo (CT) and the Margi Valley

frameworks, both for what concerns the increased presence of military contingents in Sicily, coming from the troops stationed in Constantinople, and for the hypothesised relationship between military contingents and the seizure of papal properties on which the army was allocated.²³ Both are seen as important innovations that could have had profound consequences on the organisation of the property and the rural population.

It will therefore be important for the next phase of research to enhance the context of the middle-Byzantine Sicily that existed before the landing and the possible conditioning that the settlement may have exerted on the dynamics of the conquest. In other words, it is crucial to investigate the formation of the frontier by analysing the previous choices of the Byzantine Empire and their impact on the strategy pursued by the Aghlabids.

As we shall see, in conclusion, it is possible to hypothesize that the defensive strategy put in place for the defence of the island had an evident impact on the territory and on its settlement structure, determining the formation of the frontier area within the island, which will mark the distinction between an early Islamic area, western Sicily, and eastern Sicily, object of dispute between Byzantium and Islam for a prolonged period of time.

This is a dimension that is quite present in Islamic sources but still scarcely considered by archaeological research, which needs to build tools for understanding a specific phase of the island between the 9th and 10th centuries.

The case study presented here, relating to the settlement of Rocchicella, Mineo (CT), offered, in this phase of research, the possibility of refining the archaeological indicators for this phase and has allowed the reconstruction of the settlement framework prior to the period of the landing, therefore providing useful elements for reflection on the theme of the frontier, its formation and the impact on the choices made by the Islamic emirate.

Rocchicella - Mineo (CT): archaeological context

The Margi valley is included in the western sector of the Piana di Catania, bounded to the northwest by the Erei mountains and to the southeast by the Iblei mountains. The flat conformation and the presence of the Margi River valley have favoured the development of a dense network of road axes, partly offset by modern roads (fig. 2).

They favoured the communication of the valley with the Ionian Sea and the southern coast, as well as with the inner territory of the island. The fertility of the soils and the road structure have contributed to determining the density of settlements in the valley, which in some historical phases was particularly intense. In the northern part, on the basaltic upland of Rocchicella, and on the southern terraced slope, long-lasting settlement activity is attested, from the Palaeolithic age to the late Islamic age, although different moments of *caesura* can be recognized.

The proximity of some pools of water, which emanated sulphurous exhalations and sudden jets of carbon dioxide, favoured the development of the indigenous sanctuary dedicated to the divine Palici brothers, at least from the 7th-6th centuries BC. In the Greek period, the sacred area of Rocchicella played a central

²³ Prigent 2015.

role. Around it, in fact, a large property of the sanctuary itself was developed which, according to historical and archaeological evidence, was still in existence in the 1st century AD.²⁴

After the definitive collapse of the sanctuary during the 2nd century AD, the land ownership was reorganised around a 'great estate' whose management centre seems to be recognizable in a Roman villa located at Favarotta - Tenuta Grande (2 km away), which promoted an intense development of rural and productive sites around it, including at Rocchicella, where on the remains of the Greek *hestiaterion* a late antique phase has been traced.

The relationship between the two areas of Rocchicella and Favarotta continued until the 6th-7th centuries, when a monastery was built in Favarotta²⁵ that, in our hypothesis, may have inherited, partially or entirely, the ancient property, assuming the managerial role for the area that originally belonged to the sanctuary and subsequently to the Roman villa.

In the same period in Rocchicella, inside the *temenos* of the sanctuary, on the late Hellenistic remains, a village was developed with a small church on the ruins of the *hestiaterion* and several buildings consisting of single rooms, scattered along the slope in a casual way. It is possible to distinguish a warehouse by the presence of amphorae still *in situ* (Keay LXI) and scales for weighing coins, suggesting the development of activities which were not simply related to a subsistence economy.

The life cycle of the small village, which is framed overall between the 6th and 7th centuries (HAYES 104 A, 98 A/B, 109 A, 91 D; KEAY LXI; LRA 1.2; *decanummus* of Mauritius Tiberius of 587-588), is significantly consistent with that of the monastery whose life also closed during the 7th century²⁶ (fig. 3).

In the reconstruction of the settlement dynamics of the early Byzantine age, therefore, it is believed that the monastery could have been built by inheriting part or all of the property originally belonging to the sanctuary and, later, to the Roman villa of Favarotta, assuming in some way the leadership role covered in late ancient times by the villa.

In this new context, the village (*khori*) built on the ruins can be interpreted as a *conduma* serving the monastery for the economic exploitation of the vast surrounding fields.²⁷

The end of the 7th century marked the end of the village and monastery, discontinuing a land structure inherited from the classical age. On the ruins of the village, in the early 9th century, a new settlement was established in a radically changed context.

Its chronological framework is made possible by the discovery on the layers of life of the huts of two folles by Michael I (811-813), together with cooking pots (ollae with groove decoration), and table/pantry ware (basins and amphorae). A further confirmation of the overall chronology of this phase is given by the discovery of some pits near the modern *Antiquarium*, where fragments of cooking pots and table ware associated with folles of Constantine V (741-775), Michael II (820-829) and Theophilus (829-842) were found.²⁸

The excavations conducted since 2010 have involved the southern area of the Greek *hestiaterion* (a location where banquets were held). Here, above the layer of the 6th-7th centuries, we highlighted the remains of two circular dry-stone dwellings. A second area of occupation was identified in the southeast of the sanctuary, where a large warehouse (fig. 4), destined for the storage of food as well as craft activities, was found. As a matter of fact, ceramic production is attested by ceramic waste in connection with two small ovens, a pit kiln, used for cooking pots and a mount kiln, probably for coarse ware. Although, in its present state, there is no evidence of a dedicated kiln, the abundant presence of iron slag (*bluma*) may suggest that metallurgical activities took place in the area. Warehouse A provides an interesting ceramic context to evaluate how the site was supplied and its role in the network of regional and supra-regional exchanges.

Out of a total of 70 specimens, the analysis shows that the majority (84.3%) were local or regional products (cooking pots, table ware, amphorae for storage and transport). The first class, cooking pots (25.7%), is composed almost exclusively of Rocchicella type ollae (fig. 5) made with local fabric rich in calcite spatica (fabric n.1), while the table ware and amphorae for storage and transport (fig. 6) are made from two different fabrics: one substantially local due to the presence of volcanic rock fragments, the other regional, perhaps of the central southern area (Philosophiana?).

The assemblage allows us to highlight an important percentage of imported transport amphorae (15.7%) that originated from the Aegean area and Asia Minor.²⁹

The data (numismatic and material cultural) allow us to outline with sufficient clarity the middle Byzantine phase at Rocchicella. So, the most characteristic

²⁴ Maniscalco 2008.

²⁵ Arcifa 2007.

²⁶ Arcifa and Longo 2015; Longo 2016.

²⁷ Arcifa 2017.

²⁸ Arcifa 2008.

²⁹ Arcifa 2018a.

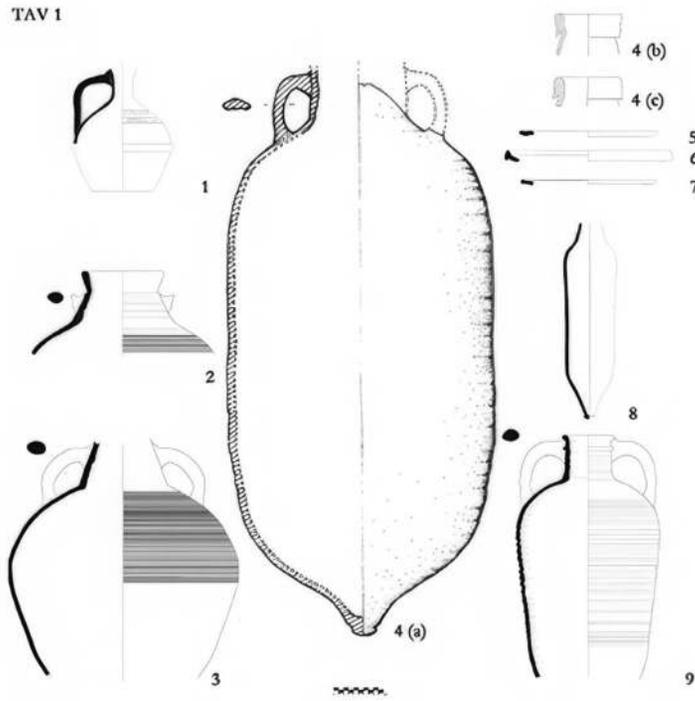


Figure 3 – Rocchicella – Mineo (CT): transport amphorae from a warehouse (6th-7th c. AD)

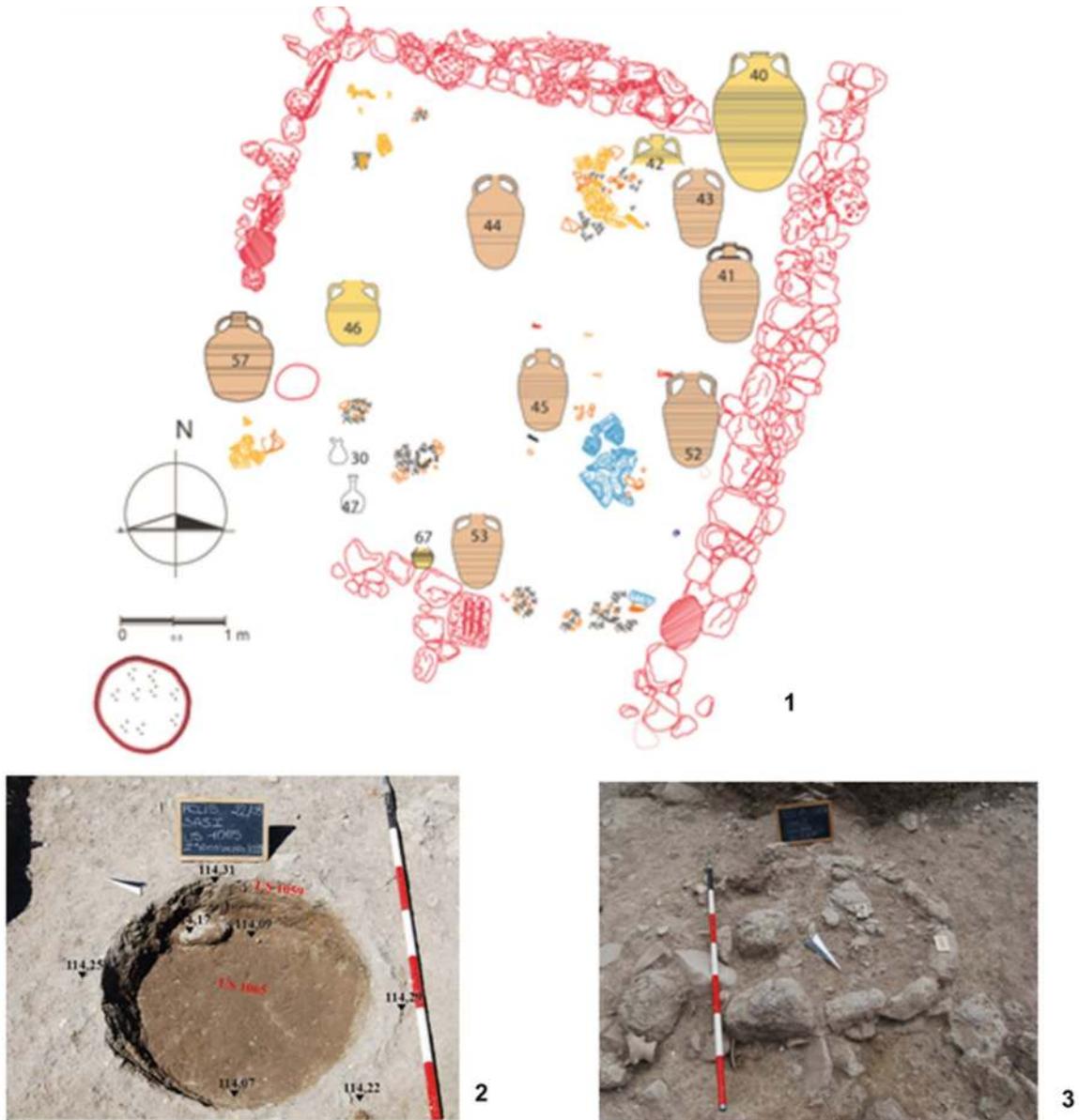


Figure 4 – Rocchicella – Mineo (CT): SAS I, crafts area warehouse (a), pit kiln (b), mount kiln (c).

archaeological markers are, first of all, handmade cooking pots (with a specific form that mixed coil and slab); local or regional amphorae with round or umbonate bottoms and handles with the typical medium grooves; chafing dishes in ‘*vetrina pesante*’ and lamps of the ‘*a ciabatta*’ type, besides globular transport amphorae imported from the East, related to the surviving LRA1 (Yenikapi 12 type or Bozborum class 1-4).

To these archaeological markers we should then add circular dry-stone dwellings, a type of building attested also in other sites of eastern Sicily and better

preserved (than in Rocchicella) at Contrada Edera in Bronte (fig. 7).³⁰

The considerable amount of material on site, largely reconstitutable, from the 9th century levels documents a sudden abandonment of the site at a rather early time, probably by the first half of the 9th century. In fact, numismatic documentation coming from life levels is polarised around the emissions of Michael I and Michael II, suggesting a settlement that had arisen within the first decades of the 9th century and abandoned shortly after.

³⁰ Arcifa 2016a.

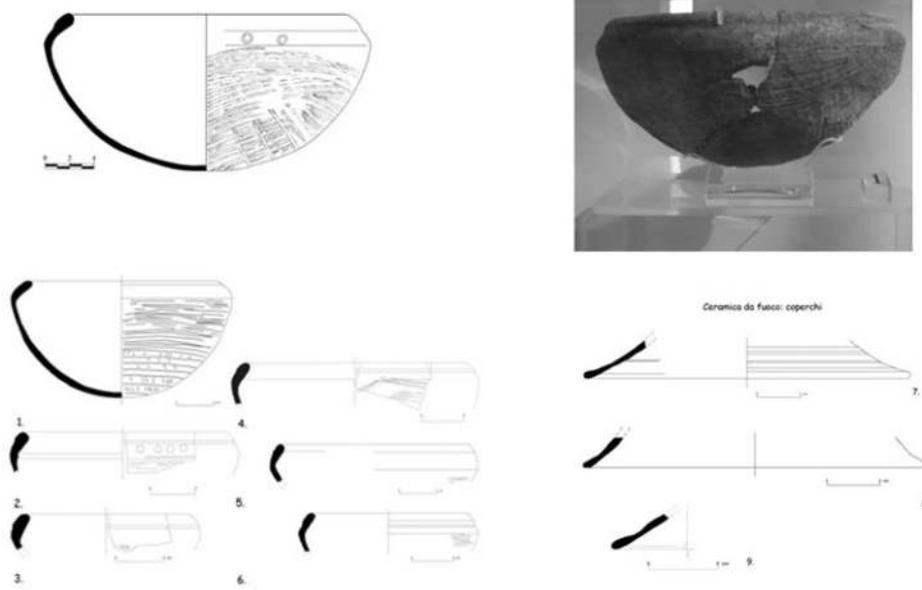


Figure 5 – Rocchicella – Mineo (CT): cooking pot with combed decoration (ollae Rocchicella type)

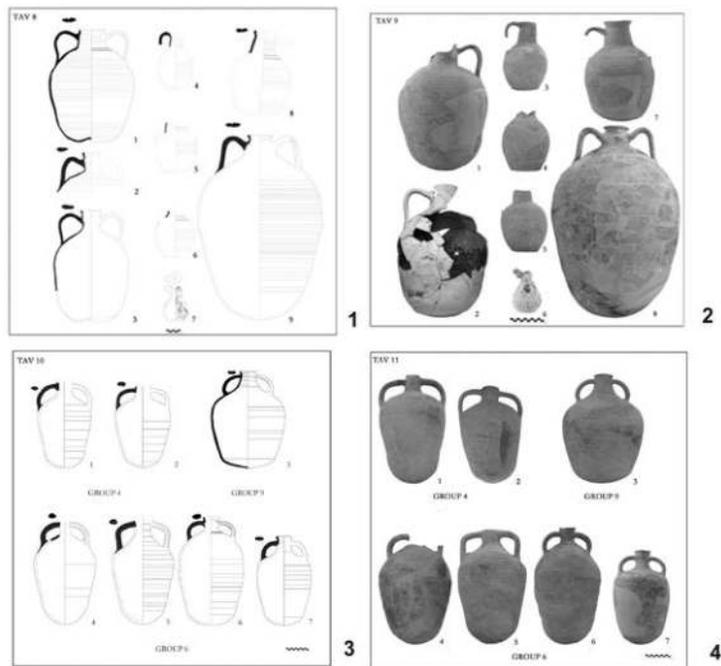


Figure 6 – Rocchicella – Mineo (CT): a-b storage and transport amphorae, regional production, c-d imported transport amphorae from Asia Minor and the Aegean Sea

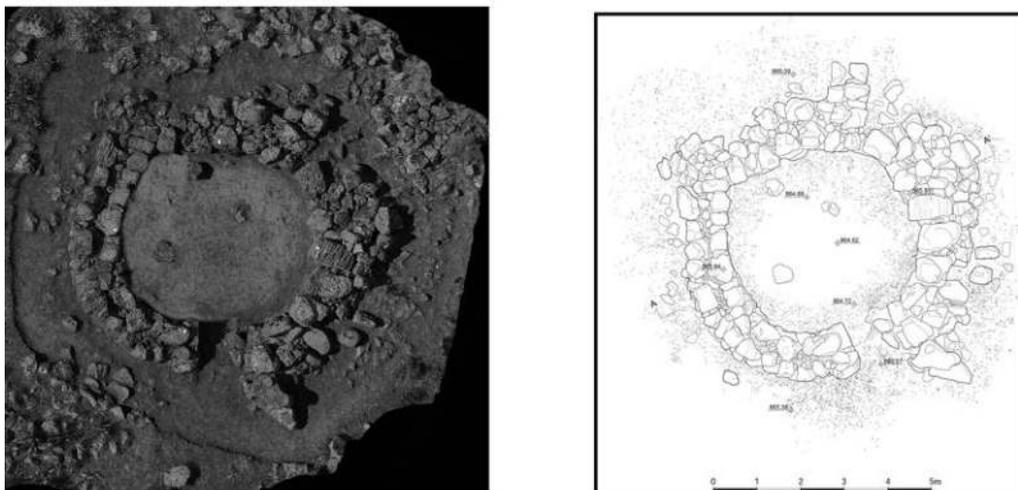


Figure 7 – Maletto (CT), Contrada Edera: circular dry-stone dwelling 7

The indications in the Islamic sources relative to the first years of the conquest, after the landing of 827, present data of great interest for this territory. The texts of Ibn al-ʿAṭhīr, al-Nuwayrī and Ibn Khaldūn³¹ contain convergent indications regarding the conquest of Mineo which took place immediately after the failed siege of Syracuse. The fortress was taken after three days of siege (828/829) and manned by a part of the military contingent. The allocation of a garrison of Arab-Muslims seems to have given rise to a not ephemeral occupation of the centre: the following year, Mineo would be besieged by the Byzantine patrician Theodotus, who was forced to withdraw to Castrogiovanni (829/830) after the arrival of Andalusī troops to support the fortress.

The scarce information provided by the sources allows us to glimpse an important role of Mineo and its territory in the years preceding the taking of Palermo (830). From the permanently occupied fortress of Mineo,³² the Arab-Muslim forces branched off towards both Agrigento, conquered in 828, and Castrogiovanni.

The position of Mineo, moreover, which dominated the plain of the Margi River, allowed easy access to two of the main axes of the island's internal road network: the

road from Catania to Agrigento through Monte Calvino and Sophiana, and the road network towards the Enna area through Aidone/Morgantina. Therefore, the taking of Mineo was functional, at this early stage, to bringing the attacks to the central-southern territory and towards the fortress of Castrogiovanni on which the Byzantine defence hinged in these years, as can be clearly seen from the presence of the Byzantine general Theodotus, sent from Constantinople 'with great armies of 'Al'am.n (Armenians?) and other people'.

The scant descriptions of the conquest allow us to outline the role played by Mineo, which in this phase was the operative base of the Arab-Muslims before the stabilisation of the emiral power in western Sicily, a less ephemeral presence than the indications of the sources reveal. It seems possible to relate to this phase the birth of a site such as Mount Catalfaro, a few kilometres from Mineo, on the summit of which some Muslim tombs have been discovered.³³

The early Islamic presence in this territory, even if of short duration, could have had a wider impact on the territory and its dynamics, ultimately determining a crisis in the rural settlements: the archaeological data verified at Rocchicella, in fact, indicates the depopulation of the site in the first half of the 9th century. Only during the second half/end of the 10th century, on the ruins of the middle-Byzantine village, would there be a new phase of life in relation to the Islamic colonizing push of eastern Sicily indicated by the first archaeological traces (glazed, painted ceramics from the second half of the 10th century).

³¹ This tradition is reported in the *Cambridge Chronicle*, Amari 1880-81, I: 278, and refers to the years 830-1: 'l'anno 6339 fu presa *Mināwh* (Mineo) ed ucciso il patrizio Teodoto'; the episode is also remembered in Ibn Khaldūn, Amari 1880-81 II: 175: 'assediate per tre giorni la città di Mineo se ne insignorirono. Presero poi il castello di Girgenti; indi marciarono verso la città di Castrogiovanni'.

³² The archaeological data and the excavations carried out on the fortifications of Porta Udienna clearly testify to the modernisation of the Hellenistic fortification with the construction of the ear-shaped ramparts, which can be dated between the 8th and 9th centuries: Maniscalco 2009.

³³ Arcifa 2001.

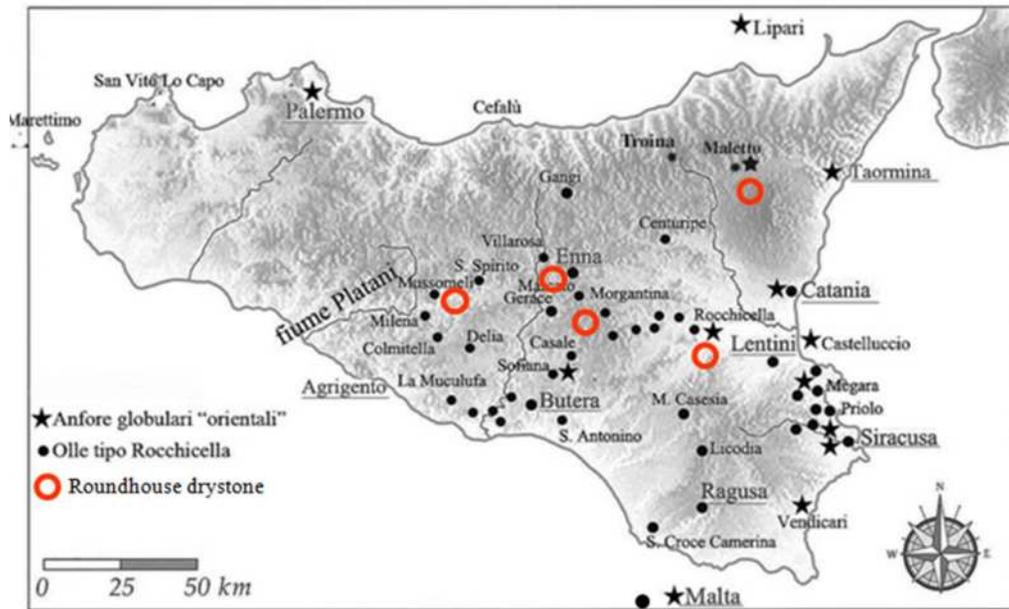


Figure 8 – Localisation of globular amphorae, cooking pots with groove decoration, dry-stone roundhouses in 9th century contexts in Sicily

Rural settlement in the 9th century: territorial frameworks and diversification processes

In order to better understand and historicize this hypothesis, it is useful to integrate these data into the wider context of the central-southern territory, for which we currently have some interesting indications from non-systematic surface surveys. If we examine, in particular, the distribution of some of the best-known indicators of the early 9th century (transport amphorae, from the Aegean Sea or Asia Minor, cooking pots with grooved decoration and slab technology, sunken buildings with circular or rectangular plans), we can see a distribution of rural settlements essentially concentrated in central-southern and eastern Sicily that favoured the areas south of Enna, between Gela and Butera, around Ragusa and between Lentini and Syracuse, and allows us to highlight a precise gravitation along areas of long-distance roads (fig. 8).

The surveys to the north of Syracuse show a dislocation along the coastal strip between the territory of Priolo to the south and Punta Castelluccio to the north, affected by the Roman coastal road network, the *via Pompeia*, whose use still continued in medieval times. Along this axis are the sites of S. Foca-Manomozza, as well as Thapsos, while further north the reoccupation involved Megara, S. Cusumano, Curcuraggi and a series of sites north of Augusta (Frandanisi, Xirumi, Vallone Maccaudo) along the road to Lentini.³⁴

From Lentini towards Piazza Armerina there is the site of Rocchicella di Mineo and the two sites of Contrada Rocca and Contrada Calvino, in the territory of Ramacca. Proceeding towards the southeast along the course of the Margherito River, there are the sites of Casalgismondo, Contrada Gallinica, Rasalgone, indicated by the Morgantina Survey, and then again, the same Villa del Casale at Piazza Armerina, Sofiana, Butera. It is an arrangement closely related to the reconstruction hypothesized for the Catania - Agrigento road axis according to the *Itinerarium Antonini*, which still occupied a leading role in ensuring the transverse link between the Ionian coast and the southern coast between Gela and Licata.³⁵

The survey carried out in the territory of Gela³⁶ showed a further concentration of settlements in the area southwest of Butera, Monte Priorato, Monte Milingiana, Suor Marchesa, La Muculufa, along the *palaia odos*,³⁷ the road axis of Greek origin which still in the Middle Ages guaranteed the internal links from Butera to Agrigento through Naro and Favara.³⁸ To the south of Butera, the sites of Perciata and S. Antonino are rather connected to the ancient *via Selinuntina*, the coastal road in the direction of Syracuse. Along this route we finally have other agglomeration points around S. Croce Camerina,³⁹

³⁵ Arcifa 2013; Randazzo in press.

³⁶ Bergemann 2010: 207; Bergemann 2014.

³⁷ Cusa 1868-82: I, 16-19.

³⁸ For the territory of Agrigento, see the date in Rizzo, Danile and Zambito 2014.

³⁹ Di Stefano and Fiorilla 2000.

³⁴ Cacciaguerra 2009; Cacciaguerra 2013; Cacciaguerra 2014.

Ragusa, Licodia Eubea and Monte Casesia,⁴⁰ which seem to suggest a further route in a northeasterly direction that passed over Mount Iblei.

In a still indefinite way, one has the impression that the location of the sites is arranged around a design that takes into account the long-distance road axes, some inherited from the Roman era, more immediately connected with Syracuse. It is no coincidence that we find the same types of materials in the urban centres marking this ideal communication network always in connection with urban areas equipped for defence: Enna's records come from the third courtyard of the castle of Lombardy and, more recently, from the slopes of the Rocca di Cerere,⁴¹ Catania, Lentini, as well as Butera and Ragusa. In these cases, excavations have revealed phases, datable thanks to the evidence of cooking pots with combed decorations (like the Rocchicella type), which provide a more precise chronological horizon for their foundation.⁴²

Compared to the data known for eastern Sicily, the archaeological picture that emerges from excavations and surveys west of the Platani seem to indicate a strong rarefaction of the rural settlements in western Sicily, at this chronological point, outlining sub-regional areas which were strongly differentiated.⁴³

The drastic decrease of the rural settlements is particularly evident from surveys of Calatafimi and Entella, which show a further reduction, in connection with a probable demographic decline. In the area of Calatafimi, already characterized by the strong concentration of settlements in the two large villages of Acquae Segestanae and Rosignolo, there are very few sites that survive, marked by poor chronological indicators for the 8th century.⁴⁴ Similarly, the survey in the area of the Monti di Trapani already indicates for the 6th -7th centuries a rarefaction of settlement sites. This phenomenon is accentuated in the late Byzantine period.⁴⁵ In the southern territory of Contessa Entellina, only 5 sites show elements of clear continuity with respect to the 13 sites still attested in the 7th century.⁴⁶ Further indications emerge from the survey of the Imera valley, where only the village of Burgitabis seems to have maintained a phase in the 8th century,⁴⁷ and from surveys of the Platani Valley, which

highlight similar difficulties in isolating the evidence on the ground for the phases of the 8th-9th centuries.⁴⁸ A similar panorama is shown by the analysis of the Jato Valley settlement, which presents sporadic evidence for the 8th century, in line with the very meagre picture that emerges from research in the western area.⁴⁹

These research projects integrate the few indications available from the Monreale Survey, conducted in the 1980s: the preliminary data published at the time foreshadowed an Islamic reoccupation of sites occupied between the late 6th and early 7th centuries and then abandoned.⁵⁰ The same conclusions were reached by the survey of Contrada Mirabile in the territory of Mazara⁵¹ where, on the four sites affected by the presence of African red slip ware dating back to the 7th century, there was then an Islamic reoccupation indicated by filter and glazed ceramics dated to the 11th century. This hiatus seems to be supported by the lack of those archaeological markers that today we can frame within the 8th-9th centuries. It is a similar picture to the one that emerges from the surveys of the Platani Valley, where the difficulty of isolating the evidence for the phases of the 8th-9th centuries arose.⁵²

The actual (and temporary) distribution of urban and rural sites for this period allows us to highlight a phase, not well-known up to a decade ago, and to verify the concrete formation of a specific area, closely linked to the role of Syracuse, the Byzantine capital of Sicily. The comparison of these first data with the archaeological and documentary evidence, referable to the 8th century, leads to this phase being seen as a real turning point. Archaeological surveys and numismatic data seem, in fact, to emphasize the demographic and economic crises that crossed Sicily – and more evidently western Sicily – especially in the second half of the 8th century. The end of the economic exploitation of the *Patrimonia romanae ecclesiae*, or the plague epidemic mentioned in sources in the second half of the 8th century are some elements of a systemic crisis that await a more thorough analysis. Compared to that phase, which must have more profoundly affected the areas away from large urban centres such as Syracuse and Catania, the first half of the 9th century highlights new features especially for eastern Sicily. This phase, in fact, is characterized by an evident Byzantine investment in terms of strengthening urban defences, an increase in agricultural exploitation, the continuity of life (as in the case of Sofiana)⁵³ or the reoccupation of sites which had been abandoned at the end of the 7th century (as in Rocchicella). It seems to indicate a deliberate strategy

⁴⁰ Arcifa 2010a.

⁴¹ Giannitrapani and Valbruzzi 2015.

⁴² For individual data, refer to Arcifa 2016.

⁴³ For instance, see Molinari 2009.

⁴⁴ Molinari 2014; Molinari and Neri 2004.

⁴⁵ Only the site of Baida – Testa dell'Acqua shows some evidence ascribable to the 8th century: Rotolo and Martín Civantos 2012; Rotolo and Martín Civantos 2014.

⁴⁶ Corretti, Facella and Mangiaracina 2014.

⁴⁷ See also the sites of S. Antonino and Passo Grande in the Imera valley where amphorae with median groove handles are attested: Belvedere, Burgio and Cucco 2014.

⁴⁸ Rizzo 2004: 154.

⁴⁹ Alfano 2015.

⁵⁰ Johns 1985; Johns 1988; Johns 1992.

⁵¹ Fentress, Kennet and Valenti 1986.

⁵² Rizzo 2004: 154ff.

⁵³ Vaccaro and La Torre 2015.

on the part of the Byzantine Empire to enhance a part of the island more closely connected to the territories still in the hands of the Empire (Puglia and Calabria) and direct economic relations with the eastern areas (Constantinople, Aegean area, Asia Minor).

In more general terms, the archaeological visibility of the 9th century in eastern Sicily compared to the more labile evidence in western Sicily for the same period would not be the result of chance, or a lack of knowledge of the archaeological indicators of western Sicily, but it rather seems to be the result of a policy of demographic strengthening conducted by the Byzantine Empire and related to the strategic role that Sicily came to play in the clash with the Arab-Muslim Empire.

The revitalization of the central and southern Sicilian countryside, in this context, appears to be in synergy with the fortifying action of the main urban centres. In this respect, archaeological data can help to highlight a dirigiste policy of considerable financial commitment concerning not only the seasonal financing of military expeditions but that also affected the countryside and villages. Although ephemeral, this recovery of rural settlement seems closely related to the profound changes that mark the relationship between the state, landowners and military between the late 8th and early 9th centuries.

At the end of the long season in which the administrative apparatus directly provided for the maintenance of the army through the reallocation of fiscal resources in terms of production and distribution of goods, a new phase began, characterized by a closer link between land ownership and support of soldiers, within a policy of compulsory circumscription.

In this context, the *chorion* formed the tax base to cover the costs of military service and provide local equipment for the *stratiote*.⁵⁴

The measures adopted or extended by Nikephoros make it possible to highlight this new dimension of the village (*chorion*), which covered the costs of military service by ensuring the maintenance of soldiers recruited or assigned to the village as taxpayers. At the same time, its fiscal capacity became the basis for recruitment.

Needs related to the provisioning of the army indirectly fed an economic circuit that increased the wealth of the eastern territories.

⁵⁴ See, in this regard, the analysis and comparison of evolution in the contemporary Carolingian context proposed by Cosentino 2017. As for the analysis of the measures attributed to Nicephorus I, see the interpretation of Haldon 2016, with reference to the first two vexations, attributed by Theophanes the Confessor to Nicephorus I, in the context of a displacement of soldiers from Asia Minor to Thrace.

The making of the frontier. A long-term strategy?

The strong focus on chronological data in the first decades of the 9th century raises many questions about the commitment and strategy pursued by the Byzantine Empire in the defence of Sicily. In this sense, archaeological research can provide a unique point of view to assess the effort put in place during the long thematic period. A first and more far-reaching question relates to the chronological period involved: is this picture the result of a settlement in response to the Islamic advance or an attempt, made in the years prior to the landing, as a result of a broader planning by the Byzantine Empire?

Is it possible, in other words, to verify the existence of a strategic policy pursued from the 8th century and strongly conditioned by the need to defend the capital, Syracuse, or are the actions of the Byzantine Empire a mere reaction to the landing and loss of the territories of western Sicily?

Although difficult to resolve due to the objective difficulty of archaeological research in achieving such a finessed interpretation, the question appears to be well-founded. In fact, it concerns the possibility of measuring the real capacity of the two empires to elaborate long-term strategies for the domination of the central Mediterranean. An investigative project aimed at focusing on these issues will, in the future, require the ability to use and compare data of different nature (archaeological, numismatic, sigillographic) which can help to compose an articulated and complex picture.

At present, the archaeological data does not allow us to interpret these interventions as a precise strategic plan previous to the Islamic landing of 827, or as a subsequent response to the Islamic presence on the island after 827. The question at the moment remains completely open: if we want to interpret the archaeological framework as the result of a Byzantine reaction in the years immediately following the landing of 827, the concentration of efforts on the eastern side of the island appears, logically, as the result of a necessary retreat after the taking of Agrigento and Palermo, which marks, initially, a sort of demarcation line, partially coinciding with the Platani River. On the other hand, at the moment, we cannot completely exclude a deliberate choice on the part of the Byzantines to have already concentrated their forces in eastern Sicily in the years preceding the Aghlabid landing. After all, the loss of control of the Strait of Sicily after the fall of Carthage (699) could have triggered a turning point in the policy of disinvestment of the Byzantine Empire in western Sicily, against a tighter military commitment in eastern Sicily and Calabria for the control of the Strait of Messina and the Ionian Sea.



Figure 9 – Localisation of the military commands of the *topoteretai* in the *theme* of Sicily. In the frame, the seal of *Theodoros, hypatos and topoteretes* of Enna (from Prigent 2015: 170)

The construction of the great fortified wall of Castronovo⁵⁵ also seems to be part of this perspective. Fruit of an economic effort of considerable proportions and unique at the time, its topographical choice enhanced, from the beginning of the 8th century, the centrality of the Platani area as a barycentric point for the defence of the island. At the same time, however, it represents an advanced bulwark for the garrison of the main roads towards eastern Sicily.

Therefore, the distribution of seals of the *topoteretai*, (fig. 9) starting from the second half of the 8th century does not seem random: it shows the establishment of elite regiments organized on the model of the Constantinopolitan *tagmata* quartered in the main fortresses with a strongly unbalanced distribution in favour of the urban centres of eastern Sicily (Enna, Catania, Syracuse, Ragusa, Cefalù).⁵⁶

In this second option, this progressive militarization of the island could probably be even more directly connected to the reorganisation underway from the second half of the 8th century on the African shore: the sending of the forces of the Abbassid *jund* to stand up to the kharijite revolt of Berbers reinforced in Ifriqiya a strong and dangerous military base which, after 800, in a context of greater political and social stabilisation following the rise to power of the Aghlabids, could be directed outward.⁵⁷

Beyond this hypothetical picture, it is evident that the Byzantine military and economic commitment to eastern Sicily was the basis for the 'resistance' of this part of the island and of the capital itself, Syracuse, conquered by the Aghlabid only in 878, 50 years after the first Aghlabid military intervention in 827 and the conquest of Palermo, the capital of the Sicilian emirate, in 831.

A better understanding of this phase is therefore of fundamental importance for understanding the formation of the frontier, verifying in concrete terms the existence of a precise strategic plan and the concrete commitment of Byzantium in a demographic and economic sense.

The context of the border and the well-known policies related to the Byzantine thematic organisation provide a plausible framework for hypothesising, at this stage, movements of soldiers or military contingents from other parts of the empire, deployed in specific areas in connection with the major arteries linked to Syracuse that contributed to the demographic and economic growth at this stage.⁵⁸

The economic and financial commitment to the eastern territory would contribute to maintaining and increasing the wealth of these territories on which the

⁵⁵ Vassallo 2009. For the latest research on the area of Castronovo, see Carver and Molinari 2017.

⁵⁶ Prigent 2006b: 149.

⁵⁷ Chapoutot-Remadi 2017; Nef 2011; Nef 2018: 80.

⁵⁸ In particular, the sunken buildings with circular or rectangular plans are a type of alien to what has been generally thought of as being Byzantine and show interesting links with examples in other areas of the Byzantine Empire, like the Crimea; so, an important question is whether they represent imported types, perhaps reflecting population movement: see the remark in Arcifa 2016a; Arcifa, Leanza, Luca and Messina 2020.

'guerrilla' campaign implemented by Arab-Muslim troops would be focused.

This kind of conflict, over time, would produce a slow transfer of resources from the rich eastern territories to the military Islamic elites in western Sicily and would contribute to the economic development of the western territories of the island during the 10th century.

Conclusion

It will be necessary to build a specific research project around the theme of frontier archaeology in early medieval Sicilian archaeology. This does not mean to elaborate an idea of the frontier as a contested area between two military forces and materializing a *limes*, but to rethink the frontier to enhance the theme of coexistence, institutions and populations, in contact and contrast. The archaeological approach, through the study of landscapes, economic resources and their exploitation, allows us to examine 'from within' the functioning of a complex society, presenting specificities - not only Byzantine and not only Islamic - and to fill the substantial void of historical and archaeological documentation for these centuries.⁵⁹

The study of material aspects can contribute to the concrete definition of the progressive integration of socio-economic contexts, productive languages, technological skills, both local and allogeneic, which over time would contribute to the recognizability and specificity of the island society in the context of the Islamic Mediterranean.

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⁵⁹ With reference to eastern Sicily, see new PhD research on *Productive landscapes in a frontier context: for a history of material culture in eastern Sicily between Byzantium and dār al-islām* led by Michelangelo Messina (University of Catania, in collaboration with Paris 1 Panthéon-Sorbonne), aimed at investigating the reality of the frontier and its dynamics between the 9th and 10th centuries.

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Chapter 15

Byzantine and Islamic Villages, 'Rupestrian Settlements' and Fortifications in Southeastern Sicily: the LAMIS Project

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1. Many villages, few fortifications: old models and new questions for early medieval Sicily

The archaeology of early medieval Sicily is known for being rich in rural settlements and poor in fortifications, despite its complex and troubled political and socio-economic history. In fact, the island experienced three main conflicts during the late antique and early medieval periods that were very different from each other and had different effects on the countryside and settlements.¹

The sources agree on the destruction caused by the Vandal war that had three phases (440-442, 455-465, 468-475/6) and alternate fortunes. In the face of this menace, between 440 and 475, armies and fleets were certainly stationed on the island and the fortifications of the main cities were probably restored. Archaeological research has also shown through the identification of many indicators the impact of the conflict on cities and the territory.² Instead, during the Gothic war, Sicily was a rear-region mainly used as a base for launching and supplying military and naval forces. The short duration of this menace (just two years: 535 and 550) probably did not lead to large-scale state investments for the construction of fortifications in the territory.

The Arab-Byzantine warfare that involved Sicily from the mid-7th to the 10th centuries had a different role.³ Even emptying the sources of their ideological charge, they are clear on the strong impact produced on the population and settlements and provide interesting data on the investment made in armies and fleets and the progressive militarization of the territory.

Considering these conflicts, the late 19th and first half of the 20th century positivist and idealist historiography and archaeology profoundly influenced the definition

of the post-classical settlement model of Sicily by applying a paradigm that emphasized the break with the Roman and late antique socio-economic model which would have collapsed as a consequence of Islamic raids carried out from the mid-7th century until the conquest of the whole island in the early 10th century.⁴ This approach was clearly derived from the influence of Pirenne's work.⁵

This interpretative model was based on the reading of some sources which emphasized the impact of the war actions carried out by the Islamic army on the Sicilian Byzantine territories. The paradigm was based on Paul the Deacon, a fundamental source for early medieval Mediterranean history. In the *Historia Langobardorum*, he states that, during the Islamic siege of Syracuse in 669, the population of the city '*per munitissima castra et iuga confugerant montium*'.⁶ This event is also reported by other Latin and Arabic sources. The *Liber Pontificalis* states that the Muslims '*obtinuerunt praedictam civitatem et multa occisione in populo qui in castris seu montanis confugerant fecerunt*'.⁷ The same information is reported by *al-Bayān al-mughrib* who reports that, in 669, Mu'āwiya ibn Ḥudayj sent 'Abd Allāh ibn Qays to Sicily for a raid and returned with a large booty of jewels which were then sold in India.⁸

The reading of the sources, their interpretation and application to archaeological contexts⁹ thus have led over time to the crystallization of the settlement model into five main aspects that would have characterized the organization of early the medieval countryside in Sicily: 1) the abandonment of coasts and depopulation of the countryside; 2) the contraction of main centres (urban and rural); 3) population transfer to fortified

¹ Paper submitted: March 2020.

² For a general overview, see: Caliri 2012; Giunta 1958.

³ Fois 2014; Nef 2014; Nef and Prigent 2010.

⁴ Agnello 2003: 23; Bonacasa 1976: 18; La Rocca 1993: 38-39; Pace 1936-49: I, preface to the 2nd edition, XVI; Pace 1936-49: IV, 461.

⁵ Pirenne 1937.

⁶ Paul the Deacon: V, 13.

⁷ *Liber Pontificalis*, 190.11-40.

⁸ Amari 1880-81: II, 2.

⁹ Maurici 1992: 15; Uggeri 1974: 211; Uggeri 2006.

hilltop sites; 4) the birth and development of rupestrian settlements; 5) a trade crisis and breaks with trans-Mediterranean trade networks.

The starting point of this paradigm hides a fundamental error. In fact, the model was built exclusively on few sources without critical analysis and contextual archaeological data.¹⁰ The weakness of this model, therefore, can be summarized briefly in three main points: 1) the absence, or low accuracy of chronological data. The model was constructed considering the phenomena simultaneously in action from the 7th century without chronological reference points based on stratigraphic data; 2) a lack of material aspects. The model was defined without the contribution of archaeological documentation on material structures and material culture; 3) the decontextualization and generalization of the model. The model was applied to the whole region in territories within and outside urban centres and without a contextual definition of the transformations.

Recently, historians and archaeologists have dealt with these well-known problems obtaining results that have challenged these assumptions. The examination of the sources, in fact, has allowed us to assess their impact and regularity on the regional territory. The results show that Islamic raids were not constant over time nor equally incisive. During the 7th century, there were few events, though they were certainly traumatic in the population's perception, and the 8th century does not seem to have been a long dangerous period. The significant peaks, instead, are mainly located in the second quarter of the 8th century and between the second and last quarter of the 9th century.

The results of recent archaeological research show that the uncritical application of this model has been overcome, but the current research challenge is to propose alternative and contextual models based on a wide dataset coming from multidisciplinary research. In fact, although the themes of the organization, exploitation and control of the countryside between the Byzantine and Islamic age have been investigated over the last thirty years, these research projects have reached neither the accuracy, nor the methodological and interpretative complexity of other Italian and European investigations.

The difficulty in defining alternative models is evident from the approach to the question of territorial defence and control. This theme lacks depth and appears to suffer from a misunderstanding between the concepts of *castralization*, a territorial defence strategy realized by state/public entities, and *encastellation*, a phenomenon of feudal power. Inappropriately, in fact,

works have been written about Byzantine *encastellation*, which is rather the result of a public intervention aimed at collective defence strategies on regional and interregional management and organization plans.¹¹ Equally and wrongly, scholars have attributed control functions within wide castral networks to Sicilian medieval feudal castles.¹²

On the other hand, although the previous researchers believed that the Arab-Byzantine warfare had decisive impacts on settlement development, a deeper reading of the sources shows very different and more complex processes compared to recent interpretations. The recent historical periodization of Byzantine *castralization* based on sources, in fact, seems to find an easy shortcut towards accurate interpretations but without material data.¹³ It would be preferable to empty the archaeological interpretation of erroneous terminology and paradigms and to proceed from the little data that we actually have.

In the face of these issues, the fundamental question, therefore, is how the settlement organization and agricultural exploitation for maintaining high production and constant tax levies were integrated with the needs of territorial defence and control during a period of political, social and economic transformations in the Mediterranean. This paper aims to outline a settlement model and military organization of the territory north of Syracuse on the basis of recent investigations and through the analysis of data and phenomena in action between the 7th and 11th centuries.

2. The LAMIS Project: Contexts and Dataset

Over the last ten years, the LAMIS Project (Megarian Landscape and Heritage Research Project) has dealt with a research program that has led to a profound re-reading of the territory north of Syracuse (Municipalities of Augusta, Melilli and Priolo Gargallo) between late antiquity and the medieval age thanks to an extensive program of territorial investigations and study of unpublished materials kept in museums and public collections¹⁴ (fig. 1). The investigations, aimed at defining the transformations of the countryside, have provided documentation to propose a new model of settlement dynamics in the wake of studies that, over the last two decades, have seen increasing and deepening research on the late antique and early medieval landscapes of Sicily.

¹¹ Wickham 1998: 34–35.

¹² Cacciaguerra 2012b: 429.

¹³ Uggeri 2006.

¹⁴ Cacciaguerra 2008; Cacciaguerra 2013; Cacciaguerra 2014; Cacciaguerra 2018a; Cacciaguerra 2018b; Cacciaguerra 2018c.

¹⁰ Christie and Herold 2016: XXVII.



Figure 1 – Megarian Area, sites studied: Byzantine sites (points), Byzantine and Islamic sites (squares), rupestrian settlements (stars) and fortifications (rhombuses)

The area surveyed is 100 km² out of a total of 304.5 km² within the boundary of the three municipalities. The survey, carried out mainly in two different campaigns (2003-2005 and 2009-2013), was conducted through an intensive survey of six sample areas in order to cover the different environments and cope with the profound destruction of the territory achieved since the 1950s by

industrial plants and mines, residential areas and other infrastructure.

The research activities were carried out paying attention to the accurate *in situ* identification of materials in order to acquire detailed chronological data. The investigations were also accompanied by a

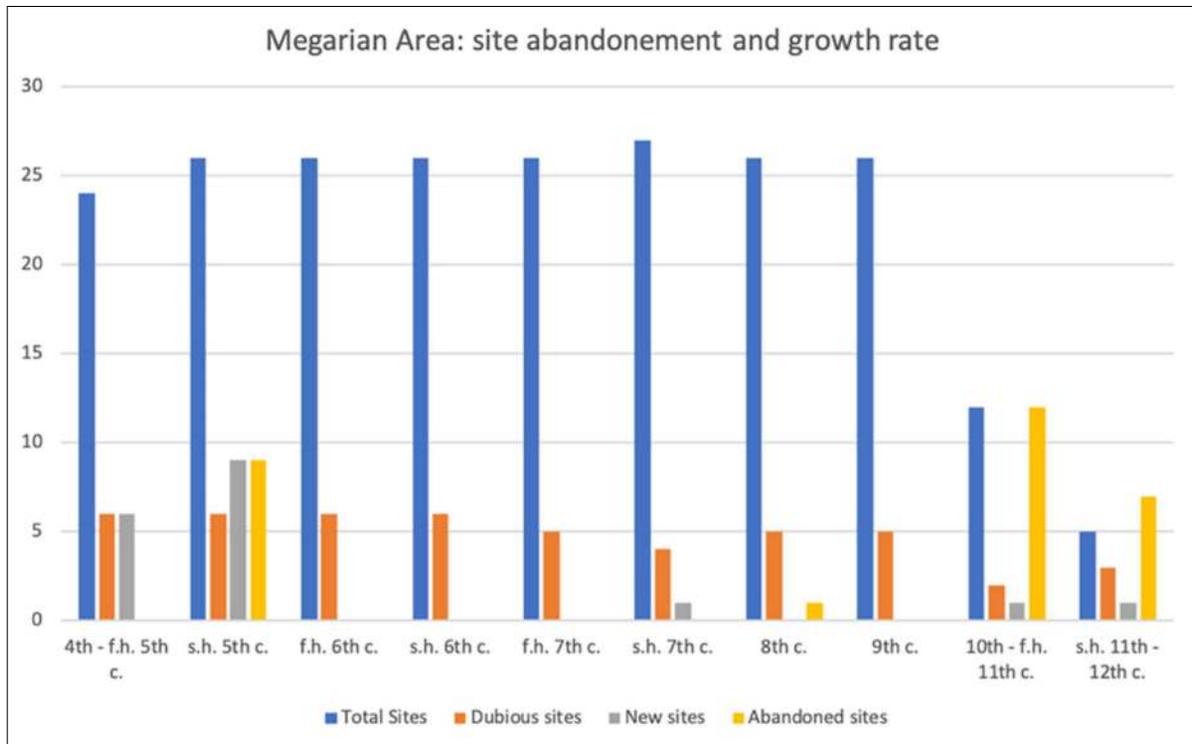


Figure 2 – Megarian Area. Quantitative fluctuation of the 4th-12th century sites

survey of historical aerial photographs and satellite images in order to complete the identification and mapping of the sites and to acquire further information on the landscape and environmental transformations that occurred. All the data are managed on a GIS platform for obtaining an organic representation of the archaeological and monumental heritage and to be able to analyse the inter- and intra-site spatial relationships.

The survey has been accompanied by studies on Roman, late antique and medieval materials coming from excavations carried out in the past (Megara Hyblaea, Monachella, Riuzzo-Bondifé-Bagnoli, Syracuse) and from museum collections and archaeological warehouses established for occasional surveys¹⁵ (Military Civic Museum, Augusta; Superintendence for the Sea, Palermo; Archaeological Museum 'P. Orsi' of Syracuse; Archaeological Museum of Lentini).

2.1. 'Quantifying' continuity and change: abandonment and growth rates

The LAMIS Project has allowed us to reconstruct the development processes of the rural settlement pattern and to identify the territorial organization model through the analysis of some parameters that

underline elements of continuity or rupture in a long-term perspective. The factors that allowed us to identify these periods of 'stress' for settlement networks are mainly the rate of abandonment and birth of new sites (fig. 2).¹⁶

If we focus exclusively on the quantitative and non-qualitative value of transformations, the results show at least three moments of deep crisis in the settlement network of the Megarian area:

1. Second-third quarter of the 5th century. During this period, the abandonment of nine medium (ha. 3-6) and large (ha. >6) settlements, amounting to more than a third of the total sites, and the birth of nine new settlements of the same entity have been documented. This phase corresponds with the Vandal 'conquest' of North Africa, the raids on Sicily and the consequent socio-economic transformation.
2. 9th century. Strong decrease phase that affected 50% of rural settlements. During the first half of the 10th century, in fact, twelve sites out of twenty-six from the previous century were not documented. The crisis of the 9th century was connected to the impact of the Islamic conquest of Sicily.

¹⁵ Cacciaguerra 2008; Cacciaguerra 2009; Cacciaguerra 2012a; Cacciaguerra 2015; Cacciaguerra and Lanteri 2016; Cacciaguerra 2018a.

¹⁶ Cacciaguerra 2008; Cacciaguerra 2013; Cacciaguerra 2014.



Figure 3 – The settlement of Manomozza – San Foca. Dark grey: surveyed areas with scattered materials; Light grey: settlement area; stars: hypogeic cemetery

3. Second half of the 11th - early 12th centuries. Abandonment of seven out of twelve settlements. This decrease could correspond to the Maniakes campaign (1038-1040) and the Norman conquest of southeastern Sicily (1070-1091).

These three phases do not complete the framework of the crises and transformations but highlight the moments of greater and permanent stress on the settlement pattern that determined a quantitative decline of sites. It is not surprising, in fact, that the abandonments correspond to the most complex and long phases of warfare that affected Sicily. These data, however, do not exclude that other crises may have occurred during this period and that they may have been manifested with 'qualitative' values (intra-site contractions, material destructurements, transformations of material culture, transformations of ownership structures, etc.). In order to identify other 'quantitative' and 'qualitative' aspects and to read times and modes of transformation, these phenomena will be analysed separately.

2.2. Abandonment, depopulation and contraction of settlements

The first phenomenon that we intend to deal with is the abandonment of coastal sites, believed to be an aspect that identifies the transformation of the late antique settlement model towards the properly medieval one. It would have been caused by the constant danger coming from long-term Arab-Byzantine warfare and, in particular, Islamic sea raids.

Archaeological data, however, describe a very different situation. If we look at the three crises identified, none of them shows an exclusive concentration of abandonments along the coast. The 5th century crisis caused the abandonment of some important coastal sites but they were replaced by other medium- and large-sized settlements during the following decades. The other two crises show a general abandonment across the whole territory, coastal and inland. In any case, however, these are not ports but rural centres that

exploited the coastal position also for short-range trade or other maritime activities (fishing, etc.). Instead, the abandonments are fairly distributed in the territory without particular distinctions between coast and inland. Furthermore, we note a general continuity of all early Byzantine coastal settlements until the Islamic age and, sometimes, the early Norman age.

The second phenomenon is the depopulation and contraction of settlement areas. On this aspect the data are poorer because they come mainly from archaeological surveys that cannot be considered accurate. However, the surface distribution of materials in some great settlements may provide some general data on the area actually occupied.

The most exemplary case is the site of Manomozza-San Foca, a 3rd-12th century large settlement near Priolo Gargallo, whose total archaeological surface can be evaluated between 15 and 20 ha. (fig. 3).

The analysis of the distribution of materials has allowed us to outline an internal evolution.¹⁷ The area of the middle-late imperial settlement (approx. 10 ha.) was partially abandoned during the first half of the 5th century, and the centre of gravity was displaced to the north and east, probably in connection with the Basilica of San Foca built on the northeastern edge of the settlement (fig. 3.4). On this vast surface (approx. 15-20 ha.), the settlement thrived until the 9th century. During the Islamic and Norman period, in fact, the settlement area contracted significantly (to approx. 1/2 ha.) on a small surface nucleated around the Basilica of San Foca, identified with the Norman *casale* of Aguglia or Agulia. This development model does not represent an isolated case and can be observed in other smaller rural centres of the territory (e.g., Tavoliere-Maccaudo) and in other large Sicilian centres such as Sophiana.¹⁸

The quantitative data of ceramics, however, show a more complex picture. In fact, the settlements still give considerable quantities of the 8th-century ceramics, but during the 9th century the situation is more differentiated towards an evident economic and demographic decline. Some large sites have consistent groups of materials (Frandanisi, Megara Hyblaea, San Cusumano, Manomozza-San Foca, Monachella, etc.), while others are attested by very few fragments (Thapsos, Augusta, etc.). From the 10th century, the settlements show a further spatial contraction with a distribution of materials over an even more limited surface.

The sum of these two different datasets, spatial and quantitative, shows three different trends: 1) a general topographic stability of settlements until the 9th century; 2) phenomena of displacement of the inner centre of gravity or short-range transfer of the sites during the byzantine and Islamic period; 2) From the 9th to the 11th/12th century the settlements become smaller with lower material quantities, following the economic and demographic decline and the transformations of the settlement network.

2.3. The rise of rupestrian settlements: Chronology, organization and function

Rupestrian settlements are one of the most important phenomena for defining the transformations taking place in the territorial organization. The LAMIS Project has revealed three different types of rupestrian settlements:¹⁹

1. Type A. Inaccessible rupestrian settlements with irregular rooms, often nucleated in large complexes (20-150 rooms). Presence of passive defence systems, realized with trapdoors, burrows and dams that allow the rupestrian complexes to be isolated.
2. Type B. Accessible rupestrian settlements, placed on low terraces without inner connection systems between the different groups. The rooms have mainly quadrangular plans.
3. Type C. Relatively infrequent rupestrian settlements with intermediate or hybrid features between types A and B.

The research has allowed us to define that the three different types of rupestrian settlements had different uses and chronological developments. The type A and C settlements arose during the late Byzantine period (late 8th/early 9th centuries?) (figs. 4-5).

In fact, they are quite clearly documented in Arabic sources in relation to the conquest of Sicily during the 9th century. The presence of a few key material indicators (regional globular/ovoidal amphorae and 'Rocchicella' type cooking ware) identified on the surface confirms these data. Spatial organisation and defensive features emphasize that they were used as temporary refuge for the rural population and army during the Arab-Byzantine warfare, coexisting with the rural settlement network.

Islamic pottery found in the type A and C settlements attests their use also during the 10th and first half of the 11th century. It may have been caused by the Byzantine military campaigns in eastern Sicily (Romanos I: 938-941; Nikephoros II Phokas: 964-965; Maniakes: 1038-

¹⁷ Cacciaguerra 2014: 382-383.

¹⁸ Bowes, Ghisleni, La Torre and Vaccaro 2011; Vaccaro 2012; Vaccaro 2013; Vaccaro 2017.

¹⁹ Cacciaguerra 2014; Cacciaguerra 2018c.

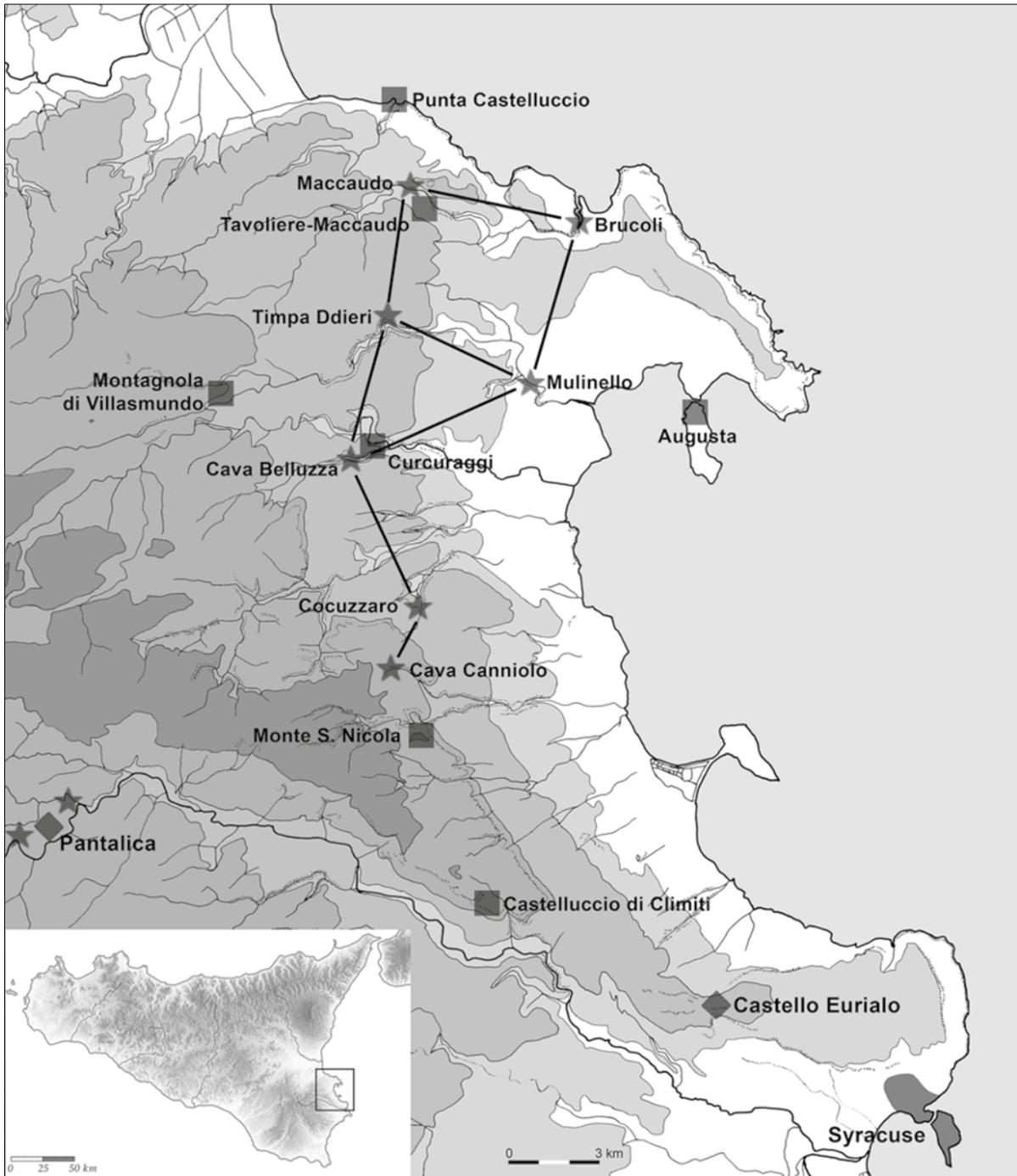


Figure 4 – Megarian Area. Rupestrian settlements (stars), hilltop sites (squares) and fortifications (rhombuses)

1040) and during the Norman conquest of southeastern Sicily between 1070 and 1091.

Further interesting data come from the distribution of the type A complexes. The territory shows a network of rupestrian settlements distributed at regular distances in order to give a very efficient defence strategy for the rural population and army during the Arab-Byzantine

conflict (fig. 4). On the other hand, the southern territory does not have any rupestrian settlements, and the strategy was aimed at seeking refuge inside the walls of Syracuse.

The new data acquired from the Megarian area, therefore, call into question the previous cultural attribution and chronological reference of rupestrian

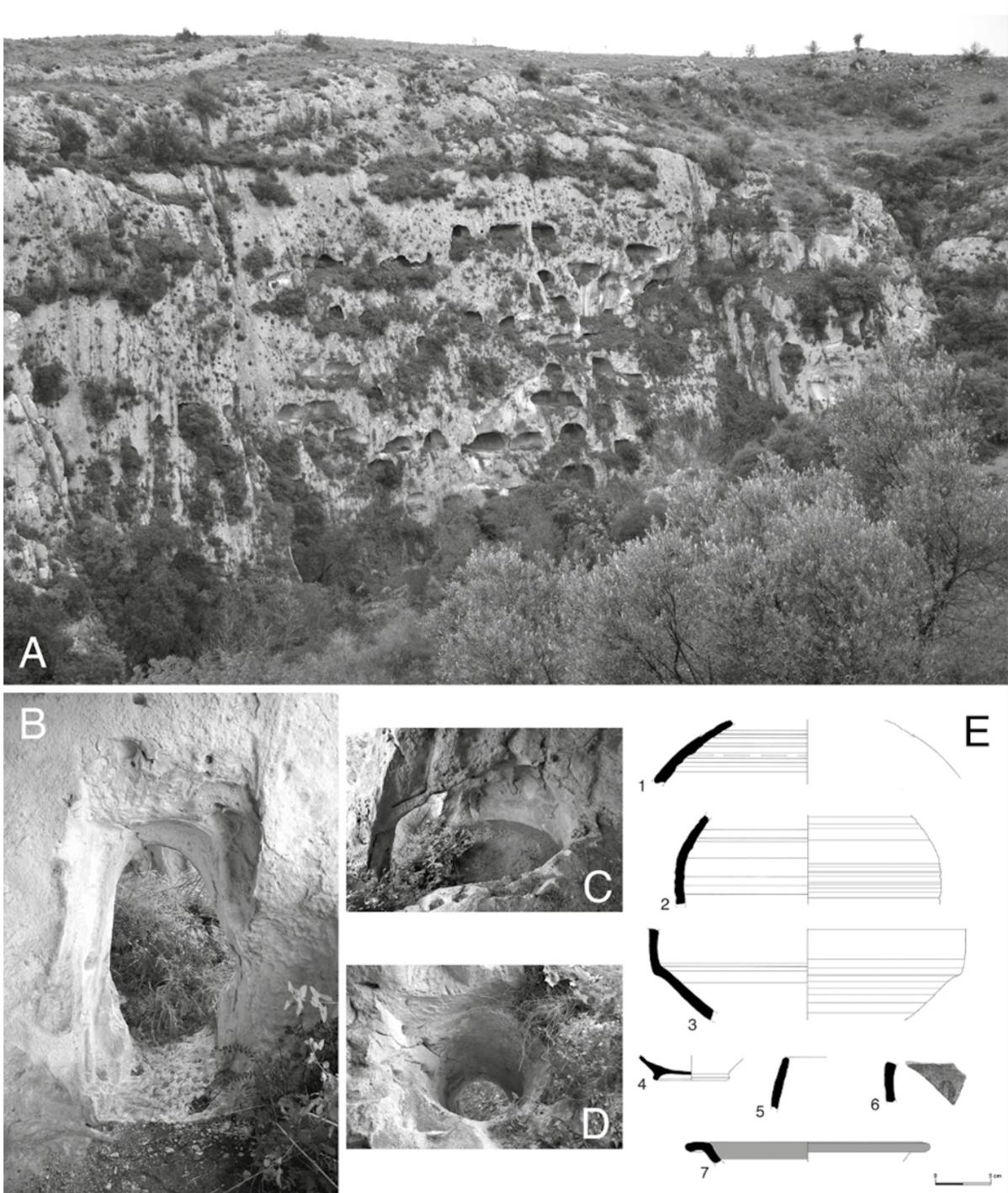


Figure 5 – The type A rupestrian settlement of Cava Belluzza (Melilli)

settlements²⁰ towards a contextual reading. Furthermore, type A did not reveal the presence of Christian or Islamic religious places. The temporary use of type A rupestrian settlements, in fact, probably did not lead to the creation of religious places, or they

are not recognizable due to low archaeological and architectural characterization.

Conversely, the type B settlements do not furnish any archaeological documentation before the Islamic period and were a typology with greater continuity from the 10th to 12th/13th centuries and onwards.

²⁰ Messina 2010.

The type B rupestrian settlements often shared their settlement space with stone buildings and sometimes fortified structures. Furthermore, the larger type B and C complexes often have rupestrian churches with frescoes realized between the 12th and 13th centuries.

2.4. Hilltop Settlements and fortifications

The occupation of hilltop sites, easily defensible in panoramic locations, constitutes a landscape marker of Mediterranean and European post-classical habitat. Its growth would be linked to conditions of general insecurity and territorial reorganization following socio-economic transformations and warfare.²¹

The Megarian area, like the Hyblaeon region, is characterized by a plateau mountain system that rarely creates isolated hills. In this geological context, hilltop settlements develop on three different orographic systems: 1) hill or isolated hill; 2) portion of plateau isolated on three sides and connected to a main plateau by a short isthmus; 3) portion of plateau limited on two sides by a steep slope.

On the basis of this topographical definition, the hilltop settlements of the Megarian area are quantitatively few (only 7) compared to the total (49) of the settlements documented between the 5th and the 11th centuries (fig. 4). The archaeological evidence shows that they did not arise suddenly in the territory and their presence did not change the settlement network. In fact, they were already occupied during the late imperial age but show a greater quantity of materials from the second half of the 5th/6th centuries which could indicate a demographic increase and an expansion of the inhabited area. Only in two cases does the archaeological record show the emergence of new sites: the Montagnola of Villasmundo, between the 5th and the 6th centuries (preliminary data), and the Castelluccio of Climiti, between the second half/end of the 7th and 8th centuries, both without evidence of early medieval fortification.

Therefore, the archaeological documentation of the Megarian hilltop sites seems to follow the Sicilian trend. In 1990, R. Wilson pointed out that there are few elements to postulate the abandonment of rural settlement toward higher and defensible positions between the 5th and 6th centuries.²² More recently, for western Sicily, A. Molinari has found the reoccupation of hilltop sites only since the second half of the 10th century,²³ while Lucia Arcifa has highlighted a similar tendency for the territory of Noto.²⁴

The presence of some hilltop sites could also explain the emergence of marginal settlements between the second half of the 5th and 6th centuries. In fact, they arose and developed for occupying the territory and 'colonizing' new lands in previously poorly populated areas with low agricultural yields. The exploitation of new areas with low agricultural yields and lands for livestock was certainly determined by the need to meet the strong cereal demand directed to the main Byzantine cities and to the army.

Unfortunately, the Megarian area has not yet shown any late antique or early medieval fortifications. However, there are some sites that show elements and anomalies compatible with defensive structures. The settlement of Tavoliere-Maccaudo is one of the most interesting Roman and late antique sites in the Megarian area. It sits on a short terrace isolated by three marked slopes. It was built in the Hellenistic period, abandoned in the middle of the 7th century and, after a hiatus of three centuries, it had a final phase between the Islamic and Swabian periods. At the centre of the terrace, the remains of a vast quadrangular structure (60x40 m. ca.) are evident on the surface. It is built with thick walls and squared blocks, which does not follow the perimeter lines of the terrace and which seems to enclose most of the 'settlement'. This 'fence' could be interpreted as the perimeter wall of a late antique *praetorium* and not necessarily as a fortified structure.²⁵

In this context, it is possible that some hilltop settlements may have developed defensive structures between the Byzantine and Islamic periods. The site of Curcuraggi, a long-term centre abandoned in the 14th century, is constituted by a defensible long, narrow terrace isolated by a slope. On the narrow isthmus that connects the site to the main plateau, there is a low depression and a mound, anomalies that could be pertinent to an early medieval fortified structure.

Another interesting site is Augusta. A 6th/7th-9th century large settlement was on the highest northern part of the ancient peninsula, where the 13th century 'Castello Svevo' was built. The materials show that it was an important consumption centre attested by ceramics (globular amphorae, regional cooking ware, ARSW and African amphorae, LR2, 5, 6 Amphorae, Samos Cistern Type, etc.) coming from different Mediterranean regions. This settlement is a rather rare case of a coastal hilltop site with two ports, maybe a supply centre for the Byzantine fleet along the Sicilian east coast for supporting the defence of Syracuse and the control of Ionian trade routes.

Instead, a certain and interesting Byzantine fortification is located at the southern boundary of the territory.

²¹ For a general overview, see: Francovich and Hodges 2003.

²² Wilson 1990: 335.

²³ Molinari 2016: 330.

²⁴ Arcifa, Bagnera and Nef 2012: 268.

²⁵ Lanteri 1997.



Figure 6 – Syracuse, Euryalus Castle. Byzantine phase: 1. Eastern wall; 2. Series of rooms on the southern wall

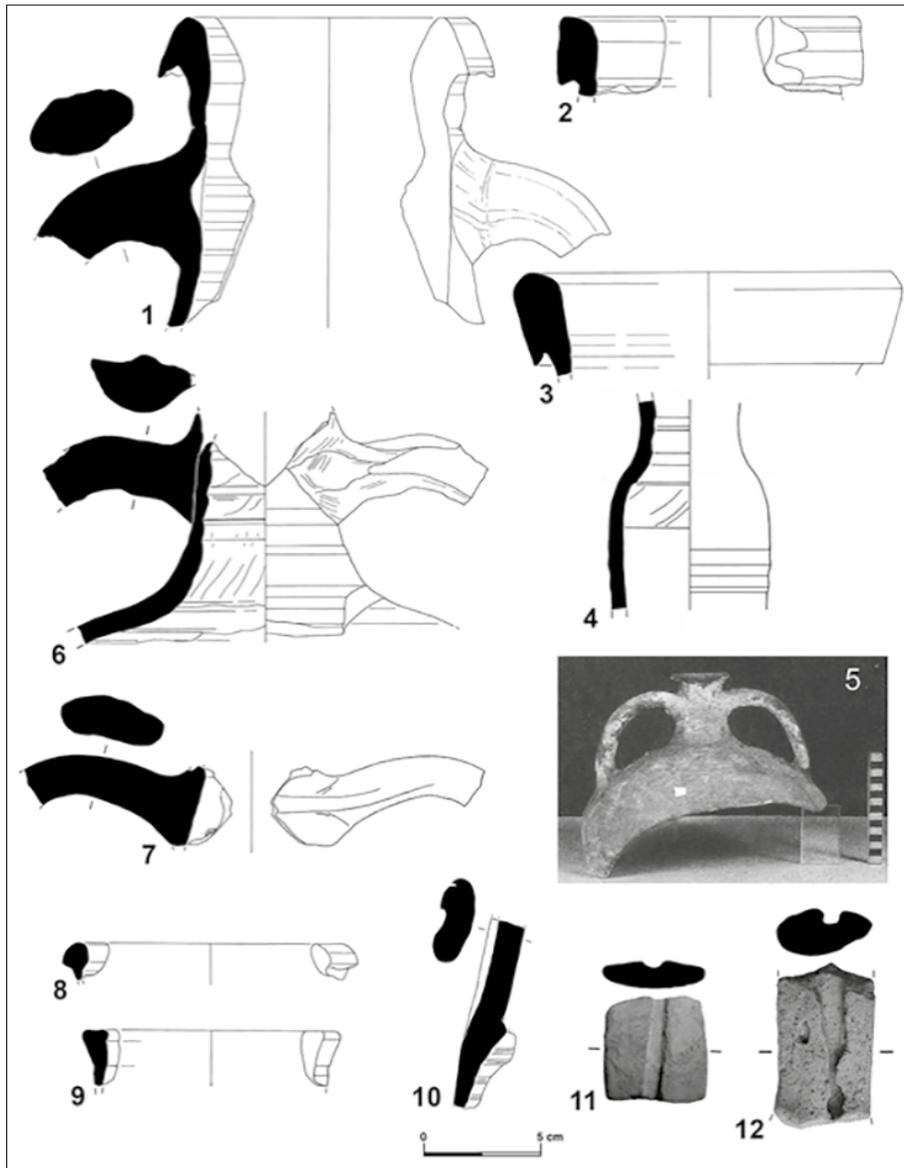


Figure 7 – Megarian area. Byzantine amphorae (7th-9th/10th centuries): 1-4. African Amphorae (7th century); 5-6. Early medieval amphorae; 7. 9th/10th light grey fabric amphora; 8-12. Late Byzantine Sicilian amphorae (Military Civic Museum, Augusta; Archaeological Museum “P. Orsi”, Syracuse; Archaeological Museum, Lentini; Superintendency of Syracuse)

The Euryalus Castle, one of the most complex defensive structures of the classical world and part of the Greek defensive system of Syracuse, had a Byzantine phase (and perhaps even a late medieval one). The eastern wall that borders the main courtyard, a series of rooms on the southern wall and the buttresses against the western towers were built during the late reuse of the fortress (fig. 6). The dating of this post-classical phase, however, has never been clarified and we can generically attribute it to Byzantine reuse for its typology of construction techniques.²⁶

The Megarian area has shown a well-defined picture of transport amphora distribution between the late antique and early medieval periods. The late antique African amphorae represent the 6th and 7th centuries' most numerous group, with heterogeneous forms that include Keay 61A/D, Keay 61C, Bonifay 47 and Keay 61D. The second half of 7th century African typology (Keay 61A, *Spatheia* 3 and Keay 34) is also well distributed in the territory, both in coastal sites and in the hinterland (fig. 7.1-4).

²⁶ Orsi 1909: 338; Orsi 1912: 301-302; Orsi 1915: 192; Agnello 2001: 57.

2.5. Transport amphorae and trade networks

Also, the 6th-7th century eastern amphorae permit us to evaluate their distribution in the territory, but it is difficult to define a seriation. The late Roman 1 and 2 amphorae are the most common typology in late antique settlements, and the late Roman 3, 5, 6 and Samos Cistern Type Amphorae, although in smaller quantities, are well attested. Regional and/or italic amphorae, such as the late Keay 52 and Crypta Balbi 2, are also present. The Megarian area shows a homogeneous distribution of amphorae, without differences between the coast and inland areas, and the absence of long-term breaks in trade networks until the 7th century.²⁷

The early medieval amphorae are present in the Megarian area and show a capillary attestation of 8th and 9th century eastern or southern Italian globular and ovoid transport containers with micaceous red and brown fabric²⁸ (Saraçhane 36/39 types) (fig. 7.5-7). These materials underline that Syracuse and its territory were a constant destination of Mediterranean trade flows during the 8th century. The spread of early medieval transport containers in Sicily shows that this region played an important role in medium- and long-distance trade,²⁹ and the Islamic raids carried out along the coasts did not interrupt the flow of goods; the importation of these containers continued supplying the city and surrounding territory.³⁰

We should reflect on the value we can attribute to this evidence. The presence of amphorae, in fact, must be related to the strong urban and regional demand given by a 'hypertrophic' demographic structure and by the presence of a widespread military apparatus in the territory. Furthermore, it is necessary to consider that the presence of 'local' elites integrated in the imperial hierarchy were in possession of large economic resources.³¹ Therefore, Syracuse and its territory represented a 'privileged' area and a centre of political and administrative power in Byzantine Sicily.

The picture seems to go through a transformation from the last quarter or end of the 8th century when the diffusion of regional amphorae appears with other imported amphorae (fig. 7.8-12).³² The appearance of their production and diffusion, however, highlights a change that must be read not towards an expansion of the Sicilian economy, but rather a progressive loss of centrality. Furthermore, Sicily began to suffer a new

phase of increased Islamic military pressure from 827. So, the Byzantine Empire lost part of the western and southern agrarian area of Sicily, and the regional export economy was strongly diminished. The maritime routes through the Ionian Sea became dangerous due to Islamic pressure, and the interruption of the passage through the Strait of Messina produced a change in the west-east routes through peninsular Italy, the Adriatic and the Strait of Otranto.³³

From the 10th century, Islamic regional amphorae spread, associated with Byzantine amphorae of very light fabric. The diffusion of Byzantine amphorae in the early Islamic age, however, seems to be a characteristic of the material culture of southeastern Sicily. These amphorae in Syracuse and in the Megarian area should not be considered so unusual since it is a territory overlooking the Ionian Sea where the Eastern and Adriatic trade routes flowed into and from the Tyrrhenian Sea and the western Mediterranean. On the other hand, archaeology has already demonstrated these relationships with southern Italy, as highlighted by lead glazed ware from Campania found in Sicily and Sicilian Islamic pottery in Campania or Puglia.³⁴

3. 'All-in-one' settlement. Hilltop sites, rupestrian villages and fortifications at Pantalica

We can find a 'topographic' synthesis of such phenomena in a site at the boundary of the Megarian area: Pantalica (Sortino). This archaeological area is located on a large limestone terrace surrounded by the deep steep valleys of the Anapo and Calcinaia rivers. It can be reached through a narrow isthmus called 'Sella di Filiporto' or two paths of stairs carved into the rock on the southern and northeastern cliffs (fig. 8).

The archaeological area is known mainly for the vast protohistoric necropolis carved into the rock between the Late Bronze and Iron Ages which dot the steep sides of the massif, and for the *anaktoron*, a Late Bronze Age building believed to have been the centre of power of the settlement. Moreover, there is a late 5th and early 4th century BC fortification with a trench at Sella di Filiporto, and a second half of the 4th to 3rd century BC sanctuary is located on a terrace of the southern cliff.³⁵ Pantalica, however, also has a medieval phase, the last of the settlement. However, the sources reveal evidence only for the last half century of the medieval settlement, which rebelled and was repressed in 1092 by Count Roger I, and which is mentioned until 1151.³⁶

²⁷ Cacciaguerra 2008: 434-436; Cacciaguerra 2012a; Cacciaguerra and Lanteri 2016; Cacciaguerra 2018a.

²⁸ Cacciaguerra, 2012; Cacciaguerra 2018a.

²⁹ Ardizzone 2000; Arcifa 2018; Cacciaguerra 2009; Cacciaguerra 2018a; Vaccaro 2013: 57-58.

³⁰ Cacciaguerra 2012a; Cacciaguerra 2013; Cacciaguerra 2014; Cacciaguerra 2018a.

³¹ Nef and Prigent 2006; Wickham 1998: 367, 373.

³² Cacciaguerra 2018a.

³³ McCormick 2001: 129-150, 795.

³⁴ Arthur 1998; Arthur 2002: 131-133; Cacciaguerra 2009: 295-296.

³⁵ Bernabò Brea 1990b: 105-110.

³⁶ Amari 1880-81: 104-105; Garufi 1899: 55-56, doc. XXIII; Malaterra 1927, *lib.* IV, § 18; Pirro 1733: II, 618, 933; Toomaspoeg 2003: 118-119.

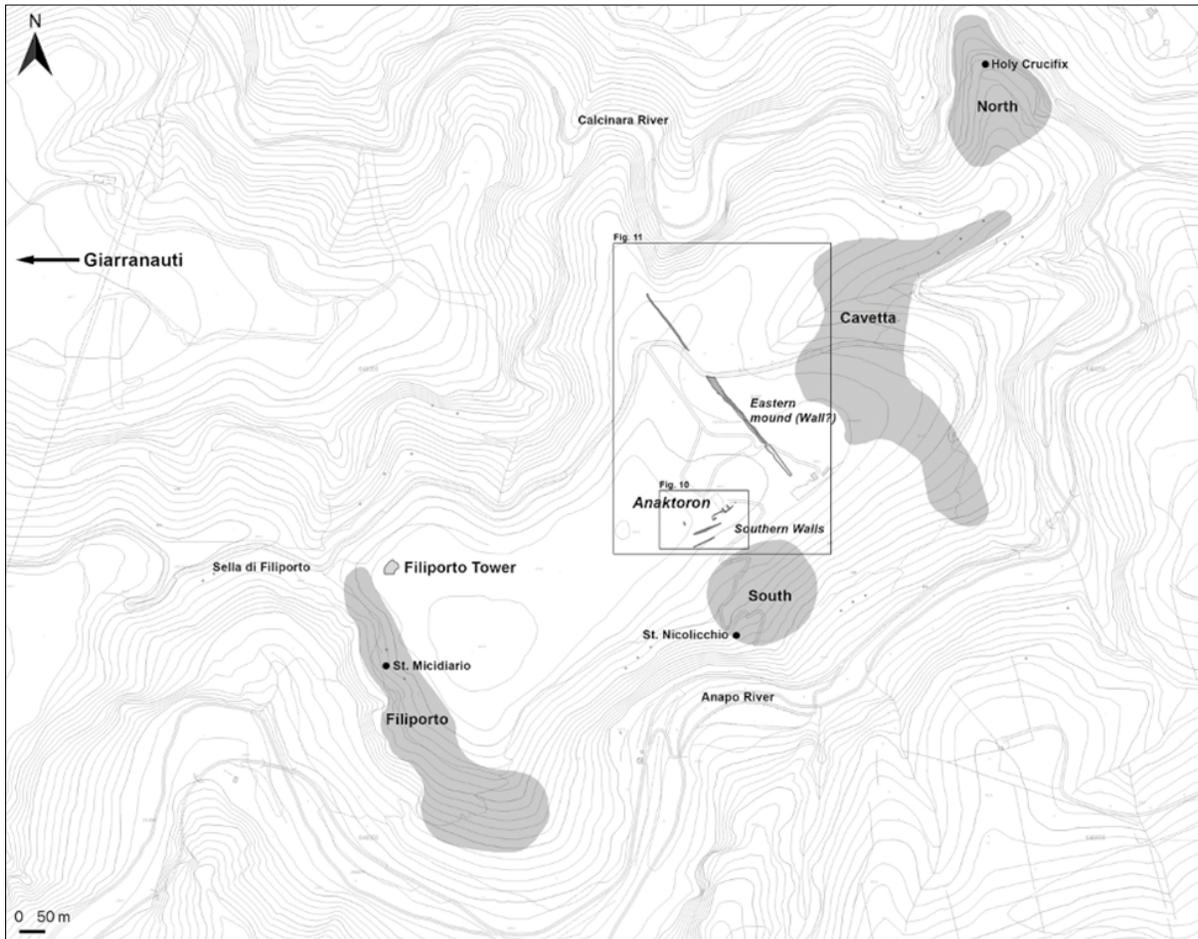


Figure 8 – Pantalica. Early medieval settlement. Rupestrian settlements (grey areas) and fortifications

Despite the accounts in the written sources, the medieval settlement consists mainly of three different kinds of archaeological evidence that expand the chronological range of the site.³⁷ The first, and most striking, is made up of four type C rupestrian settlements (fig. 8): Filiporto (49 rooms, southwest); South Pantalica (87 rooms, south); South Cavetta (105 rooms, east); North Pantalica (74 rooms, northeast). They have three small rupestrian churches (San Micidiario, San Nicolicchio and Crocifisso) with frescoes dating from the early Norman period to the 13th century.³⁸ The second is the *anaktoron*, which shows a phase of reuse and, perhaps, expansion (large southern room) during the Byzantine period.³⁹ Finally, a treasure found in 1903 near the *anaktoron* consists of a group of jewels (gold necklaces, bracelets and rings with precious stones) and a thousand Byzantine *solidi*, of which only one

of Constans II and Constantine IV with Heraclius and Tiberius (661-668 ca.), and one of Constantine IV with Heraclius and Tiberius (674-681) was recovered (fig. 9).⁴⁰

Recently, an archaeological excavation has revealed a Byzantine village at Giarranauti near Pantalica (2.5 km), composed of eight residential structures with a standard surface of about 40 m², and a small church with a graveyard. Some diagnostic ceramics (Keay 34 and late *spatheia* 3) and coins would date its abandonment to during the second half of the 7th century.⁴¹

These very complex but weak archaeological data have, over time, generated the following chronological and settlement sequence:

1. During the second half of the 7th century, the settlement of Giarranauti was abandoned due to Islamic raids on Syracuse and its territory;⁴²

³⁷ Bernabò Brea 1990a; Bernabò Brea 1990b; Cultraro 2014; Fallico 1975; Fallico and Fallico 1978; Guzzetta 1995; Leighton 2011; Leighton and Albanese Procelli 2019; Messina 1993; Militello 2017; Orsi 1889; Orsi 1898; Orsi 1899b; Orsi 1910; Orsi 1912-13.

³⁸ Leighton and Albanese Procelli 2019: 23; Messina 1979; Orsi 1898.

³⁹ Leighton and Albanese Procelli 2019: 21-22; Orsi 1899b: 79-83.

⁴⁰ Guzzetta 1995: 12-13; Orsi 1910.

⁴¹ Basile 1993-94: 1333-1342.

⁴² Basile 1996: 144-146.

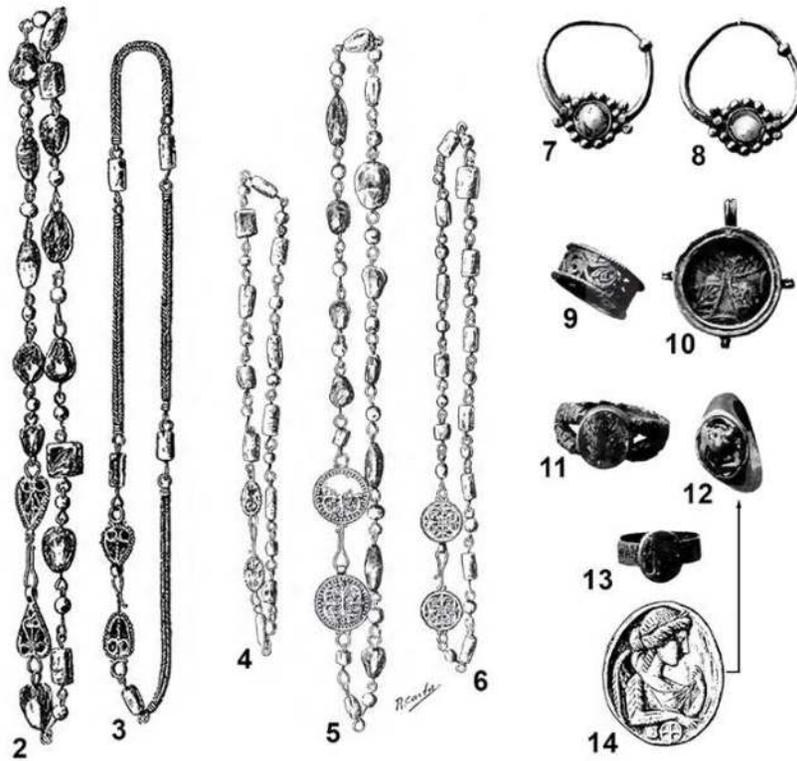


Figure 9 – Pantalica. Byzantine treasure (The Metropolitan Museum of Art, New York – Met's Open Access; CC0 1.0; Orsi 1910).

2. Following the abandonment of Giarranauti and other rural and urban centres, in the late 7th century the population would have been led to create the rupestrian settlements at Pantalica;⁴³
3. The Pantalica treasure would therefore have been buried between the end of the 7th and the beginning of the 8th centuries by refugees of the Syracuse elites who had fled to the rupestrian settlements to escape Islamic raids or during a revolt of Byzantine troops;⁴⁴
4. The rupestrian settlements remained the only settlements at Pantalica until the 12th/13th centuries, when the site was abandoned.⁴⁵

This settlement development of Pantalica, however, shows many weaknesses regarding the contextual and chronological value of archaeological data and the interpretation of the archaeological record. The dating of the abandonment of Giarranauti during the second half of the 7th century is based on few materials, while the whole material culture has not been analysed in depth.⁴⁶ The excavations, for example, have also produced a large group of 'Santa Caterina 2' type cooking ware dated between the second half of the 7th century (probably the last quarter) and the 8th century.⁴⁷ Moreover, the settlement area is scattered with post-7th century vacuolated roof tiles. The dating of the settlement abandonment, therefore, would be later than previously believed, probably during the 8th century, like the settlement of Santa Caterina in the Megarian area.⁴⁸

The dating of the rupestrian settlements of Pantalica to the 7th century is not supported by any material evidence. No archaeological materials have ever been published, and the relationship with *anaktoron* is unknown. However, the rupestrian settlements of Filiporto and South Pantalica show on their surfaces numerous 'Rocchicella' type cooking ware that indicate a 9th century chronology, while there do not seem to be 7th and 8th century ceramics.

The dating of the Pantalica treasure to the end of the 7th or the beginning of the 8th century is uncertain because we know only a small part of it (1% of the coins; an uncertain number of jewels) and we can provide a generic *terminus post quem* from the last quarter of the 7th century. The relationship with specific historical events, therefore, cannot be demonstrated. Moreover, the discovery area excludes a direct association with the rupestrian settlement located on a terrace

below and at least 150-200 m from the protohistoric monument. The treasure, therefore, must be related to the Byzantine reuse of the *anaktoron* and the settlement area surrounding the monument.

New elements can now be added. The undated fortifications (Wall I) identified by L. Bernabò Brea to the south of the *anaktoron* certainly had a Byzantine phase (figs. 8, 10).⁴⁹ The deeper filling layers around the quadrangular tower of the upper fortification gave a mound of 'Byzantine' tiles, and the lower fortification systems (Walls II-III) also gave a wide distribution of these tiles during the archaeological excavation.⁵⁰

Finally, the analysis of aerial photographs and satellite images has allowed us to identify anomalies that explain some aspects of the late antique and early medieval topography of Pantalica. A quadrangular tower, named Castello (Castle) until the end of the 19th century, located on top of the Sella di Filiporto was identified and interpreted by P. Orsi as a Byzantine structure (fig. 8).⁵¹ It has been found again through the examination of historical aerial photographs and LIDAR images, and today it appears as a large collapsed structure covered by dense vegetation. The state of conservation and the walls suggest a later dating or a long use in the medieval period, probably until the Islamic and/or Norman period. The preservation of the place-name Castello confirms this reading.

A long rectilinear mound of earth and blocks between the Masseria Pantalica and the great meander of the Calcinara River has been identified on the eastern side of the summit plateau (figs. 8, 10 and 11). Whether it was a fortification is not certain, but it is possible that a part of it constituted a portion of the defensive wall (thickness: 5 m; height 1 m). Finally, a second line of fortifications has been identified through some historical aerial photographs to the east of the *anaktoron*, immediately south of the Masseria Pantalica. Here we can identify at least two quadrangular structures, maybe two towers, that seem to have the same shape and size as the one identified to the southwest of the *anaktoron* (fig. 10). Therefore, they would appear to be part of a single defensive system.

The re-reading of the early medieval archaeological evidence and the acquisition of new data allow us to propose a new interpretation of the settlement development based on five points:

1. During the 6th-7th centuries, the plateau was occupied by a settlement at the surrounding area of *anaktoron*.

⁴³ Basile 1996: 146; Guzzetta 1995: 12-13.

⁴⁴ Fallico: 314-316; Guzzetta 1995: 12-13. More prudently Orsi 1910: 70.

⁴⁵ Bernabò Brea 1990a; Orsi 1898: 17-21; Orsi 1899b: 75-90.

⁴⁶ Basile 1996: 144-146.

⁴⁷ Cacciaguerra 2015: 239-241.

⁴⁸ Cacciaguerra 2008.

⁴⁹ Bernabò Brea 1990a: 85-91.

⁵⁰ Bernabò Brea 1990a: 88-91, 96.

⁵¹ Leighton and Albanese Procelli 2019: 20; Orsi 1899b: 33, 68, 85-86.

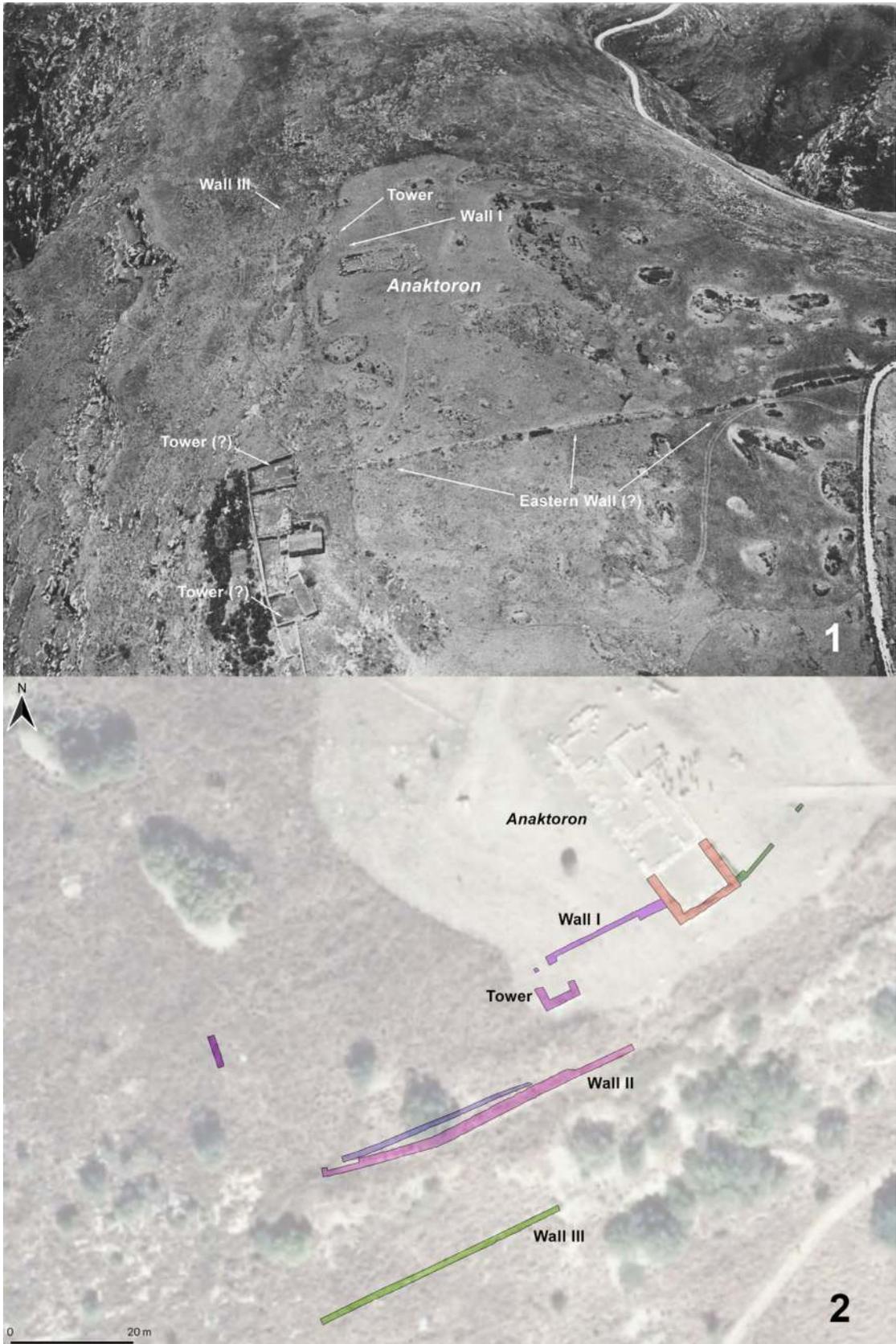


Figure 10 – Pantalica. Fortifications: 1. Historical aerial photography (© ICCD - Aerofototeca Nazionale - Foto AM_1961, foglio 274, Prosp., Fotogramma_0, Neg._17714 – Authorized by Istituto Centrale per il Catalogo e la Documentazione, MIBACT. Duplication Forbidden); 2. The southern fortifications (Anaktorion area)

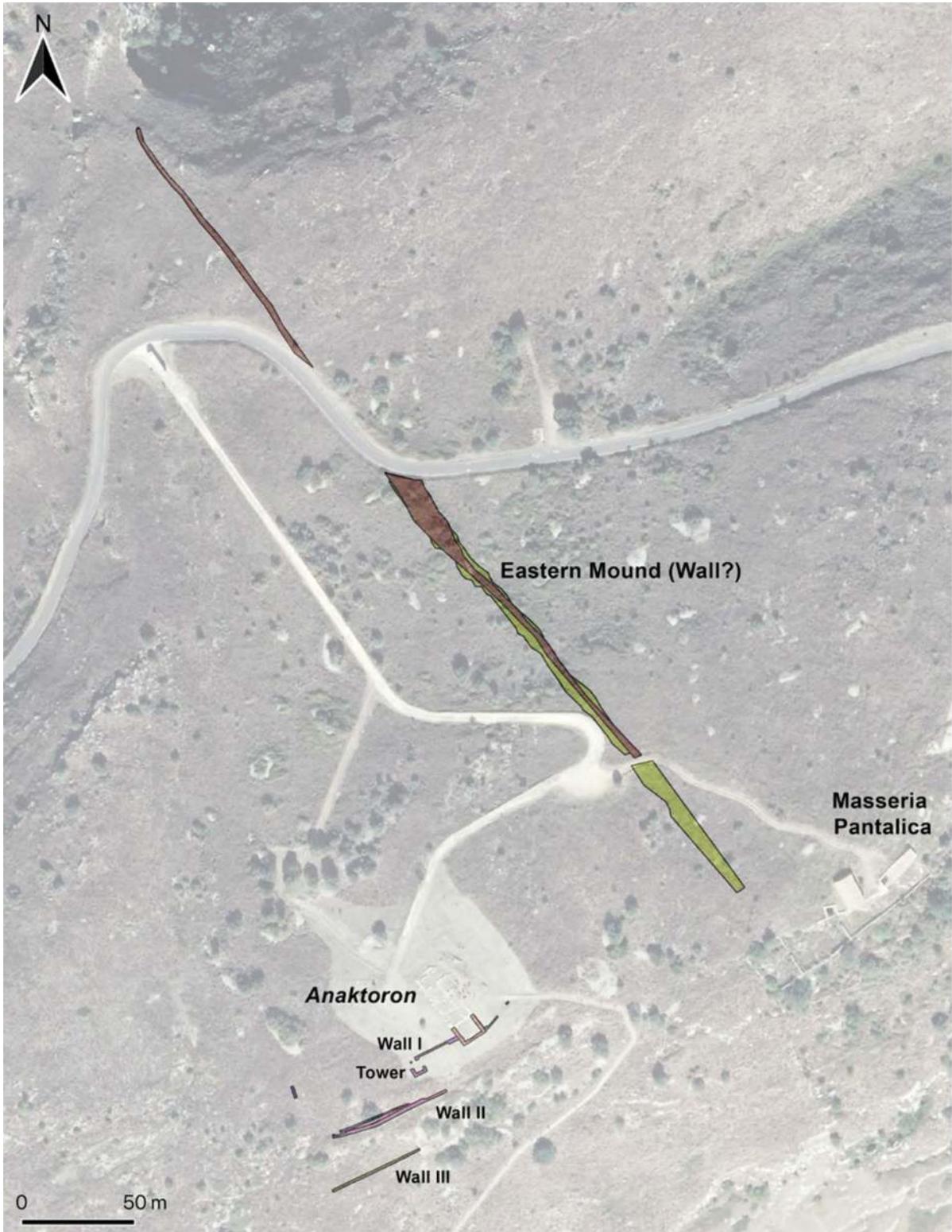


Figure 11 – Pantalica. Fortifications: the eastern long rectilinear mound (eastern wall?)

2. Between the mid/late 7th and the early 9th centuries, the plateau was fortified, perhaps by reusing portions of previous (protohistoric?, classical) defensive structures.
3. The Pantalica treasure, one of the richest Byzantine hoards of Sicily, constitutes an important chronological point of reference, even though it is not very precise, for dating the settlement on the plateau. Although its burial cannot be related with certainty to the escape of Syracusans during an Islamic raid or inner menace, on the other hand it confirms the presence of a directional pole in the area of *anaktoron* and the presence of a military or administrative elite at the fortified settlement between the last quarter of the 7th and, probably, the 8th centuries.
4. The rupestrian settlements are attested only from the 9th century, immediately outside of the fortified area. Their presence would support, in fact, the existence of 'civil' settlement poles detached from the 'military' space of the area bounded by the walls. Rupestrian settlements certainly continued to be inhabited after the 9th century and were further developed during the Islamic and Norman ages (three rupestrian churches with frescoes).
5. The Filiporto Castle (Castello), perhaps founded on a previous Byzantine tower, seems to have had a long use during the Islamic and Norman periods. It probably constituted the last defensive structure and could have been sieged and reconquered by Roger I in 1092.

In sum, the abandonment of the previous paradigm and the choice of a contextual approach today permit the hypothesis of a new development of the medieval settlement at Pantalica.

4. Towards a new model for the early medieval Sicilian countryside

4.1. Settlements, estates and agricultural exploitation

Recent research has demonstrated that the different sub-regional territories of Sicily had different developments. Research carried out in the territory north of Syracuse has permitted the definition and characterization of its peculiarities. Its geographical position and proximity to Syracuse, the most important and richest Byzantine city in the region (seat of the *strategos*, capital of the *thema*, administrative and military centre, metropolitan seat, mint, maritime and commercial node) are distinctive elements of its particular development.

Research has shown that the late imperial settlement organization of the Megarian area, based on an

integrated system of *villae*, *vici* and *stationes/mansiones* and aimed at exploiting roads and the most productive agrarian areas, fell into crisis between the second and third quarters of the 5th century. According to some historians, the impact of Vandal raids on Sicily did not cause a transformation of the settlement model and did not change the agricultural production and manufacturing system.⁵² However, the Megarian area shows elements of transformation in both the settlement organization and pottery production and distribution. These signs of transformation, crisis and sometimes destruction, moreover, have also been found in other areas of Sicily⁵³ (*Agrigentum*, *Lilybaeum*, southern coast, etc.). They could be directly caused by the fragmentation of the late antique Mediterranean produced by the Vandal economic and warfare policies which, after 440, caused damage and interruptions to the supply system and trade.

However, the resilience to this first crisis was considerable. During the second half of the 5th century, the settlement network was reorganised with a more widespread diffusion in the territory and was aimed at the occupation and exploitation of productive territories and marginal areas.⁵⁴

Given this framework, it is difficult, however, to characterize and define the Byzantine settlement typology, with so many differences in size, function/organization and material aspects. Certainly, there is at least one large village in Manomozza-San Foca (Priolo Gargallo, approx. 15 ha.) that could have had paraurban characteristics, with a cemeterial basilica (6th/7th c.), four hypogeic and one *sub divo* cemeteries (4th-5th/6th c.). At the second step, there are 'medium' sites, between 3 and 6 ha., but not of secondary importance. They are located in areas of high agricultural yield or along regional and sub-regional roads that have shown elements and structures of socio-economic complexity, such as Tavoliere-Maccaudo (3 ha.), Xirumi (4/5 ha.), Megara Hyblaea (> 4/5 ha.) and San Cusumano (4/5 ha.). Finally, there are smaller settlements that never exceed 3/4 ha., located in marginal areas with low agricultural yield that do not have elements of architectural or material complexity, such as Santa Caterina (3/4 ha.), Curcuraggi (2 ha.), Frandanisi (2 ha.) and Masseria Ingegna (3 ha.).

We can find a similar organization in central-southern⁵⁵ (Cignana, Vito Soldano, Carabollace, Eraclea Minoa, Gela and Butera, etc.) and western Sicily⁵⁶ (Segesta).

⁵² Caliri 2012: 74.

⁵³ Caliri 2012: 71-74; Wilson 1990: 333.

⁵⁴ Castrorao Barba 2016: 171-173.

⁵⁵ Bergemann 2010: 163; Bowes, Ghisleni, La Torre and Vaccaro 2011; Fiorentini 2002; Rizzo and Zambito 2010; Rizzo and Zambito 2012; Vaccaro 2013a.

⁵⁶ Molinari and Neri 2004.

However, if we wish to find comparisons in Sicily, the main centre of Manomozza-San Foca has many points in common with Sophiana (near Barrafranca) in terms of size and organization. Moreover, the cemeterial basilica of Sophiana is placed at the edge of the settlement like the cemeterial basilica of San Foca.⁵⁷ Conversely, there was a different model in the territory of Alesa (northern Sicily) where there was a sudden collapse of the settlements between the 6th and 7th centuries.⁵⁸

After the loss of Africa and the fluctuating phase of supply⁵⁹ (439-455+), the post-5th century settlement reorganization highlights the importance of maintaining ownership and land management systems aimed at obtaining high agricultural production. On the other hand, this model permitted a large portion of the central Mediterranean granary and food market to be covered, mainly for Rome. Finally, it cannot be denied that the multiplication of settlements is linked, even minimally, to a demographic increase. In fact, until the first half of the 6th century, immigrants came from various regions of the western and central Mediterranean (especially Italy and Africa), occupied by 'barbaric' people (Visigoths, Vandals and Lombards), upset by religious clashes or engaged in long conflicts (Greek-Vandal and Greek-Gothic wars).

However, other aspects have to be considered as well. It is necessary, in fact, to underline the role of the *massa fundorum* in the system of large Sicilian landholdings during the formation phase of the late antique settlement network. In the well-known case of the *massa Pyramitana* which, in 489, Odoacre donated to Pierius, the role of Syracuse and the civic offices for the management of agricultural administrative practices is evident. The document shows that, in order to make the donation, a series of obligations were applied, involving different actors and following efficient and standardized practices. These fulfilments also included the inspection of *fundi* by the *actores* of Pierius, the *chartarius* Gregory, the *decemprimus* of the curia of Syracuse, representative of the civic institution and the *inquilini sive servi* in order to verify boundaries and estates.⁶⁰ The document, however, does not provide information on the settlements where the peasants resided.

The diffusion of the *massae fundorum* system as a patrimonial and then fiscal circumscription between the 4th and 6th/7th centuries, therefore, is an important aspect of the post-Roman Sicilian landscape. In fact, it permits the evaluation of different settlement typologies in relation to rural estates.⁶¹ If we identify

the *massa Pyramitana* with an estate around the Guglia d'Agosta (Priolo Gargallo), as some scholars have proposed, and the *fundus Potaxia* with the area of Brucoli (Augusta), as I have demonstrated recently, they would be two properties about 15 km apart.⁶² On the basis of these identifications, but also from the examination of the sources of other well-known cases, it is clear that the *massae* were aggregates of *fundi*, not always contiguous, united by being in the same civic territory. Within these 5th-6th century large and fragmented estates, therefore, one or more settlements with a different demographic capacity and different social and legal composition (*coloni*, slaves, *conductores*, etc.) may have existed.⁶³

The main question is how the 5th-6th century settlement network reflects the different juridical forms of property, the systems of land exploitation and management. Faced with this problem, I do not believe that archaeology can lead to a solution;⁶⁴ only planned excavations on a large scale and in different settlements of a single territory could provide data on this issue.

However, it does not seem that the 5th and 6th century landholding organization based on *massae* always remained the same. On the basis of the late 6th century Gregorian *Registrum*, V. Prigent has recently hypothesized that, in Sicily, within each *massa*, or large public, ecclesiastical or private property, there would have been a *conduma*, a place inhabited and managed by a *conductor*, where the structures and means of production and labour were concentrated.⁶⁵ If this definition were confirmed, it would be a first step towards a territory structured on the village that would become the fiscal and productive base of the Byzantine centuries.

In fact, the 7th century settlement network kept the original seats until the 9th century. This apparent continuity is very interesting and shows that the territory maintained a settlement system based on the village with a capillary distribution, even though it was, perhaps, demographically impoverished. This landholding organization places the village and its own estates as the unit of taxation of the Byzantine Empire after the middle of the 7th century following the tax transformations that provided for a land- and hearth-tax in place of the *capitatio/iugatio*.⁶⁶

Therefore, the maintenance of the settlement network does not assume that the model of landholding and estate organization, tax system and socio-economic context remained unchanged, but that this model could

⁵⁷ Cacciaguerra 2014: 382–383; Vaccaro 2017.

⁵⁸ Burgio 2008: 256–261; Burgio 2018: 21.

⁵⁹ Giunta 1958: 104–141.

⁶⁰ Caliri 2012: 210–225.

⁶¹ Vera 1999; Prigent 2017.

⁶² Cacciaguerra 2018a.

⁶³ Carrié 2012-13: 44.

⁶⁴ Belvedere 2018.

⁶⁵ Nef and Prigent 2019: 350–352; Prigent 2017: 229–231.

⁶⁶ Brandes and Haldon 2000: 149–150.

well adapt to the changes taking place. On the other hand, this continuity shows that the land- and hearth-tax system was able to maintain high production levels even compared to the *capitatio/iugatio* adopted during late antiquity.

Such changes, however, were accompanied by intermediate periods of fiscal reorganization that impacted on both urban and rural communities. In this regard, we can mention the imperial *iussio* issued in 667 which reformed the *capita* and introduced a ship-tax for landowners in Sicily, Sardinia, Calabria and Africa, and in 681 when the number of *capita* and the collection rate of *coemptio* were reduced for Sicilian and Calabrian ecclesiastical estates.⁶⁷

During these transformations, Syracuse continued to be the administrative centre for the Megarian area. The continuity in urban administration is well documented in Syracuse thanks to some seals with references to civic offices. Around the middle of the 7th century, a *Philotheus defensor populi* is mentioned, probably as a *defensor civitatis*,⁶⁸ while for the 8th century a seal of *Sergiou patros pole(os) Syrakouses* is known.⁶⁹

The collapse of this settlement network, on the other hand, occurred after the beginning of the Islamic conquest during the 9th century. These events must certainly have led to a progressive erosion and a demographic and settlement decrease. Between the 9th and 10th centuries, in fact, the settlement network left enormous empty spaces. The Islamic period, therefore, shows a less dense settlement network with small sites that never exceeded 2/3 ha., a very different kind of evidence compared to that of the Byzantine period.

The change of the political and economic centre of gravity from Syracuse to Palermo must have had an important impact on the settlement development of the Megarian area. The 'downgrading' of Syracuse from Byzantine 'capital' of Sicily to a small urban centre on the eastern 'periphery' certainly led to a decrease in investment and political attention by the Islamic ruling classes. The deficit produced by the loss of the leading role of Syracuse is evident in the difficulty of maintaining and supporting a dense rural settlement network and intensive land exploitation. In fact, the Megarian area shows a wider network of villages with small sites scattered throughout the territory. This aspect is also confirmed by a few fragmentary sources which underline the subordinate position of this territory with respect to those of southern and western Sicily where an expansion and greater stability of rural settlement are evident.⁷⁰

⁶⁷ Haldon 1997: 142–143.

⁶⁸ Berneker 1957; *Vita Zosimi*, Acta Sanctorum Mart. III, 843B.

⁶⁹ Laurent 1966: 22, 46–48, 50.

⁷⁰ Molinari 2010; Molinari and Neri 2004.

4.2. Territorial defence and control

The central economic role of Sicily in the late antique and early medieval Mediterranean certainly produced interventions aimed at defending and controlling its resources through centuries. These actions, however, were expressed mainly through investments which are not always visible in the archaeological record (fleet equipment, small military garrisons scattered throughout the territory, reuse of previous defensive structures, etc.). As already stated, it does not seem that the 5th and 6th century events and warfare had a lasting impact on late antique defensive systems, nor was Sicily endowed with a stable army. In fact, the only military structures are the fortifications that defended the main cities⁷¹ (Syracuse, Palermo, Messina, etc.).

From the 7th century, historical sources report that the Byzantine Empire reorganized its defence through the progressive militarization of society, administration and territory in the face of the Islamic threat which began to look with interest at the regions of the northern Mediterranean after the conquest of Africa and Carthage (698).

This aspect, however, is difficult to recognize through archaeology. The acquisition of new archaeological data from the Megarian area, Pantalica and other regional sites, however, allow us to have some reference points. At that stage, a generalized and sudden rise of hilltop settlements and fortified sites is to be excluded throughout the period considered here. The data available for the Megarian area underline the continuity of open settlements and the much lower distribution of defended and fortified sites.

It is also necessary to underline the phenomena of reusing defensive structures and reoccupying older settlements that characterized the only two fortified centres closest to the Megarian area. Pantalica, in fact, reoccupied part of a protohistoric site, and the Euryalus Castle was a large Greek fortress that was the pivot of the outermost defence of Syracuse.

Pantalica, however, is the fortified site on which we can focus attention for framing the defensive system of this territory. In fact, it has numerous features in common with Castronovo, which can be summarized as follows:

1. A large fortified enclosure (Castronovo: 80 ha. ca.; Pantalica: 20+ ha. ca.);
2. A low density of structures and settlement areas within it;
3. The presence of settlements immediately outside the fortification;

⁷¹ Maurici 1992: 14.

4. An isolated position and an orographic structure used for defence;
5. Archaeological materials attesting to Byzantine elites.

These characteristics show that these two sites were not population centres but, more likely, centres for military coordination and refuge for the population and goods.⁷² The presence of settlement areas developed outside the fortified enclosure confirms that the inner area was reserved for public and/or military structures and occupied by the population only in case of menace. Castronovo and Pantalica, therefore, would be two defensive structures, more or less contemporary, belonging to a specific defensive site typology developed in Sicily after the first Islamic raids between the second half of the 7th and the beginning of the 8th centuries. It was clearly a targeted and direct choice by the Byzantine state in order to create power centres for territorial defence with wide refuge areas for rural population and important goods (agricultural products, livestock, etc.). This defensive system should also include the type A and C rupestrian villages, documented in the Megarian area and southeastern Sicily. Their position and distribution in the territory seems to confirm this interpretation and could be a complementary network to that of fortified centres.

We can include another two fortified site typologies, of which, unfortunately, we know very little. The first is made up of defended population centres, well known in 9th century sources, like Ragusa and Mineo where defensive structures were identified.⁷³ The last typology, on the other hand, is hypothetical. Small castles or defensive structures with a smaller surface area, in fact, can only be assumed because they have not yet been identified. There are, however, some clues regarding a small fortification on Monte Conca⁷⁴ (Milena, Caltanissetta) and other structures in the Hyblaean area (c.da Cassaro near Modica) and on the Nebrodi Mountains.

These three or four typologies seem to be the keystones of the late Byzantine defensive system of southeastern Sicily. During the second half of the 7th century, the Byzantine Empire developed a similar system in central and eastern Anatolia. It was based on the *kataphygia*, large enclosures located in inaccessible and isolated positions for refuge of the local population like Pantalica and Castronovo.⁷⁵ They were joined by a few

fortified population centres, undefended villages and, where possible, rupestrian settlements.

They would fit into a strategy reported in Byzantine military treatises, such as the *De Velitatione Bellica*, which was composed in the 10th century but gathers war practices from the previous two-three centuries, probably largely derived from the defence experiences in Anatolia.⁷⁶ This strategy involved scattering military forces throughout the territory to provide an early warning system so as to prevent or contain attacks and rescue people and goods in fortified centres that were rarely besieged for long periods or conquered.

A similar defence system could therefore have also been implemented in late Byzantine Sicily, although the 7th and 8th century Islamic raids were few and the real *limes* was at sea, duly patrolled by the *dromonorum stolis Siciliae*.⁷⁷ The structures of the Byzantine defence system, therefore, were placed in a rearward position with respect to the military conflict area, and so could have been even less dense than that in Anatolia.

The continuity of coastal and inland settlements in the Megarian area and other parts of the Sicilian territory is not in contrast with this model. As pointed out by Natalia Poulou for the Aegean area, between the 7th and 8th centuries there was an increase in coastal settlements as a means of control over the sea and sea trade on behalf of the state.⁷⁸

This defence system was integrated within the 7th-9th century Byzantine army organization. Although the Byzantine state continued to maintain a large army, part of the soldiers were distributed in the countryside of the *thema*, to which were probably assigned lands for their livelihood. Therefore, the army was profoundly regionalized and ruralized, and it also contributed fiscally.⁷⁹ In this organization, therefore, it was not necessary to maintain a widespread presence of centralized military structures for contrasting Islamic raids. Instead, there were enhanced military coordination centres for refuge and emergency management, according to a waiting-strategy for reinforcements coming from the main Byzantine centres or other regions.

The available data do not allow us any in-depth knowledge of the defence and control system between the 10th and 11th centuries. The Megarian area does not show Islamic defensive structures. Moreover, the settlement network has shown less complexity than in the Byzantine period. However, the collapse of the

⁷² On Castronovo, see Molinari 2016: 322–323, 326; Carver, Molinari, Aniceti, Colangeli, Giannini, Giovannini, Hummler, Mangiaracina, Meo and Orecchioni 2017a; Carver, Molinari, Aniceti, Colangeli, Giannini, Giovannini, Hummler, Mangiaracina, Meo and Orecchioni 2017b.

⁷³ Orsi 1899a; Pace 1936–49: IV, 159, 166–167.

⁷⁴ Tomasello 2009.

⁷⁵ Haldon and Brubaker 2011: 556–557; Kennedy and Haldon 2006: 84–97; McMahon 2016.

⁷⁶ *De Velitatione Bellica*, XX, 9–11; XXI, 1.

⁷⁷ Cosentino 2004; Cosentino 2018: 326; Prigent 2008.

⁷⁸ Poulou 2019: 250.

⁷⁹ Brandes and Haldon 2000: 150–151; Haldon 1997: 244–251.

dense village network was not due to the concentration of the population in defended or power centres but because of demographic decreases and a more scattered settlement network. Furthermore, the type A rupestrian settlement continued to be used, confirming a temporary use on occasions of military menace that were certainly not lacking between the 10th and 11th centuries.

5. Conclusions

The evidence coming from Pantalica confirm this reconstruction. It shows that the Byzantine fortifications were abandoned and probably reduced. The Tower/Castle of Filiporto was perhaps the only defensive structure maintained during the Islamic and Norman periods. The four rock settlements, on the other hand, seem to have had long-term continuity and were inhabited until the Norman-Swabian age, as evidenced by three churches (12th-13th centuries) and a few historical sources (1092-1151).

In conclusion, these data seem to exclude a settlement pattern based on the integrated system of *ḥiṣn-alquerías*, as hypothesized for some regions of al-Andalus and Sicily.⁸⁰ Moreover, it seems that the rescript issued by Fatimid caliph al-al-Mu'izz⁸¹ (967) did not have a decisive effect on the settlement organization of the northern territory of Syracuse. Rather, it is probable that endemic warfare and Byzantine temporary reconquest (Romanos I: 938-941; Nikephoros II Phokas: 964-965; Maniakes: 1038-1040) continued to impact this area.⁸² This undoubtedly did not allow the recovery of a sufficiently high demographic rate for the northern area of Syracuse.

The situation, however, seems different in the highest part of the Hyblaean Mountains where there was a more evident development of Islamic hilltop centres, located in areas above 400 m (Pantalica, Buccheri, Buscemi, Palazzolo, Vizzini, Ragusa, etc.) in an evidently backward position aimed at resistance. However, only future investigations will be able to evaluate and characterize this framework.

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⁸⁰ Bazzana, Cressier and Guichard 1988; Maurici 1992: 198.

⁸¹ Amari 1880-81: II, 546.

⁸² Prigent 2010.

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Suburbia and Rural Landscapes in Medieval Sicily presents the results of the main ongoing archaeological and historical research focusing on medieval suburbia and rural sites in Sicily. It is thus intended to update traditional views regarding the evolution of this territory from Late Antiquity to the Middle Ages by bringing into the picture new data from archaeological excavations undertaken at several sites across Sicily, new information from surveys of written sources, and new reflections based on the analysis of both material and documentary sources. The volume is divided into thematic areas: Urbanscapes, suburbia, hinterlands; Inland and mountainous landscapes; Changes in rural settlement patterns; and Defence and control of the territory. The essays underline the fundamental contribution of archaeological research in Sicily to the debate on the formation of early medieval landscapes at the crossroads between the Byzantine and Islamic worlds. A comparison with other research areas and constant dialogue with historical sources constitute essential elements for advancing our knowledge of the rural and suburban world of Sicily as a case study illustrating wider Mediterranean dynamics.

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