



GÖTEBORGS UNIVERSITET  
INST FÖR HISTORISKA STUDIER

# The Site of an Unidentified Greek Settlement? *New Surveys in Coda Volpe on Eastern Sicily*



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# The Site of an Unidentified Greek Settlement? *New Surveys in Coda Volpe on Eastern Sicily*

## Abstract

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This study examines Greek colonisation's potential for archaeology in relation to Coda Volpe district on eastern Sicily where necropoleis indicate the existence of unidentified both Greek and Roman settlements. Recent initial surveys near the Simeto delta suggests the location of a *periphery*, without any previous systematic study, prospecting or geophysical survey. As landscapes are discursively constructed along established theories, locating *peripheries* can yield new dimensions between material and landscape; i.e., topographical reconstruction, analysis of ancient sources and Archaic sites, and after comparison with recent studies such as for identifying *poleis* using an interdisciplinary, multi-scalar framework for studying living quarters and combining landscape archaeology with *micro-archaeology* to trace hybridities where biology, geology and geomorphology shape patterns of human activity. As archeologists interact with local culture a *creolizerad archaeology* has been suggested to help prevent "simple" solutions to practical archaeological problems. Sicilian Archaeology 'began' with Paolo Orsi, on Etna's slopes, in the central mountains and on the coasts. This narrative is broadened by inclusion of a *periphery* in Coda Volpe, with a re-evaluation of Orsi's contemporary Carmelo Sciuto Patti's interpretation on the possible location of *Symaetus*.

**Keywords:** *Archaeology, Archaic Age, Catania, Coda Volpe, Greek Colonization, Micro-archaeology, Periphery, Post-Colonial Theory, Sicily, Survey, Symaetus.*

Front page: *Masseria Coda Volpe*, 'Fox Tail Farm,' Coda Volpe district (CT) where a new survey is proposed, surrounded by what appears to be both cyclopean and Archaic limestone walls and reused stones scattered throughout the landscape. Between Lentini and Catania on Eastern Sicily. © Author, november 2018.

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## Abbreviations

<i>AJA</i>	<i>American Journal of Archaeology</i>
<i>AMMG</i>	<i>Atti e Memorie della Società Magna Grecia</i>
<i>ArchStorSic</i>	<i>Archivio Storico Siciliano</i>
<i>ARD</i>	<i>Archaeological Dialogues</i>
<i>ASAA</i>	<i>Annuario della [Regia] Scuola archeologia di Atene e della missioni italiane in Orientale.</i>
<i>ASAtene</i>	<i>Annuario della Scuola Archeologica di Atene e delle Missioni italiane in Oriente</i>
<i>AttiPal</i>	<i>Atti della Accademia di scienze, lettere e arti di Palermo</i>
<i>BPI</i>	<i>Bullettino di Paletnologia Italiana</i>
<i>Bull. Paletn. Ital.</i>	<i>Bullettino di Paletnologia Italiana</i>
<i>CT</i>	<i>Catania</i>
<i>Curr. Swedish Archaeol.</i>	<i>Current Swedish Archaeology.</i>
<i>FGrH</i>	<i>F.Jacoby, Die Fragmente der griechischen Historiker (Berlin: Weidmann, 1923-)</i>
<i>JHS</i>	<i>Journal of Hellenic Studies</i>
<i>JRA</i>	<i>Journal of Roman Archaeology</i>
<i>JRS</i>	<i>Journal of Roman Studies</i>
<i>MAL</i>	<i>Memorie della Classe di Scienze morali e storiche dell'Accademia dei Lincei</i>
<i>MEFRA</i>	<i>Melanges de l'Ecole frangaise de Rome</i>
<i>Mem. Acad. Roy. Belg.</i>	<i>Académie royale de Belgique</i>
<i>Not.Sc</i>	<i>Notizie degli Scavi</i>
<i>NSc</i>	<i>Notize degli scavi di antichità</i>
<i>PBSR</i>	<i>Papers of the British School at Rome</i>
<i>PP</i>	<i>La Parola del Passato</i>
<i>RA</i>	<i>Revue archéologique</i>
<i>Sic.Arch.</i>	<i>Sicilia Archeologica</i>
<i>SR</i>	<i>Siracusa</i>
<i>UT</i>	<i>Unità Topografico</i>
<i>World Archaeol.</i>	<i>World Archaeology</i>

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*For my son Alexander*

The bibliographic analysis on which the work was based has highlighted a vacuum regarding the archaeological 'emergencies' of the area in question, not due to an absence of ancient settlement layers, but rather, due to the fact that these areas have never been subjected to systematic study, prospecting or archaeological survey.

(Rodolfo Brancato 2018: 91)

## Introduction

The period of Greek colonization in the Mediterranean was once described as a field of research with a particular potential for archaeology (Finley 1971). This study aims to examine this notion, and if possible to add weight to what obviously could be regarded as a blanket statement. Moses Finley (1971: 168-186) suggested that archaeology stood to make its most significant contributions, having first sufficiently been adapted to the quality (and quantity) of the ancient sources, in the fields of numismatics, technical history, trade and the period of Greek colonization. This is one of many useful perspective discussed by Anders Andrén (1997) in *Between Artefacts and Texts*, a global survey of the relationships indicated by the title from historiographical, methodological, and analytical perspectives. Andrén's analysis of the crucial relationship between written, and material remains in ancient societies, employs examples from twelve major disciplines in historical archaeology, while summarizing their role in five global methodological approaches. Another view appearing in the same survey is that one should not expect any equivalence between artefacts and texts created in past activities with very different levels and scale. Big similarities rather suggest circular evidence, and the role of archaeology is therefore most important in temporal and spatial 'peripheries,' and in marginal, lesser-known areas (Snoddgras 1983, 1985a in Andrén 1997: 33).

The Archaic age on eastern Sicily, synonymous with the period of Greek colonization (734–480 BCE), is for obvious reasons still shrouded in doubt and 'mystery.' Not least since the written record was set down several centuries later (all accounts relevant here are reviewed later on). It is for instance worth noticing how the dates for foundations of Greek colonies on Sicily tend to 'line up' rather nicely. This should obviously stir caution, even while accounting for the discrepancies in the sources, and a critical approach is needed. A tendency for 'setting the record straight' seems apparent, and reasons for this could be similar to the semi-mythical (however still plausible) foundation of Rome: April 21 in 753 BCE. A legendary date handed down from Varronian chronology (Forsythe 2005: 94). But, just as with Archaic colonies on Sicily, there are varying accounts on the founding of Rome as well. One such account, 'older and more fabulous,' casts Rome as an Arcadian colony founded by Evander (Strabo *Geogr.* 5.3.3). To trace Rome's origins back to a larger colonization puzzle with Etruscan, Greek, Phoenician and Italic tribes is however not altogether unlikely. Dynamics of hybridity are evident in both Greek cohabitation and expulsion of indigenous settlers in Lentini and Syracuse – or in the distance between those cities to Pantalica (Sicels). Archaic *poleis*, in both Magna Graecia and Sicily, are sometimes founded relatively close to non-Greek colonies, such as Ischia (Greek, Phoenician, Etruscan) within comfortable travelling distance (45km) to Etruscan Capua.

If approaching the ancient sources critically and with caution, reconstructing the complex and geographical widespread events of Greek colonization is still plausible; firstly by focusing on the archeological record. With a grasp on research regarding Archaic Greek Sicily (De Angelis 2016; Tsetschladze 2006; Holloway 2004; Graham 1982) it is possible to then suggest areas suitable for new inventory and geophysical survey, in accordance with hitherto established methodology (Renfrew 2004; Andrén 1997; Ammerman 1981). Comparisons with other studies (Brancato and Manganelli 2018; Nevet et al. 2017; Leone et al. 2007) offers new perspectives on Greek cities

(Nebet et al. 2017: 156) and a methodology for identifying settlements on eastern Sicily using field survey (Leone et al. 2007: 56). Using detailed analysis of living quarters with a interdisciplinary, multi-scalar framework for focusing, aside from formal functions, also on social aspects in the built environment with micro-archaeology is a useful reference for this study (Nebet et al. 2017:159, 202).

In brief, areas suitable for field survey can be identified after comparative analysis of relevant archaeological dig-reports, ancient sources, and reconstructing the ancient topography. This basic methodology is obviously extendable to other theatres for Greek colonization in general, and for this study Archaic Euboean colonies in the Mediterranean in particular. Of interest in this regard is Chalkidiki (Vokotopoulou 1994; Cambitoglou and Papadopoulos 1994) with many understudied Euboean Archaic colonial sites (See Table 1) and the recent Olynthos project as a useful reference (Nebet et al. 2017). This study is however focused on eastern Sicily (Rizza 2000; Fisicaro 1996; Lentini 2001) in the southern and rural outskirts of Catania. In the foothills of the north-eastern corner of San Demetrio, a ridge extending north from the Hyblaean Mountains lies the Coda Volpe district, at close distance to the isthmus of the Simeto River. San Demetrio extends between Caltagirone-Primosole, rising next to the fertile Catania Plain. The presence here of both Greek and Roman necropoleis indicate the existence of unidentified nearby settlements (Brancato and Manganelli: 103–104) and this area was previously also thought to be the location for *Morgantia*:

[Morgantia] was founded, according to Strabo, 'by the Morgetes., a people of Italy, who crossed over into Sicily with the Siculi, and built this city at a small distance from the mouth of the Symathus, now La Giaretta. Thucydides, Syllax, and Pliny, place it near the conflux of the Chrysas, now the Dittaino, and the Symaethus [...]. There are now no footsteps remaining of [this city].

(Sale et al. 1738: 3)

Another settlement also supposedly located somewhere near the mouth and lower section of the Simeto is *Symaetus* (Sciuto Patti 1880). It is important to notice that where San Demetrio bounds the Catania Plain was probably an area of great importance for maintaining control over both the fertile plain and movements inland along Sicily's largest river that was navigable throughout antiquity (Mori 1936; Kärrman forthcoming). This is however also an area without any previous systematic study; prospecting or geophysics survey (Brancato 2018: 91), which in turn could be indicative of a *periphery*. This term has previously been used by Lise Nordenborg Myhre (2004) to explain how the Scandinavian Bronze Age landscape appears to have been formed, reformed and discursively constructed along established theories, with the subsequent locating of peripheries resulting in new dimensions and relations between material and landscape. This model could well apply for the foothills of San Demetrio and the Coda Volpe district also, and it is worth noticing that the isthmus of the Simeto is at about equal distance from both Catania and Lentini (c. 13km. Fig. 2).

Landscape archaeology, combined with micro-archaeology and Actor-Network Theory (Andr n 1997; Latour 2005; Muniesa 2015) constitutes a theoretical framework for the planned fieldwork connected to this study, deemed useful in particular for tracing human/environmental hybridities where biology, geology and geomorphology actively shape patterns of social and economic activity (Walsh 2008: 55; Fahlander 2008: 140). Another theoretical consideration is the suggestion that, as

archeologists from northern Europe interact with other cultures, post-colonial perspectives and terms as exotism and creolization can help illustrate how both local inhabitants (and experts) risk becoming 'the other.' A *creolized archaeology* has been described as preferable for producing a wealth of locally anchored understanding by open communication that enriches the production of knowledge and prevents 'simple' solutions to practical archaeological problems (Källén 2001: 59).

The previous archaeology done on Sicily is extensive (including on the Archaic period) that will receive an overview for the eastern part of the island in this study. Paolo Orsi is an instrumental figure in this regard, as he identified numerous ancient Prehistoric, Greek and Roman settlements during the late nineteenth century, both on Sicily and Magna Graecia (Holloway 2004: 8-20). His legacy notwithstanding, the landmass of Sicily is so vast that it is natural to still expect gaps in the archaeological record and understudied peripheries, such as the area under examination in this study (Brancato 2018: 91). It could in fact be argued simultaneously as both 'periphery' and 'prime location' given its geomorphology and ancient topography, suggesting this is a suitable location for one of the many unidentified settlements mentioned as located in this area by ancient sources. I candidate is perhaps Symaetus (Plin. Nat. 3.14) that following a late nineteenth century discovery of a Roman necropolis near the Simeto was suggested as being located nearby (Sciuto Patti 1881).

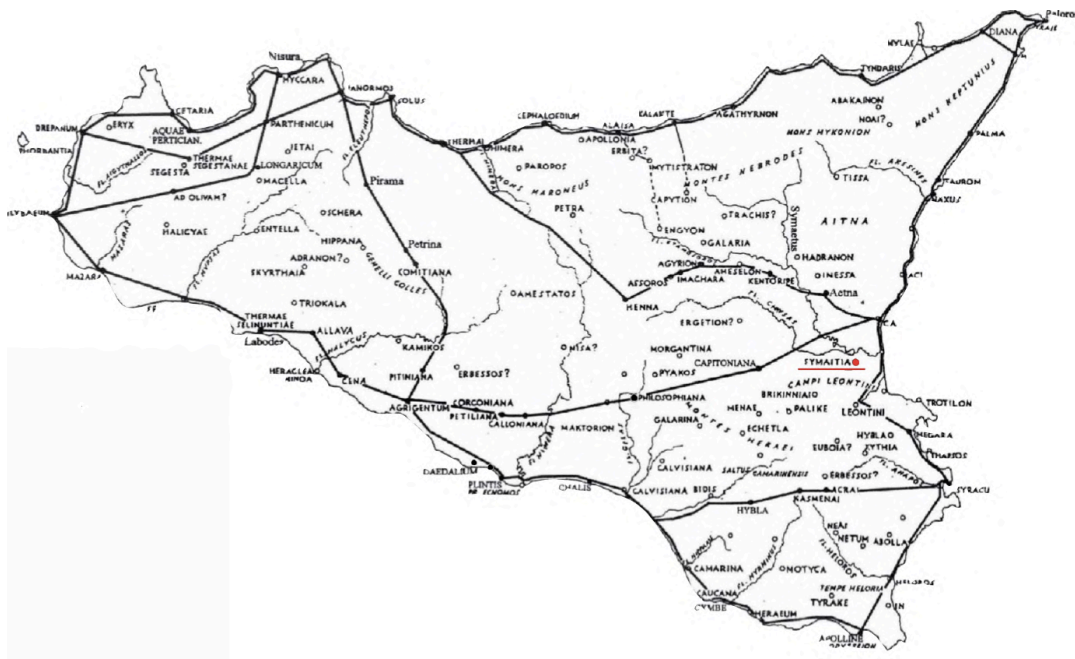
This interpretation, though unproven, has been actualized by this study. Sciuto Patti's work was discovered only after an initial survey of the area by Niklas Kärman, William Henry and the author, following an initial hypothesis developed by Kärman that "the archaeological record appeared surprisingly empty in the southern outskirts of Catania". The area containing both the mouth of the Simeto; Sicily's largest river, navigable throughout antiquity, with the fertile Catania plain bounded to the south by the San Demetrio, appeared to be a prime location for a settlement. The authors' contribution was that, as Via Pompeia is thought to have split in this area with one road moving south towards Syracuse, one inland across the Catania plain, and another crossing the hilly ridge towards Lentini, a good place to start an investigation would be where the Roman road supposedly divided. The difficulty was only that the exact location of the Roman road has only been hypothesized. This initial survey is detailed in this study, along with another recent survey (Brancato and Manganelli 2018), found while processing the initial findings.

Aside from presenting the data from the surveys, complementing each other in a remarkable fashion, a plan for the future work will be outlined in a collaboration between Gothenburg University and the Superintendency in Catania. A discussion has continued into modern times regarding the Roman necropolis (Sciuto Patti 1881; Fiscicaro 1996; Uggeri 2004), and a Coda Volpe necropolis (Brancato and Manganelli 2018). The initial survey, conducted with funds from the Adlerbert travel scholarship is a collaboration between N. Kärman, the author (Gothenburg University) and W. Henry (La Sapienza – Università di Roma). This study aims to contribute to this ongoing discussion by including a periphery in Catania's Coda Volpe district, with a re-evaluation of the contribution by Paolo Orsi's contemporary Carmelo Sciuto Patti.

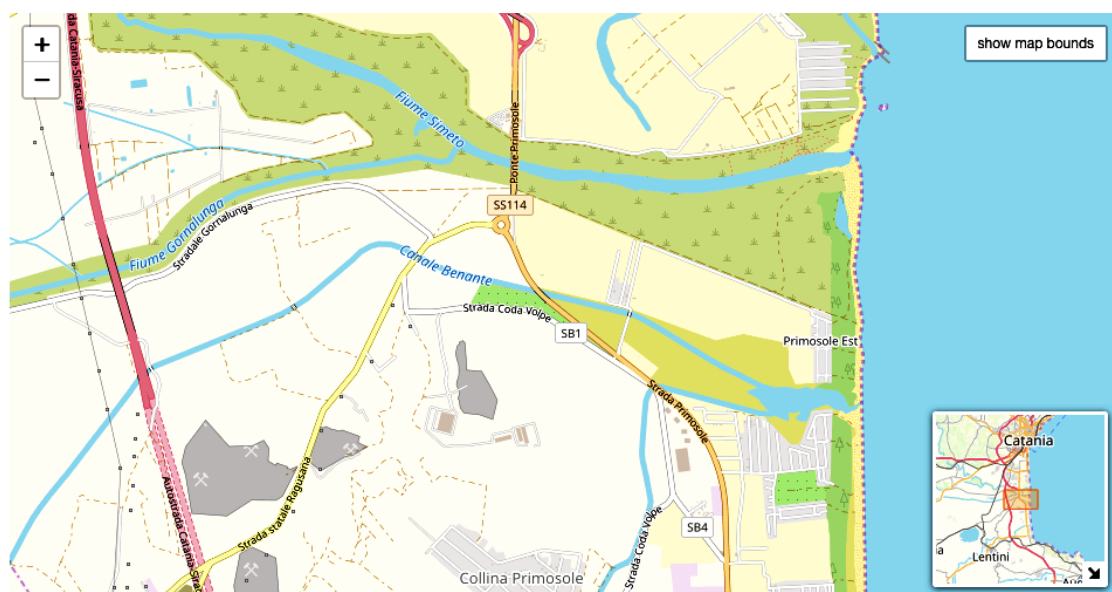
# CHAPTER 1. IDENTIFYING A GREEK SETTLEMENT

The appearance in this winter of a necropolis on the right bank of the Simeto River, although it was the only clue that we have so far, is however very important to point out precisely the site, where this ancient city [Symaetus] was built. This I believe no longer leaves any doubt, not just for its existence, but also of the site where it stood.

(Sciuto Patti 1881: 129–30)



**Fig. 1.** Map of Sicily (Uggeri 1998) with ancient road network and proposed location of Symaitia/Symaetus, underlined by author as Sfacteria did for *Philosophiana* (Sfacteria 2016: 22).



**Fig. 2.** Location of Coda Volpe district in eastern Sicily in the foothills of San Demetrio next to the isthmus of Simeto. Map made with [www.openstreetmap.com](http://www.openstreetmap.com).

## **1.1. Purpose and Research Questions**

### **1.1.1. Purpose of this Study**

This study is part of a continuing collaboration between N. Kärrman, and the author, both master-students at Gothenburg University, together with W. Henry, doctorate student at La Sapienza Università di Roma. The aim is in part to lay out the sufficient ground-work and applying for the necessary permits in order to be able to return and perform more detailed work and analysis, primarily of the walls observed during a initial reconnaissance survey in november 2018. The walls observed in Coda Volpe district (Catania), based on stylistic dating by masonry style, are indicative of re-use of ancient stones from both cyclopean and Archaic periods. Along with a nearby hill-crest, the walls belong to an extended area deemed highly suitable for a new re-evaluation of Carmelo Sciuto Patti's interpretation from the nineteenth century regarding the location of Symaetus. The purpose is first of all to assess indicators of settlement, secondly to facilitate a proper and full-scale investigation of the observed walls; breaking down into the following steps; (a) gathering sufficient data; (b) reviewing source materials; (c) consulting other relevant studies; (d) choosing an appropriate methodology for a new survey, and (e) compiling, analyzing and presenting the findings.

For the purpose of developing this work into an archaeological project in the future a motivation behind this study is also to assist in supplying relevant material, useful for the already established contacts with the archaeological authorities in Catania. This study finally also serves as a reference for applying for required funds and permits.

### **1.1.2. Research Questions**

The purpose of this study is divided into two main research questions:

1. Is Coda Volpe district on San Demetrio the site of a previously unidentified settlement from Greek colonization during the Archaic age?
2. How can this study help facilitate a proper and full-scale investigation of walls observed during an initial reconnaissance in Coda Volpe (CT)?

## **1.2. Theoretical Considerations**

### **1.2.1. Periphery, Micro-archaeology and Actor-Network Theory**

After Paolo Orsi's many excavations on Sicily, the archaeology on the eastern side of the island has primarily been focused in two areas; one region being on Etna and its surroundings; the other in the southeastern and mostly coastal region with Pantalica, Megara Hyblaea and Syracuse taking primacy. In the central part of eastern Sicily there has also been a focus in the interior mountainous region where Morgantina is located. Apart from this the central part of eastern Sicily – as per large-scale excavations – appears to have been largely overlooked. More specifically, the area of this study in between Catania and Lentini, has never been either systematically studied; prospected or geophysically surveyed (Brancato 2018: 91). It thus appears to

be part of a periphery. This terminology has previously been used by Lise Nordenborg Myhre to challenge established theories about how the Scandinavian Bronze Age landscape has been discursively shaped, transformed and constructed. Nordenborg Myhre dealt with Scandinavia in general, and southwestern Norway in particular (2004) but it is possible to see parallels to the current lack of understanding about the Coda Volpe district; essentially an area in the middle between other better studied areas on the coast and in the mountainous interior. The geographical area studied by Nordenborg Myhre had never before been studied, entirely on the basis of its own particular terms and conditions, as is also the case with the Coda Volpe district.

The archaeological material in Nordenborg Myhre's study area in southwestern Norway had previously been compared to other areas and then only studied as a periphery or colony of Denmark. Nordenborg Myhre thus describes a how a development scheme for new knowledge had been created, where only what fit into the expected model could be contained and was otherwise neglected or given a less prominent significance. As the center and periphery already had been identified, and as this was allowed to explain development and dissemination from Denmark, an impression emerged of a coherent and indivisible overall picture between the center and the periphery. The periphery was reduced to Denmark's perceptions and interpretations of the same and thus invariably 'ceased to exist' outside this dual power relationship. Nordenborg Myhre's approach became to instead explore this margin as a refraction area of change, reflected in the different dimensions and relationships of the artefacts located within the landscape that extended beyond this two-tiered division (Nordenborg Myhre 2004: 5).

Landscape archaeology has been elected as the methodological approach for the planned fieldwork in the Coda Volpe district, with a micro-archaeological perspective, while also regarding the survey area and San Demetrio as part of a marginalized or peripheral part of Sicily. As a theoretical starting point, the project will use "Actor-Network Theory" combined with micro-archaeology. Actor-Network Theory was initially intended to serve as a simplified duality between nature and culture, where these two elements could be studied independently of one another. As this concept is applied practically, it can function as a complement to micro-archaeology, specifically in that it provides more room for the impact of nature and biology. Combining this concept with non-human agency and hybridity, a theoretical framework can assist in a knowledge production containing aspects, both from the biological environment as well as the cultural landscape. Non-human agency is measured by consciously including biological, geological and geomorphological factors into understanding the landscape as *agencies* that can be afforded an active role in the shaping of the landscape, instead of a more passive role as is otherwise common practice.

The impact of social factors on the landscape is expected to have equal importance to the non-human agency actors within a network. This means that a network can be generated by all various factors, such as by objects, people and environmental processes alike, without any asymmetry between social and natural factors. Hybridity can in turn be regarded as a phenomena that creates interconnections in the network. This hybridity can be expressed in man-made structures in the landscape: both through what materials they are made out of and how the constructions are located in the landscape, as well as the hybridity that can also exist between many different environmental processes. Various factors such as nature, economy or politics control the creation of these hybridities (Walsh 2008: 551). This theoretical framework, and its integral components will primarily be used in order to understand the topographic,

natural and cultural structure of Coda Volpe district to then subsequently applying a micro-archaeological perspective on the cultural remains. Fahlander summarizes micro-archaeology as follows:

Microarchaeology is thus a way of discussing regularities in practice without the need to confine the study within a cultural context. Instead, we find clusters of interwoven fibres, that is, practices or material patterns, of varying extent in time and space that may coincide with an ethnic group, but we should not be surprised if this way of looking at social practice turns out as something that crisscross assumed cultural units, regions or ethnicities.

(Fahlander 2008: 140)

### **1.2.2. Exotism, Creolization and Social Landscapes**

With the assistance of micro-archaeology, it is possible to examine the Coda Volpe district and San Demetrio from a more open perspective, not simply focusing the survey and research solely on "Greek" remains from any particular age. Instead artefacts and materials are understood and analyzed more broadly and open-ended. As the area has not previously been studied or surveyed in any detail (Brancato 2018: 91), it is important to enter into the future work with as few preconceived notions as possible. This is particularly important, given that San Demetrio may well have been inhabited by people, coming from either mainland Greece or other Greek colonies in Magna Graecia or on Sicily. San Demetrio may obviously, and quite probably, also have been inhabited by Sicels, as there is both evidence of prehistoric settlement (Brancato 2018: 93) and given the fact that Sicels inhabited places like Pantalica, and Leontinoi several centuries before the Greeks first arrived on eastern Sicily.

A hybrid of some kind is also possible to imagine as between Sicels and Greeks, as was the case in nearby Lentini. In summation there are several different possible agencies at play throughout the cultural chronology of the Coda Volpe district. In this respect – in a more general perspective – the future work is planned while taking into account also more critical viewpoints from within archaeology. In particular regarding North-European archaeological practice in its encounter with other cultures. Post-colonial theory with concepts such as Exoticism and Creolization are useful perspectives to keep in mind for the contact between, for example; archaeologists in Gothenburg and Catania and the local people in the Coda Volpe district. The main theoretical concepts can be used as a guide in order to highlight how a local population, or even Italian authorities or archaeologists, otherwise can risk becoming "the other", which is something that can happen in the initial contacts as well as in the subsequent fieldwork. The concept of a Creolized archaeology, as mentioned previously, can possibly assist in facilitating the production of a variety of locally rooted knowledge through open communication channels; enriching knowledge production and steering away from overly "simple" solutions to the problems of archaeological practice (Källén 2001: 59).

As an urban space surrounded by Sicilian countryside Coda Volpe also belongs to a social landscape of past communities. In order to better grasp this aspect the archaeological evidence can be used to rediscover or reconstruct landscapes of practices and knowledge. Social landscapes can for instance be traced by reconstructing an urban space through discursive representations. Understanding



discourse as being *spatialised* can provide a conceptual ground for further discussion; by viewing knowledge, power, and representation in spatial terms. According to Berin Gür (2002: 237-252), while discussing the transformation of Sultanahmet in Istanbul, an urban space can be defined as where discursive representations have a social and spatial existence, making it a space approachable as an archive that renders spatial-social-political information visible. This discussion will be further developed in Chapter 4.

### 1.2.3. Colonial Hybridity and Transculturation

Hybridity, as a critical concept, stems from Postcolonial Studies with its main use being the creation of a 'third space' as the hierarchy between colonizer and colonized becomes better understood (Antonaccio 2005: 100). Hybridity can apply not only to a culture, but to people or a colonial space. The creation of a typically Sicilian colonial identity, *Sikeliotai*, as separate from other Greek colonists (Antonaccio 2001) follows from this concept. Colonial hybridity is a result of a mixture between Greek colonizer's culture and the separate native or indigenous culture, and the usefulness of this concept is not limited to small and arguably peripheral, or 'native' places only. This approach differs from simply separating Greek from barbarian or identifying the one-way influence that is implied with the term 'Hellenization' (Antonaccio 2005: 100).

In Sicily and in southern Italy, though Greek colonies arguably produced some of the most spectacular examples of Greek architecture and temples throughout the Ancient world, the study of the material culture focusing on colonization have often followed distinctively colonial forms, while simultaneously often viewing it as unorthodox, eccentric, even semi-barbarous (Ceserani 1999; Dietler 1999; Hall 2003). This has resulted from the notion that colonies have been considered to be culturally dependent and their culture as derivative (Antonaccio 2005: 201).

Archaeology on Sicily has, according to Katarina Streiffert Eikeland (2006: 17), been greatly impacted by outdated and preconceived notions such as these, especially in light of the true richness and complexity of the archaeological record. Sicily was previously seen simply as a 'cross-road of the Mediterranean' and a *passive receiver* of foreign culture. At times understood as a continuation of Prehistoric southern Italy Sicily was however mainly placed in relation to Greek and Roman colonizations. For this aspect Streiffert Eikeland (2000: 150-53) suggest Fitzjohns' review of Leighton 1999. The island's centrality for both trade, movement of people, and the transmission of cultural influences throughout the Mediterranean, is however very clear (Giannitrapani 1998: 741). Only recently could cultural change on Sicily be understood as partly controlled by native influences that upheld traditions while still maintaining contacts with southern Italy, nearby islands and the extended Mediterranean (Leighton 1999: 7).

Streiffert Eikeland points to the vast amount of artefacts with Italian origin found in Aegean sanctuaries and graves, emphasizing and elaborating a more *active* role, demonstrable from at least the Recent Bronze Age (thirteenth to eleventh centuries BCE) onwards. Streiffert Eikeland adds that the archaeological *materialities* (the material aspects of cultural practices and the social dimension of the material) point to a strong links between the Greeks and Italic peoples, previously thought to have been culturally less developed by comparison. One illustration of this is Jonathan Hall's (2002: 95) account of the vast quantities of North Syrian, Phoenician, Assyrian and

Egyptian objects found dedicated in Greek sanctuaries during eighth and early seventh centuries, possibly acquired by a Greek elite through trade or exchange (Streffert Eikeland 2006: 17).

The idea of a mainly one-sided contact is traceable to European chauvinism, exemplified for instance by some earlier British scholars' disinterest in the indigenous population. The Greeks who arrived on Sicily's shores were seen as a civilizing force of barbarians, and it was colonialism that once had shaped the archaeological discipline (while referencing Stein 2005)- This is an influence that still abounds, according to Streffert Eikeland. Thomas Dunbabin's rise to prominence in archaeology during the 1940s, with a particular interest in Etruscan metallurgy (Dunbabin 1948, 42, 173, 190) is included as yet another example of this attitude. The Greeks had "nothing to learn, much to teach" according to Boardman (1964: 203) and Streffert Eikeland (2006: 18) also reserves equal criticisms for Bernabò Brea (1957) and Paolo Orsi (1889). These criticisms will be further discussed in Chapter 4.

Far from having disappeared, imperialistic or colonial reasoning is still influencing the world even with archaeologists now often aware their own biased notions. As a response to this situation, *post-colonial critique*, was introduced in archaeology, not simply for identifying imperialism and culture, but rather with equal concern for both the past and the present, according to several researchers (De Angelis 1998; van Dommelen 1997; Given 2004; Dietler 2005. In Streffert Eikeland 2006: 19).

As a consequence, Streffert Eikeland suggests viewing interactions as cultural transformations with many possible manifestations, such as adopting new burial customs or a new alphabet. To trace these communications the material culture considering specific aspects is essential. Using a *transculturation* perspective (the inclusion of new elements in an existing culture) Streffert Eikeland examines the balance between coastal territories settled by Greeks and the indigenous communities. The level of transculturation may depend on the geographical distance to the colonized area, and whether inland indigenous settlements kept their traditions more intact than the coastal communities as in particular has been suggested for early Sicilian colonies, indicating that the Greek *chorai* (Greek zone) did not extend more than about 15km inland (Whitehouse and Wilkins 1989; Leighton 2000: 21; Streffert Eikeland 2006: 20).

Michael Dietler attributes a more active role for the indigenous people with colonial interaction not only being a process of diffusion between an active donor and a passive receptor. Consumption of alien cultural elements is rather an active, motivated, creative process that is best understood from the standpoint of the social and cultural logic of indigenous societies with their proper institutions and complex history (Dietler 1995: 90). Here Dietler opposes P. Brun, who instead prefers the model of world systems economic theory as the most plausible explanation of the forms of contacts between native people and colonists (Brun 1995), that Dietler in turn regarded as "a tendency toward structurally overdetermined, mechanistic explanations and an emphasis on "core determination of process on the "periphery": history is made at the core and the periphery simply react" (Dietler 1995: 94).

Streffert Eikeland (2006: 21) also states that she subscribes to Gosden's (2004: 7) view that post-colonial theory is the best approach to dealing with colonialism, but that what is essential is also adding the material culture in this mode of analysis.

## 1.3. Methodological Perspectives

### 1.3.1. Classical and Landscape Archaeology

The division of historical archeologies – Classical, Provincial Roman, Byzantine, Medieval, Contemporary and Industrial archaeology as well as Marine archaeology and "Prehistoric" archaeology – covers all historical periods in Europe but without any unified archaeological tradition. The divisions are due to the fact that professionalization has occurred at different times in each separate field (Andrén 1997: 19). Classical archaeology is most evidently visible here, not least in Italy where classical or 'exemplary' archaeology is most obvious, through its long history and early professionalization, and as it also played an important nationalist role in Italy. The former Roman Empire was at the center of antiquarian studies for a long time and became the very foundation of the antiquarian tradition after the excavations of Herculaneum and Pompeii began in 1738 and 1748 (Andrén 1997: 20-21). The notion that all artefacts could necessarily be linked to texts would eventually come to be challenged. This antiquarian premise was eventually countered by de Caylus who introduced the graphic image in the publication of ancient objects (Ibid: 22-23).

Topographical investigations with ancient texts as a starting point was the *modus operandi* of early archaeology (Ibid: 24-25). A philological archaeology emerged where the excavation became as important as the objects and archaeological excavations became stratigraphically done with Fiorelli and Dörpfeld. Conze defined classical archaeology in 1869 as "where the cross-sections of classical philology and art science intersect" (Ibid: 26). Philology's influence over large excavations was still felt, and temple shrines with mentions in written sources were particularly preferred. In the 1890s, entire ancient Greek cities began to be explored, whose urban planning was mentioned in ancient sources such as Priene and Miletos (Ibid: 27).

Findings in large excavations often did not match the descriptions in the ancient sources. These were therefore arranged chronologically and geographically according to stratigraphy and typology. The topography turned out to be more complex and the story considerably older than e.g. Pausanias's description of Greece. The excavations therefore led to many ancient sources being questioned in certain places. During the 1920s and 1930s, the focus increased on stratigraphy and find contexts, for instance in Pompeii (Ibid: 28). With the advent of modernism, the interest increased for Greek Prehistory, Archaic art and Late antiquity, in contrast to in Fascist Italy where Antiquity was intimately linked to political propaganda. Classical archaeology has ever since continued to operate, either paradoxically isolated from other periods and art criticism, or with radically altered perspectives with the influence of structuralism and semiotics (as with the Augustan image program in Zanker 1990; *cf.* Bratell 2019), and the Paris school on the grammar of vase paintings. Andrén argues that the most radical change in classical archaeology is the direction influenced by economic and social history with impulses from history, anthropology and Prehistoric archaeology, where graves and ceramics are used to write an alternative "archaeological" history (Ibid: 29- 30).

Particularly prominent in this third direction is Landscape archaeology with the study of Roman villas and ceramics with an emphasis on economic and social movement. In Etruria, the first landscape inventory in the 1950s was conducted by Ward-Perkins along with the American Messenian expedition in the 1960s. During the 1970s and 1980s the survey project became an integral part of Classical archaeology

with its particular methods, problems and opportunities. While traditional topographical research in classical archaeology examines individual sites known from written records, Landscape archaeology deals with time perspectives from the Neolithic to the Middle Ages or the present, without special consideration for "exemplary" periods. In this field of research, a struggle persists between *substantivists* (the ancient economy is considered as 'different and primitive') against *formalists* who emphasize its modern features (Ibid 1997: 32). Finley has stated the ancient texts as being primary and the main task of archaeology being to adapt to the quality and quantity of the sources, in order to make important contributions in particular inter alia Greek colonization (Finley 1971: 168-186). Snodgrass instead meant that one should not expect any equivalence between artefacts and texts, which are created in past activities with very different levels and scales. Thus, close similarities between written and material remains rather suggest circular evidence, arguing that the role of archaeology was greatest in the temporal and spatial "periphery" within marginal, lesser-known areas (Snodgrass 1983; 1985. In Andr n 1997: 33).

### **1.3.2. Historical Archaeology: The Basic Methodological Dialogue**

For this study, Historical archaeology is used as a methodological perspective in which artefacts and written sources are perceived as cultural expressions, whose similarities are emphasized in the philological, historical and archaeological traditions. In the border-crossing traditions of archaeology (eg Classical and Prehistoric), artefacts and text can be perceived as both equal and different cultural expressions. In the philological, historical and archaeological traditions the similarities are emphasized, with the differences being essential between artefacts and text in the aesthetic and cultural-historical traditions (Andr n 1997: 153). The discursive contexts change over time and space, which makes it necessary to first define the relationship between the archaeological material and written sources.

The methodological approach of this study is thus trying to determine the specific relationships, since the discursive contexts change over time and space and the relationship between archaeological finds and written sources is not set. This becomes an important task in historical-archaeological research: i.e. trying to determine the specific relationships for choosing the correct methodological approach. The discursive contexts can be seen historically, for example through concepts of oral culture, written culture and printed culture (Ibid: 155.) The particular type of material culture – for instance in the survey area in Coda Volpe district, of particular relevance for this study – decides if artefacts should be regarded as either categories, objects, documents or discursive contexts: all of them being important perspectives as they all contain different possible starting points for further work (Ibid: 158).

The basic methodological dialogue in historical archeologies also extends beyond simply trying to define artefacts and text alone. The converging line between material culture and writing also needs to be explored, especially when artefacts and text are defined as cultural expressions and discursive contexts. This convergence in turn takes place within a special historical-archaeological context, which also must be interpreted to assess the equivalence between material culture and writing – unlike traditional perspectives where the text is perceived as the given starting point for interpretation.

At the center of historical-archaeological dialogue is, thus; the context and its construction. As this study also aims to facilitate further practical archaeological work

on site, and in so doing will be dealing with physical context, i.e., stratigraphy, the problems and opportunities inherent to this context can be highlighted in, for example, using postprocessual or contextual archaeology. No contexts are in other words given ahead of time – but are instead based on different research traditions that are in turn applied – based after an assessment of plausibility (Ibid: 158, 160).

Conformity will be sought at the three different levels: identification, classification or correlation (Ibid: 162). In order to investigate classificatory similarity, we will need to bear in mind that classifications are in themselves constructions and that the number of typological elements for archaeological definitions is infinite (Ibid: 163). Identification can thus be possible from the ancient sources. Identification problems, as well as the classification discussion, takes up a large space in historical archeologies and are distinctly linked to a deeply text-dependent tradition. Identification has been an end onto itself, since archaeological remains – through identified events, persons and monuments – so often in the past have been related to political history. The identifications have been used to create various chronologies and events known from texts, such as the foundation of cities and great fires, or have been used to date ceramics and stratigraphic sequences, which often has been subjected to criticism as there is a clear risk of circular evidence appearing in many of the argued points (Ibid: 167). Identification also requires a close proximity between artefacts and text: For example when identifying unique events and objects such as a fire layer with a certain fire known in one place from written sources requires precise dating, as multiple fire layers can be stratigraphically close to each other, as well as a series of fires in a short period of time (Andrén 1997: 169).

### **1.3.3. Methodological Terminology for Coda Volpe**

By reconstructing spatial patterns in the landscape with details such as distances, travel times and compass points, that are then compared with the ancient sources; can result in the emergence of a feasible historical topography. This method of reconstruction can be applied to settlements and necropoleis within, and in close vicinity to the Coda Volpe district. This was incidentally the same method used by Leake, Robinson and Cunningham for reconstructing the historical topography of Greece and India (Andrén 1997: 170). Of course, any potential artefacts found on site in the survey area are essential here, not least if containing images such as coins that can assist in both identification and classification. Old maps, as well as historical photographs have also been combined with current geological data to reconstruct the topography of Coda Volpe (See Figs. 4, 23, 31). Oral tradition with local place names such as *Laestrygonii Campii* has also been helpful in choosing the location suitable for survey and inventory. Identification and correlation presuppose both basic classifications that involve searching for similar structures or patterns in both artefacts and text (Ibid: 170).

This is a matter of assessments of plausibility. Unlike classification and identification, correlation is not so much based on trying to compensate the "weak" aspects of material culture or writing. Instead, correlation assumes that there is a connection between the references of artefacts and texts. Correlations are thus to a large extent based on assessments of plausibility, which are then ultimately defined by different research traditions. The way of going about this is using either quantitative or qualitative evidence and to search for similarities in periodicity in both material culture and writing. Spatial correlations are created in a similar way, by seeking

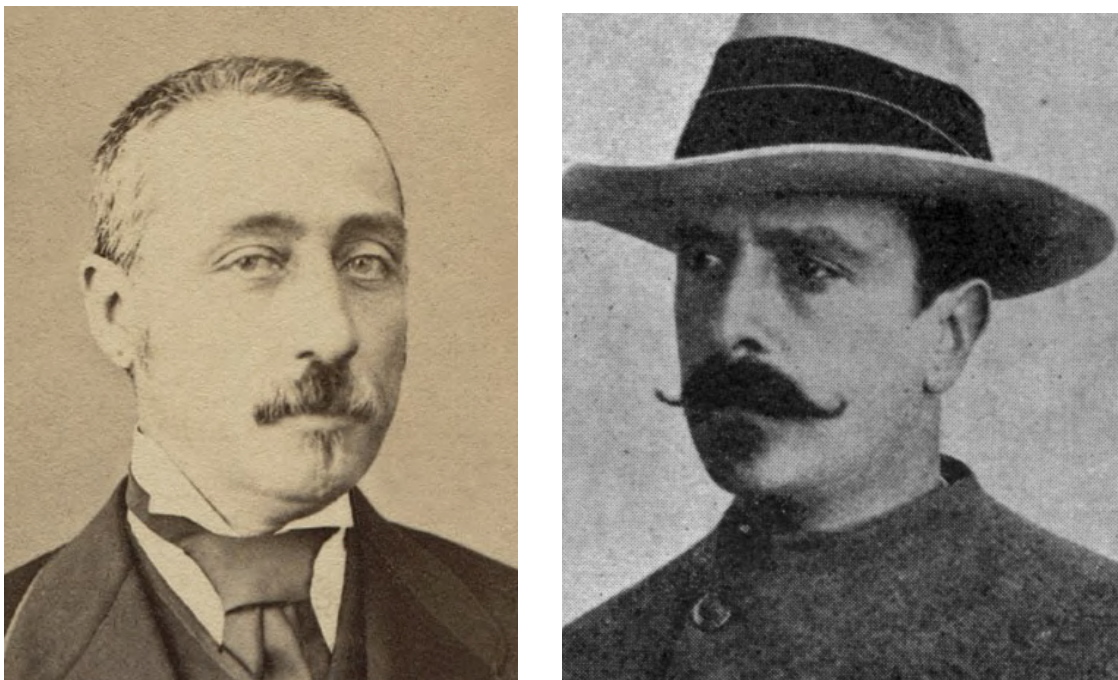
parallelism in spatial patterns, which are based on material culture and writing, respectively (Ibid: 171). When stratigraphic investigations have been carried out in Coda Volpe district, association can also assist to clarify the relationship between artefacts and texts, such as text-bearing findings where a new physical textual context arises. 'Physical textual context' is a concept from the 1980s and onwards that is unique to the historical archeologies and constitutes a break with the previous text-dominated tradition (Ibid: 173). Contrast can thus also be of importance in the planned work. By searching for contrasts between the investigated object and the analogies used, it is possible to reach "beyond" the boundaries of the analogies, to historically unknown conditions. Martin Hall (1994) has argued that it is precisely the difference, or in the "spaces between things and words" that a subclass of people, without access to writing, "is expressed and can be traced archaeologically" (Ibid: 177). What is unique to historical archeologies is not the types of contexts, but the nature of their structure and the dialogue between artefacts and text in relation to both Prehistoric archaeology and history (Ibid: 182). The most common strategy is to emphasize the complementary function of archaeology as a way of studying issues, or areas, that are poorly understood from writing alone, even when there are several texts available. This strategy is a form of searching for more or less text-free zones in time and space, where archaeology can be practiced (Ibid: 185).

Another strategy *emphasizes* the contrast between material culture and writing, avoiding simple confirmations of written information and creates a partially new picture of the past, something that is unique to the historical archeologies. Finally, theoretical strategies can also be traced, especially with regard to the construction of context within historical archeologies. All contexts can be found in the different traditions of historical archaeology and in the greater currents of ideas, but their significance clearly shifts. Identification and classification are most important in evolutionary perspectives and can, for example, be linked to philological realism and historical topography. In particular, the issue of identification is crucial for the creation of historical identity: evident for instance in the renaming of former Greek colonies such as Gela, (previously *Terranova di Sicilia*) in 1927 during Fascist Italy, but also in the importance of creating national pride and identity with a focus on the rich heritage and Greek colonization during the post-war excavations in both Gela and Lentini. On the other hand, to some extent, association and contrast are far more important for the various strands of synchronous, and in a broader sense, functional thought within the historical archeologies: Correlation concerns economic and social conditions, while association and contrast are central concepts in postmodernism (Ibid: 186).

A postmodernist discussion has thus greatly influenced historical studies, in particular its guiding idea that people themselves create their own reality based on different languages, whose subjectivity is in turn *too complex* to accommodate any real objectivity (cf. Michel Foucault's concept of discourse from the 1960s). This has resulted in the great contradiction between idealism and structuralism in fact underlying all historical research. Where Classical archaeology once sought to draw holistic images of social development with individuals from history as driving actors, such perspectives are currently more controversial and increasingly viewed as belonging to a European research tradition steeped in Eurocentrism, racism, capitalism, imperialism and colonialism. The criticism from postmodernism, rendering terms such as "Hellenization" outdated or even useless, instead offers postcolonial perspectives. In the ongoing discussion holistic terms are however still considered highly useful for historical research by some (Versluys 2014).

Archaeology dealing with peripheries and unclear refractive periods between Prehistory, Greek colonization and the Roman period is traditionally delimited by accepted dating sequences that lean on both the available archaeological source material and the ancient sources. If the methodological approach is emphasized, however, these traditional time limits are of less interest (Andrén 1997: 186). If events that were previously separated from each other in Sicily can instead be reconnected into an integrated and broader historical archaeology, it would be possible to include parts of e.g. Prehistoric archaeology that is working with place names and mythological stories such as for instance those about the laestrygonians, or *laestrygonii* who were said to once occupy eastern Sicily according to among others Homer, Thucydides and Pliny, and of which historical maps also speak (Fig. 4), can in that case perhaps be included in a broader historical archaeology: This however only applies to certain aspects of Prehistoric archaeology, since there are other dimensions that cannot be regarded as historical archaeology in this activity. Historical archaeology, as methodological perspective, does in this way a not lead to *boundless* archaeology, but to an archaeology with *fewer* boundaries (Andrén 1997: 187).

#### 1.4. Earlier Research into Greek Colonization



**Fig. 3.** Left: Carmelo Sciuto Patti (1829-1898). Right: Paolo Orsi (1859-1935). Images from Wikimedia Commons.

##### 1.4.1. Archaeology in Sicily

Sicilian archaeology is still shaped by the impressive legacy of Paolo Orsi (Holloway 2004: 8-20). On the eastern part of the island the archaeological work has primarily been focused to the slopes of Etna, centrally in the mountain region; Morgantina, Pantalica, Casabile, and on the coast; Zancle, Naxos, Megara Hyblaea, and to Syracuse in the south. The excavations in Sicily – from the nineteenth century until the mid twentieth century – have mainly focused on the coastline with Greek settlements being of somewhat primary interest. There has also been a distinct Swedish presence



**Fig. 4.** Map with ancient place-names such as Lestrigonii Campi and (still) unidentified settlements, including Aitna, Xuthia, Murgentium and few of the Hyblas (Buache 1714).

in Sicilian archaeology, for example in Morgantina and with Gothenburg University actively participating on Monte Polizzo (Karlsson 1992; Mühlenbock 2008). Currently there is also an ongoing excavation campaign on the north-eastern slopes of Etna at Francavilla di Sicilia under Swedish supervision. Sicily has perhaps, its incredibly rich archeological materials notwithstanding, not always received the attention of other comparable and well-researched locations. The past excavations have similarly been focussed on many different time-periods, which has also made it more difficult to create a working whole of the history of the Island (Streiffert Eikeland 2006: 67).

Even when excavation has made identifying settlements possible the results are still often open for discussion. There is for instance currently a consensus regarding the identification of Morgantina (since Erim 1958) but Caltagirone has however also been another suggestion (Manni 1976). On the subject of Morgantina it is also worthy to note that the Medieval castle ruins located near both the isthmus of the Simeto and the Coda Volpe district, previously thought to mark the location of 'Morgentium' as many old maps also indicate (See Fig. 4). This might perhaps be a simple misunderstanding resulting from Livy's account of a Roman fleet a hundred ships strong that supposedly once laid anchor at this city (Liv. Nat. 24. 27.) If the current location in the mountains is correct it is clear that Livy was in error, but it is also worth noting that the actual evidence for identifying Morgantina ultimately boils down to a single coin with the inscription *HISPANIORVM* (Erim 1958), making this identification still somewhat debatable. Greek settlements with a more convincing identification are, as a general rule, those who later grew powerful and were the primary sources (usually Roman) has somewhat been able to corroborate their position. In areas located between these identified settlements however, remains a more fragmented picture. This is for instance true regarding Greek settlements laid under siege, destroyed, buried under volcanic eruptions or whose populations were relocated by force as a consequence of conflicts with either Carthage, Rome or local tyrants. The situation regarding two neighboring larger settlements from the point of view of Coda Volpe district; Megara Hyblaea and



Leontinoi, both serve as illustrative examples in this regard as Megara, according Thucydides, was for example relocated and rebuilt on three separate occasions. This process, along with the supposed locations of those previous cities has only partially been possible to reconstruct with some kind of reliability. Leontinoi is similarly also supposed to have been abandoned and repopulated several times over according to both Thucydides and Pliny, whose accounts have though not been conclusively supported by the archaeological findings. Paolo Orsi justifiably still remains a presiding figure over archaeology in Sicily. Not least because so much of later fieldwork continues to build on and refer back to his many inventories and discoveries on Sicily and in Magna Graecia. Orsi's extensive publication history makes it possible to reconstruct his various field campaigns in chronological order without much difficulty. It is however also the case that Orsi kept field diaries that were not always preserved, which is an argument that has been put forward regarding Orsi's apparent lack of interest (or knowledge of) the necropoleis near and inside the Coda Volpe district (Prato 2015).

### 1.4.2. Archaeology between Catania and Lentini



**Fig. 5.** Map showing the outer extents (marked in red) of the much larger area under discussion by Brancato and Manganeli. Made with Google My maps.

Coda Volpe belongs to a larger territory extending between Catania and Lentini, which is the subject of the first of the two preliminary surveys featured in this study by Brancato and Manganeli (2018). The territory in question spans a geographical area marked by a series of river valleys (Simeto, Gornalunga and Dittaino) that is bounded to the south by hills ranging between 130-600m above sea level. The coexistence of geologically different physiographic environments is the cause of the complex geodynamics of the area, which inevitably also conditioned the trajectories of the population in the territory. The limits of this territory, between the coastline from Catania to Augusta and the immediate hinterland, is roughly marked by the current territorial borders of Lentini, Caltagirone, Aidone and Castel di Judica (Brancato 2018: 91). The first archeological work, concerning settlements on the margins of the Catania Plain (bordering with the Coda Volpe district), was done by the Cafici brothers

at the end of the nineteenth century, from which we owe also the first reflection on the dynamics of the settlement in the area in the Prehistoric age (Cafici 1914; Cafici 1920; Cafici 1938). The decisive impulse for the understanding of territorial dynamics came, however, as a result of Paolo Orsi's activities within the Soprintendenza of Eastern Sicily. Not only was Orsi's contribution essential, but his work laid the foundations for every future approach to studying the territory in question (Orsi 1930a; Orsi 1930b), not least in the sense that it was the first significant action to safeguard and enhance the archaeological heritage (Brancato 2018: 91). Orsi's work was continued by Luigi Bernabò Brea and subsequent Superintendents, paving the way for subsequent research in the area that allowed the identification of important ancient sites spawning a new wave of research into Prehistory on the margins of the Catania Plain in the 1970s (Recami et al. 1983; Brancato 2018: 91).

The results from the numerous investigations in the larger territory between Lentini and Catania has demonstrated the importance of the river ways in the process of anthropization. A process that in the area of the Catania Plain and along its margins began in the Neolithic, probably in close connection with the favorable possibilities of exploiting the territory for agriculture and livestock (Maniscalco 2000). Farming was evident already in prehistory, north-east of the hill complex formed by Monte San Basilio, from the plateau of Castellana and from the jagged system of Palazzelli by traces of inhabited sheds with levels dating from the Neolithic and Late Bronze Age (Valenti 1992).

The particular geomorphology of the area and its contextualization in the Catania Plain allows the understanding of the centrality and road conditions and settlement dynamics in the field since the most remote times. The scarcity of finds in this area concerning the distribution of settlements should however not be surprising according to Brancato (2018: 91), due to what is described as a peculiar condition of marginality, typical of a vast territory between vital and well-defined territorial entities, such as Catania and Lentini. The bibliographic analysis done by Brancato and Manganelli on which their work was based has highlighted what they refer to as a 'vacuum' regarding the archaeological 'emergencies'. The similarities of both initial surveys featured in this study of the independently reached conclusions; to referring to either a *vacuum* or a *periphery* is quite interesting. Brancato continues to add that this status of the area in question, is not due to an absence of ancient settlement layers, but rather, due to the fact that these areas have never been subjected to systematic study, prospecting or archaeological survey (Brancato 2018: 91)

Catania and Lentini are both located at the ends of the fertile Catania Plain and were founded almost simultaneously by the Chalcidians of Naxos (Diod. Sic. IV, 24, I; Strab. VI, 2, 3). According to the scholarly tradition the Chalcidian colonization effort was part of a control strategy on eastern Sicily (Dunbabin 1948: 121-35; Vallet 1962b: 41-47; Mertens 2006; Procelli 1989). The location of Lentini at about 10km inland is unique, but still exhibits the purely commercial nature of the colonies of the Messina Strait area, and is a position understandable from Chalcidian point of view as guaranteeing the control of a territory widely exploitable in agricultural terms, crossed by the Simeto, Dittaino, Gornalunga and San Leonardo rivers (Rizza 1983: 313; Branciforti 1999: 243 in Brancato 2018: 91).

Brancato goes on to describe studies of the area as having, in fact, polarized around questions relating to the archaeology of urban centers and related *chorai*; leading areas such as the one in question with a cultural profile not clearly inferable to become destined for marginality. This is an argument that once again echoes Nordenborg

Myhres' work on centre versus periphery in Scandinavia (2004). On the other hand, Brancato continues, it is not easy to trace the boundaries of the territories controlled by Leontinoi and Catania: the only information available comes from Thucydides (Thuc. VI, 65, 1.) who stated that, the border between the two cities coincided with the lower course of the Simeto River (Manganaro 1994: 133; Veronese 2006: 182-183; Frasca 2009: 46).

There have been numerous attempts to delineate the limits of the territory of Lentini, in particular for the Archaic age. Brancato claims there to be an unanimous agreement on the use of the lower course of the Simeto River as the north-eastern limit of the leontine *chora*; as recently discussed by Massimo Frasca (Brancato 2018: 92). At the end of the nineteenth century, Gaetano Columba advanced the hypothesis that the course of the Gornalunga, a river crossing the plain from west to east, marked the border with the area of Catania's influence (Columba 1891: 71-143). Tommaso Fazello, in his *History of Sicily*, had by then already written a long description of the Simeto River, considering its importance for contextualization accounts from antiquity regarding this sector of the island (Fazello II: 2. In Brancato 2018: 92).

As Iorga Prato (2015) already has stated regarding San Demetrio, Brancato then also goes on to describe how the relevance of the lentinian territory in Greek times had been overlooked by P. Orsi, after the investigations conducted on the isolated Monte San Basilio, (Orsi 1922: 1) that traditionally have been identified with the fortress *Brikinniai*, visited by Phaeax the athenian on his way to Gela (Lagona 1992). Beginning in 1940 the archaeological research conducted by the Institute of Archaeology at the University of Catania and the Superintendency of Syracuse focused on Lentini and its immediate dependencies, under the guidance of Giovanni Rizza and Massimo Frasca. Their research clarified the location, extension and distribution of the urban and peri-urban sacred areas and of the necropolis, but with few other contributions on the history of the ancient settlement in the territory. Among the most important research carried out on the territory concerns the sanctuaries of Alaimo district (Grasso 2008) and Scala Portazza (Sudano 2009); on the cult area identified in the Xirumi district (Guzzardi and Giordano 2012: 211–20). In fact, according to Brancato (2018: 92), limited interest was shown in systematic research of the territory and on the rural settlement, except for research based on investigations promoted by findings occurring during agricultural and building works following the reclamation of the area.

The coastal landscape of the Lentini area has been the subject of research since the end of the 1990s. Coastal presence since the Archaic age has emerged from archaeological finds found at the seabed of Agnone and Punta Castelluccio (La Fauci 2004). New perspectives on the close relationship between the ancient city and the environment have emerged from research on the coastal quarries (*latomies*) of the territory of Lentini conducted by Enrico Felici (Brancato 2018: 92). Furthermore, the identification of the ancient quarries located on a strip of coast about 2km south of Punta Castelluzzo, allowed to contextualize the imposing building efforts required in the ancient landscape by the Greek colony (Felici 2004: 35; Felici and Buscemi Felici 2004: 39-40). The settlement dynamics are closely linked to the understanding of direction of ancient roads; in this regard, there have been numerous hypotheses regarding the reconstruction of the routes that crossed the territory, in both north–south and east–west directions (Uggeri 2004: 201-02; Frasca 2009: 50-54).

Georges Vallet suggested the importance of the San Leonardo River basin as being a natural route penetration of Leontinoi towards the hinterland (Vallet 1962b: 31-47)

Enrico Procelli related this line, which connected the Lentini to the coast, with the small valley of the Margi River, to the common link between settlements along the wide belt of margins of the Catania Plain that existed already in pre-Greek times (Procelli 1989: 679-89. In Brancato 2018: 92). The first summary of the Greek and Roman road system (Uggeri 2004; Cf. Fig.1), suggests that Lentini's importance as a stop on the of the road connecting Catania to Syracuse, remained even after its territory became *ager publicus* after the Roman conquest in 215 BCE (Uggeri 2004: 200-2; Frasca 2009: 52; Brancato 2018: 93). Work has also been done on the route of the Via Pompeia (Sirena 2007, 2011) which is the road that crossed the Simeto, possibly in very close proximity to the Coda Volpe district.

## 1.5. Discussion of the Sources

### 1.5.1. Greek and Roman Sources

The earliest source mentioning the area between Catania and Lentini in any detail is Homer, who mentions the existence there of a breed of man eating giants called 'laestrygonians' (Hom. *Od.* 10.81-82). Both Thucydides and Polybius located these mythological beings to south-eastern Sicily, Polybius specifically to the Lentinian plain, Laistrygonian Plain or Simeto River Valley (Thuc. 6.2.1; Plb 1.2.9; Plb 8.9.1).

According to Thucydides the Sicels (one of three indigenous peoples next to Sicani and Elymians in Sicily before Phoenicians and Greeks) travelled from southern Italy to Sicily and settled on the island's eastern side and lived there for three centuries before the first Greek settlements were founded with Katane and Leontinoi (Thuc. 6.2.). After the Greeks settled on the coast the Sicels supposedly moved further inland (Streiffert Eikeland 2006: 79). Later ancient sources mentioning Sicily often discuss a few central topics; the tyrants who began to operate from Archaic until Hellenistic periods or the Roman period Punic wars, slave wars and rebellions. Some of these accounts also discuss settlements located in and around the Simeto River Valley. A number of these settlements have either been impossible to identify or have only received hypothetical or uncertain identifications. One of these is for instance Ergetum or Ergetini that probably was located somewhere along the Simeto Vally, and is mentioned by Silius Italicus, Pliny, Ptolemy and Polyaeus (Sil. Ital. XIV, 122-149; Plin. *Nat.* 3.14.5; Ptol. 3.4.13; Polyaeus *Strat.* 5.6.)

There is often disagreement between these ancient authors, as when Ps-Scylax placed the location of Megara Hyblaea next to the 'Symaithos' (*Periplous* § 13) with *Symaithos* being the ancient name for the Simeto, previously also known as the Giarretta. The account by Livy, already mentioned, of a Roman fleet once laying anchor at Morgantina (Liv. *Nat.* 24.27.) obviously implies that Morgantina was located on the coast, or perhaps in connection to the isthmus of the Simeto. This however seems unlikely as several other sources indeed places this settlement further inland. A better candidate for such a position for an unidentified settlement is perhaps that of the 'Symaethii' appearing to have recieved its name from the Symaithos River (Ps-Scylax, *Periplous* § 13). Pliny and Ptolemy both mention it in their enumeration of settlements in eastern Sicily (Plin. *Nat.* 3.14.5; Ptol. 3.4.13.) The Roman road Via Pompeia supposedly followed the coast from Messina all the way to Syracuse. After hypothetically dividing after Catania, it then crossed the Simeto, with one section following the coast south, the other continuing towards to Leontinoi (Sirena 2007).

The road first went north, then turned southeast again, and rejoined Via Pompeia just before Megara Hyblaea (Talbert 2000: 47). A useful source for hypothesizing the location of unidentified settlements by tracing the roads during Roman times is finally The Antonine Itinerary which unidentified *civitates* will be examined further later on in this study (See 4.2.2. Rural Outbranch and Decolonization).

### 1.5.2. Geophysical Survey

For studying sources from Greek and Roman times, such as either building remains or written sources, one must also take into account how later time periods have impacted on the materials. Written sources are interpreted and translated based on the prevailing worldview of that current time, with sections being omitted, deleted, misinterpreted or lost. Artefacts and buildings are equally affected by continued use, destruction or rebuilding. Buildings can be destroyed, either by war, fire, weather, wind, earthquakes or floods. Restorations are then in turn also carried out based on a variety of motives, specific for each period. Thus, what remains can be assumed to be far from complete and we are usually left with examining only surviving materials through either random or conscious preservation. Studying buildings as expressions of a Greek culture is at the same time facilitated directly by the condition of the remains. It is still however possible to trace effects of cultural processes even with archaeological source materials that are considerably less well preserved.

For example reconstructions are possible, but having no or only a few well preserved buildings, still poses a great challenge in general. What remains are often merely ruins of already destroyed buildings. With a bit of luck, up to a few meters of the walls may have been preserved, perhaps with some part of the decoration. All too often however what remains from buildings are simply plundered house plots. Geophysical surveys are essential in these situations, and they become an increasingly common method nowadays, as it makes creating detailed plans possible that can show entire buildings and colonized cities. Even with this possibility, a clear picture of the different building phases might still be missing and we are left with an incomplete picture of the gradual process of change (Ulrich 2014: 383-84).

The amount of materials preserved from each particular period also offer important clues to the varying reception and understanding of disparate and distinct cultures. For instance the Byzantine period appears to be especially overlooked in Italy. According to Giovanni Gasbarri, curator of *Picturing a Lost Empire: An Italian Lens on Byzantine Art in Anatolia, 1960–2000*, an exhibit on Byzantine archaeology in Istanbul, this is a result of the Byzantine period fitting less well with the Risorgimento notions of an Italian culture and nation, and that substantially more attention by comparison has been afforded to the Greek and Roman periods across Italy. The pioneering moment in Byzantine archaeology came when a small group of Italian archaeologists, with rather modest means, began to successfully use Procopius' (c. 500–570 CE) accounts to locate Byzantine archaeological sites in Anatolia during later part of the last century (Bevilacqua and Gasbarri 2018). Procopius covered Sicily also but, according to Gasbarri in a post-exhibition lecture conversation with the author, that particular book has unfortunately been lost.

Another significant aspect regarding the use of built remains as source materials is that that even as inscriptions no longer could be understood and as Greek colonization and the Roman Empire were partially forgotten during Late antiquity or Early Middle ages, the monumental aspects of buildings would still have maintained some of their

communicating properties but in completely different contexts. It was, in this sense possible to rediscover a vibrant and lost ancient world during the 'Middle ages'; a period defined during the Renaissance. At that time, building monuments thus assumed a special position for understanding the past, even as they then had largely been incorporated into other later structures. The ancient buildings have as such enabled constant recap views of antiquity throughout the ages, in turn probably playing a crucial role in the emergence of Western civilization.

The image of an ancient world has therefore been in constant change in interaction with each new contemporary period, which in turn has brought with it a series of recurring rebirths of inspiration from, and reverence for, 'antiquity'. It has been possible to gain support for a variety of contradictory interpretations of the past from the plethora of different – often contradictory – examples and approaches made available by the ever-growing bank of information about antiquity, as once argued by Salvatore Settis (2006: 75).

Our current and future understanding of Coda Volpe and eastern Sicily will thus partly be a product, and the culmination of, already several centuries of research and material collection. Since the present understanding of antiquity reasonably is a result with influences from all subsequent periods, the interpretations of our own time must necessarily receive its strongest support from both available first-hand sources, as well as artefacts, data collection from for example geophysical survey, systematic study and archaeological excavation, as well as initial reconnaissance surveys in the field. As a consequence of this the findings of this study will also rely to a large extent on the two surveys. Before describing them more closely we will first take a closer look at the Greek Archaic (colonial) period on Sicily.

# CHAPTER 2. ARCHAIC GREEK WESTWARD COLONIZATION



**Fig. 6.** A selection of Greek colonies and cities to 500 BCE with founders (in red on the map) numbered as follows: (1) Chalcis and Eretria, (2) Achaeta, (3) Phocaea, (4) Locris, (5) Colophon, (6) Miletus, (7) Rhodian and others, (8) Megara, (9) Corinth, (10) Thera, (11) Sparta, (12) Teos, (13) Teos and Kazomenai, (14) Andros and Chalcis, (15) Paros, (16) Chios, (17) Aeolis, (18) Samos, (19) Athens. (Oxford classical Dictionary, Ancient World Mapping Center 2015.)

## 2.1. Historical Overview

### 2.1.1. Chalcis and Eretria

In the eighth century the greatest cities of Archaic Greece was arguably Chalcis and Eretria of Euboea, with a reputation in war and according to Strabo (X. 446-449) at the centre of a Cycladic empire. Both cities may be regarded as founders of Pithecusa and Cyme, even though there is confusion in the literary evidence. Their position as a seafaring superpower is confirmed by a *koine* recognizable from the tenth century in the pottery of an area spanning coastal Thessaly to Naxos, with Euboea as its centre (Desborough 1976). Euboea also had close relations with the eastern Mediterranean (Boardman 1980: 39ff; Ridgway 1973).

The eretrian city had by the eighth century been planned out on a large scale, extending ambitiously at a site with a small bay for harbor and a formidable acropolis (Auberson 1975). This reputation would appear consistent with an ability, as warlike and sea-fairing builders on a grand scale, to successfully colonize far-away eastern Sicily (Graham 1982: 102). Chalcis and Eretria were in this sense both great pioneers of Greek colonization. They were, aside from being the very first to venture westward towards the Italic peninsula and Sicily, also first in the colonization process of the Aegean north coast in present Chalkidiki (probably named after Chalcis) even before the eastward expeditions to the Ionian coast (Graham 1982: 115). A war eventually broke out between the two cities over controlling the fertile Ielantine plain of Euboea (Lelantian War, c.710-650 BCE), after which they never regained their former status

(Graham 1982: 249; Parker 2014: 91). Instead it was other, then recently formed Greek city-states, such as Corinth and Athens, that began to dominate the Archaic age of continued Greek colonization. The many colonies founded from Euboea (See Table 1) met a myriad of different ends. Some were abandoned or destroyed while others continued to expand and flourish. A few have survived as cities until the present day such as Rhegion (Reggio Calabria) Zancle (Messina) and Katane (Catania). Their collective history as archaeologically significant sites began in earnest during the nineteenth century, with the pace of exploration at the same time varying considerably in different places in the Mediterranean. For example in Sicily archaeology has now 'moved away from the coast' and is instead focusing mainly on settlements inland. Archaeologists working in Chalkidiki however are still very much working at coastal cities. In Sicily this work began in the 1890s under presiding figures such as Paolo Orsi (Holloway 2004: 8-20), while Euboea's colonies on the Aegean north coast, apart from initial survey, became the subject of systematic study only much later in 1986-1994 (Vokotopoulou 1994; Cambitoglou and Papadopoulos 1994).

The research into the totality of an Euboean Colonization Matrix is in this regard separated in Sicily and Chalkidiki by nearly a century. A situation that indicates a lot of potential for new archaeological questions concerning the foundations and expansion into cities of Euboean colonies such as Mende, Toroni, Leontinoi and Katane during the Archaic period. The ancient sources on Greek colonization in the Mediterranean during the Archaic age are, taking more mythological account as Homer aside, in brief: Herodotus, Thucydides, Strabo, Ps. Scymnus and Eusebius (Boardman 1980: 85).

The period has been the subject of frequent debate for more than a century; which has been a useful and necessary exercise according to some (Morakis 2011: 460) and according to others a discussion at times not so useful (De Angelis 2003: 11). The discussion has however resulted in both a more critical attitude towards a once rather tyrannical use of the sources in dealing with Greek colonization, as regarding in particular the reading of Thucydides (Papadopoulos 1999). The role of archaeology has also been argued as being positioned to play a crucial role in reconfiguring historical studies (Lightfoot 1995). In addition, conceivable explanations have also been put forward on how contradictory data can be reconciled within sources, such as Thucydides and Ephorus, concerning Euboea's many colonies (Hornblower 1997). Finally, a long-standing disagreement has still persisted among the experts about the correct way to use the ancient texts and how to interpret finds from excavations (Boardman 1980: 10-21).

This discussion is a useful reference for this study, in concert with a more detailed outline on basic methodology for the relation between artefacts and text (Andr n 1997) as well as the notion that the primary task for archaeology is to adapt to the quality and quantity of the sources in order to make important contributions, particularly in the field dealing with Greek colonization in the Mediterranean (Finley 1971: 168-186).

### **2.1.2. Pithecusa and Cyme**

Euboean colonists settled Pithecusa and Cyme in the eighth century in what today is Campania. Pithecusa was located on Ischia, the largest island outside Naples, on an c. 46km<sup>2</sup> area about 11km from the mainlands nearest point at Cape Misenum. The colony was located at Monte di Vico at the north-west on Ischia, with a flat headland



surrounded by steep slopes with sheltered harbors at its foot on both east and west sides (Plan. 1). Cyme is located on the coast north of the Bay of Naples, with a majestic acropolis rising in front of a long, flat shore, ideally suited for control of the surrounding country and coastal sea traffic. It has been said that Cyme had no harbour, although there might have been one available south of the acropolis, in a location currently on land (Paget 1968). If the sea previously washed the foot of the acropolis, which is likely, there were suitable beaching bays both north and south of the headland, which also would indicate the positions similarities to Monte di Vico (Graham 1982: 98).

Cyme's acropolis, located *c.* 14km from Pithecusa is within good viewing distance. For both colonies the written record is sparse, but the archaeological records is all the more telling. Most excavation materials from Cyme date from the early twentieth century (Gabrici 1913) but excavations have continued at Pithecusa since 1952 and onwards (Buchner 1966; Buchner 1971; Buchner 1972; Buchner 1975; Klein 1972). These excavations have been described as essential for the current knowledge of the westward Greek colonization (Graham 1982: 99). The excavations were focused to three main areas: a large unstratified dump 'Scarico Gosetti', on the slope east of Monte di Vico, a cemetery, and finally at Mazzola, a small satellite settlement in Mezzavia area, at a distance of between 200-400m south of Monte di Vico. This excavation demonstrated the extent of the city (with minor settlements included) at 3-4km<sup>2</sup> in the Late Geometric II period (*c.* 725-700 BCE). With no Early Iron Age material appearing in the excavations, Pithecusa was perhaps uninhabited upon the arrival of the Greeks (Graham 1982: 99).

Castiglione, on the other hand *c.* 4km east of Monte di Vico on the coast to the north had a village from the Early Iron Age (Bruchner 1937; Bruchner 1975: 64). The defensive nature location is evident, and the presence of indigenous peoples supports the previous notion that most women of the colony were natives (Buchner 1975: 79). As no public buildings or shrines are in extent, reconstructing the eighth century way of life is dependent on graves and traces of settlement. Many graffito indicate writing as with 'the cup of Nestor', a Late Geometric grave find in the form of a bird kotyle from *c.* 720—*c.* 710 (Graham 1982: 99). Pithecusa also has the first signature on a locally manufactured vase (Klein 1972: 38f; Buchner 1975: 69). The cemetery's graves, are ordered according to families, with some identified as for slaves as the latter appear much simpler indicating the lower status of these individuals (Buchner 1975: 69-73).

The trade was extensive at Pithecusa with wares coming from Syria, Egypt, Phoenicia, Greece and Etruria in the eighth century, with in particular 'S O S' amphorae from Attica and Euboea being very common (Graham 1982: 101). Perhaps they contained oil (Vallet 1962a), though not according to d'Agostino (1977: 52). Locally, the industry consisted of the manufacturing of iron- and, fine metalworks and pottery, some of which were exported to Italy (Klein 1972; Buchner 1971: 67; Buchner 1972: 364-72; Buchner 1975: 68-86). At this large industrial and settlement set up for trade there were also Phoenician settlers living alongside the Greeks, as indicated by finds such as graffito on reused amphorae for burials from LG II (*c.* 725—*c.* 700). This is thought to demonstrate Phoenician burials alongside the Greeks (Buchner 1978; Garbini 1978; Kärman forthcoming), which are reminiscent also of the close contacts between Greeks and Phoenicians in the Levant (Graham 1982: 101).

The founding dates are however not known for either Cyme or Pithecusa.

Eusebius dates the foundation for Cyme to 1050, which could only be correct for the Aeolian Cyme. On the other hand Strabo (V. 247) claimed Cyme to be the oldest Greek colony in the west, in contrast with the other account that Chalcidians settled Pithecusa first and only afterwards moved to mainland Cyme (Livy VIII. 22. 5-6; *cf.* Vallet 1958: 51).

Strabo's account is however also not supported by any archaeological finds as the oldest material in Cyme (Johannowsky 1975: 102; Coldstream 1968: 326) is from LG II and as a consequence later than both Pithecusa and many other Sicilian colonies. The main indication that Cyme's foundation is older than the first archaeological material is that that Zancle supposedly was settled from Cyme (Thucydides VI. 4.5), with Zancle approximately having been founded in the eighth century's third quarter (Graham 1982: 102). As Pithecusa lacks any foundation date but instead has plenty of LG I materials (*c.* 760–*c.* 735) this is suggestive of a foundation date to *c.* 750. Its size and character in the LG period has however been suggested as indicating an even earlier date (Buchner 1971: 67; Buchner 1972: 373; Buchner 1975: 66f. In Graham 1982: 102). Cyme's earliest archaeological material is very similar to Pithecusa's; including seven princely burials with ashes of both sexes belonging to a warrior aristocracy signalled by weapons wealth and precious metals. One tomb has an earlier type 'SOS' amphora, safely dateable to within the eighth century (Albore-Livadie 1975; Buchner 1975: 74ff). These burials correspond to those found at Eretria's western gate within exactly the same type of cult, highly suggestive of Homeric ideas (Bérard 1970: 13-32; Coldstream 1976 in Graham 1982: 102).

Graham speculates as to the motivation behind this first wave of westward Greek colonization, for which no grounds can be established from any written source. However, the colonies were clearly intertwined, as stated by Livy and as supported by archaeology (Graham 1982: 102). From around 700 there is a clear diminishment of the population at Pithecusa (Buchner 1975: 65) attributable perhaps to the greater draw of Cyme and its fertile lands (Buchner 1975: 80; Ridgway 1973: 12; *cf.* Cook 1962; Vallet 1958: 57 n. 3; Lacroix 1965: 112. In Graham 1982: 102). The fertile land does not suffice solely to explain the far-away settlements, as fertile grounds could be found closer to Greece as well, in locations where colonization would also soon follow (Graham 1982: 102). Perhaps it was a need for metals (Dunbabin 1948: 3, 7f). This seems probable given the plentiful signs of metalworking at Pithecusa, and iron from Scarico Gosetti that indeed came from Elba (Buchner 1972: 378; Buchner 1975: 68f). This is not enough though, Graham continues, as Euboean Greeks surely did not have to relocate in Campania in order to harvest metals (Graham 1971b: 43-45. In Graham 1982: 103). Access to iron and copper would however still add to why a particular site was chosen for settlement (Graham 1982: 103).

Maybe Pithecusa was a trade station for Euboean wares connecting the Aegean and the Orient with Italy (Buchner 1972: 374; Ridgway 1973). Finally it could be the Etruscans that are the reason, as Campania clearly felt their presence by the eighth century (d'Agostino 1974: 11ff). Only 40km away from Cyme, lay Capua. It would be a surprise if the Euboean Greeks did not found Cyme with this in mind (Vallet 1968: 132. In Graham 1982: 103). Graham also notes how the Etruscan elite was influenced by burial practices of the Euboean aristocracy from Cyme and Eretria (d'Agostino 1977; d'Agostino 1977b), indicative of, if nothing else that perhaps the Euboean Greeks assumed the Etruscans had located themselves in a suitable region for trade, rich in natural resources and with fertile lands (Graham 1982: 103).

## 2.2. Archaic *poleis* in Sicily and Magna Graecia



Fig. 7. Greek, Phoenician and Etruscan cities in Sicily and Magna Graecia (Boardman 1980: 160)

### 2.2.1. Zancle, Naxos, Leontinoi, Katane and Megara Hyblaea

Zancle (present day Messina) was perhaps founded by pirates under a leader named Perieres from Cyme, with more settlers eventually joining from Chalcis led by Krataimenes (Thuc. 6.4.5–6), which could indicate a double foundation (Braccesi and Millino 2000: 19-21; Veronese 2006: 136-39). Pithecusa may well also have founded Zancle (Antonelli 1996: 322). The foundation story could be the result of a social division, evident later during Classical and Hellenistic period Zancle (De Angelis 2016: 68). The sources and archaeological remains (pottery) indicates a eighth century foundation in the third quarter (Graham 1982: 102; De Angelis 2003: 13; De Angelis

2016: 68). A break in occupation has been suggested between the Bronze age and the arrival of the Greeks as Zancle appears founded and developed on previously unsettled ground (Bacci 1999: 51; Gras 2002: 20). The name has local origins (Thuc. 6.4.5) suggesting a Early Iron age settlement preceded Zancle, which however has not been confirmed by any evidence, perhaps due to uneven distribution of strata or a native toponym referring merely to a not permanently settled part of the landscape (De Angelis 2016: 68). Zancle (Plan 3.) was planned out in accordance with the steep terrain with preexisting watercourses and a coastline located further inland during antiquity (Bonfiglio 1999). This afforded both access to water and a natural harbor formed by the sickle-like peninsula (De Angelis 2016: 68).

Naxos, also settled from Euboea, was founded by Theokles (Thuc. 6.3.1; Ephoros, *FGrH* 70 F137; Braccesi and Millino 2000: 15–18; Veronese 2006: 151–54). An even higher dating than 737/6 by Hellanikos and Antiochos now commonly accepted is suggested by Ephoros: starting from Troy at *c.* 1150 and placing Naxos and Trotylon in the 'tenth generation' thereafter, meaning 36 or 39 years multiplied by ten, so either before *c.* 790 or *c.* 760 (Miller 1970: 87). Ephoros' high dating has subsequently been rejected by scholarly work making also the oikist having instead been an Athenian (De Angelis 2016: 68). Naxos (Plan 4) was located at a low rocky headland now known as Capo Schisò just north of the isthmus of a river (currently the Alcantara River, a name of Arab origin referring to a Roman bridge). The small bay provided a natural harbor. All sacred ambassadors leaving Sicily for Delphi would supposedly sacrifice at the altar of Apollo *Archegetes*, marking the exact location where the Greeks first touched land (Thuc. 6.3.1. In De Angelis 2016: 68). Naxos was in this sense a significant part of a maritime network, connected with Greece and Magna Graecia (Gras 2005: 161).

Archaeological evidence points to the third quarter of the eighth century, and literary accounts to 735, making Naxos Sicily's first ever *polis* (De Angelis 2003: 11-12, De Angelis 2016: 69). Ancient sources also mention Ionians, Dorians, and Naxians in the foundation, suggesting a contingent from Cycladian Naxos also took part. Theokles was soon afterwards, *c.* 729, also the founder of Leontinoi (Thuc. 6.3.3; Braccesi and Millino 2000: 18–19; Veronese 2006: 151-54).

The earliest archaeological evidence supports both this date, and that natives according to ancient tradition supposedly occupied the site upon the Greek arrival (De Angelis 2003: 12; Frasca 2009: 25-35, 41-44). The expulsion according to tradition of these Sicel natives is however less attestable. Instead, Leontinois' hilltop inland location along the San Leonardo River linked to the sea via an outlet at the rivers mouth in the Lentinian plain, rather suggests coexistence and integration into a Prehistoric system (Caffi 2004). This system, predating the Greek arrival, remained in use well into the twentieth century (De Angelis 2016: 69). Naxos earliest remains of settlement shows a street grid extending over the eastern section of the peninsula (Plan 4). The settlement initially covered about 10ha and continued to expand in the seventh and sixth centuries to *c.* 40ha (De Angelis 2016: 83).

Katane (Plan 6) was reportedly founded shortly thereafter by Euarkhos, which is mostly all that is told of this event (Thuc. 6.3.3; Braccesi and Millino 2000: 18-19; Veronese 2006: 175-79). Archaeology has offered sparse details to expand on the literary evidence, due to regular lava flows from Etna and numerous later occupations having covered a site naturally well-suited for human settlement and communication (De Angelis 2016: 69).

There is more certainty regarding the difficulties facing founders of Megara Hyblaea: attested by both literary and archaeological evidence. The sources detail two Megarian failures under Lamis at Thapsos and Leontinoi before, at the behest of Sicel ruler Hyblon, being allowed to successfully settle north of Syracuse (Thuc. 6.4.1; Polyaeus. 5.5.1; De Angelis 2003: 13-14). The site of Megara Hyblaea (Plan 8) was previously unoccupied and the orientation of the town was subsequently altered, reflecting perhaps how the 'Insenatura', a flat and wide area rich in water suitable for landings, was in the middle of the settlement, dividing it into two defined areas (Tréziny 2002: 267-71). Prehistoric routes, that actually already crosscut the settlement in roughly north-south and east-west directions, later became part of the towns layout, complete with corresponding gates in the later fortifications built in the last quarter of the sixth century (De Angelis 2016: 71).

### **2.2.2. Syracuse, Gela, Himera, Selinous and Akragas**

The other colony in south-eastern Sicily, besides Megara Hyblaea, is traditionally Syracuse which was founded earlier, in 734, and once again there is mention of a Sicel expulsion (Thuc. 6.3.2f). Syracuse by contrast evidently later still had Sicels living within the city (De Angelis 2016: 71). This fact, taken together with the existence of Euboean-sounding toponyms, have raised legitimate questions whether in fact Euboean settlers also occupied the site, alongside the Corinthians early on (Braccesi and Millino 2000: 25; Cordano 2006: 466-7; Veronese 2006: 279-80). Syracuse was a location ideally suited for founding a colony (Plan 7).

In the seventh century, Greek colonization expanded further along the north and south coasts of Sicily in new locations in the south-east and into a previously unsettled subregion in the north. The first of these was Gela. Founded in 688 (Braccesi and Millino 2000: 36-39; Veronese 2006: 257-59) by Rhodians under Antiphemos and Cretans under Entimos jointly, and by perhaps even earlier settlers (Thuc. 6.4.3). Gela stood (Plan 9) at the head of large well-watered plain with easy access to the interior. After Gela, Himera (Plan 10) was founded at the next fertile stretch of land on Sicily's northern coast resulting in yet another hybrid community of Zancleans and exiles from Syracuse (Thuc. 6.5.1; Diod. Sic. 13.62.4; Braccesi and Millino 2000: 21; Veronese 2006: 105-09). The two major plateaus at Himera, on the coast and at a hilltop, show signs of settlement in at least the last quarter of the seventh century, which is in harmony with the foundation date by Diodorus Siculus. The hybridity of this settlement is evident from later inscriptions and subsequent claims about the founders different origins (De Angelis 2016: 73).

Selinous foundation in Sicily's south-west region also took place at approximately the same time. Ancient tradition suggests that Megara Hyblaea sent for an oikist from Megara, Pammilos, who then founded a colony in 651 (Thuc. 6.4.2) or in 628 (Diod. Sic. 13.59.4). Both dates are possible to support from the archaeological evidence, which could suggest another foundation in stages as with now several previous Archaic poleis in Sicily (De Angelis 2003: 124; De Angelis 2016: 73). Selinous was located (Plan 11) between two rivers and surrounded by another fertile coastal plain, that is both relatively large and flat (De Angelis 2016: 83).

Selinous started small due to the limited size of the landing area near the river mouths (Mertens 2006: 84). A seventh century necropolis, subsequently surrounded by the sixth century city wall, could mark this first phase of settlement (that remained in memory, Rallo 2002) which demonstrates a gradual process of adapting the town plan

(De Angelis 2003: 140), only finalized in the first quarter of the sixth century (Mertens 2006: 173-75).

Finally, Akragas was the last Archaic colony in Sicily. Founded *c.* 580 by settlers from Gela led by Aristonous and Pystilos (Thuc. 6.4.4). Akragas (Plan 12) may initially have been partially delimited by an inland bay on a north-south inclined hilltop overlooking a fertile coastal plain (De Miro 1992: 152; Di Vita 1996: 294; Mertens 2006: 195; De Angelis 2016: 73). Akragas possibly began as an emporium located at the isthmus of the Akragas River, at Montelusa (De Miro 1992: 152; Di Vita 1996: 294; Mertens 2006: 195) to only later develop on the Hilltop inland, with a continuation of using the coastal area for purposes of exchange and burial (De Angelis 2016: 83).

## 2.3. Chapter 2: Summary

### 2.3.1. A Chalcidian Colonization Matrix

Chalcidians also founded Rhegium on the opposite side of the Strait of Messina (Fig 8). Antiochus claims that Zancleans sent for a Chalcidian expedition led by Antimnestus, (*FGrH* 555 F 9), perhaps leaving out also a Messenian participation (Vallet 1958: 66-80; Graham 1971: 17-19), and then specifically refugees from the first Messenian War (743-720), that would place Rhegium's foundation to before *c.* 720. Rhegium was perhaps the first Greek colony in the far south of Italy. As little arable lands surrounds the site, it was chosen as a strategic position by the sea in connection with other Greek poleis in Sicily (Graham 1982: 109) that have previously been discussed. In a relatively short period, Greeks had established themselves in Campania, eastern Sicily and in the Straits of Messina (Achaean, Troezenian and Spartan Greek also founded Sybaris, Taras and Croton in the Gulf of Taranto during the Archaic period, Graham 1982: 109-11).

The mother cities behind this wave of colonization were possibly influenced by Phoenicians, who according to some 'taught the Greeks to colonize' (Jeffery 1976: 47f). The main argument being that the Phoenicians were already in Sicily before the Greeks and their cities looked alike, a statement that however does not quite hold up as pointed out by Drögemüller (1965: 46, 55f). According to Graham however it remains an interesting speculation that it was through their contacts with the Phoenicians that the Greeks were introduced to the opportunities for colonization in the west (Graham 1982: 113). The pioneering Euboean colonization Matrix was surely the product of both Greek competence, as warlike and sea-fairing builders on a grand scale (Graham 1982: 102) but the successful colonization of far-away eastern Sicily was surely the result of many close encounters, exchanges and interactions with Etruscans, Sicels and Phoenicians as well.

### 2.3.2. Tables

**Table 1.** List of Euboean colonies (Graham 1982: 160-62).

<i>Colony</i>	<i>Mother city or cities</i>	<i>Literary foundation date</i>	<i>Earliest archaeological material</i>	<i>Location</i>
<b>Pithecusa</b>	Chalcis and Eretria		c. 750–725	Ischia
<b>Cyme</b>	Chalcis and Eretria		c. 725–700	Campania
<b>Corcyra</b>	(1) Eretria; (2) Corinth	(2) 733 or 706	c. 720–700	Corfu
<b>Rhegium</b>	Chalcis		c. 730–720	Calabria
<b>Zancle</b>	Chalcis		c. 730–720	Sicily
<b>Naxos</b>	Chalcis	734	c. 750–725	Sicily
<b>Leontini</b>	Chalcis	729	c. 750–725	Sicily
<b>Catane</b>	Chalcis	729		Sicily
<b>Assera</b>	Chalcis			Chalkidiki
<b>Cleonae</b>	Chalcis			Chalkidiki
<b>Gale</b>	Chalcis			Chalkidiki
<b>Mecyberna</b>	Chalcis			Chalkidiki
<b>Mende</b>	Eretria			Chalkidiki
<b>Methone</b>	Eretria	c. 706 or c. 733		Pieria
<b>Pilorus</b>	Chalcis			Chalkidiki
<b>Sarte</b>	Chalcis			Chalkidiki
<b>Sermyle</b>	Chalcis			Chalkidiki
<b>Singus</b>	Chalcis			Chalkidiki
<b>Torone</b>	Chalcis	before c. 650		Chalkidiki

**Table 2.** List of other Archaic colonies in Sicily (Graham 1982: 160-62).

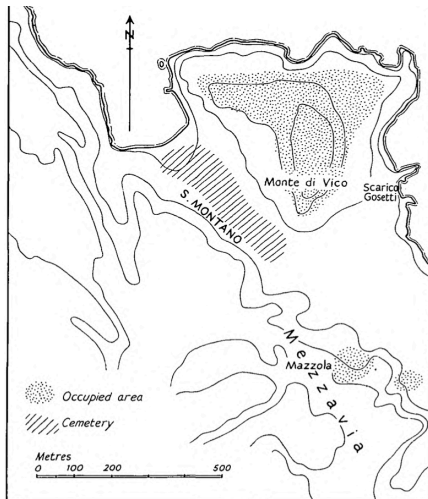
<i>Colony</i>	<i>Mother city or cities</i>	<i>Literary foundation date</i>	<i>Earliest archaeological material</i>	<i>Location</i>
<b>Syracuse</b>	Corinth	733	c. 750–725	Sicily
<b>Megara Hyblaea</b>	Megara	728	c. 750–725	Sicily
<b>Gela</b>	Rhodes and Crete	688	c. 725–690	Sicily
<b>Himera</b>	Zancle	c. 648	c. 625–600	Sicily
<b>Selinus</b>	Megara Hyblaea	628	c. 630–620	Sicily
<b>Akragas</b>	Gela	580	c. 600–575	Sicily

**Table 3.** Sicily, basic chronology (in project handbook from Stanford excavations at Monte Polizzo, 4th edition 2004).

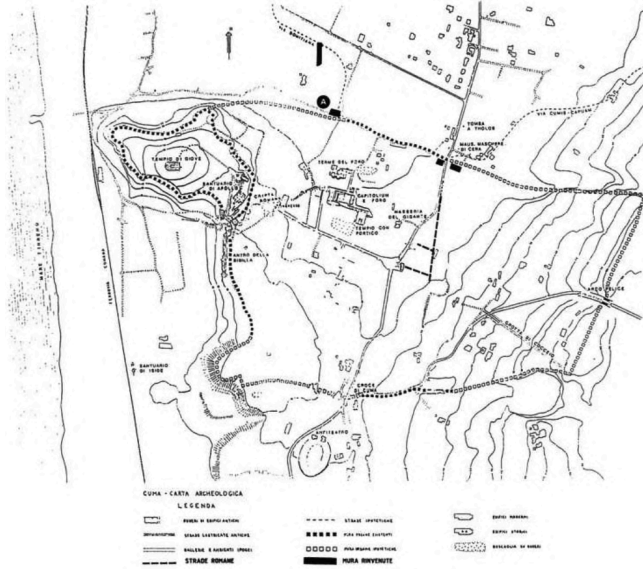
<i>Period name</i>	<i>Years</i>
<b>Early Bronze Age</b>	2500-1500 BCE
<b>Middle Bronze Age</b>	1500-1200 BCE
<b>Late Bronze Age</b>	1200-900 BCE
<b>Early Iron Age</b>	900-734 BCE
<b>Archaic (Colonial) period</b>	734-480 BCE (Founding of Naxos–Battle of Himera)
<b>Classical period</b>	480-323 BCE (Athenian siege of Syracuse, 415-413; Dionysius I, 406-367)
<b>Hellenistic period</b>	323-241 BCE (First Punic War, 264-24)
<b>Roman Republic</b>	241-31 BCE
<b>Roman Empire</b>	31 BCE-476 CE
<b>Gothic occupation</b>	476-535 CE
<b>Byzantine period</b>	535-827/902
<b>Arab period</b>	827/902-1060/1093
<b>Norman/Swabian period</b>	1060/1093-1266
<b>Angevin, Aragon, Bourbon dynasties</b>	1266-1860 (Sicilian Vespers, 1282; Black Death, 1347-50; Etna eruption and earthquake, 1693] Garibaldi lands in Marsala, May 11, 1860)
<b>Fascist period</b>	1922-1943



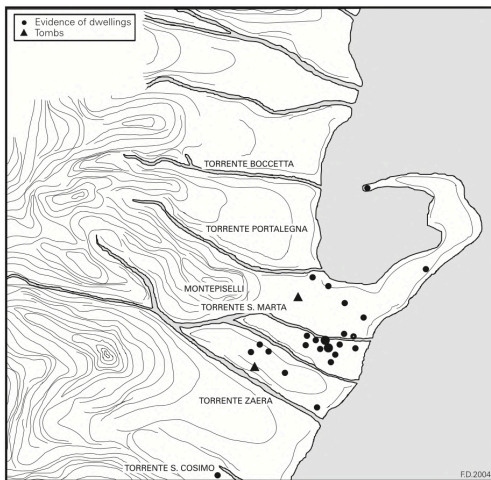
### 2.3.3. Plans of Archaic Greek Colonies



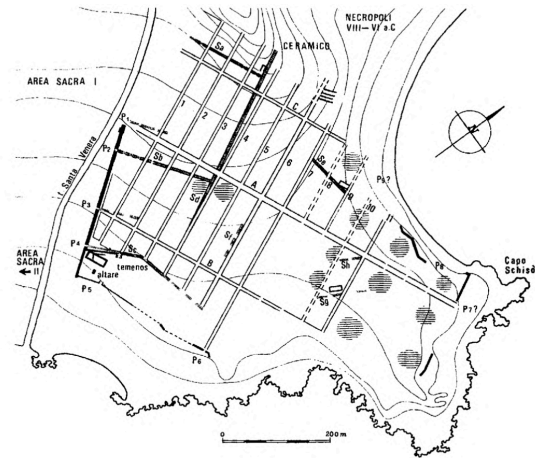
**Plan 1.** Pithecusa (Graham 1982: 98).



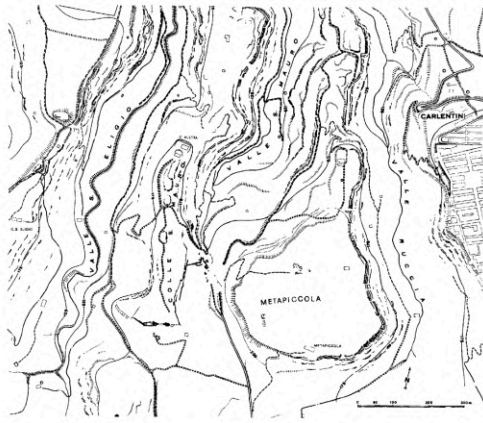
**Plan 2.** Cyme (d'Agostino 1999: 22).



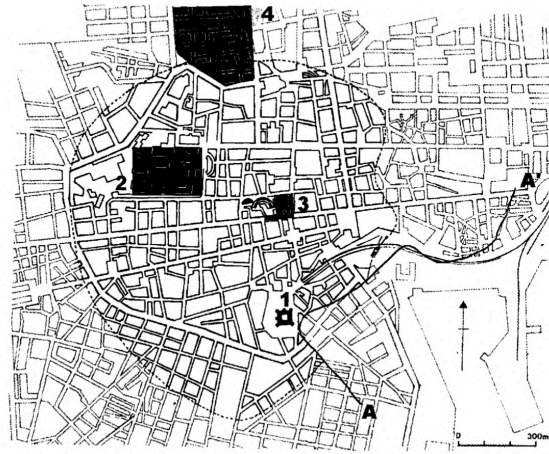
**Plan 3.** Zancle (Domínguez 2006: 267).



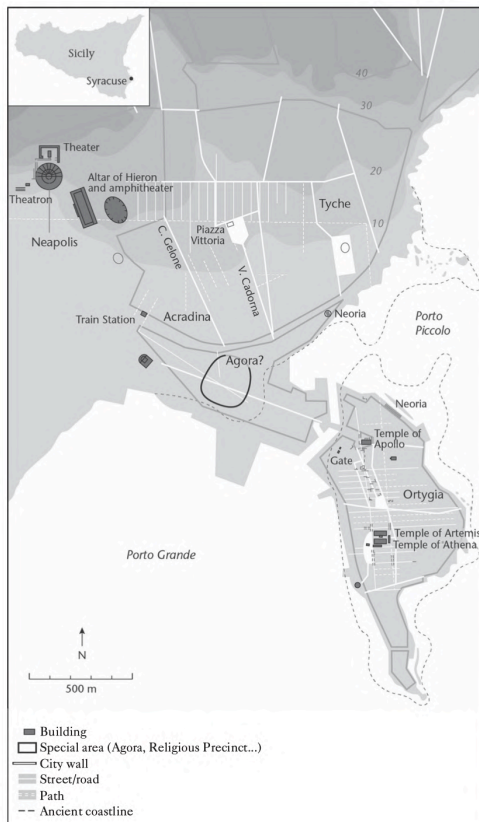
**Plan 4.** Naxos (Domínguez 2006: 257).



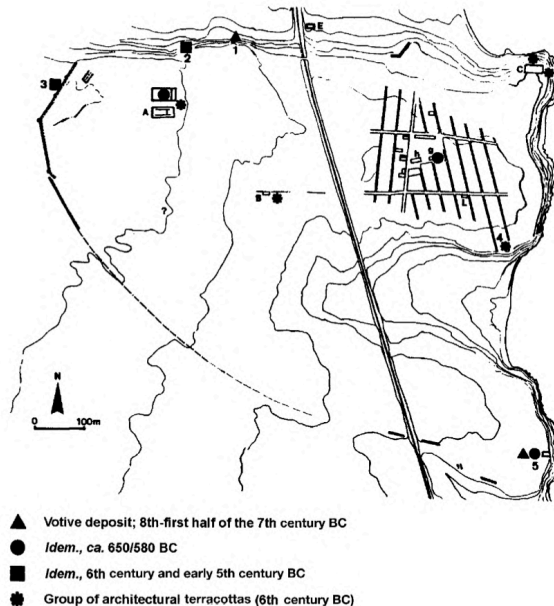
**Plan 5.** Leontinoi (Domínguez 2006: 260) .

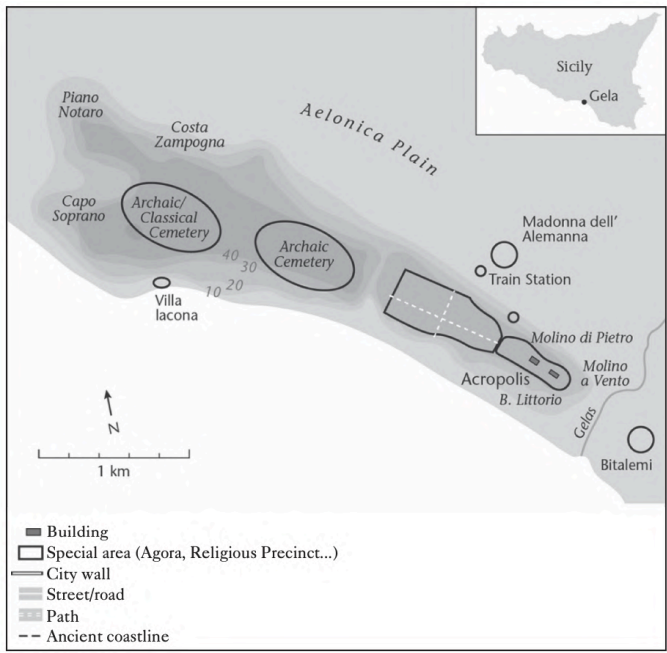


**Plan 6.** Catane. The location in the modern city of the remains of the Greek city. Elaboration after several sources: A-A'. Ancient coastline, sited in ancient times by the coast; 2. Former Benedictine monastery (*acropolis?*); 3. Votive *stips* in San Fransesco square (Seventh to fifth centuries BCE) ; 4. Hellenistic (older?) necropolis (Domínguez 2006: 264).

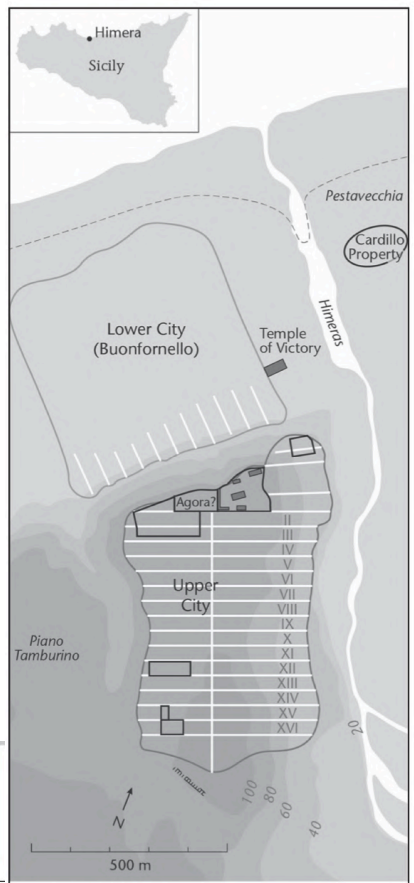


**Plan 7.** Syracuse (De Angelis 2016: 77). **Plan 8.** Megara Hyblaea (Domínguez 2006: 278).

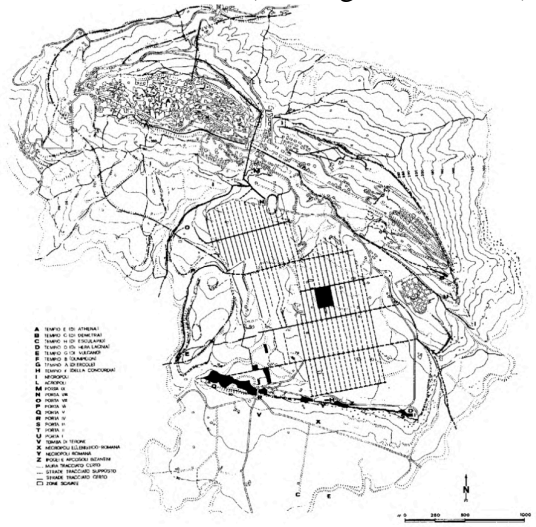
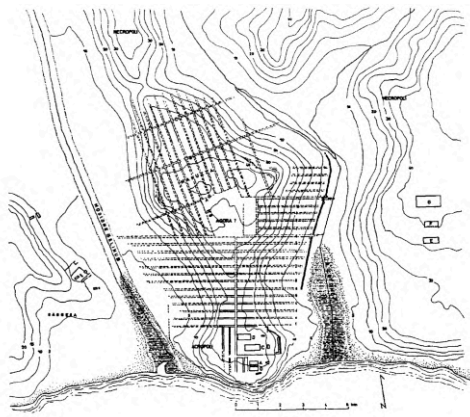




**Plan 9.** Gela (De Angelis 2016: 82).



**Plan 10.** Himera (De Angelis 2016: 79).



**Plan 11.** Selinus (Domínguez 2006: 304). **Plan 12.** Akragas (Domínguez 2006: 309).

## CHAPTER 3. PRELIMINARY SURVEYS

### 3.1. San Demetrio High



**Fig. 8.** The Plain of Catania with surrounding settlements and San Demetrio (circled in red). Map by N. Kärrman (after Talbert 2000).

#### 3.1.1. Territorial Context of the Surveys

The area covered by both initial surveys detailed in this study falls almost entirely in the administrative territory of the Municipality of Catania, included in the I.G.M. "Reitano", (formerly *Villaggio Delfino*) F. 270 III SO (Brancato 2018: 88). I.G.M. = 'Istituto Geografico Militare', is the national mapping agency for Italy. This territory is crossed by San Demetrio, the last stretch of the Caltagirone-Primosele system; a hilly ridge that constitutes the southern physical boundary of the Plain of Catania with respect to the Hyblaeen territory in the Regional Territorial Landscape Plan (Area 14 of the Piano Territoriale Paesaggistico Regionale (Brancato 2018: 88). For purposes of discussing the section of the ridge, the names "Primosele Hill" or "San Demetrio" appears to be used interchangeably, although technically Primosele Hill is actually another nearby hill on the same ridge (Manganelli 2018: 89). San Demetrio is the name used here for the whole ridge, as this is both useful and common practice in geology as well (Monaco et al. 2004; Longhitano and Colella 2007). This is however mostly referring to the section in north-east, with its belonging foothills nearest to the coast with the Coda Volpe and Grotte San Giorgio districts. The hills containing those

districts are offshoots extending in front of the Ionian Sea on the San Demetrio, the northernmost section of a ridge that in fact is extending all the way from the Hyblaean plateau. The whole area, including the northern flood plains of Catania and southern Lentini, belongs to a larger landscape set in a convergence zone of seismic-tectonic structures, represented to north-west by the Caltanissetta Basin and to the south-east by the Avampaeus Ibleo. This landscape is characterized by terraces, no longer used for cultivation, cisterns and *saie*, for the collection and distribution of water, and stone quarries, probably a result from the need to supply walls within the terraces. Quarries have been documented along the Strada Statale 194 and along the western margins of the adjoining terrace in Piana della Catena (Brancato 2018: 88).

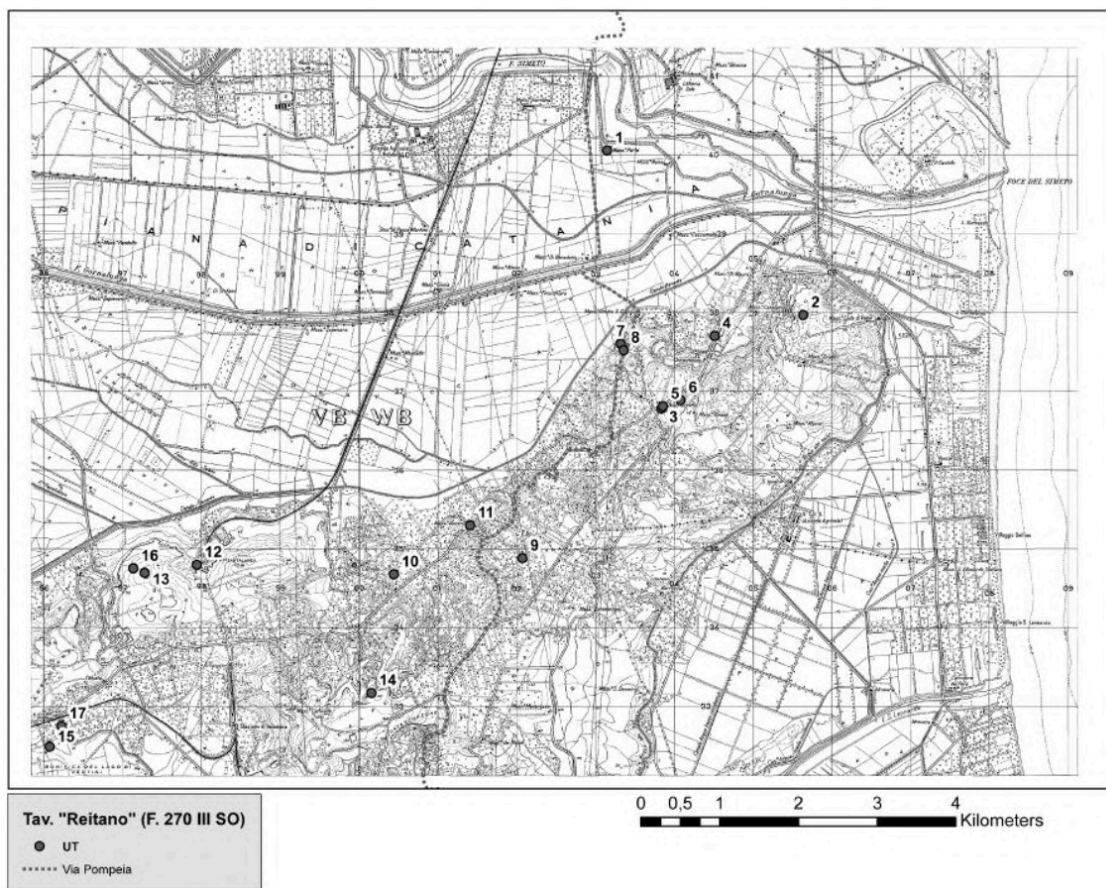
The landscape has been greatly affected by specialized citrus cultivation, since from the end of the nineteenth century; by the reclamation plans (1933) and by agrarian reforms of the 1950s –1960s, which overall have restricted and changed the physical margins of the San Demetrio, making traces and systems of the ancient landscapes much less defined, which was a central motivation behind the Brancato and Manganelli survey (Brancato 2018: 88).

### **3.1.2. Geomorphology and Geology**

The Catania Plain is a single geomorphological unit, divided into two distinct areas: Piana di Catania and Bassopiano di Lentini (The Catania Plain and the Lentini Lowlands). The division is caused by the same tectonic movements that have brought San Demetrio into emergence. As part of the carbonate-volcanic massif of the Hyblaean Mountains, to the north delimited by faults oriented north-east to south-west and east-west, San Demetrio there becomes gradually submerged by alluvial sediments of the Catania Plain. San Demetrio's morphology separates the hydrographic basins of the Simeto to the north and San Leonardo River towards the south. Brancato and Manganelli consider San Demetrio their main focus area within the larger context between Lentini and Catania, referring specifically to the summit of the north-east section of the ridge as *Alto Structural di San Demetrio*, with a height varying from c. 50–130m above sea level. This portion of the hill is delimited by direct (normal) faults oriented in a north-east to south-west direction. In north, these faults fall into soils towards north-west, while in the south the faults fall in the opposite direction, i.e., south-east, giving the hill itself a narrow shape (approximately 3km in the north-west to south-east direction) and also quite long (over 7km in the north-east to south-west direction). Brancato and Manganelli also express gratitude to Dr. Marco Neri of National Institute Association of Geophysics and Volcanology in Catania for supplying them with updated and previously unpublished data (Manganelli 2018: 89).

The stratigraphy of soils consists, from layers oldest (bottom) to the most recent (top), of Miocene limestone and volcanites, occurring in small patches outcropping on the north side of the hill, known as the Carlentini Formation. On San Demetrio it is part of the deepest outcropping strata, partly coeval with limestone found on the north side of nearby Primosole hill, and covered from Pliocene basaltic lava flows deposited in both underwater and submarine environments. Above this stratigraphic succession, a conglomerate of arenaceous and clayey marine sediments emerge (lower-middle Pleistocene), in turn covered with limestone from the middle-upper Pleistocene. Finally, the hills are bordered to the north, east and south by continental alluvial sediments, mostly of Holocene and present age (Manganelli 2018: 89).

### 3.2. Brancato and Manganelli (October 2017–January 2018)



**Fig. 9.** The "Reitano" map with topographical units indicating "emergencies" i.e. points worthy of preservation and of archaeological interest with a hypothetical *Via Pompeia* (Brancato and Manganelli 2018: 99).

#### 3.1.1. Purpose of Survey

Brancato and Manganelli's survey in the Coda Volpe and Grotte San Giorgio districts aims to contribute to the knowledge of the ancient topography of the territory between the southern margins of the Catania Plain and the northern part of Lentini. They also illustrate their results with photographs from the reconnaissance surveys, conducted between October 2017 and January 2018. Work began as an implementation of the preventive verification procedure of archaeological interest (VPIA) in relation to a specific work of public interest. The preventive archaeological investigations were carried out by Brancato and Manganelli in support of the interventions against the planned expansion of the landfill belonging to the Sicula Trasporti company for non-hazardous waste located in the Grotte San Giorgio district and extending into the territories of Catania and Lentini (Brancato 2018: 87). The survey was conducted in close collaboration with the Superintendencies of Heritage, Culture and Environment in Catania and Syracuse. The archaeological activities related to the VPIA provided for a review of all the archaeological documentation from published and archived documents, analysis of historical aerial photography and systematic and sometimes targeted recoveries, for the purpose of understanding the dynamics of the settlements in the area between Catania, Lentini and Caltagirone.

As a premise and support for bibliographic research and thanks to the availability of an updated cartographic apparatus (including the “Reitano” map and a lithological map, Brancati 2018: 87) an investigation into the morphological and geological characteristics was also carried out, in order to better understand the settlement dynamics of the areas in question and their complex interactions with a wider area. The limited previous investigations here are stated as being the result of tendencies of swamping through history and more recently due to intense agricultural and industrial exploitation. Their conclusions are based on geomorphological analyzes, paleo-geographic reconstructions, on the results of the reconnaissance, and on the interpretation of the sites identified and on their positioning within the IGM tablet, with the final aim of creating an updated catalog of archaeological sites and to draw up a map of the archaeological 'emergencies' found within the area under investigation (Brancati 2018: 87).

### 3.2.1. Topographical Unit Index

1. Necropolis, Passo Martino-Torrazza district, Catania (CT). Necropolis established from burials within a clay sarcophagus (Sciuto Patti 1880; *cf.* Sirena 2007: 105) (Brancato 2018: 93). The discovery of a Roman necropolis in Passo Martino to the south of Catania in 1880 was by C. Sciuto Patti placed in relation to the position of Symaetus, a settlement known from the sources (Plin. *N.H.* IV, 8; Sciuto Patti 1880; Sciuto Patti 1881). C. Sciuto Patti based his identification of Symaetus on his reading of a 1093 document, a diploma which attested to the transfer by the Tancredi Altavilla, Count of Syracuse, to the diocese of Catania, among other land areas the Ximet or Simed farmhouse, also identified by the Carrera with the "Grotte" district (probably "Grotte San Giorgio") and of his property, border area of the latifundia ceded for the establishment of the 'feudo' of the Episcopal assets of Catania in 1102 (much) later seized by the kingdom of Savoy. The large estate extended to the San Leonardo River in the south and to the Simeto in the north, to the sea in the east and west to the *carraia* (ancient cart road) of Lentini-Paternò. A document from 1102, another diploma, transcribed later by S. Cusa (1868: 549), testifies to the donation by Tancredi to “[...] half of the River Muse belonging to Bishop Angeri of Catania, Abbot of the Monasteries of St. Mary and St. Agatha, together with the giarretta of that river; Lake Bullèt and vast lands around the river and the lake to the sea [...]” (Brancato 2018: 93). On the documentation of the contribution to ancient topography from Arab-Norman records Brancato suggests Degni 2006).
2. Necropolis, silos, area of clay fragments, Coda Volpe district, Lentini (SR). The UT (topographical unit) shows traces of human habitation starting from at least the Prehistoric age, indicated by a sequences of post holes on the calcareous bank with a different orientation both to the burials and to the arrangement of the silos (Figs. 10-11). The inner walls do not have hydraulic mortar, essential if they had to contain water, supplied from either rain or from a water supply underground. (Brancato 2018: 93). Human presence during Greek times is attested by a strip of necropolis with carved pit tombs appearing on the calcareous bank, indicating the presence of a not yet identified settlement near the area. The two silos are characterized by the bell-shaped profile, very similar to those in the San Giorgio district (UT 7, see Fig. 13). The reuse of the tombs for new functions, probably

processing tanks, is to be related to a phase of late attendance, in the context of which it is possible to frame the presence of silos for the storage of grains. It must also be borne in mind that the bell-shaped profile is typical of the silos of the Early Middle ages, suitable for containing foodstuffs in an separated anaerobic environment (grain pits) prevalent in southern Italy and Sicily (Arcifa and Longo 2015; Alfano and D'Amico 2017. In Brancato 2018: 93).

3. Rock settlement, bunker, Grotte San Giorgio district, Lentini (SR). The UT 3 consists of the ruins of a powder keg and of the relative underground bunker datable to years of the Second World War. (For more information see Brancato 2018: 94).
4. Necropolis area, masseria Primosole, Catania (CT). In the estate of the farmhouse, the existence was verified of artificial cave tombs, carved into the outcropping bank.
5. Quarry, district Grotte San Giorgio, Lentini (SR). On the eastern side of the plateau, containing a tobruk (see UT 3), there is an area of stone extraction (UT 6), visible from the SS 194. The mining activity is on a small scale and it is assumed that the extensive terracing systems for cultivation or the oldest farms that characterize the area, are to account for it as both appear to be built with blocks from the same site. The strong link between geomorphology, the stone quarries and creation of “negative” buildings, carved into the bedrock and by regularizing spaces already characterized by gorges and drains emptied for prolonged cultivation, in correspondence with outcrops along the slopes subjected to local phenomena of differentiated erosion, is evident in the whole San Giorgio district. There are numerous attestations of exploitation of the coasts south of the Punta Castelluzzo promontory. On the coastal quarries in the territory of Lentini Brancato suggests Felici and Buscemi Felici (2004). (Brancato 2018: 95).
6. Cave environments, Grotte San Giorgio district, Lentini (SR). Accessible from SS 194, the UT 6 is identified with a large area entirely excavated into the rock. Characterized by several phases of excavation and various occupations, with continuity of use until recent times (animal shelters); the stripping of the external wall and the absence of dating material do not allow to propose a chronology.
7. Cave environments, Grotte San Giorgio district, near the San Demetrio gallery (road ANAS 339 Catania-Syracuse), Lentini (SR). Find area of lithic industry, ceramic fragments from the early Bronze Age and Roman era, datable to between first and fourth centuries CE (Fiscaro 1996: 122 ; Valenti 1992: 21-22; Uggeri 2004: 202; Sirena 2007: 105. In Brancato 2018: 95). The UT 7 coincides with an important system of grottoes, characterized by large chambers carved into the rock, pseudo-quadrangular and with internal niches (Fig. 13). The environments, known as the Grotte San Giorgio stands on the plateau overlooking the so-called 'Galleria San Demetrio' (Catania-Syracuse motorway section), consisting of two large main chambers, one of which is very deep, whose walls are marked by niches referable to the phase of expansion of the environment. Inside the larger room Brancato and Manganelli noted the existence of two large silos, characterized by a bell-shaped profile (See UT 2.) At present they were difficult to locate. The different phases of occupation remain difficult to date. The portal of the minor chamber, for example, preserves traces of an entablature carved in the rock, today very worn down by external forces. The system of caves, probably used for funerary purposes in the Prehistoric age and adapted between late

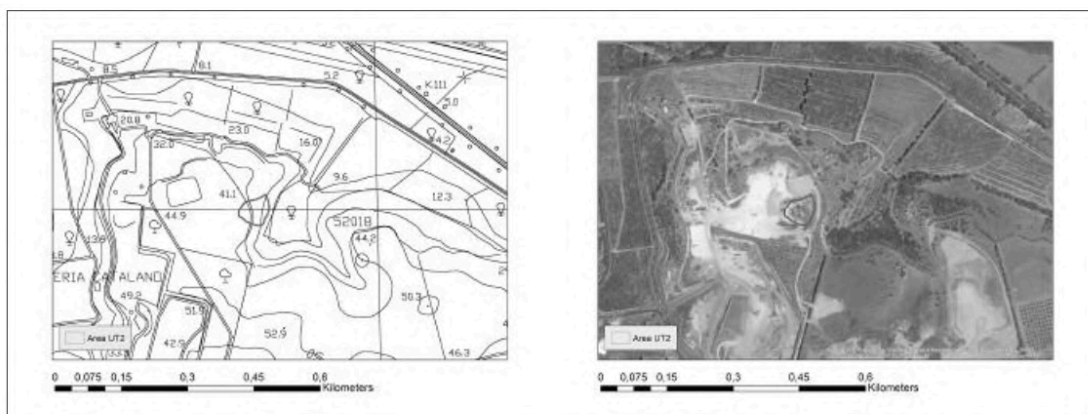


antiquity and the Byzantine age – as the place’s name seems to suggest – certainly certifies a long continuity of use until the modern era (as shelters for both humans and animals). Noteworthy, but of equally uncertain date, are the numerous external masonry structures and those that partly redesign the entrances to the rooms, as well as the infill walls, one of which is aimed at closing an ancient and wide connection between the two chambers. Behind the rocky ridge, an artificial cave tomb with a curved ceiling (UT 8) helps to frame the most frequent phase in the area with more certainty. (Brancato 2018: 96)

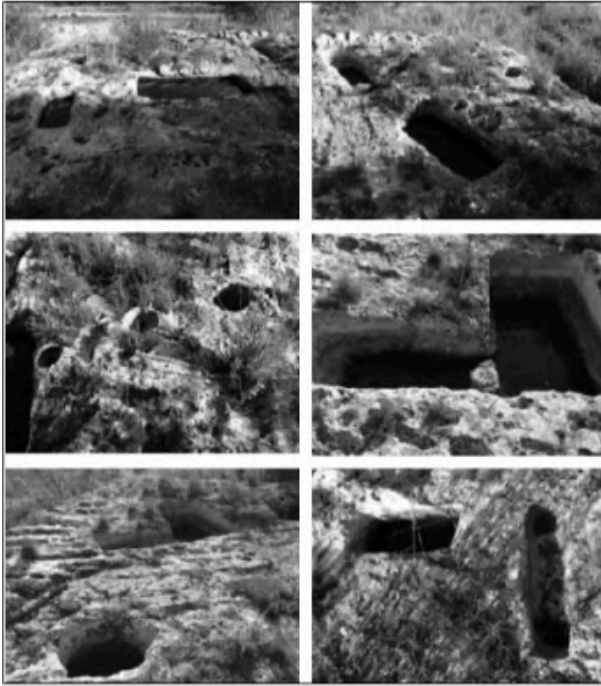
8. Isolated tomb, Grotte San Giorgio district, near the San Demetrio tunnel (new road ANAS 339 Catania-Syracuse) on San Demetrio, Lentini (SR). The UT 8 consists of an artificial cave tomb, dug out of the rock, with a sub-circular plan and curved roof with low profile, accessible by a simple quadrangle entrance and apparently isolated in the context of other finds (Fig. 12). Regarding this topographical unit Brancato and Manganelli note both the very poor visibility at the time of reconnaissance and the traces of erosion along the ridge, largely obliterated following the construction of the Catania-Syracuse motorway section 'Galleria San Demetrio' (Russo 1996 in Brancato 2018: 96).
9. Necropolis, Piana della Catena, Lentini (SR). Located on the north-eastern offshoots of the Caltagirone-Primosole ridge, the UT extends over a large limestone terrace, on whose northern slopes face artificial cave tombs with alternating flat and curved ceiling, and possible rock shelters below (Brancato 2018: 97).
10. Structures, area of fragments, Bonvicino district, Lentini (SR). Remains of walls and structures attributable to a rural site of the Augustan age (Spigo 1982-1983: 342; Bejor 1986: 506; Sirena 2007: 106. In Brancato 2018: 97).
11. Masseria Bonvincino, Lentini (SR). Neolithic settlement known according to the piles of holes in the limestone bedrock; necropolis of the Bronze Age (Brancato 2018: 97).
12. Santalanea district, Lentini (SR). Area of stone fragments, dated from the second to fourth centuries CE. Necropolis with bell-shaped pits and arcosolium of late antiquity; 20m track of a carraia (Fisicaro 1996: 121; Valenti 1998: 256; Brancato 2018: 97).
13. Piano Meta, Lentini (SR) Area of stone fragments; necropolis. The site extends on a series of low hills separating the basin of the Biviere from the Catania plain, consisting of extensive limestone banks, in which there are few such outcrops. Close to the SS 385, the highest hill forms a modest plateau called Piano Meta. It lies against the Plain with a steep slope towards to the north, and a gentle slope towards south in a landscape today severely damaged by a quarry. At the top of the site finds of ceramic and basalt (wedge axes), quartzite and flint have been discovered; the site was inhabited during the ancient Bronze Age (Castelluccio), datable to the clay fragments as well the necropolis strip of tombs with artificial grottos on the northern slope of the hill (Baldini et al. 1976; Tomarchio 1987; Valenti 1992: 17-18. In Brancato 2018: 97).
14. Valsavoia district, Lentini (SR), extends over the low limestone hills that from the east dominate the homonymous railway station and the basin of the Biviere di Lentini. The archaeological traces are near the Cattivelle farm, located on the central part of a rock bank sloping down towards the Biviere, where traces of some artificial grotto tombs are visible. The site was investigated by P. Orsi, who

noted the chronology of inhabitation extended from the Bronze to Iron Age, and the reuse in the Byzantine period for housing purposes (Orsi 1899; Orsi 1902; Bernabò Brea 1958: 107-11. In Brancato 2018: 97). Near Cattivelle farm, in the 1980s the Bronze age (Castelluccio) settlement emerged as a result of the investigations promoted by the Superintendency of Syracuse (Valenti 1992: 49-51. In Brancato 2018: 98). West of the Cattivelle farm also lies a short section of a carraia, (200m, direction east-west), and traces of inhabitation from the Roman imperial age, dating from between first half of the third and fifth centuries CE, indicated by the area of clay fragments and from pit tombs with "cappuccina" and arcosolium (Spigo 1892-1983: 342; Bejor 1986: 507; Fisicaro 1996: 121; Valenti 1998: 257 in Brancato 2018: 98).

15. Galermo district, Lentini (SR). Cave dwellings of late antiquity. Area of clay fragments, consisting of Roman pottery dating back to the first and fourth centuries CE (Fisicaro 1996: 121; Valenti 1998: 256 in Brancato 2018: 98).
16. Abbandonata district, Lentini (SR). The archaeological area consists of the remains of a Byzantine settlement located on the top of a hill that gives its name to the district. Reconnaissance conducted in the area identified the presence of ceramic fragments from the late imperial age; on the sides of the hill is documented a group of arcosolium tombs from the late ancient period (Fisicaro 1996: 121 in Brancato 2018: 98).
17. Catalicciardo district, Lentini (SR). The site has the remains of a Roman building and ceramic fragments datable between the second and fourth centuries CE. From the district a fragment of a sepulchral tombstone comes with the inscription *VIXIT* and coins with the effigy of Vespasian (Cianco 1967: 30-31; Spigo 1982-1983: 342 ; Bejor 1986: 506; Fisicaro 1996: 121; Valenti 1998: 257. In Brancato 2018: 98).



**Fig. 10.** Catania, Coda Volpe District in satellite image and excerpt from section number 641010 of the C.T.R. at 1: 10000 scale; the polygon identifies the UT 2 identified in the survey (Brancato and Manganelli 2018: 94)



**Fig. 11.** Catania, Coda Volpe District UT 2 (Brancato and Manganeli 2018: 94).



**Fig. 12.** Lentini, Grotte San Giorgio district, artificial cave tomb. (Brancato and Manganeli 2018: 97).

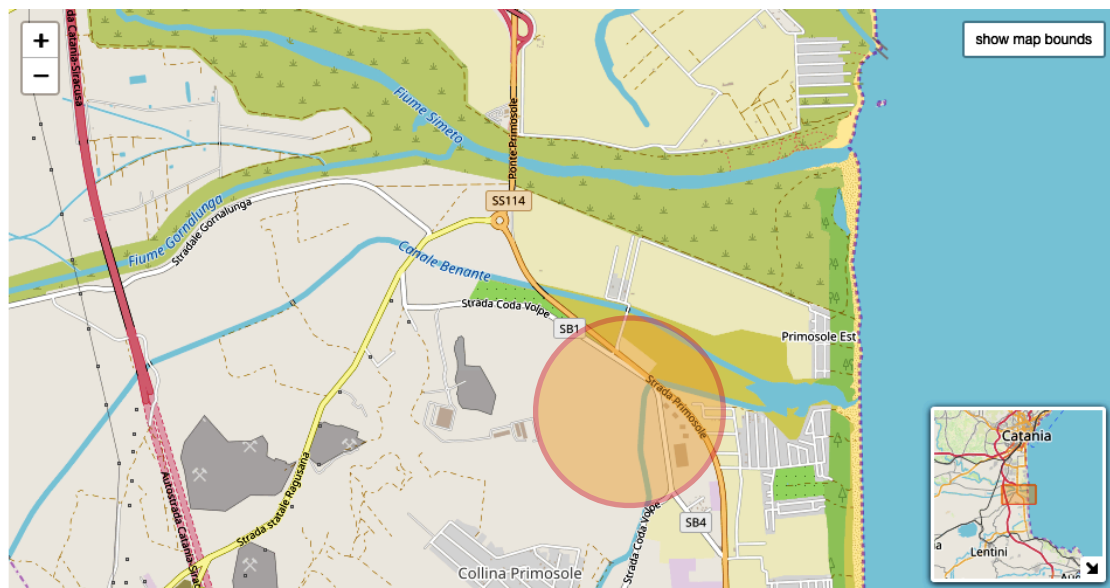


**Fig. 13.** Lentini, Grotte San Giorgio District, environments of the rocky habitation (Brancato and Manganeli 2018: 96).

### 3.2. Kärroman, Henry and Bratell (October–November 2018)



**Fig. 14.** Impression of location points from reference photos by Kärroman, Henry and the author, (satellite view in Mac Photos, view roughly corresponding to Fig. 15).



**Fig. 15.** Location of landscape features in Coda Volpe district (CT). Map made with [www.openstreetmap.com](http://www.openstreetmap.com).

#### 3.2.1. Purpose of Survey

Kärroman, Henry and the author's survey was conducted with aims to understand the current landscape in order to determine the potential for creating more knowledge of the ancient topography of the territory between, and including, the isthmus of the Simeto, and the north-east corner of San Demetrio, covering an area roughly corresponding to 5km<sup>2</sup>. The more extended surveillance area also included other and further out areas, such as Grotte San Giorgio district, as well as some other features

observed on the opposite side of the Simeto and very close to the isthmus. As some of these areas are sufficiently documented by the findings of Brancato and Manganelli, focus is, for the purpose of this study, placed specifically on a particular set of landscape features observed while conducting the survey in between October 2018 and November 2018. These features are illustrated with photographs here as they are part of the area purposed for further survey and inventory. Work began according to the assumption, that this was a large area that was understudied, with ancient sources, as well as the existence of necropoleis, indicating the possibility of a nearby unidentified settlement. The first measure was to estimate and track the ancient coastline, which also was thought to have been located much further inland and closer to San Demetrio, rendering it a much more significant and strategic location for the purpose of controlling movements inland across the Simeto and the fertile Plain of Catania. The assumptions regarding the coastline was later substantiated by geological data presented by Brancato and Manganelli (Monaco et al. 2004).

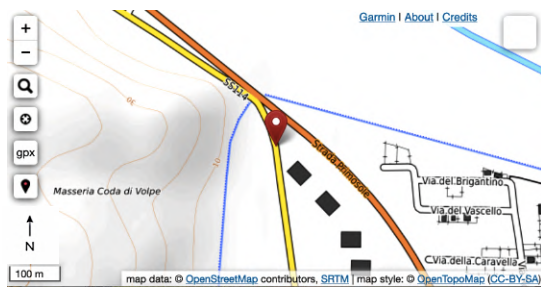
The ancient shoreline was in fact much closer to San Demetrio, possibly even washing the north-east corner on both sides during Prehistory as will be discussed later (Fig. 23). The hypothesized route and the location where Via Pompeia divided (one road crossing San Demetrio towards Lentini and the other continuing south towards Syracuse) was also central. As the exact position of Roman road has only been hypothesized (Sirena 2011), it was also assumed that the Roman road reached the Simeto, and thus remains of a ferry berth could perhaps be located somewhere in close proximity to the survey area. In the area near the isthmus of the Simeto River the Roman road has for instance been argued as tracking below modern roads, such as in nearby Passo Martino district (Frasca 2009: 52-53. For a recent suggestion of Via Pompeia in the area see Fig. 9). The presence of Sicula Trasporti SrL's landfill and waste management activities in the Grotte San Giorgio district was clearly felt, with a pungent smell permeating the air during parts the survey on San Demetrio. Much of the work was also either prepared beforehand, or continued afterwards in Sweden: the results from which are included in this study. The landscape features that will now be illustrated immediately appeared puzzling to the team. A further analysis of this material, viewed in context also with Brancato and Manganellis' work will follow in Chapter 4. Meters above sea level was measured with GPS using an Iphone X, so not very accurate, but a rough estimate that appears quite consistent with the topography. Studies have shown that an earlier modell, an iPhone 6, is consistent with the general accuracy levels observed of recreation-grade GPS receivers in potential high multi-path environments (Merry and Bettlinger 2019).

### **3.2.2. Landscape Feature Index**

1. Road. (SS 114, or Stradale Coda Volpe) is part of the modern infrastructure but sections could correspond to the ancient network of roads following the coast and dividing before starting to climb San Demetrio. A foothill dominates the area of the road (*c.* 30m above sea level) called Masseria Coda Volpe (Fig. 17 and front page image). The elevation of road drops by about 3m in *c.* 1km from 6.97–2.66m above sea level.
2. Foothill. Here are several residential buildings along a small road. On a second plateau is a hotell called Masseria Coda Volpe (Fig. 16), the foothill rises to *c.* 30m above sea level. The foothill and hotell dominates the area that is surrounded by several stone structures of interest from an archaeological point of view.

3. Canal. *Canale Acque Alte Nord*, appears to be part of the major reorganizations of the infrastructure in the 1950s. However, the massive walls that are a part of this infrastructure appears to consist of reused stone, as both the canal itself and the walls exhibit signs of erosion, as well as the technical aspects of the construction, that give the impression of appearing to be, at least to some extent, ancient masonry, engineering and stone work.
4. Walls. There are massive walls made using cyclopean masonry, with also sections appearing Archaic based on stylistic dating. The erosion on the stones also give the impression of them being ancient. Possibly even in situ, but appearing to also have been reworked during modern times, perhaps at the same moment that the area was fitted with concrete, paved and reorganized, presumably some time after the Second World War. The sheer scale of the execution of these walls, and the various platforms and ramps they create, appears quite striking in the landscape. More measurements and closer examination is required in order to determine the validity of these on site observations.
5. Plateau. This plateau stands directly above the section of walls flanking the canal. There are faint traces of paving, now completely overgrown, with the appearance of being from the same time when this whole area was reorganized. A on site suggestion by W. Henry was that this flat area would appear to be perfectly suited for GPR. The plateau is also, given the vicinity of the ancient coastline (discussed later on), certainly evocative of the type of construction expected in an environment close to, or in direct contact with water, i.e. a ferry berth for instance.
6. Outcrop. A small semi-flat and rugged terrain area (c. 30m above sea level) with a limestone outcropping penetrating the ground surface surrounded by soil, grassy pastures and meadows, bringing to mind the fact that as Sicily became part of Aragon Spain in the late Middle Ages, gracing sheep were introduced across vast areas, resulting in this type of landscape becoming a rather common sight. What lies beneath these wide-ranging and seemingly largely empty pastures is, given the reconstruction of the topography and the ancient coastline, a valid question for archaeology.
7. Crest. In clear sight from the outcrop is a small crest that represents a culmination of the rolling and climbing rural landscape. A small road continues in this direction, that eventually leads to a Greek necropolis that will be further discussed in Chapter 4. The distance is slightly less than 1km, indicating that the small crest is also suitable for further inventory and survey.

### 3.2.3. Figures



**Fig. 16.** Road and foothill (*ca.* 30m above sea level) on north-east San Demetrio and topographical overview of Masseria Coda Volpe ([www.openstreetmap.com](http://www.openstreetmap.com)).



**Fig. 17.** (1) Road, view facing south to south-east *c.* 6.97m above sea level and (2) view facing north *c.* 1.66m above sea level. (3) Foothill, view from Stradale Coda Volpe facing north-west. (4) View from road facing north-west *c.* 2.15m above sea level.

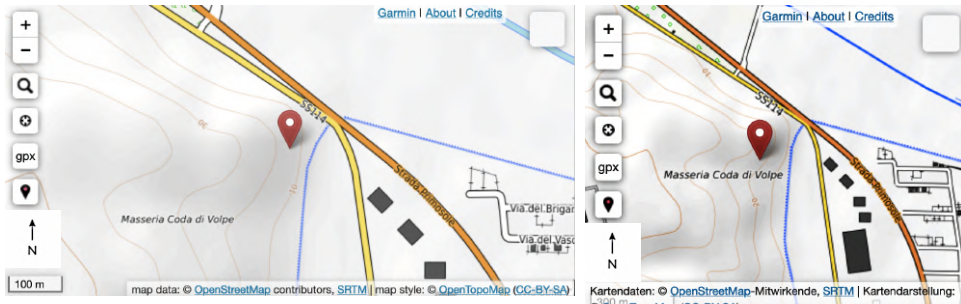


**Fig. 18.** Walls are located along SS 114 Coda Volpe to north-west, turns and follows along Canale Acque Alte Nord towards south ([www.openstreetmap.com](http://www.openstreetmap.com)).



**Fig. 19.** (1) Canal, view of bridge-crossing on Stradale Coda Volpe. (2) Canal, view facing south to south-west. (3) Canal (direction north to south) turns east and bridges road going north to north-west after crossing (1.62m above sea level). (4) Walls facing east moving south. (5) Walls flanking canal, view facing west. (6) View of walls facing north-east and moving along road to south-east.



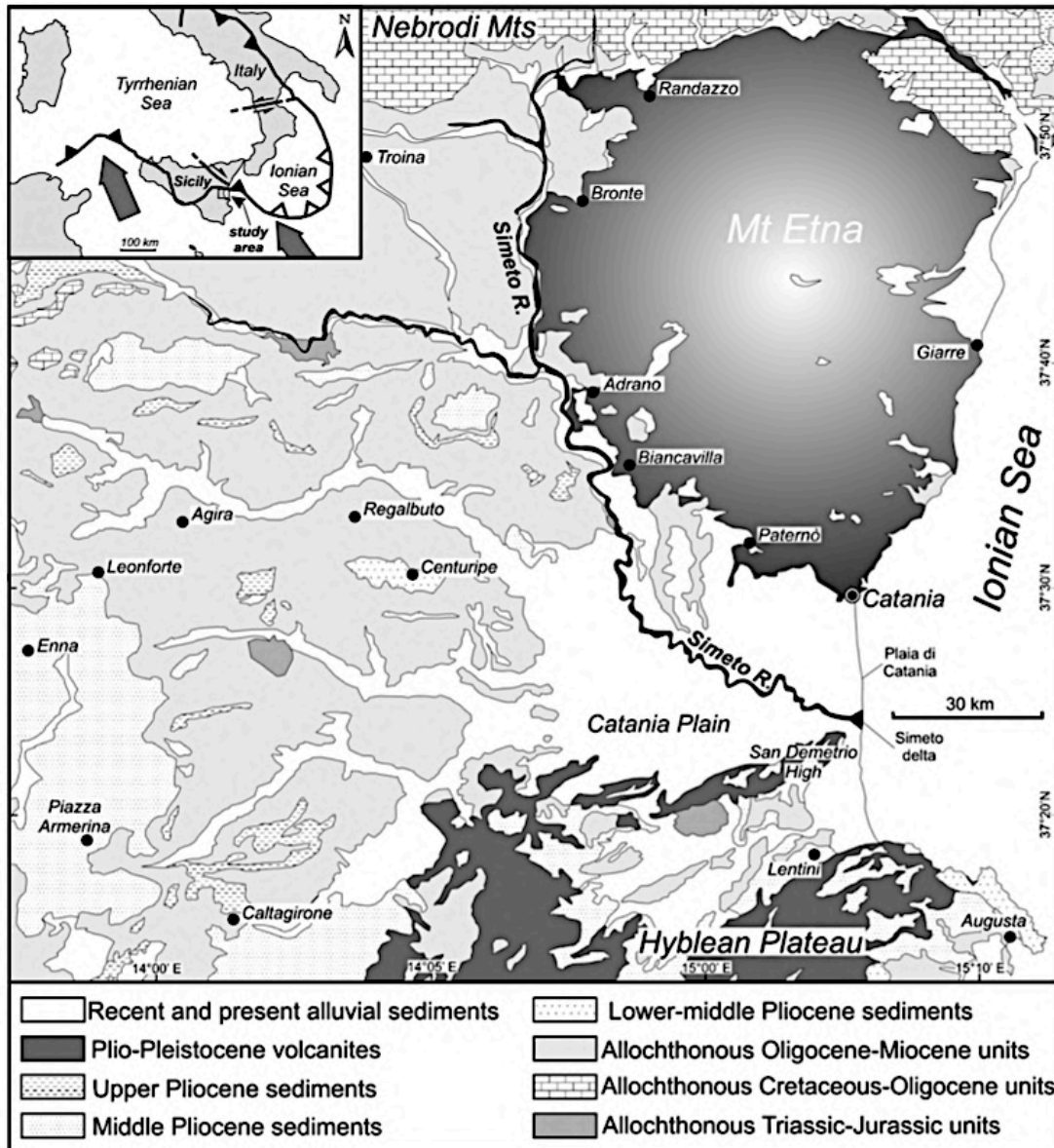


**Fig. 20.** (1) Location of plateau between Canale Acque Alte Nord and Masseria Coda Volpe and (2) location of outcrop ([www.openstreetmap.com](http://www.openstreetmap.com)).



**Fig. 21.** (1) Plateau, view of ramp towards foothill facing west to north-west c. 6.21m above sea level. (2) Plateau. (3) Plateau, view of wall-ramp facing W c. 6.625m above sea level. (4) Plateau, view of walled ramp to climbing foothill, view facing north. (5) Outcrop, view facing north-east c. 29.53m above sea level. (6) Crest, view from outcrop, facing east. c. 29.75m above sea level.

# CHAPTER 4. MAIN INDICATORS OF A GREEK SETTLEMENT



**Fig. 22.** Lithological setting of the Simeto River drainage basin and San Demetrio High with Plio-Pleistocene volcanites and Upper Pliocene sediments/calcareous rock (Longhitano and Colella 2007: 196).

## 4.1. The current understanding of San Demetrio

The analysis will now be developed further by processing results from both initial surveys and by discussing overall points of contact emerging from the account of previous research, in order to establish main indicators for locating a previously unidentified settlement from Greek colonization during the Archaic age on San Demetrio. The chapter concludes with details of next planned survey, in order that this study can facilitate a full-scale investigation of walls observed during a initial reconnaissance in Coda Volpe district. The study ends with the conclusions presented in Chapter 5 followed by a brief summary.

#### 4.1.1. Conclusions from the Initial Surveys

The conclusions reached by Brancato and Manganelli from their study of the San Demetrio and its environs, is that it presents traces of a Prehistoric settlement network with roots in locations like Valsavoia, Piano Meta, Piana della Catena and Grotte San Giorgio (Brancato 2018: 98). These areas are all thought to have developed homogeneously between the Greek and Roman periods (Fig. 9). Furthermore, Via Pompeia: the road connecting Messina to Syracuse (Cic. *Verr.* II, 5, 169), in turn structured the local rural landscape of the area during the Principate. Via Pompeia followed a path that, after coming from Catania, probably retreated from the coastline (Sirena 2011). To be able to answer at which point, it is first necessary to look at the local settlement dynamics of the area, which would allow to clarify with greater precision what was the path of the track between Lentini and Catania (Brancato 2018: 98).

According to G. Uggeri, Via Pompeia tracks current SS 194, or *strada dello Scussuni*, which after crossing the San Leonardo River on the Ponte dei Malati, and the districts Sabuci, Madonna dei Malati and Piano della Catena then proceeds to the Bivio Iazzotto (Uggeri 2004: 202). M. Frasca instead suggests Via Pompeia going along a different path: after leaving Lentini and having passed the San Leonardo, Frasca proposes a path through the Armicci and Valsavoia districts, where the existence of ancient cart roads is known. Then, continuing past the hills of Bonvicino district and through the Plain of Catania it moves along the Passo Martino road (Frasca 2009: 52-55). As this places Via Pompeia below the current E45, that near Passo Martino also passes a Roman necropolis, this hypothesis also actualizes C. Sciuto Patti (who made the original report), who's interpretation was that this necropolis indicated the nearby presence of Symaetus (Sciuto Patti 1880). Based on the current understanding, Symaetus should be located in the area south of the bends of the Simeto River, given that the Simeto probably once contained a series of lookouts, boat crossings and ferry berths, as the traditional name for the River, 'Giarretta' is suggestive of, according to Brancato (2018: 99), and that this was perhaps a modest settlement relating to it. In modern times, the crossing took place at Passo Martino or more to the east, in the place called, not surprisingly, *Barca di Primosole* "The Primosole Boat", based on the most suitable place for crossing, probably conditioned by the trend of the tides (Uggeri 2004: 202; Brancato 2018: 100).

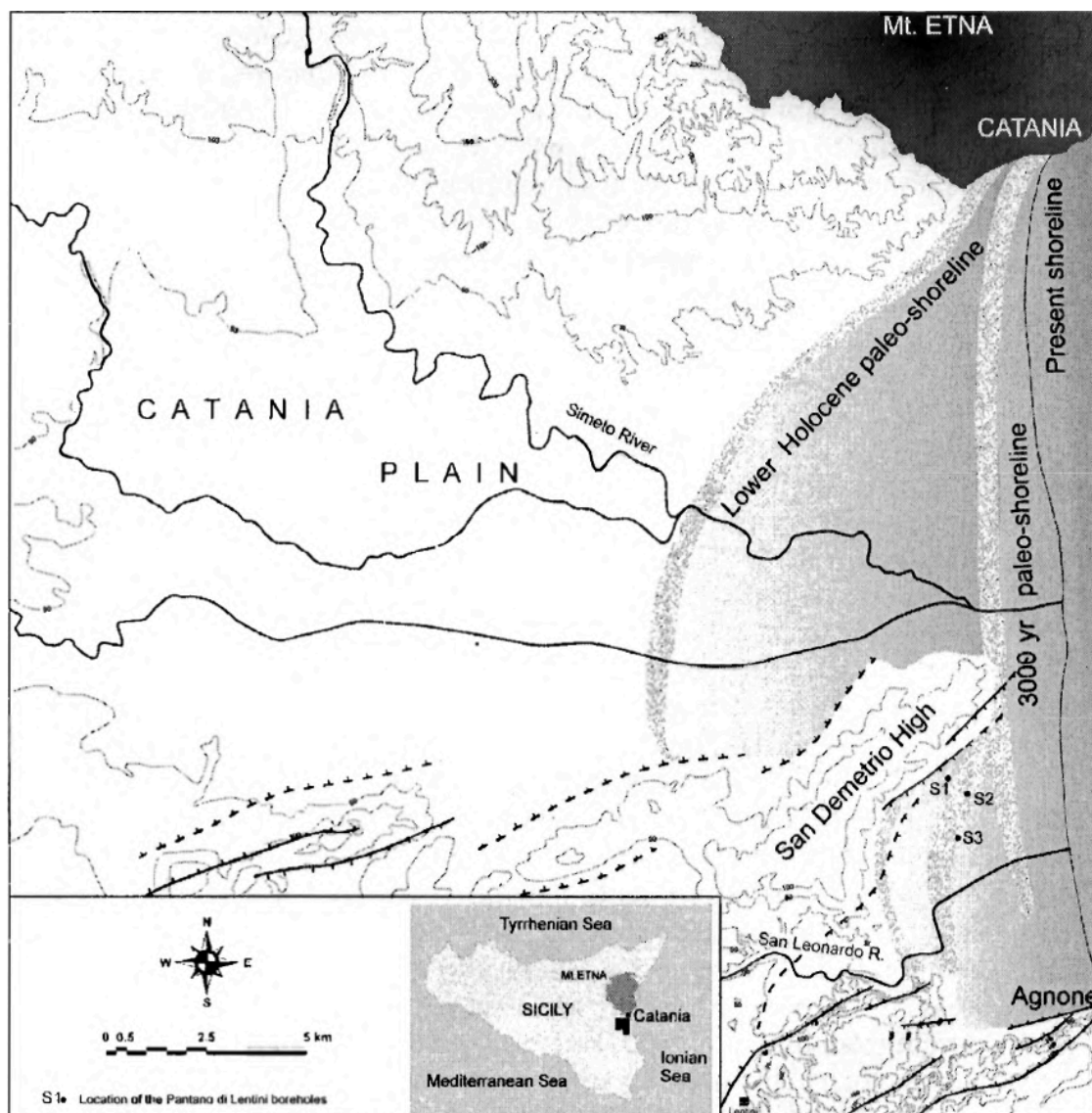
#### 4.1.2. Topographical Reconstruction

To understand the history of settlement in the area it is, according to Manganelli (2018: 100), necessary to consider the evolution of the geomorphology of the territory, at least of its most recent phases. The area of the Pantano di Lentini is the most submerged portion of the Catania Plain (2.5m. below sea level) that is also partially separated from the comparable coastal river area of Catania by San Demetrio. A recent stratigraphic and sedimentological study conducted by the University of Catania, based on absolute datings, showed that the whole area between the furthest north-east extension of the San Demetrio and the River San Leonardo, corresponded in ancient times to a brackish lagoon (Fig. 23) fed by the same river that only dried up for the first time during the 1950s (Monaco et al. 2004; Spampinato et al. 2011).

In fact, surveys of specific points (Spampinato et al. 2011: 222-23, 225-26) have highlighted one variety of layers related to a holocene sedimentary cycle whose

passages correspond, from top to bottom, to the following deposits (1) lagoon: lying between the current earth level and the first 2m, (2) infralittoral: sand deposits with grain size ferried according to the different depth levels of the sea, (3) clay and marl: coastal marsh, and (4) alluvial: gravel sediments of the early middle Pleistocene age. The altimetric difference of the last deposit (phase I), included between -27.00m and -39.00m, suggested the underlying presence of a Wurmian paleo-valley engraved between the alluvial deposits and marly clays at the end of the last Ice Age (9368 -9534 BP), when temperatures slowly began to rise and with them the sea level (Manganelli 2018: 100).

The paleoecological analysis of Holocene deposits confirms a constantly evolving environment: at the lagoon levels of the upper Paleolithic (phase II) the different inter-coastal planes due to the subsequent and rapid rise in the level of sea (Holocene transgression), attest to, a great bay between the Mesolithic and the Iron Age, characterized by shallow waters and bounded by the two structural maxima (San Demetrio towards north and the current Agnone cliffs towards south).



**Fig. 23.** Paleogeographic evolution of the coastal sector of the Catania Plain during different stages of the Holocene sediment filling and development of sand barriers, noticing in particular the paleo-shoreline *c.* 1000 BCE (Monaco et al. 2004: 178).

This marine environment of benthic type (facies III), shallow (4/5m), perpetually submerged and delimited from above by plant and mollusc species, unable to withstand prolonged emergencies (posidonia, gastropods, pulmonate and bivalves), characterized the entire catchment area of the San Leonardo River up to 3000 BP, when new marine currents triggered the southern migration of the alluvial deposits of the Simeto River which, together with deposits of the San Leonardo (ancient *Terias* River), gave rise to a sandy barrier that once again isolated the bay from the open sea and developed a brackish lagoon lasting until the 1950s, plausibly similar, Manganelli argues, to the present coastal bogs and landscape of Vendicari (Noto) of today. Thus, two different environments formed along the banks of the San Leonardo River; no longer navigable; swampy and sandy to the north and impervious and rocky towards south (Manganelli 2018: 101).

Brancato then compares the existence of this brackish lagoon, with the claim by Ps-Scylax that Lentini was reachable from the open sea by navigating through a river of twenty stadia (3.7km) going up the Terias River (Ps-Scylax XIII; cf. Orsi 1930; Brancato 2018: 101). Uggeri proposes to accept the amendment by Cluverius, from ten *rhian* of the manuscript tradition (Uggeri 2011: 4), based on comparisons with other sources (Thuc. VI, 50.3, 94.2; Diod., XIV, 14.3; Plin. *NH.* 3.14). Cluverius proposes furthermore, a correction of the distance in forty stages, that Uggeri however observes is not required. Edrisi (Amari and Schiaparelli 1883) indicates the distance as 6 *miglio* (108km) from the sea to the city, which he describes as arranged on the banks of the same river through which cargo boats approached upstream, landing on the eastern side (Brancato 2018: 101).

G. Uggeri, does not rule out the correctness of the handed down figure and, based on the available data and topographical considerations, proposes a much more internal position than the Terias River mouth in the fifth century BCE, at the foot of the *San Leonardo Soprano* farm. In fact, hypothesizing a wide mouth for the Terias River that allowed crossing the shallow lagoon from the sea and reaching ancient Leontini from the river. Already in the Greek age the shoreline coincided, roughly, with the current one, with the difference that the vast coastal areas were then characterized by swamps and marshes (about 4km calculated from the mouth on the open sea towards the interior) in what today are the reclaimed areas of Pantano di Lentini, Bonifica Gelsari, Pagliarazzi, and Tenuta Grande (Uggeri 2011: 4).

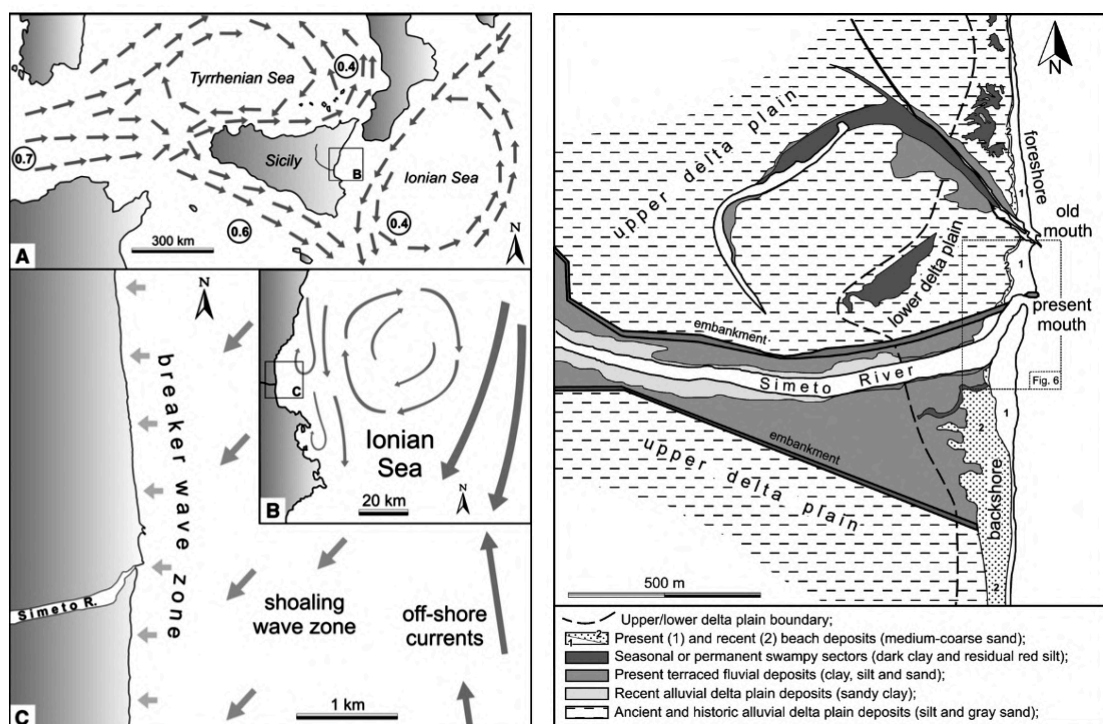
Indeed, Brancato continues, the available geological data shows that this first coastal strip, defined as wetlands, was land occupied in Greek times that during the Neolithic had been a bay. It was still navigable by ascending the River Terias, to the foot of the San Leonardo Soprano farm: which was where "wet earth" ended and "dry land" began. From here, navigating the river another 20 stadia it was possible to reach Lentini. This provided a functional connection to the sea from the Calchidian city, at a relative distance from the coast, corresponding well to the colonial aims of a Greek society of Euboean origin (Brancato 2018: 101).

Even though the colony was located in the hinterland it had two landing places on the sea: (1) Trotylon and (2) the mouth of the Terias (Columba 1891: 108). Along the coast, the major archaeological site is *Punta Castelluccio*, an ideal place for sea loading and unloading, whose current toponym has replaced the original *Punta San Calogero* (Brancato 2018: 102). The first identification of a protohistoric settlement on the site is owed to L. Bernabò Brea, for which he hypothesized a topographical link with the pre-Greek Xouthia, later Leontinoi (Bernabò Brea 1968: 167-8). Based on

other topographical considerations he also placed the Trotylon at the mouth of the stream San Calogero, where, according to the sources, the Megarians would have been stationed briefly before the foundation of Megara Hyblaea (Bernabò Brea 1968: 167; Brancato 2018: 102). In the area between the promontory and the mouth of the river, it has been proposed to identify Murgantia, as already mentioned by Livy, but in relation to, not the Simeto but rather the San Leonardo river port, where in 214 BCE a fleet of Roman ships were awaiting events then taking place in Syracuse (Liv. XXIV, 27-30; Caffi 2004: 72-3; Brancato 2018: 102). Little evidence is however available in support of the existence of such a large landing near the mouth of that river; on the other hand, the possibility of ascending along the Terias River does not necessarily require the existence of a typical port-channel, as Brancato claims that other kinds of port-channel are also possible to imagine (Felici 2016: 109-134; Brancato 2018: 102).

In addition to the Terias (San Leonardo) River, the hydrographic network available to the Greek colony also included its tributaries: the Lissos - S. Eligio, Carrunchio and Falconello. E. Felici and G. Buscemi Felici hypothesized the existence of a series of internal waterway connections in the *Chora* within the San Leonardo river basin, suggesting that it is very important to understand the topographical context of some sites, such as the periurban sanctuary of the Portazza district, reachable through the Lissos (Felici and Buscemi Felici 2004: 41; Brancato 2018: 102).

The geological data available today is very useful also for understanding the evolution of ancient roads in the area, an element of the landscape closely linked to the geomorphological context. Notwithstanding the absence of surveys and point references relating to the area directly north of the San Demetrio, it is possible, on the



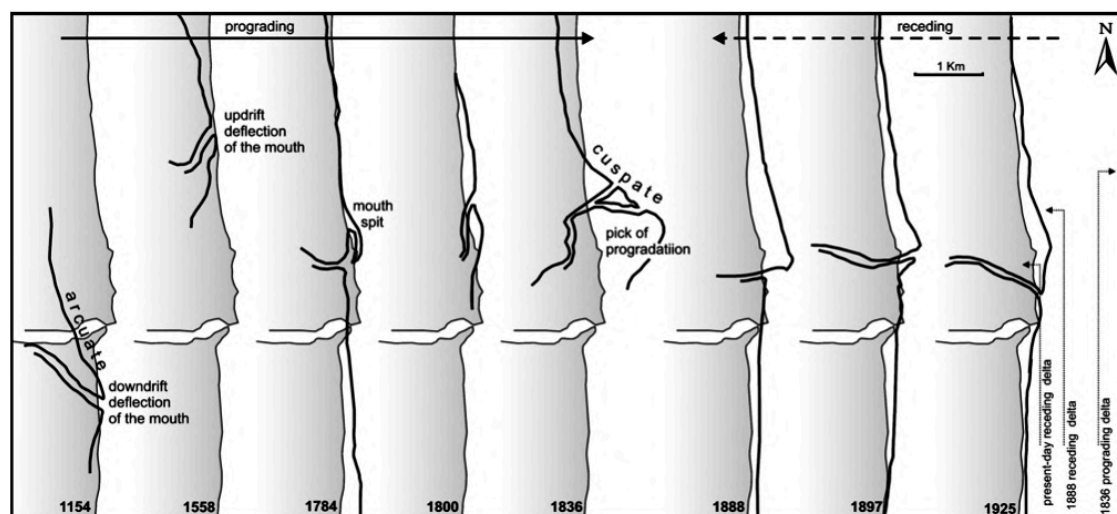
**Fig. 24.** Left: Distribution and direction of the main sea-currents in the central Mediterranean (numbers express velocity in knots). (B) Clockwise circulation and S-directed offshore currents along the Sicilian eastern coast. (C) Offshore currents and wave motion active on the Catania Plain coastline. Right: Distribution of depositional environments in the subaerial Simeto River delta system (Longhitano and Colella 2007: 198, 199).

basis of the dynamics observed in the San Leonardo area, to hypothesize a similar transformation of marine and lagoon environments in the floodplain of Catania but, probably, characterized by more significant lagoon intervals given the greater influx of deposits from of the Simeto and Gornalunga, in all likelihood contributing to a faster advancement of the coastline of the Catania plain compared to that of Lentini (Fig. 22) For the recent reconstruction of the physiographic context and geomorphological analysis of the Catania area in the pre-classical age Brancato and Manganelli (2018: 102) suggests (Cultraro 2016: 239, fig. 1).

#### 4.1.3. Population Movements: Bronze - Greek - and Roman Ages

Based on these data, with reference to the Neolithic age, Brancato and Manganelli suggests that it is possible to hypothesize how the population moved through the area under examination during Prehistoric times. An important force of direction, active at least since the Mesolithic, they claim, is probably a line crossing the territory in the north-south sense: The most obsidian observed in the area, typologically comparable with lithic fragments found in Paternò and perforated sea shells of *Perriere Sottano* (Ramacca), are related to the Etna area, in both the high coastal side and the south-west. (For bibliographic references on sites cited by Brancato and Manganelli (2018: 102) they suggest Nicoletti (1994).

Another line of movements, perhaps active from a later phase and apparently limited to the lower Simeto basin, proceeds in northeast to south-west direction: the existence of this line would account for the distribution in the area of the research of the cretaceous flints, probably originally gathered from the Hyblaeen hills (Nicoletti 1994: 192-94). From the study of the materials collected in the sites falling between San Demetrio and the south-west region of Etna it was possible to frame testimonies of exchange, both from within the territory and from the outside. In short, use of lava *sgrassanti* in ceramics (a particular manufacturing process) from Palagonia or from areas neighboring Calatino are in continuity with the previous phase; the presence of ochre is linked to contacts with the area of Caltagirone or Ramacca; flint, in particular found in Predio Pisa, is probably of Hyblaeen origin; the gray obsidian, originating



**Fig. 25.** Evolution of the Simeto delta from 1154 to 1925. The delta shape evolved from arcuate to cusate, reaching a peak of progradation during 1836. Since this date, the delta has begun to recede until assuming its present-day morphology (Longhitano and Colella 2007: 214).

from the Aeolian archipelago, would instead indicate contacts with the neighboring areas north of the territory (Maniscalco 2000). Currently no human directionality appears possible to ascertain from the south-east coast through the lower plain of Lentini, a deep marine bay in the Neolithic; and vice versa, the delta of the San Leonardo River, despite being an alluvial plain characterized by coastal ponds during the Prehistoric age, was probably a network of navigable waterways, as is attested in Greek times (Brancato and Manganelli 2018: 103).

At the start of the first millennium BCE, the geomorphological dynamics varied differently respectively to the north and south of San Demetrio. This hypothesis would explain the presence of Roman tombs near Passo Martino. Even if so, the exact amount of "wet earth" between San Demetrio and Catania's southern areas during various historical periods is still an open question. The answer could partly come from the position of the three chronologically distinct burials known in the area: Piana della Catena and Grotte San Giorgio (Bronze Age), Coda Volpe district (Greek age) and Passo Martino (Roman age). According to Brancato and Manganelli, Coda Volpe's necropolis suggests the existence of a settlement located on the Pleistocene terrace of the high structural section of San Demetrio; the Roman necropolis, on the contrary, would indicate a more modest attendance downstream, positioned along the current area of Passo Martino and more specifically near Masseria Porto, linked to the management of the passage of the river passage.

The different locations of the settlements could be explained, argues Brancato and Manganelli if, during Greek times, the north-east tip of San Demetrio was still surrounded by water on both sides, with either marine and lagoon environments directly affected by different delta systems. In Roman times, the shoreline affected by the Simeto delta system probably advanced, as indicated by the location of the discovery of Roman graves, uncovered after a flood at 2m below the current ground level of the floodplain. The constant tendency in the current industrial area of Catania to swamp would therefore lead to hypothesize a section of the route of the Via Pompeia in accordance with the current hypotheses, significantly submerged, but still located between Passo Martino and the E45. G. Uggeri considered that, the lookout point and the ferries on the Simeto River should take place "further west, given that the last stretch of beach, the *'la Plaia'*, had not yet formed" (Uggeri 2004: 202. In Brancato and Manganelli 2018: 104).

#### **4.1.4. Further Theoretical Discussion**

Moving, briefly, into a more broad discussion, there is currently less talking about civilizations within both anthropology and archaeology. A preferred term is instead "culture" – to bring order to the great diversity of human societies that cannot be explained solely by biological variation. This term becomes a less blunt tool than speaking more broadly about the concept of "civilization." Doing so also enables comparisons between different societies on the basis of a finer mesh than just how morally developed, technically advanced or how complex they are considered to be. Defining the culture in a way that suits everyone who uses the concept professionally is at the same time quite difficult. Instead, the definition has been suggested as being best adapted, specifically, to the sources and methods used and what kind of analysis is intended to be carried out. It could, for example, be about defining Greek culture based on the objects, beliefs and customs that characterized the people who regarded themselves as Greek (or Sicel and Roman), and also by others were seen as Greek (on



defining Roman culture see Woolf 1998: 11). There is an interesting discussion in this vein regarding whether or not the Greeks actually considered themselves to be part of any unified culture, for instance during the Archaic age in Sicily. Nowadays, few topics are as thoroughly debated as the role of colonization in shaping an awareness of Hellenic identity: Recent patterns, however, tend to be different, including hybridity from a cultural standpoint and what could be called Archaic Greek 'un-ethnicity', meaning, the absence of a Hellenic consciousness in both early Greece, and in particular the areas affected by Greek colonization during mainly the eighth–seventh centuries BCE (Porciani 2015: 9-18). This view was brought forth in particular by Carla Antonaccio (2004: 55-81).

Regarding the Greek presence on San Demetrio the walls in Coda Volpe district readily bring to mind the type of large buildings in stone that are markedly different from the collections of smaller wooden houses surrounded by large earthen walls, the types of buildings most common before the Greek (Romans and Phoenicians) arrived in many parts of the Mediterranean (Woolf 1998: 8). Terms such as Hellenization, however, needs to be defined more narrowly so as to become a useful 'tool'. This is because cultures are neither static nor are their characteristics the result of any uniform consensus. In addition Greek culture obviously continued to undergo major changes over several centuries. One approach that began to gain greater popularity in the latter part of the twentieth century was, rather than viewing culture as a superior system, to instead look more closely at separate individuals' creative cultural activities. Roman Ernst Roth has argued that so much research has by now been devoted to terms like Romanization (an argument that perhaps could also be extended to Hellenization) that the concept behind them, previously synonymous with a civilizing force *per se* have been released from their previous burdens and have now become neutral (Roth 2007: 10).

Although there is no full consensus in this ongoing discussion on the previous terms, they are still considered useful for historical research (Versluys 2014). Thus it is possible to regard any traces of individuals in Coda Volpe district and on San Demetrio, be it Greek, Sicel, Roman or other, as a kind of ambassadors of their respective culture as individual representatives of a particular influence on Sicily. The influence of culture is thus possible to regard as a process traceable to individual agency actors running cultural processes in interaction with different local cultures. At the same time, the actors are then reasonably inspired by both own ambitions and established tradition. In this way, there are different ways to interpret this interaction: According to a non-interventionist model the power elite in Archaic Sicily influenced the local population to adopt Greek attire, building style, language and diet, which strengthened their position as local governments eventually got an administration according to Greek model (as happened later during Romanization *cf.* Millet 1990: 35-44). However, this was not the case for all parts of the island, where instead discrepant identities is possible to imagine where no typical identity might have existed. Nor did perhaps all the inhabitants on eastern Sicily actively try to emulate the Greeks. In this way, the concept of Hellenization explains almost nothing (for a similar argument on Romanization *cf.* Mattingly 2004: 13; Bratell 2019).

As a concept like Hellenization, ultimately risks become unusable, partly through the influence of postmodernism (as has occurred with for instance Romanization), this problem is instead given its solution through applying post- or anti colonial concepts such as acculturation, colonization, creolization, resistance and hybridization (Versluys

2014: 12). Acculturation refers to a confluence of the colonizing and local traditions, not least in a religious context, such as the acceptance of local gods. This acculturation is considered to have been particularly valid for the children raised hostage in Rome (Webster 1997). According to creolization, a modern concept that serves as a counterpoint to multiculturalism in the era of globalization, refers to how the contacts between a colonizer and a local culture gives rise to a mixed culture (Webster 2001). Typical of the construction of these perspectives, however, is that a concept like Hellenization or Greek colonization for that matter is either provided with apostrophe: 'Greek colonization', and then used within an ever narrower definition, or simply considered as an expanded term. A problem that also characterizes theories of postmodernism in general is how increasingly complex and narrow definitions run the risk of falling into yet ever narrower interpretations – ultimately reaching an almost absurd degree of complexity (For criticism on the complexity of postmodernism *cf.* Dawkins 1998; Hitchens 2005).

Is the increasing level of theoretical complexity being accompanied by a correspondingly increased degree of empiricism? Is it possible to do away with all broad explanatory models? Is it simply *wrong* to search for Greek culture on eastern Sicily? According to Jean-François Lyotard, the postmodern era was characterized, among other things, by the fact that "the big stories" had lost their credibility. The great metaphysical and ideological systems could no longer explain the world, society or history. We are referred to more partial, more fragmentary, individual truths. The notion of postmodernism came to prominence with the title of *La Condition postmoderne* (Lyotard 1979). At the same time, the influence of postmodernism has brought an increased understanding that, in addition to broad explanatory models, there is an almost infinite number of other perspectives and interpretations, which of course also is true. The idea that the stories that are given prominence are considered the ones who serve those in positions of power in society however risks also becoming an incomplete picture. Particularly if studying the Coda Volpe district solely as an expression of the exercise of 'Greek power and colonization'.

Another dimension that seems traceable within the framework of the concept of Greek colonization is that Greek power and influence may well have been left 'unchallenged', but what is communicated through the archaeological record on Sicily is also Greek traditions and competence as "warlike and sea-fairing builders on a grand scale" (Graham 1982: 102). The remnants of Greek culture may therefore also be seen as representing well-built and enduring expressions of Greek traditions and values in a complex interaction with local traditions. A non-interventionist model; that Greek colonization influenced the local populations on Sicily to adopt Greek culture, as it strengthened their own position, and was given an administration, infrastructure and goods according to a pre-existing Greek model, thus seems to add a useful perspective for this study (For a similar discussion on Hellenization and Romanization in southern France *cf.* Bratell 2019).

At the same time, as the subject for a continuing theoretical discussion, 'Greek colonization' as a concept can be used to refer to a process traceable to individual actors who, inspired both by Greek ambitions and traditions, drive cultural processes before them, in interaction with different local cultures. Finally, it is however suggested to remain cautious about drawing far-reaching conclusions about what this has to say about bigger changes in Sicilian societies, or about the attitudes of the population at large.



latitudinally, while Selinous' blocks are 32.8m wide (100 Doric feet) and subdivided longitudinally, with lengths and shapes varying considerably depending on their location in the plan (Mertens 2006: 174, 179).

All town plans extended to surface areas of a comparable size that was in turn determined by two topographic factors: (1) Placement of cemeteries, and (2) City walls (De Angelis 2016: 75). Eighth century Greeks in the west began to consciously separate the worlds of the living from that of the dead (*Cf.* Frederiksen 2011: 60, 76, 89; Bintliff 2012: 269), and here the cities had at least two cemeteries, generally spatially segregated between and within, which can be connected with social choices of the inhabitants (De Angelis 2016: 76). City walls were added later between three and six generations from foundation to demarcate the line separating the worlds of the living from the dead (Frederiksen 2011: 105), but are thought to have been part of the first town planning also. The topography factors allow for rather close estimations of the size for Naxos, Leontinoi, Megara Hyblaea, Himera and Selinous, as either one factor or both are known (De Angelis 2016: 78), while only more general but still useful indications are possible for Zancle, Katane, Syracuse, Gela and Akragas (De Angelis 2016: 82). All cities vary between 50–100ha in size and are as such classified as agrarian cities, preceded by a well documented smaller village-like state in at least two of the cities (Morris 2006: 28-30; Morris 2013: 145; *cf.* Bintliff 2012: 269; De Angelis 2016: 82).

The most detailed understanding of city walls comes from Megara Hyblaea and Leontinoi. With space clearly reserved in the earliest town plans for these walls, it was only in the seventh and mostly sixth centuries they were actually built. During early to mid-seventh century it was a more ephemeral wall of agger-fossum type that was replaced later by stone using entirely local materials (De Angelis 2016: 92). The patterns of City walls of other Sicilian Greek cities is not known, but they appeared in the second half of the sixth century at Naxos, Katane, Gela, Selinous and Agrakas.<sup>1</sup> Eventhough the tyrant Phalaris, supposedly built the city wall less than ten years after Akragas was founded, this is unlikely given the anachronistic literary tradition and the stratigraphy of the archaeological record that instead points to the second half of the sixth century (Adornato 2011: 47-67).

City walls indicate both level of social and economic organization of the community they surround. During the third phase of the walls of Megara Hyblaea there are enough details to roughly estimate the amount of labor and materials expended in Archaic Greek Sicily. The wall itself contained *c.* 58,000m<sup>3</sup> of stone, rubble and earth fill, with movement of an equal amount of earth for creating the ditch in front. The wall runs for 3km and is 2.8m by 6.5m (Frederiksen 2011: 95, 162–64). The ditch is at least 10m by 1.9m (Frederiksen 2011: 88, 162–64). De Angelis (2016: 93) makes his estimates excluding openings for gates and towers, but supports the recent view that city walls demanded similar resources to temples, be it with less technical skills required (Frederiksen 2011: 119). The Archaic temples at Selinous

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<sup>1</sup> **Naxos** (Karlsson 1989: 77; Tréziny 1999: 241-42, 272; Tréziny 2006: 256, 259; Mertens 2006: 128-29; Frederiksen 2011: 173-74), **Katane** (Branciforti and Amari 2005: 54–55) Gela (Fischer-Hansen 1996, 331; *cf.* Karlsson 1989: 77; Tréziny 1999, 241–42; 2006: 256; Millino 2001: 132; Mertens 2006: 209-10; Frederiksen 2011: 143), **Selinous** (Mertens 2003; Tréziny 1999: 241-42, 272, 2006: 256, 259; De Angelis 2003: 135; Mertens 2006: 175-77; Frederiksen 2011: 185-86), **Akragas** (Braccesi and De Miro 1992; Di Vita 1996: 294-96; De Miro 1998; De Angelis 2000: 135-36; Fischer-Hansen, Nielsen and Ampolo 2004: 186-89; Mertens 2006: 195-198; Veronese 2006: 438-96; Fiorentini 2006; Fiorentini 2009; Adornato 2011: 79–83; Frederiksen 2011: 126-27).

consist of just over 50,000 m<sup>3</sup> of stone costing c. 1,200–1,600 talents (De Angelis 2003: 164–65) The different levels of technical ability for building of temples and city walls aside, comparing volume in two types of building activity still indicates the overall output of a city. A part from just guarding the city, walls marked identity and characteristics for the polis, as no sharp division existed between city and country in the Greek world in general (Hansen and Nielsen 2004: 135–37), while also indicating the overall size of the population located within the *polis* (De Angelis 2016: 93).

While concluding the second part of this section regarding city walls it is for the purposes of this study of particular interest to also note Fredericksens' argument that, after having assembled all available sources for Archaic city walls in the ancient Greek world; that widespread fortification of settlements and towns, usually considered to date from the Classical period, in fact took place much earlier (Fredericksen 2011). Discussing both the types of fortified settlement and the topography of urban fortification, Fredericksen also gives account for the preservation of structures from early settlements. There are however numerous instances of where Archaic walls are found to correspond to a refuge and it is essential to keep in mind that Archaic Greek walls do not necessarily correspond to a proper settlement. Take for instance the fortification walls at the *Emporio* on Chios, where, according to Fredericksen lack of finds from habitation inside the wall, combined with finds of habitation remains on the west side of the hill extending an area of about four hectares "suggest that the fortification was a refuge" (Fredericksen 2011: 150). Other examples are in Eleusis (Attika), Asine (Argolid), Xobourgo (Tenos) and Zagora (Andros) with actual walls, and Arisba (Lesbos) with walls found but mainly dated by masonry style, Ephesos (Ionia) with actual walls and walls attested by literary sources, all of them considered to be refuges rather than settlements (Fredericksen 2011: 121–200).

#### 4.2.2. Rural Outbranch and Decolonization

In the countryside, a situation comparable to urban town planning, as described above, would also in part be true for sanctuaries. If these were equipped with buildings, those would however consistently be smaller and less refined than in the cities. In parts of countryside directly connected to urban areas it is thought common to expect such sanctuaries (de Polignac 1995). As a general rule, they would be associated with the Demeter and Persephone, in that these Chthonic deities were a natural fit while moving from an organized settlement into a more rural, agricultural setting. The rural sanctuaries have also been argued as marking the border between different states (De Angelis 2000: 116, 2016: 92).

According to Laura Pfunter, urban settlement on Sicily would experience a sharp contraction during the late Roman Republic, followed by a slow decline during the Principate. The landscape of Roman imperial Sicily was however not simply decaying urban centers with emerging luxury villas. Many new settlements, appear during the Principate, like Philosophiana and the Roman rebuilding of Naxos, as semi-urban, organized population centers of strightly economic (as opposed to political) activity (Pfunter 2019: 225). As several of the ancient sources with relevance for this study (See 1.5.1.) are Roman and as there are many instances of continuation of Greek settlements and roads within a Roman context it is natural to compare the current understanding of both Greek and Roman periods on Sicily. To categorize settlements known to have existed in Roman Sicily is however not a simple task. They were connected with the road system and to agricultural activity, but referring to these as

“road stations” or “estate centers” is insufficient. This was also not a matter of a ruralizations of the existant Greek poleis, but according to Pfuntner part of the much longer process of the decolonization of the Hellenic world, referencing Asheri (1996).

Economic centers would develop alongside political and social ones, as with for example Naxos with Tauromenium nearby. Naxos possessed monumentality and organization, but was loosely defined and limited as a settlement; seemingly with no independent political existence. Instead it was Tauromenium, being the *colonia* of the region, that served as political and administrative center. Pfuntner argues that in poleis such as Naxos signs are clearly visible of the decolonization of Sicily with rule passing to Rome by way of the small number of loyal *coloniae*. This is evident in Naxos how Hellenistic and Roman houses, storerooms, kilns surround and overlie the ship sheds of the classical polis (Pfuntner 2019: 225).

Likewise, several Archaic Greek poleis were gradually abandoned through the same process with emerging new networks of social, political and economic activity. Settlements like Segesta and Morgantina retained their economic role for a time, even after the loss of political and social status, while settlements on the north coast saw economic centers appearing, for instance on coastal landings. The availability of building material and other resources within monumental urban centers caused the poleis to remain as centers for settlement, or to re-emerge as such, with an example of this being the existence of lime kilns at the roadside settlement at Megara Hyblaea.

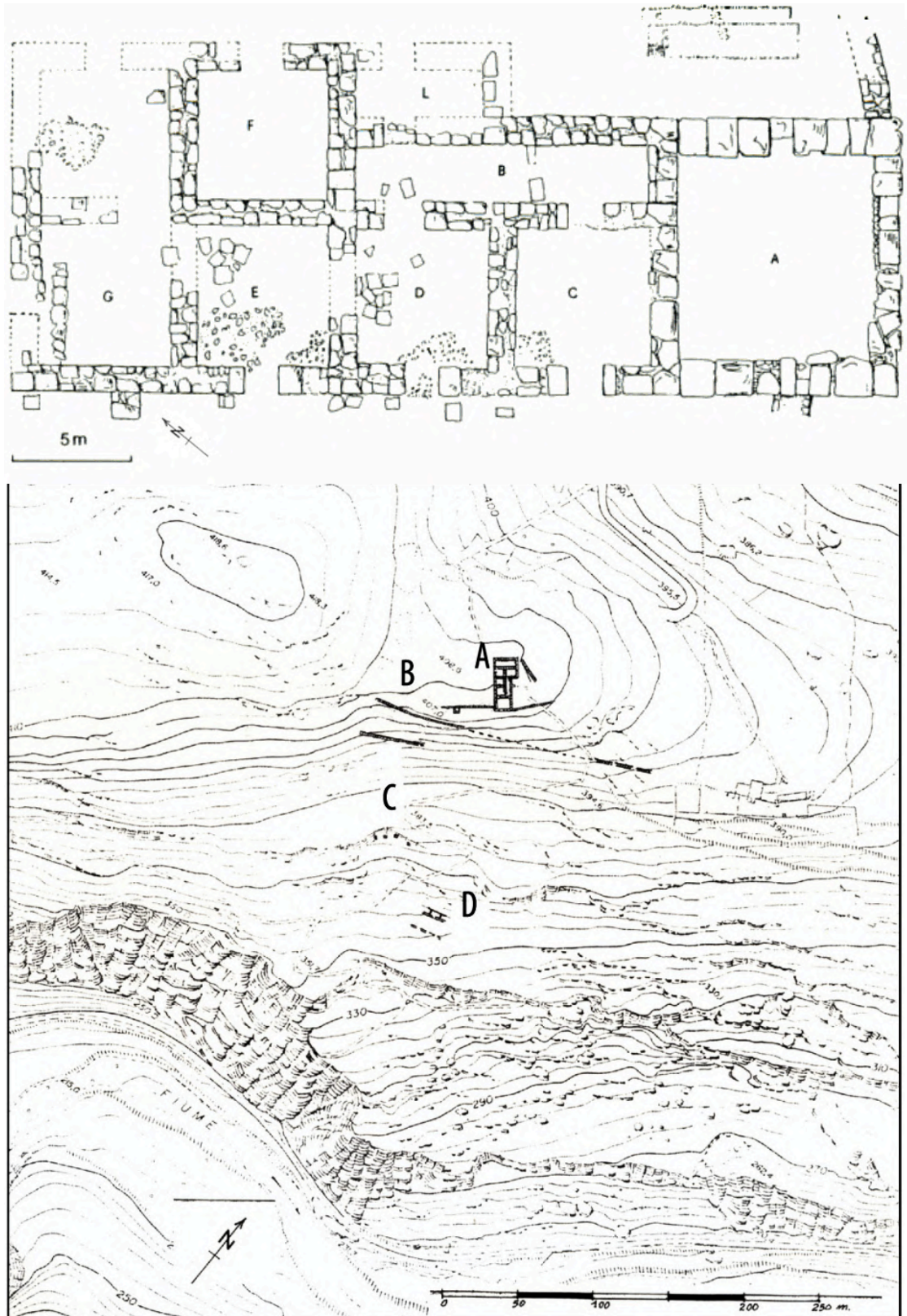
Late antiquity would see further expanded settlements with an increase in material presence, as has been reported by archaeology. Either as a result of ruralization, or a rural revival linked to the demands for agricultural products from Rome, in particular after the founding of Constantinople and the subsequent Vandal takeover of the African provinces, this resulted in large estates with elaborately decorated villas on the coast and in the interior of Sicily. In the south-east and along the southern coast, non-elite rural settlement with evidence of Christian communities becomes more visible with rural churches and burial areas. The monumentalization was however focused to major city centers in Sicily during late antiquity, attributed to continued political stability and economic integration with the Mediterranean, and evident in how christian martyrs from for Hybla for instance would be buried at Catina (Pfuntner 2019: 226). Pfuntner also provides an updated account of a correct reading of the Antonine Itinerary’s Sicilian Section, as well as a list of ethnicities mentioned in Pliny of unknown or uncertain location. Symaethii has been underlined by the author:

Acestaei, Bidini, Citarini, Echthlienses, Egguini, Ergetini, Herbessenses, Herbitenses, Herbulenses, Ichanenses, Imacarenses, Magellini, Mutustratini, Noini, Paropini, Petrini, Scherini, Semelitani, Symaethii, Talarenses, Tissienses, Triocalini, Tyracinenses [...].

(Pfuntner 2013: 37)

Pfuntner (2013: 37) states that there is much scholarly controversy regarding the potential locations of these *civitates*, citing Wilson (1990: 36) who has assigned secure locations to twenty, tentative locations to eight, and classified the remaining seventeen as unknown. Pfuntner (2019: 226) concludes that a lot more archaeological work needs to be done in order to gain a better grasp of the rural settlement landscape and for determining the relationship to urban centers in Roman and late antique Sicily.

### 4.2.3. Anaktoron



**Fig. 27.** Pantalica 'Anaktoron' (after Leighton 1999: 157) and Pantalica (SR), planimetry with indication of the areas of intervention of L. Bernabò Brea in 1962-64 (A) Anaktoron; (B) southern fortification; (C) chamber tombs; (D) sacello from the Archaic age (Cultraro 2014: 118).



**Fig. 28.** Anaktoron's layout and south-east wall. Images are from G. Giampiccolo's website: <http://www.terraiblea.it>.

In Sicily the break with the first wave of Aegean influence had been abrupt, with lasting ties however maintained through emporions such as Thapsos. To appreciate this fact, Robert Holloway suggests venturing into the hills north of Syracuse, reaching a promontory connected to the neighboring ridges at a single point, and with it the site of Pantalica. The gorges below contain thousands of chamber tombs, hundreds of which were investigated by Paolo Orsi 1895–1910. These burials began while the



Mycenean influence became less apparent during the thirteenth or twelfth century, and continued to be in use for many centuries. The burials were the result of an industrious community, located on the sheer cliffs at positions often unreachable without ropes or ladders, varying from single large rooms to multi-chambered tombs. No houses of the community remain, or are yet to be discovered on the hilltop that was resettled during the early Middle Ages. Before the uncovering of warehouses at Thapsos the hilltop however contains the only large-scale prehistoric architecture found anywhere on Sicily. It is however worth to notice the also existence of cyclopean walls on the western Sicily, particularly in Erice that are considered punic (Acquaro et al. 2010) that consists of cyclopean foundation walls incorporated into later structures. Orsi named the remains of the main building in Pantalica the ‘anaktoron’, imagining an Aegean style palace belonging to a ruler of similar type. The building only survives on its lowest level, made of massive blocks of stone, carefully fitted together (Fig 28).

In its present state the building measures 37,5m by 11,5m. including just two connected blocks with rooms, each forming a rectangle. A large courtyard, visible while Orsi visited the site for the first time was destroyed shortly afterwards. The ‘anaktoron’ has a plan like no other Mycenaean palace however, apart from similarities with a peculiar building on the acropolis of Gla, notices Holloway (2000: 37), that possibly was some kind of storage house rather than a residence. The courtyard also brings storehouses at Thapsos to mind, however as Holloway points out, this doesn’t explain the buildings function. A collection of bronze tools were discovered in the anaktoron, seemingly indicating a forge, which doesn’t contradict Orsi’s palatial interpretation. It also fits with King Hyblon, being possibly the last in a line of Sicel kings at Pantalica. Other sites in connection with the Pantalica Culture are all hill-towns surrounded by the necropoleis on the slopes below. These are Pantalica, Cassibile, Caltagirone, Monte Dessucri, Monte Castellazzo di Palma di Montechiaro, who all stand out against surrounding Early Bronze Age farms, sanctuaries, villages, as well as the minor settlements in connection with the Thapsos phase. Holloway argues that the population seemingly was concentrated in a few locations, a process

	AEGEAN	SICILY	LIPARI
1300	LH IIIA	THAPSOS	MILAZZESE
	LH IIIB		
1200	LH IIIC	PANTALICA I (NORTH)	AUSONIAN I
1100			
1000	SUBMYCENAEAN		
900	PG	PANTALICA II (CASSIBILE)	AUSONIAN II
	EG		
800	MG	PANTALICA III (SOUTH)	
	LG		
700	PC	EARLY COLONIAL (FINOCCHITO)	



**Fig. 29.** Table showing traditional chronologies for the Aegean and Sicily (Bernabó Brea 1957; Lipari: Bietti Sestieri 1979; after Leighton 1993: 273) and Pantalica (SR): detail of the southern fortification wall (1963 photo in Cultraro 2014: 118).

familiar from antiquity as synoicism, reminiscent of the founding of Athens by Theseus during the Bronze Age, rendering Orsi's interpretation even more plausible.

It appears evident to Holloway that once seafaring was underway, Sicily received Aegean weapons through Thapsos, resulting in a dramatic reorganization of Sicilian culture. The island's inhabitants were driven by force to settle in new towns founded by Sicilian kings, a repetition of how the Mycenaean world was shaped by the Shaft Grave barons. Late Bronze Age Sicily remained rudimentary in organization compared to the palace system of production known in Greece, as according to Holloway, the distance was greater to the more advanced Near East that had inspired the Greeks. Thus a simpler but more enduring order than in Greece was established in Sicily (Holloway 2000: 38)

#### **4.2.4. Knowledge-scapes in Coda Volpe District**

As an urban space surrounded by Sicilian countryside Coda Volpe also belongs to a social landscape of past communities. In order to better grasp this aspect the archaeological evidence can be used to rediscover or reconstruct landscapes of practices and knowledge. Social landscapes can for instance be traced by reconstructing an urban space through discursive representations. Understanding discourse as being *spatialised* can provide a conceptual ground for further discussion; by viewing knowledge, power, and representation in spatial terms.

According to Berin Gür (2002: 237-252), while discussing the transformation of Sultanahmet, Istanbul, an urban space can be defined as where discursive representations have a social and spatial existence, making it a space approachable as an archive, rendering spatial-social-political information visible. Gür (2002: 237) describes Sultanahmet as an urban palimpsest whose archival structure has been shaped through discursive representations, each constructed on the preceding one, a useful model perhaps for understanding Coda Volpe district in Catania as well. Gür's two mutually reinforcing points; discourse is spatialised, and urban space becomes reconstructed through discursive representations, leads to her main claim that spatialisation is in it self political. Spatialisation is seen as both a cause and an effect of relations of power, placing space at the centre of the arguments on dialectical relations between power, knowledge, discourse, and representation, which inserts space into social thought and imagination. This view strives to assist in explaining the manner in which social and spatial relations are mutually inclusive and constitutive of each other and how society and space are simultaneously realized by thinking, experiencing, and making social actors. This view on spatialisation connects mental and material space with spatial metaphors/symbols of the social (Gür 2002: 237).

Gür concludes that reconstruction of urban space is therefore not an independent act. If urban space is the hegemonic construction of politics and of representations that seek to constitute a social identity. In Coda Volpe cyclopean and Archaic limestone walls and reused stones scattered throughout the landscape are architectural structures that today stand as the materialization of these politics and of these representations (Fig. 17 and front page image). The conscious intervention of the political domination into the social processes of urban space reconstruction can be recognized by referring to architectural evidence (Gür 2002: 250). Gür's model is guided by an argument as formulated by Lefebvre: "it is space that produces reproduction of socio-spatial dialectics by introducing into it its multiple contradictions" (Lefebvre 1976: 19). In this sense, space, as a dialectical component of the inseparable (social and spatial)

relations of production, is where these relations are reproduced in “a socially concretized and created spatiality” (Gür 2002: 238). In Coda Volpe district each political authority after the other has made its social and physical existence felt by rebuilding on the previous one. The common point shared by these authorities is that the location, articulation, and restoration of the features are determined by politics. These visual evidences (characterized by terraces, no longer used for cultivation, cisterns and *saie*, for the collection and distribution of water, and stone quarries) illuminate the way in which according to Gür’s model the social construction of the discourse is realized by the social production of the urban space. In this sense, the urban space of Coda Volpe has become an archive that juxtaposes the layers of heterogenous information. Its archival structure, is both in demand of archaeological survey, while simultaneously constituted by and constitutive of the politics, rendering Coda Volpe as the material-visual form of the knowledge of the productive processes (after Gür 2002: 250).

### 4.3. Planned New Survey in Coda Volpe District

#### 4.3.1. Preliminary results

This chapter concludes with a brief outline of the proposed archaeological survey. As this is currently being planned in contact with Italian archaeological authorities a quick overview will also be accompanied by two documents with particular relevance for the purpose of this study. Prior to this follows some preliminary results that are deemed essential for the planned survey, presented here using table form. Firstly, some significant conclusions were drawn after a closer comparison of both the occurrence and about distance of *Topographical Units* from Brancato and Manganelli’s survey and their vicinity to the proposed survey area in this study (Table 4). Another typology in table form aims to elucidate both potential and indicators for settlement with a few known and unknown variables (Table 5).

**Table 4.** Occurrence and about distance of topographic units from Brancato and Manganelli’s survey in vicinity to, Kärroman, Henry and Bratell’s survey area.

<i>About distance to survey area</i>	<i>1km</i>	<i>2km</i>	<i>3km</i>	<i>4km</i>
<i>Greek necropolis, Coda Volpe</i>	●			
<i>Necropolis, Masseria Primosole</i>		●		
<i>Unidentified Greek settlement</i>		●?		
<i>Rock environments, Grotte San Giorgio</i>			●	
<i>Quarry, Grotte San Giorgio</i>			●	
<i>Isolated tomb, Grotte San Giorgio</i>			●	
<i>Cave environments, Grotte San Giorgio</i>			●	
<i>Unidentified Roman settlement</i>				●?
<i>Passo Martino Roman Necropolis</i>				●

**Table 5.** Typology with location and attribution of sites as indicators of settlement.

Site	Attribution	Location	Period	Indicator
Necropolis	Prehistoric/ Greek clay fragments	Coda Volpe (UT 2)	Prehistoric/ Greek	Settlement
<b>Unidentified Greek settlement</b>	Emporio?/ Fortification? Outbranch?	San Demetrio	Greek	<i>Morgentia/ Symaetus?</i>
Necropolis	Unknown	Masseria Primosole (UT 4)	Unknown	Settlement
Quarry	Terracing systems for rural farms	Grotte San Giorgio (UT 5)	Unknown	<i>Settlement?</i>
Cave environments	Unknown	Grotte San Giorgio (UT 6)	Unknown, multiple excavations, in use until present.	Settlement
Cave environments	Uncertain, perhaps from Prehistoric to Byzantine period	Grotte San Giorgio (UT 7)	Bronze Age/ Roman (First- fourth centuries CE)	Settlement
Isolated tomb	Unknown	Grotte San Giorgio (UT 8)	Unknown	<i>Settlement?</i>
<b>Unidentified Roman settlement</b>	Castrum? / Modest settlement at River crossing?	Passo Martino	Roman	<i>Morgentia/ Symaetus?</i>
Necropolis	placed in relation to the position of Symaetus	Passo Martino (UT 1)	Roman	Settlement

To elucidate possible problems facing archaeologists working in colonial contexts, Table 6 is thought to be of use as a kind of shorthand for the planned fieldwork. It contains a set of problems as outlined by Katarina Streiffert Eikeland (2006) in a condensed and portable format. These problems could possibly be addressed by checking of own biases suggests Streiffert Eikeland primarily by asking whether the term transculturation could be a more appropriate term to adopt. Streiffert Eikeland further asks if this reasoning is a result of biased notions based on the assumption that

”the proper business (and privilege) of the ’barbarians’ [is] to be Hellenised, e basta.”(Ridgway 2000: 181. In Streiffert Eikeland 2006: 21). This outlook, though obviously considered useful, is also a point of contention. Specifically regarding Streiffert Eikeland’s representation of John Boardman as epitomizing prejudices by simply stating that Greeks had ”nothing to learn, much to teach” (Boardman 1964 in Streiffert Eikeland 2006: 18), while equal criticisms are reserved for Bernabò Brea (1957) and Paolo Orsi (1898).

**Table 6.** Nine problems according to Katarina Streiffert Eikeland with numbers 1–6 (2006: 21) and 7–9 (2006: 26).

- 1 The old misleading notion that Sicily was just a passive *receiver* of foreign culture.
- 2 Archaeological material is interpreted as supporting *alienation* between Greeks and Italic people.
- 3 Older archaeological tradition’s lack of interest in non-Greek natives with implied priority to the *superiority* of the Greeks.
- 4 Archaeological data was *selected* with certain elements *suppressed* to prevent questioning the Hellenist charter of ’Western Civilization’ (Gen Dunbabin).
- 5 The Greeks’ influence on the indigenous population? A high level of cultural adoption has often been considered to be a case of *acculturation*,
- 6 These problems and constraints have in the long run caused a *plethora of misunderstandings*, inherited by modern archaeologists.
- 7 Extensive knowledge about the Greek culture due to archaeological tradition tends to *neglect indigenous material* (read *barbarian material* ).
- 8 *The reduction by priority of second rate materials*, with Greek priority before indigenous, equals ignorance towards an archaeological record not offering a neatly displayed context.
- 9 The reduction by priority of second rate materials only offers a limited, selected archaeological picture, causing difficulties for present and future research.

To be fair Streiffert Eikeland also ascribes due credit to Luigi Bernabò Brea who, not only excavated at the island of Lipari, and coined the concept of Ausonian culture, but in *Sicily before the Greeks* (1957) covers a time span from the Paleolithic to the eight century BCE: Hence, not focussing on the Greeks, as this was mostly before their arrival (Streiffert Eikeland 2006: 23). Bernabò Brea (1957:159), however also considered the Greeks as the *superior* civilization while others, including Piero Orlandini, Vincenzo Tusa, and the ’father’ of Sicilian archaeology Paolo Orsi, *did* show an early interest in the local sites (Streiffert Eikeland 2006: 23). But what John Boardman actually said in the passage that ends, somewhat categorically, with ”the Greeks had nothing to learn, much to teach” is actually, something not entirely suggestive of chauvinistic disinterest for the non–Greeks:

We might expect to find some native influence in the matter of religion or customs upon the newly-come Greeks, with whom there must surely have

been intermarriage. It has been suggested that the siting of some of the extra-mural sanctuaries in Greek colonies was dictated by pre-existent native cult-places, and this is highly probable, but the goods were purely Greek and conceded nothing in attributes or function to native belief, though the character of votive offerings might in places be affected by local traditions. An important concession to Sicel usage was the adoption by some cities of weights for their coinage which would suit both native and Greek standards. Farther off we find a Sikelos and a Sikanos working in the potters' quarter in Athens in the later sixth century, but they do not have to be Sicilian slaves. In the west the Greeks had nothing to learn, much to teach.

(Boardman 1980: 190).

A tempting corollary would perhaps be to quote from Shakespeare as spoken by Antonio: "Mark you this, Bassanio, The devil can cite Scripture for his purpose" (TMOV 1.3.). This perhaps seems a bit much, though a Swedish expression with the same gist somehow seems more appropriate, but I digress. Moving forward, while harnessing what clearly are useful aspects in Streiffert Eikelands outlook, another table illustrates the importance for assessment of known and possible (even plausible) cases of reuse and colonial hybridities (Table 7).

**Table 7.** Known (and possible) cases of reuse and colonial hybridities.

Site	Location	Colonizer	Indigenous	Hybridity
Necropolis	Coda Volpe (UT 2)	Greek	Prehistoric	Reuse
<b>Unidentified Greek settlement</b>	San Demetrio	Greek	<i>Sicel?</i>	<i>Reuse?</i> <i>Cohabitation?</i>
Necropolis	Masseria Primosole (UT 4)	Unknown	Unknown	Unknown
Quarry	Grotte San Giorgio (UT 5)	<i>Greek?</i> <i>Roman?</i>	<i>Sicel?</i>	<i>Reuse?</i>
Cave environments	Grotte San Giorgio (UT 6)	Unknown	Unknown	Reuse until modern times
Cave environments	Grotte San Giorgio (UT 7)	Roman	Bronze Age	Reuse
Isolated tomb	Grotte San Giorgio (UT 8)	Unknown	Unknown	Unknown
<b>Unidentified Roman settlement</b>	Passo Martino	Roman	Unknown	Unknown
Necropolis	in relation to Symaetus	Roman	Unknown	Unknown

Site	Attribution	Location	Period	Indicator	1 km	2 km	3 km	4 km	Colonizer	Indigenous	Hybridity
Necropolis	Prehistoric/ Greek clay fragments	Coda Volpe (UT 2)	Prehistoric/Greek	Settlement	●				Greek	Prehistoric	Reuse
<b>Unidentified Greek settlement</b>	<i>Emporio?/ Fortification? Outbranch?</i>	San Demetrio	Archaic	<i>Morgentia/ Symaetus?</i>		●			Greek	<i>Sicel?</i>	<i>Reuse? Cohabitation?</i>
Necropolis	Unknown	Masseria Primosole (UT 4)	Unknown	Settlement		●?			Unknown	Unknown	Unknown
Quarry	Terracing systems for rural farms	Grotte San Giorgio (UT 5)	Unknown	Settlement?			●		<i>Greek? Roman?</i>	<i>Sicel?</i>	Reuse
Cave environments	Unknown	Grotte San Giorgio (UT 6)	Unknown, multiple excavations, in use until present.	Settlement			●		Unknown	Unknown	Reuse until modern times
Cave environments	Uncertain, perhaps from Prehistoric to Byzantine period	Grotte San Giorgio (UT 7)	Bronze Age/ Roman (1-4th centuries CE)	Settlement			●		Roman	Bronze Age	Reuse
Isolated tomb	Unknown	Grotte San Giorgio (UT 8)	Unknown	Settlement?			●		Unknown	Unknown	Unknown
<b>Unidentified Roman settlement</b>	Castrum? /Modest settlement at River crossing?	Passo Martino	Roman	<i>Morgentia/ Symaetus?</i>				●?	Roman	Unknown	Unknown
Necropolis	placed in relation to the position of Symaetus	Passo Martino (UT 1)	Roman	Settlement				●	Roman	Unknown	Unknown

**Table 8.** (See **Tables 4–7**): Typology with location and attribution of sites as indicators of settlement. Occurrence and about distance of topographic units from Brancato and Manganelli’s survey in vicinity to, Kärman, Henry and the author’s survey area. Known (and possible) cases of reuse and colonial hybridities.

### 4.3.2. Establishing Contacts with Italian Authorities

After the initial survey contacts have been established with local authorities in Sicily with the help of Fanny Lind and Kristian Göransson – secretary, and former director – at the Swedish Institute in Rome. Fanny Lind forwarded e-mails via the Swedish Institute with a request for more information about Coda Volpe and Kristian Göransson contacted Daniele Malfitana, former head of the Institute for Archaeological and Monumental Heritage at the National Research Council (CNR-IBAM), to help forward the inquiry regarding: (a) the building history of walls and canal systems in Catania's sixth district, eastern section, and (b) whether any systematic study archaeological survey or excavations, (including unpublished) had been carried out in the area. By fall 2019 a reply came from Maria Teresa Magro, archaeologist at the Sicilian Regional Department for Cultural Heritage and Sicilian Identity, who explaining that this section of Catania had been a personal interest of hers for many years and that no previous or unpublished study existed of the area, referred to by Magro simply as *Codavolpe*. When showed photographs from the site and the walls she responded enthusiastically as appearing 'most interesting'.

Magro has offered to visit the site together with the team upon the next return trip, previously scheduled for the spring of 2020 but due to the outbreak of Covid-19 moved to the fall of 2020. As no previous systematic study exist of this area, confirmed also by Brancato and Manganelli whose survey covers a much larger area not focused specifically on Coda Volpe, it is currently understood as 'a periphery' located between other more studied parts of eastern Sicily. Magro's suggestion was that the next step would be to set up an official agreement in order to be able to apply for necessary permits to perform a detailed and collaborative survey in Coda Volpe. Magro has also offered to contribute in creating a correct archaeological map of the area.

Magro then sent a document that outlined the required stipulations, that in turn was forwarded to Gothenburg University and read by Serena Sabatini, associate Professor at the Department of Historical Studies. Advice was also sought from Ulf R. Hansson, currently the director at the Swedish Institute in Rome, as it was not immediately clear at which institution the collaboration was most efficiently hosted with Magro working on the regional level on Sicily and the members of the team affiliated to Gothenburg and Rome universities respectively. Magro initially suggested it perhaps be most expedient for a *convenzione* to be established between *La Sapienza* and the Superintendency in Catania. Another suggestion was that the Swedish Institute should act as host to facilitate the right connections between the institutions in Gothenburg Rome and Catania. It was finally decided that a *convenzione* needs to be established directly between University of Gothenburg and the Superintendency in Catania, which in its current form also has been approved and signed by Henrik Janson, Head of the Department of Historical Studies (Appx. A) but due to the still ongoing Covid-19 pandemic the return trip, originally planned for April 2020 and financed with grants from the Adlerbert travel scholarship has been postponed, possibly to October or spring 2021 when the author is the recipient of the *Stora Arkeologiska Stipendiet* at the Swedish Institute in Rome. As this document is still pending approval, Magro has written a short letter of confirmation of intent regarding this work to be forwarded to the C.M. Lericci Foundation (Appx. B).

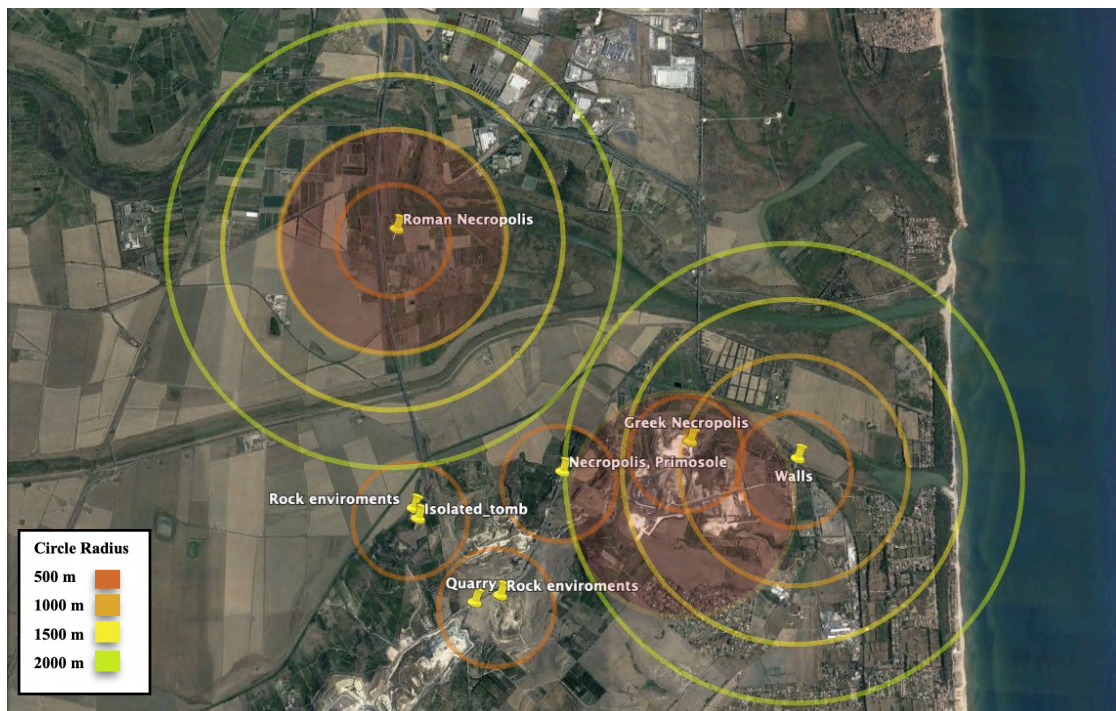


### 4.3.3. Suggested Location for a Greek Settlement

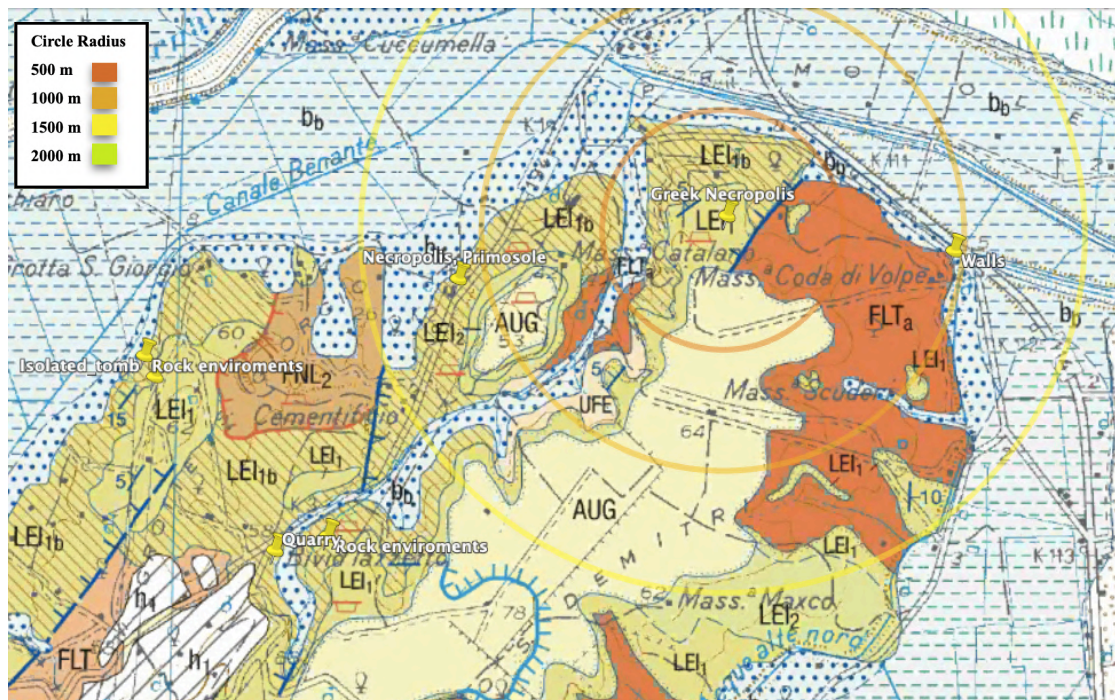
Now follows a brief outline on the possible location of the unidentified Greek settlement whose existence has been indicated during the course of this study. This is to try and provide an answer to whether Coda Volpe district on San Demetrio is the site of a previously unidentified settlement from Greek colonization during the Archaic age. This section also, based on the current understanding of the area, aims to offer ways in which this work could be developed further in the future by simultaneously attempting to narrow down the location of this supposed settlement.

As it has been suggested for early Sicilian colonies the Greek *chorai* did not extend more than about 15km inland (Whitehouse and Wilkins 1989; Leighton 2000: 21; Streiffert Eikeland 2006: 20). A 'Greek zone' could thus be imagined – for the purpose of this discussion – corresponding to roughly 15km around each point of interest. By using a set of concentric circles with a radius ranging from between 500m to 2000m, overlapping areas or 'hotspots' can be identified. As these hotspots indicate possible areas of contact between certain features this could be good places for further field inventory and assessment of suitability for geophysical survey in the future. Placing these circles or 'zones', around both the walls in Coda Volpe and the Roman Necropolis can illustrate that, though at relative close distance from each other, there is apparently no direct contact (Fig. 30). When adding the smallest radius unit of 500m however around each of the UT's, several possible 'Greek zones' start to appear. One such zone could for instance contain both the walls in Coda Volpe and the Primosole necropolis with the Greek necropolis at its centre (Fig. 30).

To then in turn map these points and relationships on to the respective geological profiles (Table 9) can perhaps allow for a more high resolution level of analysis regarding the possible location of a Greek settlement. By comparing the three main geological profiles on the north-east corner of San Demetrio; *Augusta Syntem*



**Fig 30.** Example of identifying 'hotspots' or areas of interaction between UT's and survey area using circle radius between 500–2000m. Central zones with 1km radius indicated in red. Map made with Google Earth.

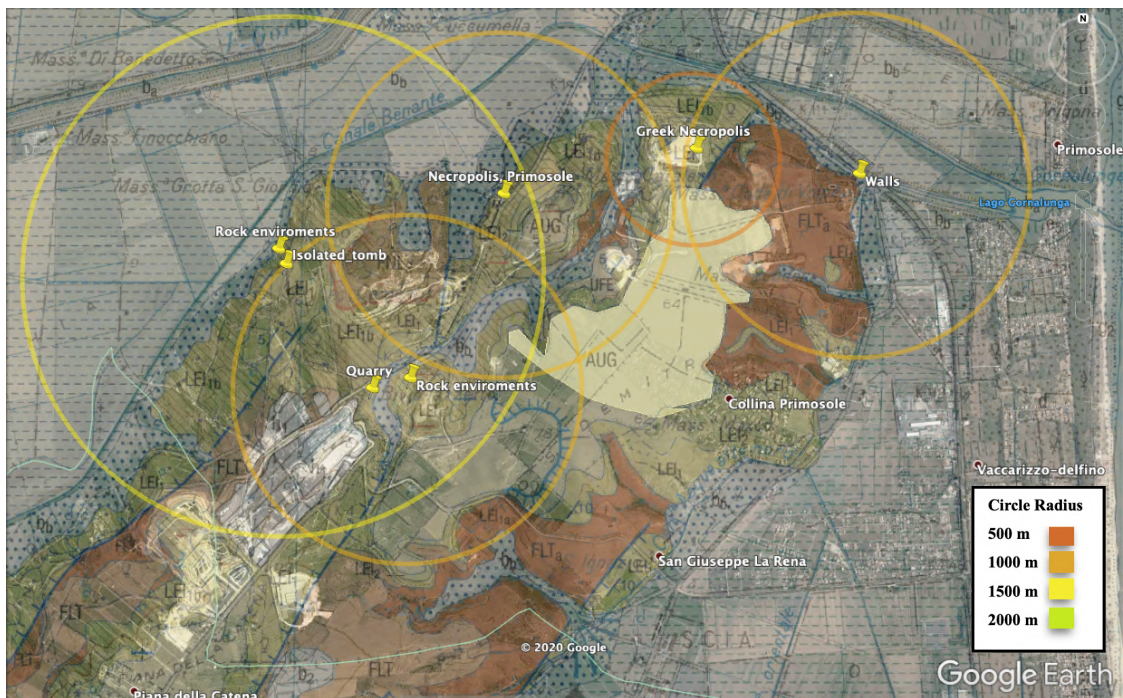


**Fig 31.** Identifying the geological profiles corresponding to UT's and the walls in the survey area. Map made after (Carbone et al. 2009) with Google Earth.

(Middle-upper Pleistocene, coarse sands and limestone of yellowish color.), *Lentini Synthem* (Lower Pleistocene marine sediments delimited at the bottom by limestone and volcanic substrate, clay and sand) and the *Carlentini Formation* (Miocene volcanoclastics and subordinate basaltic flows) makes it evident that all UT's from Brancato and Manganellis's survey are found within the *Lentini Synthem* (Fig. 31. See AUG, LEI and FLT in Table 9).

The walls in Coda Volpe are however found within the Carlentini Formation. As it is the nearby Greek necropolis with both Prehistoric and Greek attestation by carved pit tombs on the calcareous bank that is primarily thought to indicate the presence of a not yet identified settlement (Brancato 2018: 93) – "somewhere on the Pleistocene terrace of the high structural section of San Demetrio" (Brancato and Manganelli 2018: 104) – it is finally estimated that this settlement should in that case be located within the "AUG" synthem. Supposing that several, if not most of the UT's in Brancato and Magnanellis' survey (Necropoleis, graves and quarries) are confined to the outer edges of, and in close contact with, a somewhat distinct dwelling area close by, this geological unit is surely a good candidate. When the hypothetical zone circles are drawn around the UT's they all comfortably make contact with the Augustan synthem (Fig 32. See AUG). In this area is also the small village *Collina Primosole* that appears to have been established in the 1960s in what at that time was unpopulated and forested areas (extending to its north-west extent over this geological synthem). There are numerous wells sprinkled across San Demetrio and the question of water supply is obviously essential for deciding the settlements location with more precision. Many cisterns and *saie*, for the collection and distribution of water, are meanwhile also documented in the area (Brancato 2018: 88).

The fact that modern settlement is located in the area is probably a good sign. Megara Hyblaea was by comparison also founded in the very same geological profile, which could either be an accident or perhaps add further weight to this hypothesis. It is suggested that if San Demetrio was once the site of a Greek settlement its location



**Fig 32.** Points of contact in distance with a hypothesized Greek zone within the Augustan synthem (AUR). Map made using Geological map of Italy, scale 1: 50.000 Website: [www.isprambiente.gov.it/Media/carg/sicilia.html](http://www.isprambiente.gov.it/Media/carg/sicilia.html) and Google Earth.

should be expected within this particular geological synthem, with another suitable location being the area currently occupied by Sicula Trasporti SRL (Fig. 31: h<sub>1</sub>). This other suggestion could also be the site of a later settlement, possible from Roman or Byzantine times. It is of course possible that most traces of previous settlements on San Demetrio has either vanished or that its north-east corner during the Archaic age merely served as a defended refuge such as the Emporio on Chios (*cf.* Fredericksen 2011: 150). Though the area currently occupied by Sicula Trasporti is reminiscent of an 'acropolis' entirely overrun by industrial activity, its probably too far away from the Greek necropolis, leaving the Augustan synthem as the slightly better alternative.


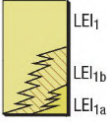
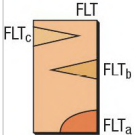
Remains of any potential settlements on San Demetrio could finally have been destroyed by several processes, including such modern industrial and agricultural exploitations. According to Livio Mario Cortese, who has written extensively on the current situation on San Demetrio involving Sicula Trasporti, the company is in fact implicated in a scandal of monumental proportions. To verify the following claims – or contacting the journalist – has unfortunately proven unsuccessful. He writes:

[...] another largely underestimated issue concerns the hill of Primosole itself: here there is, in fact, a necropolis carved out of limestone, dating back to the Bronze Age and to the Sicani population. Over the years, traces of the acropolis of a city that could have been the ancient Symaetus, cited from Latin and Hellenistic sources, have been found. A later site, from the Byzantine era, would have been found during the construction of the biocompactor and therefore destroyed; despite reports to the Superintendency of Cultural Heritage, the last one last year, no research is underway. This further step extends an ever worsening environmental problem, which is currently lacking in valid institutional responses [...]

(Cortese 2016)

This section unfortunately ends on a rather grim note. But even if many of the statements made by Cortese above should prove both factually and historically inaccurate it nonetheless speaks of some of the current perceptions about this part of San Demetrio and the possibilities for archaeology in this part of Sicily.

**Table 9.** Geological scheme with individual profiles annotated in Geological Map of Italy scale 1: 50.000 "Foglio 641 Augusta" (Carbone et al. 2009).

 <p>AUG</p>	<p><b>Augusta Synthem</b> (Middle-upper Pleistocene). Coarse sands and limestone of yellowish color, weakly cemented, with interlocking stratification. Locally at the base of metric thickness of conglomerate with rounded volcanic limestone elements of 5-20cm in diameter, in yellowish-brown arenitic matrix. Faunal content represented by poorly preserved and encrusted fossil remains, by "trivial" faunas in from associations of temperate-warm environment. The unit is delimited at the bottom by a highly erosive boundary surface both on the deposits of the Lentini synthem and on the pre-quaternary substrate. The upper surface is erosive and is marked by terraces and thin discontinuous strips of red earth. Infralittoral environment. The formation constitutes up to six orders of terraces distributed between 210–20m above sea level.</p>
 <p>LEI<sub>1</sub> LEI<sub>1b</sub> LEI<sub>1a</sub></p>	<p><b>Lentini Synthem</b>, (Lower Pleistocene). Marine sediments of various texture and depositional environment, in a latero-vertical heteropia ratio. The unit is delimited at the bottom by an angular discordance on a limestone and volcanic substrate of the Upper Cretaceous-Pleistocene, the upper limit surface represents the envelope of more erosive surfaces affected by terraces and by lenses and / or pockets of paleo-soil, sometimes, with vertebrate fauna.</p> <p><b>Subsynthem of Villasmundo.</b> Calcarenites and fossiliferous yellowish sands, massive or parallel plane stratification (LEI<sub>1</sub>), or clinostratified (LEI<sub>1b</sub>) in the middle-lower part. At the base of the formation are frequent lenses, up to 5 m thick, of sand, silty clays and polygenic conglomerates (LEI<sub>1a</sub>). The base of the microfauna and planktonic and benthic units are indicative of Sanerniano. The unit is discordant with onlap geometry on different terms of the substrate. The transition to LEI<sub>2</sub> clays is laterally vertical. Thickness from a few meters to 150 m in correspondence with paleo-crags. Infra to circalittoral environment.</p> <p><b>Subsynthem of Scordia.</b> Silty-marly clays and clays of gray-blue color, yellowish on alteration, massive or weakly stratified (LEI<sub>2</sub>). Locally at the base, lenses up to 2 m thick of sands and calcarenites rich in molluscs and corals, or associations of shallower sea. Among the microfauna associations referable respectively to the biozones and foraminifera and nannofossils Outcropping thickness from 0 to 60 m, and up to 300 m in the subsoil of the Augusta bay. Circalittoral environment.</p>
 <p>FLT<sub>c</sub> FLT<sub>b</sub> FLT<sub>a</sub></p>	<p><b>Carlentini Formation</b> (Miocene, Tortorian). Volcanoclastics with variable granulometry from blocks to ashes with more or less abundant sedimentary carbonate fraction (FLT), and subordinate basaltic flows (FLT<sub>a</sub>), mainly of the alkaline-sodium series. Volcanoclastites are interspersed with coral biolites. In volcanoclastites, impact and load structures, inverse gradation and accretive lapilli levels, cross layering of antidunes, parallel and wavy lamination are recognized. These are products due to diatremic eruptions in a subaerial or subtle sea environment, attributable to two events. The oldest with emitted pyroclastites and lavas, with scarce areal diffusion: two levels of biolites are interspersed with them. The products of the most recent event have reached more distal areas, creating a continuous horizon. Outcropping up to 100m thick.</p>

#### 4.3.4. Proposed Survey and Convenzione

The survey area in Coda Volpe district is bounded by natural barriers, a paved road, a canal system, a larger collection of stone walls, partly overgrown by vegetation, which in turn have been joined together with modern buildings. For example, part of the wall surrounds a smaller plateau (c. 20m wide and extending parallel next to the canal for more than 100m). There is a gravel paved road that leads up the hill, lined by a smaller number of properties. Where the road ends, pastures and fields take over and continues to rise further up the crest of this part of the San Demetrio ridge which here rises to approximately 63m above sea level. (Talbert 2000: 47. See Figs. 16–19).

The survey will be performed in accordance with the *convenzione* (Appx. A) in two steps (1) a preparatory trip to Catania when the team, consisting of N. Kärrman, W. Henry and the author will meet with M. T. Magro (October 1–4, 2020; due to the C19 outbreak these dates are still preliminary) and, at her convenience, accompany her by car to Coda Volpe. Magro will assist in creating a correct archaeological map of Coda Volpe, work that is scheduled to be begin ahead of time (at what time is under discussion) using data from the recent initial survey near the planned survey area by R. Brancato and L. Manganeli (2018). The team will also meet in Rome at the Swedish Institute and upon receiving a permit to conduct archaeological survey in Coda Volpe offer participation to the Department of Ancient Sciences of Sapienza University, regarding expedient ways to assist in the survey; more specifically, isotopic analysis of surface stone/earth samples.

(2) Step two is a detailed survey consisting of (a) magnetometry, (b) stone and earth samples, (c) shovel test pits on top of terrace; to ascertain the previous stylistic dating of walls in Coda Volpe, in a collaborative effort between participating institutions, October 5 – 26, 2020 (dates are still preliminary). The planned documentation for the 2020 survey consists of preliminary photography and measurement of the entire survey area with camera, using either kite for coverage or – preferably – a drone. There are strong indications that team will be able to have access to both magnetometry and GPR during the planned 2020 fall session. Sampling of the soil is planned ahead of time to determine composition as well as suitability for surveying with GPR. For this purpose, external expertise is needed and contacts have been established with potential collaborators affiliated with La Sapienza. Measurements of the walls will consequently be performed using photography, photogrammetry, GPS, and ideally also GPR.

Data collected at site will be transferred to an existing GIS (or one created by the team) and all data will be made available to Catania's archaeological authority in accordance with previously mentioned agreement (Appx. A). After the necessary preliminary work is concluded, the digging of test pits using standard archaeological field equipment such as shovels, trowels, etc., will be carried out. Test pits will be planned asymmetrically in accordance with a stratigraphic and contextual methodology. After comparisons with the results of the measurements already carried out new assessments will follow on location in consultation between the participants and local archaeological authorities. The consent and willing cooperation of landowners and residents affected in any way is finally an aspect of instrumental importance to the members of the team. Pending the outcome of the above detailed survey, distances measuring using Lidar is being considered useful and further 3D representations of the site are also planned in the future. Now follows a tentative schedule:

**Table 10.** Tentative schedule for planned survey in Coda Volpe.

2020

- (1) Finalizing the previously outlined *convenzione* between Gothenburg University and the Archaeological Superintendency of Catania.
- (2) Applying for additional funding and scholarships.
- (3) Meetings and visits on site with M. Magro and the Archaeological Superintendency of Catania.
- (4) Meetings and visits to the survey area with other potential collaborators and archaeologists.

2021

- (5) Applying for the necessary permit to conduct archaeological survey (an application with outlined *convenzione* has already been sent to Catania)
- (6) Applying for more funding and while in Italy as recipient of *Stora Arkeologiska Själpensioner* continue to move the project forward in concert with other duties and obligations at the Swedish Institute in Rome.
- (7) Planning and execution of the survey (as detailed above) in a collaboration between the project participants, concerned institutions and local authorities.

Below is the *convenzione* for conduct of archaeological research in Coda Volpe between Catania's Superintendence represented by Dr. Rosalba Panvini, approved by University of Gothenburg Department of Historical Studies represented by Henrik Janson, now pending approval. The following is agreed and stipulated:

**Article 1:** The premises constitute an integral and substantial part of this agreement:

**Article 2:** The parties undertake a four-year relationship, renewable by mutual agreement.

**Article 3:** In particular, the activities that will be carried out under this implementing agreement are the following: a) the creation of excavation tests and surveys, previously agreed between the techno-scientific managers; b) the study of archaeological finds c) the scientific publication of the research results, partial and final, in scientific co-direction through publication in specialized journals and seminars; d) the use of human resources and any equipment in possession or endowment to the structures for the realization of the project; e) the use of human resources and any equipment in possession or endowment to the structures for the realization of the project;

**Article 4:** The organization and execution of the activities referred to in article 3 will be agreed in advance by the scientific managers designated by both parties in Michael Bratell for the University of Gothenburg and Dr. Maria Teresa Magro, for the Superintendency. Where it is deemed necessary, based on the needs of the research, additional professional skills with specific skills may be identified by mutual agreement.

**Article 5:** It is agreed that the risk assessment related to the activities carried out in the places in use, with the consequent drafting of the risk assessment document (DVR) and / or the safety plans relating to the various phases of the activities, this

implementing convention will be the responsibility of the University security officer. Each of the parties will carry out the ordinary and extraordinary maintenance of any machines and / or equipment that they will make available for the excavation activities, as well as compliance with the same. It will be the responsibility of each Body to ensure its staff who request to carry out research at the excavation site and the obligations that the current legislation on training, information and training and health surveillance provide. The staff that the Superintendence will use for the activities envisaged by the agreement is already classified in the roles of the Sicilian Region or in any case already in charge of the same and, therefore, no additional charges will arise as a result of this activity. The scientific managers will present, every year, to both the institutions they belong to, a report and a copy of the excavation and survey documentation.

**Article 6:** The University undertakes to provide insurance coverage for accidents and civil liability, relieving the Superintendency of any possible liability in this regard. Participation in research activities is also foreseen by subjects from other university institutions (eg Erasmus or similar), provided that they are covered by an insurance policy stipulated independently that covers the risks connected to the activity.

**Article 7:** Michael Bratell on behalf of the University of Gothenburg undertakes to provide the Superintendency with a copy of all the documentation produced, excavation papers, u.s. Tables of materials and list of cassettes, as well as photographic and graphic documentation, on paper and /or digital support, at the end of each year of the stipulation of this agreement.

**Article 8:** Individual entities may, separately or together, submit requests for financing to public or private, national or local entities, foundations, credit institutes or private companies to carry out their activities. In the absence of external funding, any research burdens remain borne by the University research funds assigned to the University's scientific coordinator, Michael Bratell.

**Article 9:** This implementing agreement has a duration of four years and is renewable with written agreement of the parties.

**Article 10:** This agreement will be registered in case of use. Registration fees will be borne by the party requesting it.

(For original see Appx. A)

This section concludes with a few words by M.T. Magro about the planned survey:

Hereby, I confirm that the non-invasive investigation project proposed by Michael Bratell, student at the University of Gothenburg, on the site in c.da Coda Volpe is of great scientific interest. I will be happy to collaborate with Michael and support the project once the covid-19 emergency is over and all necessary documents and permits have been obtained. In particular, to carry out the project it will be necessary for the Department of Historical Studies of the University of Gothenburg to produce an official request for collaboration and to sign an agreement with the Superintendency. Once the agreement has been signed, it will be necessary to obtain authorization for non-invasive investigations. As long as these documents are not produced, I can only express my personal opinion on Michael's project and not the official one of the Superintendency. Best regards, Catania, 28/04/2020.

(For original see Appx.B)

## 5. CONCLUSION

The purpose of this study was divided into two main research questions:

1. Is Coda Volpe district on San Demetrio the site of a previously unidentified settlement from Greek colonization during the Archaic age?
2. How can this study help facilitate a proper and full-scale investigation of walls observed during a initial reconnaissance in Coda Volpe (CT)?

The conclusions reached by this study regarding the first question can be summarized in two main points: Coda Volpe is (a) a periphery on eastern Sicily and (b) has several indicators of the existence of an unidentified Greek settlement. To understand Coda Volpe as a periphery is in part based on Lise Nordenborg Myhre's work who used the same terminology in challenging established theories about how the Scandinavian Bronze Age landscape has been discursively shaped, transformed and constructed. Nordenborg Myhre dealt with Scandinavia in general, and southwestern Norway in particular (2004), but it is possible to see similarities with the current lack of understanding regarding Coda Volpe; essentially an area in the middle of more studied areas on the coast and in the mountainous interior.

Nordenborg Myhres' chosen geographical area had also never before been studied entirely on basis of its own particular terms and conditions. The archaeological material had only been compared to other areas and studied as a periphery or colony of the center. Nordenborg Myhre describes how a development scheme for new knowledge was created, where only what fit into the expected model could be contained and was otherwise neglected or given a less prominent significance. As the periphery already was established, this was allowed to explain development and dissemination from the center. An impression emerged of a coherent and indivisible overall picture between center and periphery. The periphery was reduced to the centers' perceptions and interpretations of the same and thus invariably 'ceased to exist' outside this dual power relationship.

A periphery such as Coda Volpe is also not created in a single moment or with a single idea. Modelled after Gür's discussion of Sultanahmet, Coda Volpe is instead constantly reconstructed as an urban space, through processes emerging with the acts of discursive representations. As a transformed and socially concretized space it is involved in the dialectical mode of relations between spatiality, sociality, and historicity. This dialectical relation links Coda Volpe to its past and to its future and makes it a dynamic and not static product of discursive representations (after Gür 2002: 250). Nordenborg Myhre's approach became to instead explore this margin as a refraction area of change, reflected in the different dimensions and relationships of the artefacts located within the landscape that extended beyond this two-tiered division (Nordenborg Myhre 2004: 5).

This leads to the second main point to do with the first main research question, being the indicators of the existence of an unidentified Greek settlement. Of particular interest in this regard are the walls and the Greek necropolis as described respectively in the two initial surveys detailed in this study. This also merits a re-evaluation of Carmelo Sciuto Patti's interpretation from the nineteenth century regarding the possible location of Symaetus (Sciuto Patti 1881; Brancato 2018: 93). However, this



technically applies also for other unidentified settlements such as Aitna (Pfundner 2013: 371), Xuthia (Uggeri 2006), Morgentia (pages 14-15, 19; Caffi 2004: 72-3; Brancato 2018: 102) Hybla Gereatis (Pfundner 2013: 375), Kallipolis (Braccisi and Millino 2000: 60) and Capitoniana (Pfundner 2013: 288), as at least one of these sources could actually be referring to one and the same settlement. Ps-Scylax mention of *Symaithos* as 'both' a city and river, might for instance not be referring to *Megaritis* (Megara Hyblaea) and its port *Xiphoneios* (*Periplus* §13) but instead a description of the location of Symaetus. The walls, observed by Niklas Kärrman, William Henry and the author are, based on a stylistic dating by masonry style, indicative of both cyclopean and Archaic periods (Figs. 18–19). Less than 1km from these walls is a Greek necropolis, as indicated by a sequences of post holes on the calcareous bank (Figs. 10-11) as described by Rodolfo Brancato and Laura Manganelli (2018: 94).

With the other necropolis (Masseria Primosole) located at a distance of about 1,5km from the walls (see Tables 4–7), it is possible to establish a perimeter within which it is plausible to suspect traces of a Greek settlement, possibly "on the Pleistocene terrace of the high structural section of San Demetrio" (Brancato and Manganelli 2018: 104).

This study suggest, based on the relations in distance and in view of the topographical reconstruction, that its location also should be confined within the Augusta Synthem, thus placing it in the same geological profile as Megara Hyblaea (See Figs. 30–32). Furthermore, as this part of Sicily appears to have been overlooked for both historical, political, and perhaps practical reasons, it is also possible that traces of this settlement have either been destroyed or simply neglected. This area has never been systematically studied; prospected or geophysically surveyed (Brancato 2018: 91) as searching for a settlement on this part of the island has not fit with any previous clearly defined or viable narrative or agenda. Instead this periphery 'ceased to exist' in an archaeological sense with considerable industrial and agricultural exploitation as a result, contributing even further to the current situation.

After these conclusions follow the second main research question which is how this study can help facilitate a proper and full-scale investigation of walls observed during a initial reconnaissance in Coda Volpe. A survey consisting of (a) magnetometry, (b) stone and earth samples, (c) shovel test pits on top of terrace; to ascertain the previous stylistic dating of walls in Coda Volpe, in a collaborative effort between participating institutions in accordance with the *convenzione*, is currently pending approval in Catania. The aim of this study is – in collaboration Italian authorities and the University of Gothenburg – to stimulate further work and discussion, while adding to a better understanding of Coda Volpe.

## Summary

Continuing in the footsteps of Paolo Orsi (1859-1935), archaeology on eastern Sicily has primarily been focused to Etna's surroundings; the southeastern, mostly coastal region with Pantalica, Megara Hyblaea and Syracuse and in the mountainous region with Morgantina. Apart from this eastern Sicily's central region – as per large-scale excavations – appears largely overlooked and more specifically, the area between Catania and Lentini appears to be part of a periphery. During the Archaic period, in a relatively short order, Greeks had established themselves in Campania, eastern Sicily, the Straits of Messina and in the Gulf of Taranto. The Greek mother cities were possibly influenced by the Phoenicians, who some even would claim 'taught the Greeks to colonize' with the main argument being that the Phoenicians were already in Sicily and their cities were similar, which perhaps wasn't totally correct. It has remained an open question whether the Phoenicians influenced the Greek colonizing in the west. The pioneering Euboean colonization Matrix was however most certainly the product of both Greek competence as warlike and sea-fairing builders on a grand scale, as well as many close encounters with Etruscans, Sicels and Phoenicians.

No matter where on Sicily Archaic Greek poleis are found they follow a basic pattern of urban and rural development. Archaeological evidence shows that insubstantial temporary buildings soon gave way to town planning at Naxos, Syracuse, Megara Hyblaea and Himera, Selinous and Akragas, with some poleis still not fully understood as a result from their successive occupation layers. Still, excluding Katane, orthogonal town planning that corresponded to natural lines in the landscapes is prevalent at mostly all sites. Orthogonal plans divided the landscape into blocks separated by streets, often paved, ranging from between about 2.5–6.5m, with the widest streets as major thoroughfares. All town plans extended to surface areas of a comparable size determined by two topographic factors: placement of cemeteries, and city walls. Eighth century Greeks in the West began to consciously separate the worlds of the living from that of the dead, and here the cities had at least two cemeteries, generally spatially segregated between and within, connected with social choices of the inhabitants. City walls were added between three and six generations from foundation to demarcate the line separating the worlds of the living from the dead, but are thought to have been part of the first town planning as well. The topography factors allow for rather close estimations of the size of the Archaic Greek poleis, all varying between ha 50–100ha in size and classified as agrarian cities and preceded by a well documented smaller village-like state.

With space clearly reserved in the earliest town plans for city walls, it was only in the seventh and mostly sixth centuries they were actually built, possibly demanding similar resources to temples, be it with less technical skills required. Apart from just guarding the city, walls marked identity and characteristics for the polis, as no sharp division existed between city and country in the Greek world in general while also indicating the overall size of the population located within the polis. It is essential to remember also that Archaic Greek walls do not necessarily correspond to a proper settlement and that widespread fortification of settlements and towns, usually considered to date from the Classical period, in fact took place much earlier. Considering both the types of fortified settlement and the topography of urban fortification, there are numerous instances of where Archaic walls are found to correspond to a refuge and as with the fortification walls at Emporio on Chios.

In the Sicilian countryside, sanctuaries, equipped with buildings, connected to urban areas was rather commonplace. As a general rule, they were associated with Demeter and Persephone and probably marked the border between different states. The Sicilian landscape changed drastically during the Roman Principate and was not simply decaying urban centers with emerging luxury villas, but also with new settlements, like Philosophiana, and Roman rebuilding of Greek poleis such as Naxos, as semi-urban, organized population centers of strictly economic (as opposed to political) activity. In poleis like Naxos signs are clearly visible of the decolonization of Sicily with rule passing to Rome, evident in how Hellenistic and Roman houses, storerooms, kilns surround and overlie the ship-sheds of the classical polis. Likewise, many Archaic Greek poleis were gradually abandoned through the same process with emerging new networks of social, political and economic activity. Late antiquity would see further expanded settlements with an increase in material presence; Either as a result of ruralization, or a rural revival linked to the demands for agricultural products from Rome.

In conclusion Coda Volpe is currently understood to be located within a periphery on eastern Sicily with several indicators of the existence of a nearby Greek settlement. This settlement is thought to be located within the Augusta Synthem based on the known extent of the Greek zone and the relations in distance between the walls and necropoleis described in two initial surveys in this study. The walls indicate modern reuse of stones from both cyclopean and Archaic periods. Less than 1km from these walls is a necropolis with silos and clay fragments, exhibiting traces from Greek times indicated by a sequences of post holes on the calcareous bank with a different orientation both to the burials and to the arrangement of the silos. These indicators of settlement appear to largely have been overlooked for both historical, political and perhaps practical reasons. It is possible that traces of settlement have been either destroyed or neglected as a result from that searching for a settlement on this part of the island has not fit with any previously accepted models. Instead there has been considerable industrial and agricultural activity that might also account for, while also contributing further to, the current situation.

There are finally also those who have expressly stated a different view; from Carmelo Sciuto Patti in the past to Giovanni Uggeri, Rodolfo Brancato, Laura Manganello, Livio Mario Cortese, Maria Teresa Magro, Niklas Kärrman, William Henry and the author of this study, who all seem to agree that this area is both worthy of further study and better preservation. Post-colonial perspectives have been of assistance to point to some of the archaeological difficulties raised by asking the research questions. The only existing parallel on stylistic grounds to the walls in Coda Volpe on Sicily appears to be Anaktoron in Pantalica which, if accurate, points to a complex web of colonization and hybridity between Greeks and Sicels in this part of Sicily. It is worth noticing the existence of cyclopean walls also on western Sicily in Erice that are considered punic. The fact that the north-east tip of San Demetrio was probably still surrounded by water on both sides during the Archaic age is essential new information for future archaeology on this part of the island. The aim of this study is to stimulate further work and discussion and with the survey currently pending approval in Catania, in collaboration between participating institutions, hopefully add to a better understanding of Coda Volpe.

## BIBLIOGRAPHY

- d'Agostino, B. 1974. La civiltà del Ferro nell'Italia meridionale e nella Sicilia. *Popoli e civiltà dell'Italia antica* 11: 11–94.
- d'Agostino, B. 1977. Tombe " principesche" dell'orientalizzante antico da Pontecagnano. *Mon. Ant.* 49: 1–110.
- d'Agostino, B. 1977b. Grecs et 'indigenes' sur la cote tyrrhenienne au Vile siècle: la transmission des ideologies entre elites sociales. *Annales: Economies, Societes, Civilisations* 32: 3–20.
- d'Agostino, B. 1999. Eubean Colonisation the Gulf of Naples. In Tsetschladze, G.R. (ed.). *Ancient Greeks West and East*. Leiden: Brill, 207–227.
- Adornato, G. 2011. *Akragas arcaica: Modelli culturali e linguaggi artistici di una città greca d'Occidente*. Milan: Edizioni Universitarie di lettere economia diritto.
- Albore-Livadie, C. 1975. Remarques sur un groupe de tombes de Cumes. *Cahiers du Centre Jean Bérard* 2: 53–8.
- Alfano, A., and D'Amico, G. 2017. La conservazione dei cereali a lungo termine nella Sicilia Medievale. L'importanza del dato archeologico per una nuova prospettiva di ricerca. *Archeologia Medievale XLIV*: 73–91.
- Amari, M., and Schiaparelli, L. 1883. L'Italia descritta nel 'Libro del Re Ruggero' compilato da Edrisi. *Atti della Reale Accademia dei Lincei, Memorie*. II. VIII. Rome, 15–69.
- Andrén, A. 1997. *Mellan ting och text*. Eslöv: Symposion. (English: *Between Artefacts and Texts. Historical Archaeology in Global Perspective*. eBook, 1998).
- Antonaccio, C. M. 2001. Colonization and Acculturation. In Malkin, I. (ed.). *Ancient Perceptions of Greek Ethnicity*. Cambridge, Mass: Harvard University Press, 113–157.
- Antonaccio, C. M. 2004. Siculo-geometric and the Sikels: Identity and the Material Culture in Eastern Sicily. In Lomas, K. (ed.). *Greek Identity in the Western Mediterranean*. Leiden: Brill, 55–81.
- Antonaccio, C. M. 2005. Excavating Colonization. In Hurst, H. and Owen, S. (Eds.). *Ancient Colonization: Analogy, Similarity and Difference*. Duckworth: Bristol Classical Press, 97–113.
- Antonelli, L. 1996. La falce di Crono. Considerazioni sulla prima fondazione di Zancle. *Kokalos* 42: 315–25.
- Acquaro, E., Filippi, A., Medas, S. (eds.). *La devozione dei naviganti: il culto di Afrodite ericiana nel Mediterraneo; atti del convegno di Erice, 27–28 novembre 2009. Biblioteca di Byrsa* 7. Lugano: Lumières internationales.
- Arcifa, L., and Longo, R. 2015. Processi di diversificazione territoriale nella Sicilia di inizi IX secolo. Il contesto di Rocchicella-Mineo (CT). *VII Congresso Nazionale di Archeologia Medievale. Prétirages (Lecce, 9-12 settembre)*. 2, sez. IV: 441-7.
- Asheri, D. 1996. Colonizzazione e decolonizzazione. In Settis, S. (ed.). *I Greci: storia cultura arte società I: noi e i Greci*. Turin: Giulio Einaudi Editore, 73–115.
- Auberson, P. 1975. Chalcis, Lefkandi, Eretrie au VHIe siècle. *Cahiers du centre Jean Bérard* 2: 9-14.
- Bacci, G.M. 1999. Alcuni elementi di topografia antica. In Bacci, G.M. and Tigano, G. (eds.). *Da Zancle a Messina: Un percorso archeologico attraverso gli scavi*, Palermo: Regione siciliana, Assessorato dei beni culturali e dell'identità siciliana, Dipartimento dei beni culturali e dell'identità siciliana, 51–7.

- Baldini, G., Cassataro, G., Longo, U., and Recami, E. 1976. Recenti scoperte sul Paleolitico siciliano. *Natura Società italiana Scienze Naturali* LVII: 125–7.
- Buache, P. 1714. *Siciliae Antiquae quae et Sicania et Trinacria dicta Tabula Geographica*. Paris 1714 (1745). Website: [www.raremaps.com](http://www.raremaps.com), accessed on May 25 2020.
- Bejor, G. 1986. Gli insediamenti della Sicilia romana: distribuzione, tipologie e sviluppo da un primo inventario dei dati archeologici. In Giardina, A. (red.). *Società romana e impero tardoantico*. III. *Le merci. Gli insediamenti*, Rome/Bari, 463–519.
- Bérard, C. 1970. *L'Heróon à laporte de l'ouest. Eretria. Fouilles et Recherches III*. Berne.
- Bernabò Brea, L. 1957. *Sicily before the Greeks*. London.
- Bernabò Brea, L. 1958. *La Sicilia prima dei Greci*. Milano.
- Bernabò Brea, L. 1968. Il crepuscolo del re Hyblon. Considerazioni sulla cronologia della fondazioni di Leontinoi, Megara e Siracusa e sulla topografia della Megaride di Sicilia. *PP* 23: 161–86.
- Bevilacqua, L. 2018. Gasbarri, G. *Picturing a Lost Empire: An Italian Lens on Byzantine Art in Anatolia, 1960–2000*. ANAMED, Istanbul. Exhibition: 1 June to 31 December 2018.
- Bintliff, J. 2012. *The Complete Archaeology of Greece: From Hunter-Gatherers to the 20th Century A.D.* Malden, MA, Oxford and Chichester: Wiley-Blackwell.
- Bonfiglio, L. 1999. La distribuzione dei siti archeologici, il contesto stratigrafico e la ricostruzione paleoambientale. In Bacci, G.M. and G. Tigano, G. (eds.). *Da Zancle a Messina: Un percorso archeologico attraverso gli scavi* 1. Messina: Sicania, 9–17.
- Boardman, J. 1980. *The Greeks Overseas. Their Early Colonies and Trade*. London.
- Braccesi, L. and De Miro, E. (eds.). 1992. *Agrigento e la Sicilia greca: Atti della settimana di studio, Agrigento 2–8 maggio 1988*. Rome, 151–6.
- Braccesi, L. and Millino, G. 2000. *La Sicilia greca*. Rome.
- Brancato, R. and Manganelli, L. 2018. Contributo alla carta archeologica del territorio tra Catania e Lentini (IGM 270 III SO, Reitano). In Uggeri, G. (ed.). *Rivista di Topografia Antica XXVII* 2017. Florence: Congedo Editore, 87–108.
- Branciforti, M.G. 1999. Siti e insediamenti nella regione etnea. *Magna Grecia e Sicilia*: 241–8.
- Branciforti, M.G., and S. Amari. 2005. Gli scavi archeologici nell'ex Reclusorio della Purità di Catania. In Gigli, R. (ed.). *Μεγάλοι νῆσοι: Studi dedicati a Giovanni Rizza per il suo ottantesimo compleanno* 2. Catania, 47–77.
- Bratell, M. 2019. *Provincia Nostrum: Romanization and Monumentalization in Gallia Narbonensis during the Augustan Age*. Unpublished Mphil dissertation submitted to the University of Gothenburg.
- Brun, P. 1995. From Chieftdom to state organization. In Arnold, B. and Gibson, D.B. (eds.). *Celtic chieftdom, Celtic state. The evolution of complex social systems*. Cambridge: Cambridge University Press, 13–25.
- Buchner, G. 1966. Pithekoussai, oldest Greek colony in the west. *Expedition* 8: 4–12.
- Buchner, G. 1971. Recent work at Pithekoussai. *Arch. Rep. for 1970-71*: 63–7.
- Buchner, G. 1972. Pithecusa: scavi e scoperte 1966-71. *Legend nongreche della Magna Grecia. Attidelundicesimo convegno di studi sulla Magna Grecia*: 361–74.

- Buchner, G. 1975. Nuovi aspetti e problemi posti degli scavi di Pithecusa con particolari considerazioni sulle orificiere di stile orientalizzante antico. *Cahiers du centre jean Bérard* 2: 59- 86.
- Buchner, G. 1978. Testimonianze epigrafiche semitiche del viii secolo a.C. a Pithekoussai. *PP* 53: 130–42.
- Caffi, M. 2004. Il porto fluviale di Lentini. In Frasca, M. (ed.). *Leontini: Il mare, il fiume, la città. Atti della giornata di studio, Lentini, 4 maggio 2002*. Catania, 71–7.
- Cafici, C. 1914. Stazioni preistoriche di Trefontane e Poggio Rosso in territorio di Paterno (provincia di Catania). *Mon. Ant.* XXIII: 358–485.
- Cafici, C. 1920. La stazione neolitica di Fontana di Pepe (Belpasso) e la civiltà di Stentinello in Sicilia e nel versante adriatico. *AttiPal*.
- Cafici, C. 1938. Apporti delle ricerche alla conoscenza delle culture presicule. *Bull. Paletn. It.*
- Carbone, S., Lentini, F. and Branca, S. Catania: Geological Map of Italy. Scale 1: 50.000 "Foglio 641 Augusta" (modified 2015). ISPRA - Istituto Superiore per la Protezione e la Ricerca Ambientale. Website: [www.isprambiente.gov.it/Media/carg/sicilia.html](http://www.isprambiente.gov.it/Media/carg/sicilia.html), accessed on 5 May 2020.
- Ceserani, R. (ed.). 1999. *Guida allo studio della letteratura*. Bari: Laterza.
- Coldstream, J. N. 1968. *Greek Geometric Pottery*. London.
- Coldstream, J. N. 1976. Hero-cults in the age of Homer. *JHS* 96: 8ff.
- Columba G. 1891. Contributi alla storia dell'elemento calcidico d'Occidente. Archeologia di Leontini. *ArchStorSic* XVI: 71–143.
- Cook, R. M. 1962. Reasons for the foundation of Ischia and Cumae. *Historia* 9: 113–4.
- Cordano, F. 2006. A Project of Greek Colonisation from Sicily to Etruria? *ASAA* 6: 465–80.
- Cortese, L.M. 2016. Manifestazione contro la discarica. 'Noi vittime degli esperimenti'. *Live Sicilia*. Website: <https://catania.livesicilia.it/2016/07/29/>, accessed on 4 May 2020.
- Crielaard, J.P. 2009. Cities. In A Companion to Archaic Greece, Raaflaub, K.A. and H. van Wees (eds.) Malden, MA and Oxford: Wiley-Blackwell, 349–72.
- Giampiccolo, G. Pantalica: l'Anaktoron. Website: <http://www.terraiblea.it>, accessed on 25 May 2020.
- Given, M. 2004. *The Archaeology of the Colonized*. London: Routledge.
- Graham, A. J. 1971. *Colony and Mother City in ancient Greece*. Manchester University Press.
- Graham, A. J. 1971b. Patterns in early Greek colonization. *JHS* 91: 35–47.
- Graham, A. J. 1982. The colonial expansion of Greece. In Boardman, J. (Ed.). *The Cambridge Ancient History. Second Edition. Vol III. Part 3. The Expansion of the Greek World. Eight to Six Centuries B.C.* Cambridge University Press, 83–159.
- Dawkins, R. 1998. Postmodernism Disrobed. *Nature* 394 (9/7): 141–3.
- Degni, P. 2006. Le scritture dei documenti italo-greci della Sicilia normanna e sveva. *ΝέαΡώμη* 3.
- Desborough, V. 1976. The background to Euboean participation in early Greek maritime enterprise. In *Tribute to an Antiquary. Essays presented to Marc Fitch*. London, 25–40.
- De Angelis, F. 1998. Ancient past, imperial present: the British Empire in TJ Dunbabin's The western Greeks. *Antiquity* 72 (277): 539–549.

- De Angelis, F. 2000. Estimating the Agricultural Base of Greek Sicily. *PBSR* 68: 111–148.
- De Angelis, F. 2003. *Megara Hyblaea and Selinous: The Development of Two Greek City-states in Archaic Sicily. Monograph*, no. 57. Oxford: Oxford University School of Archaeology.
- De Angelis, F. (ed.). 2016. *Archaic and Classical Greek Sicily. A social and Economic History*. New York: Oxford University Press.
- De Miro, E. 1988. Akragas, città e necropoli nei recenti scavi. In *Veder greco: Le necropoli di Agrigento. Mostra internazionale, Agrigento, 2 maggio–31 luglio*, Rome 235–52.
- De Miro, E. 1992. L'urbanistica e i monumenti pubblici. In Braccesi, L. and De Miro, E. (Eds.). *Agrigento e la Sicilia greca: Atti della settimana di studio, Agrigento 2–8 maggio*. Rome, 151–6.
- Di Vita, A. 1996. Urban Planning in Ancient Sicily. In Pugliese Carratelli, G. (ed.). *The Western Greeks*, Milan, 263–308.
- Dietler, M. 1995. The Cup of Gyptis: Rethinking the Colonial ENcounter in Early Iron Age Western Europe and the Relvance of World-Systems Models. *Journal of European Archaeology* 3 (2): 89–111.
- Dietler, M. 1999. Consumption, cultural frontiers, and identity: anthropological approaches to Greek colonial encounters. In *Confini e frontiera nella Grecità d'Occidente (Atti del XXXVII Convegno di Studi sulla Magna Grecia, Taranto, 3-6 ottobre, 1997*. Naples: Arte Tipographica, 475-501.
- Dietler, M. 2005. The Archaeology of Colonization and the Colonization of Archaeology: Theoretical Challenges from an Ancient Mediterranean Colonial Encounter. In *The Archaeology of Colonial Encounters: Comparative Perspectives*, Stein, G. (ed.). Santa Fe: SAR Press, 33–68.
- Dominguez, A. 2006. Greeks in Sicily. In Tsetskhladze, G. (ed.). *Greek Colonisation: An Account of Greek Settlements Overseas*. Boston: Brill, 253–357.
- van Dommelen, P. 1997. Colonial constructs: colonialism and archaeology in the Mediterranean. *World Archaeol.* 28 (3). *Culture Contact and Colonialism*: 305–23.
- Drögemüller, H. P. 1965. Untersuchungen zur Anlage und zur Entwicklung der Städte 'Grossgriechenlands'. *Gymnasium* 72: 27–62.
- Dunbabin, T. J. 1948. *The Western Greeks*. Oxford.
- Erim, K. 1958. Morgantina. *AJA* 72: 79–90.
- Fahlander, F. 2008. Differences that matter: Materialities, material culture and social practice. In Glørstad, H. and Hedeager, L. (eds.). *Six essays on the materiality of society and culture*. Lindome: Bricoleur Press, 127–154.
- Felice, E. 2016. *Nos flumina arcemus, derigimus, avertimus. Canali, lagune, spiagge e porti nel Mediterraneo antico*. Bari.
- Felici, E., and Buscemi Felici, G. 2004. Cave costiere nel territorio di Lentini. In Frasca, M. (ed.). *Leontini, il mare, il fiume, la città*. Siracusa, 27-50.
- Finley, M. 1971. Archaeology and History. *Daedalus: Journal of the American Academy of Arts and Sciences* 100: 168–186.
- Fischer-Hansen, T., Nielsen, T.H. and Ampolo, C. 2004. Sikelia. In *An Inventory of Archaic and Classical Poleis: An Investigation Conducted by the Copenhagen Polis Centre for the Danish National Research Foundation*. Hansen, M.H. and Nielsen, T.H.(eds.). Oxford, 172–248.

- Fisicaro, S. 1996. Insediamenti rurali di età romana nel territorio a nord dell'antica Lentini. *Aitna. Quaderni di Topografia Antica* 2: 121–2.
- Fitzjohn, M. 2000. Review of Leighton, R. Sicily before History: An Archaeological Survey from the Paleolithic to the Iron Age. *Scholia: Studies in Classical Antiquity* 9: 150–53.
- Fiorentini, G. 2006. Le fortificazioni di Agrigento alla luce dei recent scavi. *Sicilia Antiqua* 3: 67–125.
- Fiorentini, G. 2009. *Agrigento V: Le fortificazioni*. Rome.
- Forsythe, G. 2005. *A Critical History of Early Rome*. Berkeley/Los Angeles: University of California Press.
- Frasca, M. 2009. *Leontinoi: Archeologia di una colonia greca*. Rome.
- Frederiksen, R. 2011. *Greek City Walls of the Archaic Period, 900–480 BC*. Oxford: Oxford University Press.
- Gabrici, E. 1913. Cuma. *Mon. Ant.* 11.
- Garbini, G. 1978. Un'iscrizione aramaica a Ischia. *PP* 33: 143–50.
- Giannitrapani, E. 1998. Public Archaeology and Prehistory in Sicily. *Antiquity* 72: 739–43.
- Gras, M. 2002. L'urbanisme de Zancle. In Gentili, B. and Pinzone, A. (eds.). *Messina e Reggio nell'antichità: Storia, società, cultura. Atti del Convegno della S.I.S.A.C. (Messina–Reggio Calabria 24–26 maggio 1999)*. Messina, 13–24.
- Gras, M. 2005. Il commercio in età arcaica e classica. In Ghedini, F., Bonetto, J., Ghiotto, A.R., and Rinaldi, F. (eds.). *Lo stretto di Messina nell'antichità*, Rome, 159–63.
- Grasso, L. 2008. *Il Santuario di Alaimo a Lentini. Un'area sacra tra la chora e il mare*. Catania.
- Gosden, C. 2004. *Archaeology and Colonialism: Cultural Contact from 5000 BC to the Present*. New York: Cambridge University Press.
- Guzzardi, L., and Giordano, I. 2012. Il santuario arcaico di Xirumi presso Lentini, in Panvini, R., Sole, L. (eds.). *La Sicilia in Età Arcaica. Dalle apoikia ai 480 a.C. Atti del Convegno Internazionale Caltanissetta Museo Archeologico 27-29 marzo 2008*. Caltanissetta, 211–30.
- Hansen, M.H., and Nielsen, T.H. (eds.). 2004. *An Inventory of Archaic and Classical Poleis: An Investigation Conducted by the Copenhagen Polis Centre for the Danish National Research Foundation*. Oxford.
- Hall, J.M. 1994. *Subaltern voices? Finding the spaces between things and words*. Paper presented the World Archaeological Congress 3 in New Delhi.
- Hall, J.M. 2003. 'Culture' or 'Cultures'? Hellenism in the Late Sixth Century. In Dougherty, C. and L. Kurke, L. (eds.). *The Cultures within Ancient Greek Culture: Contact, Conflict, Collaboration*. Cambridge: Cambridge University Press, 23–34.
- Hitchens, C. 2005. Transgressing the Boundaries. *NY Times* (22/5).
- Holloway, R. 2004 (1991). *The Archaeology of Ancient Sicily*. London: Routledge.
- Jeffery, L. H. 1976. *Archaic Greece, the City-States c. 700–500 B.C.* London.
- Johannowsky, W. 1975. Problemi relativi a Cuma arcaica. *Cahiers du centre Jean Bérard* 2: 98-105
- Karlsson, L. 1989. Some Notes on the Fortifications of Greek Sicily. *Opuscula Romana* 17: 77–89.
- Karlsson, L. 1992. *Fortifications Towers and Masonry Techniques in the Hegemony of Syracuse 405-211 BC*. Stockholm: P. Åströms Förlag.



- Klein, J. 1972. A Greek metalworking quarter – eighth-century excavations on Ischia. *Expedition* 14 (4): 34–9.
- Källén, A. 2001. Creolised Swedish Archaeology. *Curr. Swedish Archaeol.* (9): 59–76.
- Lacroix, L. 1965. Monnaies et colonisation dans l'Occident grec. Brussels: *Mem. Acad. Roy. Belg.* 58 (2).
- Lagona, S. 1992. Monte San Basilio. *Bibliografia Topografica* X: 478–83
- La Fauci, F. 2004. Rinvenimenti archeologici sottomarini ad agnone e a Punta Castelluccio. In Frasca, M. (ed.). *Leontini, il mare, il fiume, la città*. Siracusa, 21–6.
- Leighton, R. 1993. Sicily During the Centuries of Darkness. *Cambridge Archaeological Journal* 3 (2): 271–283.
- Leighton, R. 1999. Sicily before History: An Archaeological Survey from the Palaeolithic to the Iron Age. London: Duckworth.
- Leighton, R. 2000. Indigenous society between the ninth and sixth centuries BC: territorial, urban and social evolution. In Smith, C. and Serrati, J. (eds.). *Sicily from Aeneas to Augustus, new approaches in archaeology and history*. Edinburgh: Edinburgh University Press, 15–40.
- Lentini M. C. (ed.). 2001. *Naxos di Sicilia in età romana e bizantina ed evidenze dai Peloritani*. Bari: Edipuglia.
- Longhitano, S. and Colella, A. 2007. Geomorphology, sedimentology and recent evolution of the anthropogenically modified Simeto River delta system (eastern Sicily, Italy). *Sedimentary Geology* 194: 195–221.
- Liotard, J-F. 1979. *La condition postmoderne: rapport sur le savoir. Collection "Critique"* 0181-3358. Paris: Éd. de minuit.
- Manganaro, G. 1994. Per una storia della 'chora Katanaia.' *Geographica Historica* VII.
- Maniscalco, L. 2000. Il neolitico attorno alla Piana di Catania: l'insediamento preistorico delle Salinelle di San Marco. In Pessina, A., and Muscio, G. (eds.). *La neolitizzazione tra Oriente e Occidente*. Udine, 489–507.
- Manni, E. 1976. Su alcune recenti proposte di identificazione di centri antichi della Sicilia. *L'Italie préromaine et la Rome républicaine. Mélanges offerts à Jaques Heurgon*. Vol 2. Rome: 605-617.
- Mattingly, D.J. 2004. Being Roman: Expressing Identity in a provincial setting. *JRA* Vol. 17.
- Merry, K. and Bettlinger, P. 2019. Smartphone GPS accuracy study in an urban environment. *PLoS ONE* 14 (7). <https://doi.org/10.1371/journal.pone.0219890>
- Mertens, D. 2006. *Città e monumenti dei Greci d'Occidente: Dalla colonizzazione alla crisi del V secolo a.C.* Rome.
- Miller, M. 1970. *The Sicilian Colony Dates*. Albany, N.Y.; SUNY Press.
- Millet, M. 1990. Romanization: historical issues and archaeological interpretation. In Blagg, T. and Millett, M. (eds.). *The Early Roman Empire in the West*. Oxford.
- Millino, G. 2001. Mercenariato e tirannide in Sicilia tra V e IV secolo. *Anemos* 2: 125–88.
- Monaco, C., Antonioli, F., De Guidi, G., Lambeck, K., Tortorici, L., and Verrubbi, V. 2004. Holocene Tectonic Uplift of the Catania Plain (eastern Sicily). *Quaternaria Nova* VIII: 171–85.

- Morris, I. 2006. The Growth of Greek Cities in the First Millennium BC. In Storey, G.R. (Ed.). *Urbanism in the Preindustrial World: Cross-cultural Approaches*, Tuscaloosa, 27–51.
- Morris, I. 2013. *The Measure of Civilization: How Social Development Decides the Fate of Nations*. Princeton.
- Mühlenbock, C. 2008. *Fragments from a Mountain Society. Tradition, innovation and interaction at Archaic Monte Polizzo, Sicily*. GOTARC serie B, Gothenburg Archaeological Thesis 50.
- Nicoletti, F. 1994. Considerazioni sulle origini e il consolidarsi del popolamento umano nel Calatino. *Società Calatina di Storia Patria e Cultura. Bollettino, Estratto* (3): 163–94.
- Nordenborg Myhre, L. 2004. *Trialectic archaeology: Monuments and space in Southwest Norway 1700–500 BC*. *AmS-skrifter*; 18. Stavanger: Arkeologisk museum i Stavanger.
- Orsi, P. 1889. Contributi all’archeologia preellenica Sicula. *BPI* 15, 158–88, 197–231.
- Orsi, P. 1899. Valsavoia. *Not.Sc.*: 279.
- Orsi, P. 1902. Necropoli e stazioni sicule di transizioni. 1) La necropoli di Valsavoia. *Bollettino di Paleologia Italiana XXVIII*: 103–104.
- Orsi, P. 1899. Pantalica e Cassibile. *MAL* 9: 33–146.
- Orsi, P. 1922. Insigne scoperta a Monte Casale presso Scordia. Il sepolcreto del Duce ignoto. *Aretusa VII*, (4): 1–3.
- Orsi, P. 1930a. Vasi di Lentini. Contributo all’archeologia di quella città. *RIASA II*: 149–77.
- Orsi, P. 1930b. Scavi di Leontini-Lentini. *AMMG III*: 7–39.
- Oxford Classical Dictionary. 2015. Greek Colonies to 500 BCE. Ancient World Mapping Center. Website: <https://oxfordre.com/classics/page/maps/>, accessed on May 25 2020.
- Paget, R. F. 1968. The ancient ports of Cumae. *JRS* 58: 152–69.
- Pfuntner, L. 2013. *The Changing Urban Landscape of Roman Sicily*. PhD dissertation submitted to the University of California, Berkeley.
- Pfuntner, L. 2019. *Urbanism and Empire in Roman Sicily*. Austin: University of Texas Press.
- de Polignac, F. 1995 *Cults, Territory and the Origins of the Greek City-state*. Trans. Lloyd, J. Chicago.
- Porciani, L. 2015. Early Greek Colonies and Greek Cultural Identity: Megara Hyblaea and the Phaeacians. *Dialogues d'histoire ancienne* 2 (41/2): 9–18.
- Prato, I. 2015. La 'Piccola Pantalica Catanese': Le Grotte di Primosole. Website: <http://urbanfilecatania.blogspot.com/2015/02/grotte-di-primosole-3.html>, accessed on April 4 2020.
- Procelli E. 1989. Aspetti e problemi dell’ellenizzazione calcidese nella Sicilia orientale. *MEFRA* 101 (2): 679–89.
- Rallo, A. 2000. Considérations sur les fouilles récentes de Sélinonte. *RA*: 194–8.
- Recami, E., Mignosa, C., Baldini, L.R. 1983. Nuovo contributo sulla preistoria della Sicilia. *Sic.Arch.* LII-LIII: 45–82.
- Ridgway, D. 1973. The first western Greeks: Campanian coasts and southern Etruria. In Hawkes, C. and Hawkes, S. (eds.). *Greeks, Celts and Romans*. London, 5–38.
- Ridgway, D. 2000. The First Western Greeks Revisited. In Ridgway, D, Serra Ridgway, F.R, Pierce, M, Herring, E., Whitehouse, R.D, and Wilkins, J.B. (eds.),

- Ancient Italy in its Mediterranean Setting: Studies in Honour of Ellen Macnamara.*  
London: Accordia Research Institute, 179–191.
- Rizza, G. 1983. Leontinoi e Katane nell'VIII e nel VII secolo a.C. *ASAtene* 59.
- Rizza, S. 2000. *Studi sulle fortificazioni greche di Leontini.* Catania: Consiglio nazionale delle ricerche, Centro di studio sull'archeologia greca 7.
- Roth, R. E. 2007. *Styling Romanisation: pottery and society in central Italy*, Cambridge.
- Russo, I. 1996. Pianadella Catena (Lentini). *Rivista di Scienze Preistoriche* XL, VII.
- Sciuto Patti, C. 1880. Sul sito dell'antica città di Symaetus. *ArchStorSic* V: 367–74.
- Sciuto Patti, C. 1881. Catania. *NSc*: 217–22.
- Settis, S. 2006. *The Future of the 'Classical'*. Cambridge.
- Sfacteria, M. 2016. Viabilità Romana in Sicilia. Nuove Osservazioni Sull'Ipotetico Percorso Della Via Interna Catania-Agrigento. *Peloro* 1, (1): 21–40.
- Sirena, G. 2007. La viabilità costiera della Sicilia orientale in età romana: la cosiddetta Via Pompeia, sta. In *La Sicilia romana tra Repubblica e Alto Impero, Atti del III Convegno di studi del 20-21 maggio 2006*, Caltanissetta: Sicili Antica, 91–109.
- Sirena, G. 2011. *Via Pompeia: L'antico tracciato stradale tra Messina e Siracusa.* Acireale/Catania: Bonanno.
- Snodgrass, A. M. 1983. Archaeology. In Crawford, I. M. (Ed.). *Sources for Ancient History*: 137–84.
- Snodgrass, A. M. 1985. Greek Archaeology and Greek History. *Classical Antiquity* 4: 193–207.
- Spampinato, C.R., Costa, B., Di Stefano, A., Monaco, C. and Scicchitano, G. 2011. The contribution of tectonics to relative sea-level change during the Holocene in coastal south-eastern Sicily: New data from boreholes. *Quaternary International* 232: 214–27.
- Spigo, U. 1982-1983. Note preliminari sugli insediamenti di età imperiale romana nei territori di Lentini, Carlentini, Ramacca, Caltagirone, Grammichele. *Kokalos* XVIII- XXIX: 341–4.
- Stanford University. 2004. *Stanford Excavations at Monte Polizzo, Sicily: Project handbook*. 4th edition. Website: <http://archaeology.stanford.edu/MountPolizzo/HandbookTOC.htm>, accessed on 21 April 2020.
- Stein, G. J. (ed.). 2005. *The Archaeology of Colonial Encounters: Comparative Perspectives*. Santa Fe: School of American Research Press.
- Streiffert Eikeland, K. 2006. *Indigenous households: transculturation of Sicily and southern Italy in the Archaic period*. Gotarc seriesB, vol 44. Gothenburg University: Gothenburg.
- Sudano, F. 2009. Leontini. Lo spazio sacrificale dell'Heraion di Scala Portazza. *Fasti on Line* 164: 1-8.
- Talbert, R. J. A. (Ed.). 2000. *Barrington Atlas of the Greek and Roman world*. Princeton: Princeton University Press.
- Tomarchio, G. 1987. Testimonianze di un'antica strada nella Piana di Catania. *Viabilità antica in Sicilia, atti del III convegno di studi*: 37–43.
- Tréziny, H. 1999. Les fortifications grecques en Occident à l'époque classique (491-322 av. J.-C.). *PALLAS* 51: 241–82.
- Tréziny, H. 2002. Urbanisme et voirie dans les colonies grecque archaïques de Sicile Orientale. *Pallas* 58: 267–82.
- Tréziny, H. 2006. Les fortifications archaïques dans le monde grec colonial

- d'Occident. In Vaggioli, M.A. and Michelini, C. (eds.). *Guerra e pace in Sicilia e nel Mediterraneo antico (VIII–III sec. a.C.): Arte, prassi e teoria della pace e della guerra. Atti delle quinte giornate internazionali di studi sull'area elima e la Sicilia Occidentale nel contesto Mediterraneo, Erice, 12–15 ottobre 2003*. Pisa, 255–66.
- Uggeri, G. 2004. *La viabilità della Sicilia in età romana*. Galatina: Mario Congedo Editore.
- Uggeri, G. 2006. Xuthia. In Cancik, H., and Schneider, H., (eds.). *Brill's New Pauly. Antiquity volumes*. Accessed on 5 May 2020. Website: [http://dx.doi.org.ezproxy.ub.gu.se/10.1163/1574-9347\\_bnp\\_e12213730](http://dx.doi.org.ezproxy.ub.gu.se/10.1163/1574-9347_bnp_e12213730)
- Uggeri, G. 2011. La Sicilia nel Periplo dello pseudo-Scilace. In Congiu, M., Micciché, C., and Modeo, S. (eds.). *Timoleonte e la Sicilia della seconda metà del IV secolo a.C. Atti del VII Convegno di studi (Caltanissetta, 22-23 maggio 2010)*. Caltanissetta, 87-99.
- Ulrich, R., and Quenemoen, C. (eds.). 2013. *A Companion to Roman Architecture*, West Sussex.
- Valenti, F. 1992. *Lestrigonia, Insediamenti preistorici nel territorio dell'antica Leontini*. Catania.
- Valenti, F. 1998. Note preliminari per lo studio degli insediamenti di età romana a sud della Piana di Catania. *Kokalos XLIII-XLIV*. 1997-1998: 233–73.
- Vallet, G. 1958. *Rhégion et Zancle*. Paris.
- Vallet, G. 1962a. L'introducon de l'olivier en Italie centrale d'apres les donnees de la ceramique. In *Hommages a Albert Grenier*. Brussels-Berchem, 1554–63.
- Vallet, G. 1962b. La colonisation chalcidienne et l'hellenisation de la Sicilie orientale. *Kokalos VIII*: 31–47.
- Vallet, G. 1968. La cite et son territoire dans les colonies grecques d'occident. *La citta e il suo territorio. Atti del settimo convegno di studi sulla Magna Grecia*: 67-142.
- Veronese, F. 2006. *Lo spazio e la dimensione del sacro: Santuari greci e territorio nella arcaica*. Padua.
- Versluys, N.J. 2014. Understanding objects in motion. An archeological dialogue on Romanization. *ARD* 21: 1–20.
- Walsh, L. 2008. Mediterranean Landscape Archaeology: Marginality and the Culture–Nature 'Divide'. *Landscape Research* 33(5): 547–64.
- Webster, J. 2001. Creolizing the Roman Provinces. *AJA* 105: 209–25.
- Webster, J. 2007. Necessary Comparisons: A Post-Colonial Approach to Religious Syncretism in the Roman Provinces. *World Archaeol* 28: 324-38.
- Whitehouse, R. and Wilkins, S. 1989. Greeks and natives in south-east Italy: approaches to the archaeological evidence. In Chapion, T.C. (Ed.). *Centre and periphery*. London: Taylor and Francis, 102–26.
- Wilson, R.J.A. 1990. *Sicily under the Roman Empire: The Archaeology of a Roman Province, 36 BC–AD 535*. Warminster, UK: Aris and Phillips.
- Wolf, G. 1998. *Becoming Roman: The Origins of Provincial Civilization in Gaul*. Cambridge.

# APPENDIX A

## CONVENZIONE

relativa alla conduzione di ricerche archeologiche in c.da Coda Volpe

Tra

la Soprintendenza per i Beni Culturali e Ambientali di Catania, con sede legale via Luigi Sturzo, 62, Catania, rappresentata dal Soprintendente dott.ssa Rosalba Panvini,

e

e l'università di Göteborg, per il tramite del Dipartimento di studi storici rappresentato dal Preside Henrik Janson.

Si conviene e si stipula quanto segue:

**Articolo 1:** Le premesse costituiscono parte integrante e sostanziale nella presente convenzione:

**Articolo 2:** Le parti si impegnano in un rapporto di durata quadriennale, rinnovabile di comune accordo

**Articolo 3:** In particolare le attività che verranno svolte nell'ambito della presente convenzione attuativa sono le seguenti:

- a) la realizzazione di saggi di scavo e survey, preventivamente concordati tra i responsabili tecnoscientifici;
- b) lo studio dei reperti archeologici
- c) la pubblicazione scientifica dei risultati della ricerca, parziali e finali, in codirezione scientifica tramite pubblicazione in riviste specializzate e seminari;
- d) l'utilizzazione di risorse umane e di ogni strumentazione in possesso o dotazione alle strutture per la realizzazione del progetto;
- e) l'utilizzazione di risorse umane e di ogni strumentazione in possesso o dotazione alle strutture per la realizzazione del progetto;

**Articolo 4:** L'organizzazione e l'esecuzione delle attività di cui l'articolo 3, saranno anticipatamente concordate dai responsabili scientifici designati da entrambe le parti nel dott. Bratell per l'Università di Göteborg e della dott.ssa Maria Teresa Magro, per la Soprintendenza.

Ove si riterrà necessario, sulla base delle esigenze della ricerca, potranno essere individuate, di comune accordo, ulteriori professionalità con competenze specifiche.

**Articolo 5:** Si conviene che la valutazione dei rischi legati alle attività svolte nei luoghi in uso, con la conseguente redazione del documento di valutazione dei rischi (DVR) e/o i piani di sicurezza relativi alle diverse fasi delle attività presente convenzione attuativa saranno di competenza del responsabile della sicurezza dell'Ateneo.

Ciascuna delle parti provvederà alla manutenzione ordinaria e straordinaria di eventuali macchine e/o attrezzature che metteranno a disposizione per le attività di scavo, nonché al rispetto della conformità delle stesse.

Sarà cura di ciascun Ente assicurare al proprio personale che richiede di svolgere attività di ricerca presso il sito di scavo e gli adempimenti che le disposizioni legislative vigenti in materia di formazione, informazione e addestramento e sorveglianza sanitaria prevedono. Il personale che la Soprintendenza utilizzerà per le attività previste dalla convenzione è già inquadrato nei ruoli della Regione Siciliana o comunque già in carico della stessa e, pertanto, non deriveranno a seguito di questa attività oneri aggiuntivi.

I responsabili scientifici presenteranno, ogni anno, ad entrambe le istituzioni di appartenenza, una relazione e una copia della documentazione di scavo e di survey.

**Articolo 6:** L'Università si impegna a fornire la copertura assicurativa per infortuni e responsabilità civile, sollevando la Soprintendenza da ogni possibile responsabilità in merito.

E' prevista la partecipazione alle attività di ricerca anche di soggetti provenienti da altre istituzioni universitarie (per es. Erasmus o similari), purché coperti da polizza assicurativa stipulata autonomamente che copra i rischi connessi all'attività.

**Articolo 7:** Michael Bratell a nome dell'Università di Göteborg si impegna a fornire alla Soprintendenza copia di tutta la documentazione prodotta, giornali di scavo, schede di u.s. Tabelle dei materiali e elenco delle cassette, nonché documentazione fotografica e grafica, su supporto cartaceo e/o digitale, alla fine di ogni anno della stipula della presente convenzione.

**Articolo 8:** I singoli enti potranno, separatamente o insieme, presentare richieste di finanziamento a Enti pubblici o privati, nazionali o locali, Fondazioni, Istituto di credito o imprese private per lo svolgimento delle attività.

In mancanza di finanziamenti esterni, eventuali oneri della ricerca restano a carico dei fondi di ricerca dell'Ateneo assegnati al coordinatore scientifico dell'Ateneo, Michael Bratell.

**Articolo 9:** La presente convenzione attuativa ha una durata di quattro anni ed è rinnovabile con accordo scritto delle parti.

**Articolo 10:** La presente convenzione sarà registrata in caso d'uso. Le spese di registrazione saranno a carico della parte che la richiede.

Soprintendenza ai Beni Culturali e Ambientali di Catania  
Il Soprintendente  
Dott.ssa Rosalba Panvini  
f.to digitalmente

Dipartimento di Studi Storici  
Università di Göteborg  
Prof. Henrik Janson  
f.to digitalmente



## APPENDIX B

A la Fondazione M.C. Lericì

Con la presente, confermo che il progetto di indagini non-invasive proposto da Michael Bratell, studente presso l'Università di Göteborg, sul sito in c.da Coda Volpe è di grande interesse scientifico. Sarò lieta di collaborare con Michael e supportare il progetto, una volta che l'emergenza covid-19 sia finita e che tutti i necessari documenti e permessi siano stati ottenuti. In particolare per portare avanti il progetto sarà necessario che il dipartimento di studi storici dell'università di Göteborg produca una richiesta ufficiale di collaborazione e che firmi una convenzione con la Soprintendenza. Una volta firmata la convenzione, sarà necessario ottenere un'autorizzazione ad indagini non-invasive. Finché tali documenti non saranno prodotti, posso solo esprimere la mia opinione personale sul progetto di Michael e non quella ufficiale della Soprintendenza.

Cordiali saluti,

Catania , 28/04/2020

Maria Teresa Magro

