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# Surveying the Complexity: A Global Approach to Italian Landscapes

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# Surveying the Complexity: A Global Approach to Italian Landscapes

Romanization; economic; demographic aspects; Processual archaeology; GIS; sociocultural identity.

Methodological remarks from our survey projects in Italy (Central Liguria; Northern Coastal *Etruria*; South *Picenum*) will be discussed. We chose these study areas because they are significant in exemplifying different Italian regional and geomorphological contexts:

1) Northern Coastal *Etruria*: Ager Pisanus and Volaterranus in plain and softly hilly territory along the Tyrrhenian coast.

2) South Picenum: ager Firmanus in mostly hilly territory along the Adriatic coast.

Both areas present large extensions of ploughed fields and can be walked with a high degree of visibility.

3) Polcevera Valley is a mountainous and wooded district with a very low degree of archaeological visibility.

Moreover, a strong reason for choosing these districts was that they are rich in literary, epigraphic and archaeological evidence—mostly concerning the Romanization process—which we aimed at integrating with the naturalistic research and the survey data.

Our objectives are both to identify the relationships among the various landscapes which succeeded one another and to stress the changing elements in the ancient societies (economic, social and demographic aspects, human behaviour, etc).

These survey projects have a global approach as they are diachronic (from Prehistory up to the Early Middle Ages) and multidisciplinary including geomorphology, palaeogeography, remote sensing, geophysical surveys and all available evidence (ancient and medieval archaeological, epigraphic and literary sources; toponyms; historical cartography, etc.).

We apply the Processual methodology standards<sup>1</sup> both in fieldwork and in artefact collection and documentation, as well as in data management by means of Geographical Information Systems. Nevertheless, we think that geomorphologic, spatial and quantitative evidence is to be integrated with qualitative and symbolic data<sup>2</sup> in order to reconstruct the complexity of the anthropic activities in the studied areas throughout the centuries.

In particular we are looking for theoretical tools in order to identify, in ploughsoil assemblages, not only native or Roman sites, but also the related changes in land use, human behaviours, economic, social and demographic aspects, etc.

From our point of view, a joint and flexible analysis of space and time, geomorphology and anthropic agencies can be a useful tool for outlining landscapes overlapping in all their complexity.

<sup>1</sup> See Bintliff 2006.

<sup>2</sup> Ashmore and Knapp 1999.

# Case Study (1) Northern Coastal Etruria

The studied area in Northern Coastal Tuscany (lower Arno and Serchio, Fine and Cecina river valleys) consists of alluvial Holocenic plains mostly formed by sand and silt deposits and bordered by mountainous/hilly ranges (Monti Pisani in the north; Colline Livornesi and Colline Metallifere in the south).

Since the 1990s we have been implementing a GIS concerning the present provinces of Pisa and Leghorn (*Pisae* and *Volaterrae* territories in Roman times) as part of the *Carta Archeologica della Regione Toscana* Project. In this GIS we have processed data derived by our field surveys, laboratory research and integrated studies: about 600 topographic units (sites and off-sites) have been identified, dated from Paleolithic up to Late Antiquity.<sup>3</sup> The Processual methodology has been adopted in surveying and processing data but without deterministic approaches. In particular flexible standards have been applied in quantitative and qualitative analyses concerning the ploughsoil assemblages, e.g. a very accurate study of sherds can identify diagnostic items for defining site typology, chronology and, in general, economic and social changes.

We chose for its representative value the hinterland of *Vada Volaterrana* harbour as a sample area. Here rural settlement strongly increased in the 2nd century BC. Latial and Campanian Graeco-italic amphoras, cooking wares and black glazed vessels are the diagnostic tools for dating the sites and reconstructing the Romanization process in this district. Besides the economic aspects, the social importance of these imported goods has been stressed as they provided evidence of cooking and symposium praxis according to the Roman fashion.

Other kinds of finds (painted plasters, mosaics, marble slab pavements, bathing elements) have been used to distinguish the most remarkable units (*villae*) from the simpler rural sites (farmsteads, in Latin *villae*, *villulae*, *casae*, *tuguria*<sup>4</sup>). In our DataBase vocabulary we do not adopt a rigid classification: when survey data are not sufficiently specific we use intermediate terms such as "villa or farmstead;" "farmstead or small rural building" (either for independent habitation or as part of larger estates). We think this is a useful strategy to avoid interpretative bias when the archaeological visibility is not good enough, due to natural or anthropic agencies.

# Case Study (2) Southern Picenum (Ager Firmanus)

Our Pisa South *Picenum* Survey Project (Marche Region) concerns the territory of the Latin colony *Firmum Picenum* (264 BC) which extended between the Tenna and Aso river valleys. This territory is characterized, west to east, by a mountainous area (650m a.s.l. average) which slopes down in a Plio-Pleistocenic hilly sector (400–200m a.s.l.) reaching the Adriatic littoral. The narrow and low coastal strip is mostly gravelly and sandy.<sup>5</sup>

The methodology applied in surveying, managing and processing data is the same as reported above. In this area we identified 780 topographic units, dated from Lower Paleolithic up to Late Antiquity.

Comparing the results of the Tuscany and Marche surveys, we note different interpretative conditions in these two areas. While the Tuscan plain or gently hilly territory was generally walked with good archaeological visibility, in the latter area steep slopes and human agencies affected the ancient landscapes and their archaeological documentation more strongly. The ratio between sites and off-sites is clear evidence of this regional

<sup>3</sup> Francovich, Pasquinucci, and Pellicanò 2001.

<sup>4</sup> Giuseppe 2005.

<sup>5</sup> Pasquinucci and Menchelli 2004.



Fig. 1 | Field scatters in the *ager Firmanus*.

difference: in the *ager Firmanus* the off-sites reached 58%, as 330 sites and 450 off-sites have been identified, while in the coastal *ager Volaterranus* the off-sites are about 11% of the total topographic units.

We analyzed these 450 field scatters very carefully, in order to define their origin. For example, most of them have been interpreted as site-derived sherds: that is the last residue of missing sites, almost completely destroyed or concealed by anthropic/natural post-depositional processes, while the other scattered sherds derived from various human activities across the countryside.<sup>6</sup> As well known, specific off-site analysis can provide highly informative data for landscape archaeology.<sup>7</sup>

In this territory 108 sites have been interpreted as farmsteads connected with the *Firmum* triumviral *centuriatio* quoted by several literary sources and epigraphic evidence. The global approach is particularly necessary in this case, including the integrated study of all kinds of sources for reconstructing a more complete framework of the local social and economic history.

# Case Study (3) Valpolcevera (Genua-Liguria)

The study area is the mountainous district of the Valpolcevera (Polcevera Valley), in Central Liguria, between the port city *Genua* and the Apennine passes leading to the Po Plain.

The Valley is characterized by steep slopes and dense vegetation cover while ploughed fields are very small and rare. Moreover, the archaeological evidence is very scanty. In fact it is very difficult to identify the Ligurian sites by survey, as they generally consist of small huts made of perishable materials.

The local ancient landscape and its economic and social structures are described in a remarkable epigraphic source, the *Sententia Minuciorum* (117 BC), which also provides information concerning the first segment of the *via Postumia* (148 BC). This was the major Roman road connecting Genoa and Aquileia through the Polcevera Valley and was constructed during the Romanization process of Northern Italy. The *Sententia* provides fundamental information about the Valley's administrative-juridical organization and the borders of *ager privatus* and *ager publicus*, which were marked by 21 *termini* (boundary stones). These were the object of specific research.<sup>8</sup>

- 7 Bintliff and Snodgrass 1988.
- 8 Pasquinucci and Launaro 2009.

<sup>6</sup> Menchelli 2008.



Fig. 2 | Polcevera Valley's landscape. The remarkable stone mid-slope may be interpreted as *terminus* (see *Siculus Flaccus, De condicionibus agrorum*, 139 L; 142, L.).

Due to the peculiar archaeological evidence in the Valley, a specific strategy has been applied including thorough consideration of various interpretative categories (religious, symbolic, ideological aspects). In this perspective the Polcevera Valley appears to keep its marginalization and its social-cultural identity due to a strong bond between people, their places and their collective memory.

In conclusion, in spite of the stochastic nature of survey evidence, we think that by applying a global approach—including quantitative and qualitative analyses, technological systems applications and place perception—we have a higher probability of understanding the ancient landscapes' complexity.

# Bibliography

### Ashmore and Knapp 1999

W. Ashmore and A.B. Knapp, eds. Archaeologies of Landscape. Contemporary Perspectives. Malden: Blackwell, 1999.

#### Bintliff 2006

J. Bintliff, ed. A Companion to Archaeology. Malden, Oxford, Carlton: Blackwell, 2006.

### Bintliff and Snodgrass 1988

J. Bintliff and A. Snodgrass. "Off-site Pottery Distributions. A Regional and Interregional Perspective". *Current Anthropology* 29.3 (1988), 506–513.

#### Francovich, Pasquinucci, and Pellicanò 2001

R. Francovich, M. Pasquinucci, and A. Pellicanò. *La Carta Archeologica fra ricerca e pianificazione territoriale. Atti del seminario di studi.* Biblioteca del Dipartimento di Archeologia e Storia delle Arti, Sezione Archeologica, Università di Siena 4. Firenze: All'Insegna del Giglio, 2001.

#### Giuseppe 2005

H. di Giuseppe. "Villae, villulae e fattorie nella Media valle del Tevere". In *Roman Villas Around the Urbs. Interaction with Landscape and Environment. Proceedings of a Conference at the Swedish Institute in Rome, September 17-18, 2004.* Ed. by B. Santillo Frizell and A. Klynne. Roma: Swedish Institute in Rome, 2005, 2–19.

### Menchelli 2008

S. Menchelli. "Surface Material, Sites and Landscapes in South Picenum (Marche, Italy)". In *Thinking about Space. The Potential of Surface Survey and Contextual Analysis in the Definition of Space in Roman Times*. Ed. by R. Brulet, J. Poblome, and H. Vanhaverbeke. Studies in eastern mediterranean archaeology 8. Turnhout: Brepols, 2008, 31-43.

#### Pasquinucci and Launaro 2009

M. Pasquinucci and A. Launaro. "Researching 'on the Margins'. Landscape Archaeology in the Polcevera Valley". In *Liminal Landscapes. Beyond the Concepts of 'Marginality' and 'Periphery'*. Ed. by I. Holm and K. Stene. Oslo Archaeological Series 11. Oslo: Unipub : Institutt for arkeologi, konservering og historiske studier, Universitetet i Oslo, 2009, 183–201.

#### Pasquinucci and Menchelli 2004

M. Pasquinucci and S. Menchelli. "Landscape Archaeology in South Picenum. The Tenna, Ete and Aso River Valleys". In *The Geoarchaeology of River Valleys*. Ed. by H. Dobrzanska, Jerem. E., and T. Kalicki. Budapest: Archaeolingua, 2004, 28–48.

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