The Margi River Valley

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Abstract The impact that geographical and topographical conditions have had on settlement choice has always been a matter of discussion, especially for the way that different environmental situations have influenced the structure of settlements, their economy, and their network of contacts. The concept of landscape and its very definition are not simple or unequivocal, and the term is open to a wide range of possible meanings. Italian law gives a good definition of landscape: "The term landscape applies to a homogeneous territory, whose characteristics are derived from nature, from human history, and their reciprocal relations".¹ A legal definition has been necessary in order to produce a series of laws and regulations, so that the territory is adequately known, safeguarded, and managed according to the values inherent in the different contexts that affect it.² Landscape not only exists as a physical entity—as a stone that can become a wall, soil that can become a vase, or vegetation that can become food—but also it exists as a creation in our minds. This is especially important in antiquity, when the physical world was, sometime, imbued with a spiritual meaning and a spring, a river, or a forest could assume a particular significance.

It is not simple to understand the human perception of the Margi river valley in antiquity, though its physical landscape is very definite. The valley is the southwestern appendix of the plain of Catania and, by way of the Margi-Maroglio river system, it connects the two coasts of southeastern Sicily: the Ionian coast to the east and that of the Sicilian Channel to the south with a watershed at Caltagirone (Fig. 1). The valley is bordered on its western flank by the southeastern foothills of the Erei mountains, large calcareous outcrops, and, on its eastern flank, by the high plateau of the Hyblaean mountains with an altitude between 500 and 650 m above sea level. Much of the Hyblei was created by the subduction of the

^{1 &}quot;Per paesaggio si intende una parte omogenea di territorio i cui caratteri derivano dalla natura, dalla storia umana o dalle reciproche interrelazioni" (art. 131, comma 1 del Codice dei Beni Culturali D.Lgs. 42/2004).

² The Landscape Plan (*Piano Paesistico*) for the territory of the Provincia di Catania was adopted in 2018, see https://www2.regione.sicilia.it/beniculturali/dirbenicult/bca/ptpr/pianopaesistico.html (checked on February 16th, 2022).

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Fig. 1 Sites in the Valley dei Margi (from Privitera and Spigo 2005)

African tectonic plate, as it goes under the Euro-Asian tectonic plate: the Margi valley, in fact, lies directly along the subduction and suture line between these two massive geological structures which are covered partially by sediments of the solfifera series (Fig. 2). The Margi river and the other rivers in the area, the Pietrarossa on the Erei side and the Catalfaro on the Hyblei side, are all tributaries of the Gornalunga and therefore, of the Simeto, Sicily's largest river, which flows across the delta-like plain of Catania to the island's eastern shore. The transformations wrought by sea-level changes and the modification of the coastline documented in the plain of Catania have had an impact also on the Margi river system with consequences for accessibility from the valley to the coastal area.³

Today, the main agricultural feature of the Margi valley's landscape is arable crops that cover more than two-thirds of the area, interspersed with citrus orchards and olive groves (Fig. 3). Agricultural activity here has a low degree of diversity: the arable land is cultivated mainly for hard wheat in rotation with forage and legumes, such as vetch and field beans. Specialized agriculture consists essentially of tree crops (orange and olive groves and some rare chestnut trees), vegetable crops (almost exclusively artichokes in rotation with arable crops), and it is equal to about 40% of the total agricultural production in the valley. The areas with the greatest vegetation are the mountains: Castello di Serravalle, Rocca S. Agrippina, and the volcanic reliefs of Rocchicella, Poggio Cavoni, and Contrada Urticchi. These areas include shrub vegetation that mostly represents stages of degradation of woodland.⁴

³ Monaco et al. 2004, 185, fig. 5.

⁴ La Fico-Guzzo and Maniscalco 2013.



Fig. 2 Central Valley dei Margi: geology (adapted from La Fico – Guzzo and Maniscalco 2013)



Fig. 3 Central Valley dei Margi: agricoltural landscape (adapted from La Fico – Guzzo and Maniscalco 2013)

Settlements

The Margi valley's landscape in antiquity was probably quite different from its current state, but the importance of the valley as a route since ancient times is reflected in the area's numerous settlements and the way in which they took advantage of the valley's many resources for agriculture, animal breeding, and hunting. A rapid review of the valley's earliest occupants leads us to a place that would become a focal point in the area's geography: the large grotto at Rocchicella, where the earliest traces of occupation date back to the Epipaleolithic Age.⁵ Here and at Perriere Sottano, a rocky ridge that rises from the plain of Catania, as well as at Sant'Ippolito at the opposite end of the valley, and at several sites along the Gornalunga river and the Torrente Monaci, the Neolithic age is also well-documented.⁶

During the Early Copper Age, settlements began to spread to the Hyblaean highlands, probably as a result of a large-scale pastoral activity and the search for new grazing areas and new raw materials, like basalt, which could be obtained in easy-to-use quantities from open-air quarries typical of the Hyblaean highlands.⁷

During the Early Bronze Age, numerous groups of rock-cut tombs appear on the slopes of the Erei and Hyblei, evidence for a dense network of small settlements and an index to extensive population development across the territory linked to an intensification of agricultural and pastoral activities. At Monte Catalfaro and Camuti, in the territory of Mineo, circular huts with a wooden structure in oak were attested.⁸ Today the rock-cut tomb remains a permanent feature of this landscape, as it was the most common burial structure for almost a millennium, even if the tomb plan itself underwent several changes over the centuries (Fig. 4).

Ancient literary sources indicate that the Margi Valley and its surrounding hills were considered to be lands of the Sikels, the indigenous people of south-eastern Sicily.⁹ During the Archaic Period, urbanized centers developed on these sites which had been already inhabited for some time: the Montagna di Ramacca, Piano Casazzi, Coste Finocchio, and Monte Balchino on the Erei side of the valley, and Favarella-Piano Bellia, Terravecchia di Grammichele, Monte Catalfaro, Menainon, and Palikè on the Hyblaean side (Fig. 1).¹⁰ Most of these centers would continue to be inhabited until the first century BCE. Judging by the infrastructure that is known to us or was presumably built during the Archaic period—roads, bridges, water channels, or fortifications—the only remains that still have an

⁵ Maniscalco 2008, 37.

⁶ Maniscalco 2008, 66; Messina 1979; Maniscalco 2000, fig. 1; Agodi, Procelli and Sapuppo 2000; Crispino 2014.

⁷ McConnell 2003.

⁸ Maniscalco 2012, 747; Castiglioni 2008, 380.

⁹ Holloway 1990.

¹⁰ Procelli 1989; Holloway 1990; Privitera and Spigo 2005; Maniscalco 2005.



Fig. 4 Rocca S. Agrippina, Mineo.

Fig. 5 Castellito, Ramacca.

impact on the valley landscape are the fortifications, some of which are still very visible in the countryside. In some cases, they were created less out of military necessity but rather as an affirmation of self-identity.¹¹

From an archaeological point of view, the Punic wars and the entry of Sicily into the Roman sphere are perceptible in the strong drop in the number of settlements from the third through the first centuries BCE. During Late Roman times the settlements increased in number, and this is closely linked to the agricultural exploitation of the plain with a consequent depopulation of hilltop centers.¹² The development of large estates in the Margi valley is documented in the presence of settlements such as Favarotta, the site of a villa that probably incorporated a portion of what had been the territory of the ancient sanctuary of the Palici, as well as Castellito (Fig. 5), the site of a villa strongly connected with agricultural activity.¹³ In the imperial era, Rome's interest in the plain is clearly visible in the *via Capitoniana*, a major highway that passed though the Margi valley on the way from Catina (Catania) to Agrigentum (Fig. 6).

In the Margi valley, at least two important roads have been identified: the road coming from the Ionian coast and running across the southern slopes of Mount Etna, and one that connected central Sicily with the southeastern part of the island.¹⁴ These were pathways that were in use for many centuries, with settlements from various periods situated along their routes. They were also succeeded by historical roads (*trazzere*) and, in some cases, even by modern highways (Fig. 8). These two basic roads met at the narrowest point in the valley, precisely in the area, where there was the principal cult site, Rocchicella di Mineo or ancient Palikè (Fig. 7). The continuity of occupation at this site is largely due to its crucial

¹¹ Procelli 1988–89; Brancato and Caliò 2019; Maniscalco 2020.

¹² Bonacini 2007, 95.

¹³ Cirelli, Grasso and Maniscalco 2016; Albanese and Procelli 1988-89.

¹⁴ Bonacini 2007, 101 with previous bibliography.



Fig. 6 Late Roman roads (from Uggeri 1997–98)



Fig. 7 Valley dei Margi at Rocchicella (G. Barbagiovanni)

geographic position. Even following its abandonment as a cult-site by the second century CE, some of the monumental buildings of the former sanctuary were remodeled for agricultural purposes. In the sixth century CE, a small settlement was created, perhaps in relation to the military *Annona*, and later the area once again became the site of a settlement during the eighth and ninth centuries CE.¹⁵

¹⁵ Maniscalco 2008, 129–36; Arcifa 2016.



Fig. 8 Central Valley dei Margi: trazzere and modern roads (adapted from La Fico – Guzzo and Maniscalco 2013)

Botanical Analysis

The analysis by Castiglioni of botanical samples from Rocchicella, S. Febronia, M. Catalfaro, Piano Casazzi, Monte S. Mauro, and Pietrarossa gives us some information about the environment of the Margi river valley in antiquity¹⁶. As Castiglioni points out, we may infer certain aspects of the spontaneous and cultivated vegetation across time from botanical samples recovered from these sites, but we must be careful not to assume that the plants represented come solely from the immediate area-there may be wood and/or other botanical materials used for specific technological purposes that were brought from elsewhere, along with other imported objects. This is not the case for olive trees, and to a lesser extent, evergreen oaks and holm oaks that are attested with a certain consistency since the Neolithic period. These species certainly would have been useful for practical applications at this location, but their simple presence would indicate their significance in the Margi valley over a long period of time. The dominance of the olive tree can refer to actual selection for its great versatility, but it can also suggest the tree's greater availability: in fact, the olive tree in formations like Mediterranean maquis scrubland (also called garrigue) is the plant that reaches the largest size and therefore provides the largest pieces of wood, suitable both for carpentry and fuel. The exploitation of forest resources from the region of Mount Etna can be deduced in the fifth century BCE from the presence of fir timber in the construction of Stoà B at Rocchicella, and even earlier in the Early Bronze Age, from birch resin that was used as a glue in the repair of a pottery fragment from Santa Febronia.¹⁷

Since the Neolithic Age, the cultivation of different varieties of cereals and legumes is documented in the valley. Among these cereals, the cultivation of spelt (*farro*) seems to be preferred, probably for its genetic resistance to disease and environmental adversity.¹⁸ The legendary fertility of Sicilian fields is reported in many ancient sources. In particular, the *campi Leontinoi*, where according to Diodorus Siculus (V, 2) barley grew spontaneously, were rated by Pliny the Elder (N.H. XVIII, 95) as having, along with Baetica in the Iberian peninsula and Egypt, one of the highest wheat yields in the Roman Empire. This was also the result of the cereal monoculture imposed on Sicily by Rome since the end of the third century BCE. The late Roman granary at Pietrarossa, a structure with several large rectangular sections on the north slope of the Algar mountains (Fig. 9), which dates to the fourth and fifth centuries CE, gives us a rare glimpse of cereal production and storage during this period. In a granary found there, *triticum dicoccum* dominates other cereals. It is possible that different species were planted in separate fields around the structure as part of an exten-

¹⁶ Castiglioni 2008.

¹⁷ Castiglioni 2008, 380; Mentesana 2015; De Benedetto and Fiorentino 2015.

¹⁸ Castiglioni 2008, 371.



Fig. 9 Pietrarossa, Mineo, granary

sive cultivation of large lots that did not require particular treatment.¹⁹ In Sicily, according to Roman agricultural policy, barley was cultivated mainly for domestic consumption—following typical habits of the Greek world—while wheat was destined for export, especially towards the capital city of Rome. Along with cereals and legumes, grape cultivation is also present, and the production of wine is attested already in the fifth century BCE at Rocchicella by the grapes that were found ready for pressing close to a tub in Stoa B.²⁰

At Rocchicella, a series of channels dated to the Archaic age, cut in the bedrock and running out to the plain below, point to the importance that water management must have had in the valley (Fig. 10). The fact that this management seems to have been under the control of the main sanctuary in this area is not surprising and seems also to suggest the role of the Sanctuary of the Divine Palikoi in the management of land and agricultural production.²¹

¹⁹ Castiglioni 2008, 383.

²⁰ Castiglioni 2008, 376; Randazzo 2008, 196.

²¹ La Fico-Guzzo, Maniscalco and Mc Connell 2015.



Fig. 10 Rocchicella: water channel

Conclusion

The picture we can draw of the Margi river valley from the first millennium BCE onwards, is that of a landscape characterized by woods, pastures, and land with mixed crops, interspersed with olive trees and vines. Data from the pollen diagrams of the two sites closest to the Margi Valley—the Biviere di Gela and the Lago di Pergusa—also allow us to reconstruct an environment characterized by forests, scrub, and grasslands.²² Earlier, around 2300 BCE, the climate throughout the Mediterranean became drier; however, the area of the "Biviere di Gela", closest to the Margi valley, even during the period of aridification continues to maintain the environmental characteristics of a humid climate with evergreen oaks, juniper, and ash, and a habitat similar to that documented by botanical analysis for Rocchicella and its neighboring sites.

The future of the Margi valley is not very promising (Fig. 11), even if a certain mitigation of the effects of the current tendency toward aridification and soil erosion is possible through careful planning and wise use of residual resources.²³ The study of the landscape in

²² Noti et al 2012.

²³ Drago 2005.



Fig. 11 Sicily: map of climate vulnerability (from Drago 2005)

antiquity, now more than ever, is a fundamental contribution to understanding one of the most formidable challenges that we face in the near future: climate change.

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