Heritage as an Alternative Driver for Sustainable Development and Economic Recovery in South East Europe

Landscape and cultural heritage: best practices for planning and local development: an example from Southern Italy

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Abstract

The multidisciplinary study of the landscape aims to highlight, through a multi-scale and multi-temporal reading, the development and evolution of processes of natural and anthropogenic transformation in the different contexts examined, recognizing their common characteristics and structural differences. Such an approach cannot be separated from the identification of settlement dynamics and social-economic changes of long duration, nor from diachronic analysis of specific vocations and evolutive processes of the territory. In the study area, which includes the land around Castel Lagopesole, was carried out an archaeological and topographic research about settlements and their lands in the XIII and XIV century (§ 1.-2., by S. Del Lungo); a structural analysis of the rural landscape and a comparison between ancient and current intended use of the soil (§ 3., by C. A. Sabia). The aim is to bring out the elements of the historical landscape of merit and to propose appropriate criteria for planning for their protection and local economic development (§ 4., by C. Pacella).

Keywords: Landscape; Cultural Heritage; Cultural Landscape; Castel Lagopesole; archaeology; Frederick II; Charles I of Anjou; viticulture; Aglianico; Gaglioppo; Sagrantino; Tamurro nero; agriculture; identity of territory, map-algebra comparison, urbanistic planning

1. Project and method

This paper is part of a larger project, done by CNR IBAM and Comunità Montana in an operative agreement about Landscapes and agricultural productions in Lucania under the emperor Frederick II.

The focus is on viticulture, vineyards and, naturally, wine, in a research and a new composition of all greek and latin sources, to reindentificate ancient and medieval vine and grape varieties. One of the questions, where it can try

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to find an answer, could be: What did drink Frederick the II? If you say Aglianico, you have perhaps done a big
discovery that local winemakers can use to sell better their product. Then, the history meets some economic aspects
very important.

In Italy, as in the others european countries, lands are a very and unusual palette for special painters: the men
who lived there in the time. Nature is the Space (S) with its best dress. The Man works inside and gives the Time
(T). Both and togethers they make Culture (C), and the Landscape (L) takes all this. If you only have the right keys
to understand and analyze it, you can catch every characters of lands and taste them, using this formula:

\[ S \times T \rightarrow C \geq \leq L \]  

(1)

In 1963 Carlo Alianello distinguished ‘mountains’, like natural monuments in countries without a long history (let
say the Grand Canyon; the Rocky Mountains, in USA, and so on), from the ‘mounts’, not very tall, or big, but lived
in the Past and used by human communities (the Apennines, in Italy). The difference is the Man who lived there for
a very long time.

Remembering the english movie of The Englishman who went up a hill but came down a mountain (1995), in
Wales there was a natural mountain (Flynnon Garw) lower than the measure limit (2000 feet) fixed by the National
Geographic Society. It becomes an hill and then, another time, it has upgraded to a mountain, when countrymen
build a tumulus on the top. Well, perhaps all differents can be resumed there, in the thin line that man gives to Past,
Present and Future.

It has also to keep three keywords of research:

- knowing (archaeological and historical topographic research) in the treasure chest of the Past (museums,
  archives, biblioteques) and in the field;
- studying the land use in history and agricultural capability;
- planning the economic and sustainable develop of lands.

The case of study here explained is about castle of Lagopesole (fig. 1 a.), in the Avigliano and Filiano shires, and
the land around in an area of 100 km², with three other fortified medieval settlements (from the NW to the SE, Torre

What was Lagopesole? A real castle? Not at all. It was a *domus*. This latin word could be translated with ‘house’
but the emperor Frederick II thought to a ‘palace’ (Sthamer, 1995, p. 115 nr. 177). Here he never staied, because in
that moments (1242 and 1250; Cadei, 1996) he was building something of new over ruins of a longobard settlment
and a normann fortress. He will be the third son, Manfredi, and his baddest enemy, Charles I of Anjou, that
complete the palace and use it.

The land takes many traces and signs of those times. If you change your eyes and look around, you can see
another land where agricultural and food produces find their real identity.

2. Knowing

Archaeological and historical topographic research save objects and places from the anonymity of simple listing,
reconstructing their physical and emotional identity acquired through interaction between man and the environment.
In order to do this, all the items found in the local area and coming from the past, expressed in the form of traces,
signs or evidence, both tangible and intangible, are identified and interpreted. The purpose is to reconstruct and
make available the original mosaic from which the dispersed, remote and sometimes casual fragments derive
because of stratification over time. Four are the steps:

- to reconstruct the weave of a land (edges and limits of properties, public and private) by the rediscovery and
  analysis of boundary elements. During the XIII century Swabians and Angioins dynasties used for them
  fountains, stones with arms and symbols graved in, or simples (the *termini*), and lines, like rivers, roads, external
  forest right lines, changing of cultivations (the *limites*);
- to learn by ancient documents, archive maps and books, crossed with place-names, which were the land use, its
  environmental carachters, cultivations types and the cattle breedings in use there in that time;
• to examine historical structures and infrastructures linked to agriculture and cattle breedings;
• to find by surveys archaeological evidences in the fields.

![Fig. 1 a-b. (a) The *domus* of Castel Lagopesole (Avigliano, PZ) on the top of the hill, and the roman imperial *via Herculia*; (b) The Lagopesole (*Lacus pensilis*) in Piano del Conte (Avigliano, PZ).](image)

The area of study is the east side of Atella or Vitalba valley. This land is now a typical neglected and deserted area, without a specific economic activity. Sheeps give milk to produce fresh and aged cheese but quantities are very low. A projectual idea to develop is the use of research on cultural heritage to recover history and traditions of agriculture and food produces, because we want they become uniques on the markets (then quality, and culture, against quantity).

What was the land of Lagopesole (*lacus pensilis*, ‘the lake suspended’; fig. 1 b.) in the XIII and XIV century? In the 1316 it is a *terra* (land) with *nemoribus* (forests) *defensis* (fields defended by laws) *possessionibus* (properties), *vineis* (wineyards), *olivetis* (olive groves), *terris cultis et incultis* (cultivated and uncultivated fields), *planis* (plains) *montibus* (mounts) *pratis* (grasslands) *pascuis* (grazing lands) *molendinis* (mills) *aquis* (springs) *aquarumque decursibus* (streams).

Lagopesole is the central imperial and, then, royal propertie (*demanius*) with four large fields defended by laws (*defensae*) around (S. Angelo, Monte Marcone, Nocella and Perazzi). It is possibile to recognize them in their boundary lines (natural and cadastral), up to our times. Forests are opened to the grazing of cows, sheeps and pigs, but only by imperial and royal permission. They are on the W and S side of Lagopesole. There, it would also be possible hunt deers, roe deers and fallow deers by another type of royal license. In fields on E and N side of the *domus* there is grain, to do flour and bread, and barley, to the horses eating (Fortunato, 1902; Montanari 2010, pp. 124-146) (fig. 2).

And vines varieties? Nothing of them was planted here because there are highlands and the cold climate doesn’t help their cultivation.

Now, if history enters in the lands study, what could happen?

• We can discover places unsuspected, a lot of times known by strangers but not by inhabitants;
• A produce became the symbol of a country and its land context. If this context is known and preserved in every cultural features (from the monuments to the traditional uses of countrymen), helps the produce to become unique against global competition.

So, let return to the first question: which type of wine did Frederick II drink? In Vulture area there are some wine tags that speack about swabian history. But when the emperor came here, he arrived, like usual for him, with wine coming from his wineyards in Sicily (‘Gaglioppo’) and a reserve of ‘Sagrantino’, usefull to save the health of his hawks (Del Lungo, 2010).

Instead, Charles the I of Anjou preferred the best red wine from Melfi (*de vino Rubere Melfie meliori quod haberí poterit, percipiendo vindemiarum tempore*) (Fortunato, 1902); then, perhaps the ‘Aglianico’ with ‘Tamurro nero’. 
He remained in Lagopesole for a long time with his court and he needed to buy there foods and drink, two times every week. Barrels have builded directly inside the caves of Lagopesole *domus* and they have filled in, perhaps really by Aglianico.

Fig. 2. The territory of Castel Lagopesole in XIII and XIV century.
3. Studying the land use in history and agricultural capability

Landscape is the result of the succession, over time, of the environmental, social, cultural and economic-productive evolutionary processes that occur in an area. The study of rural landscape evolution consists in a reconstruction of the historical features, where there is an overlay of different elements (natural beauties, archeological site, cultivated areas, etc.). This kind of analysis can be useful to recover the past identity of the territory. The study of the agricultural use of a soil in history, through the definition of its vocational degree, provides empirical confirmation useful to validate the reconstruction hypotheses of the agricultural landscapes in the past, deriving generally from archeological or historical researches. Therefore, the vocational degree allows gathering information on the capability to develop agricultural practices and possible cultivations (Grassano, Tedone, Verdini & De Mastro, 2010).

It is worth considering that:

- The natural environment and the plants are part of results from the combination and the mutual influence of abiotic factors (soil, temperature, water, light, wind) with biotic factor (natural and vegetable micro-organisms);

All agricultural species show sensitivity to these factors and the productive success of an environment (vocation) depends both on the capability to satisfy their needs and, at the same time, the capability of the species to adjust to all this (Giardini, et al., 1997).

In this type of analysis is also necessary to consider the principles of the ancient agricultural practices and technological limitations related to the tools available for working the land, besides the absence of the most modern technical means (improved cultivars, fertilizers, pesticides, etc.). The making of the Map of the Agricultural Capability for the area around the Castle of Lagopesole resulted from the following major steps:

- choice of territorial parameters (chemical, physical and environmental factors);
- data collection and creation of an informative database (SIT);
- GIS processing and map-algebra comparison of the parameters considered;
• Analysis of the environmental/orographic characteristics of the territory and attribution of a numerical value on the basis of the needs how all the agricultural species considered (arable crops and vineyard);
• Definition of the different classes on the basis of the vocational degree;

These classes divide the study area into low, medium and high-vocational degree areas with regard to the cultivations considered, that is arable crops (cereals and legumes, in rotation of cultivation) and vineyard, according to the ancient cultivation practices (Sabia, Carbone, Gioia, 2013).

Since ancient times in the study area around the castle Lagopesole (fig. 3) was practiced agriculture and pastoralism, as evidenced by an ancient imperial road called Via Herculia (Del Lungo, 2013). The geomorphological conformation has high hills with an altitude between 500 and 1200 meters. The castle is located in the center of this area, at an altitude of 828 meters, which allows it to assume a dominant position. Currently in this area is mainly practiced cereal and breeding of sheep and goats. Scarce is the production of vineyards and olive groves.

The analysis has confirmed that the current agricultural use of the land is largely corresponding to his vocation. In fact the high agricultural capability areas for arable crops are mainly found in sub-level areas located near the alluvial plains of the major watercourses especially in correspondence of Iscalunga in the territory of Filiano, the Piano dell’Isca (to the SE of Castel Lagopesole), but also on the highland of Piano del Conte (fig. 4).

Another significant element of the vocation of this land emerges with the analysis of the agricultural capability related to viticulture (fig. 5). In this case there is a lower altitude of the territory in this type of cultivation which, of course, is the best climatic conditions further north, in the Vulture area.

It was also possible to notice that the condition of low agricultural capability, for some portions of territory, is determined not only by factors such as altitude, or the exposure to an unfavorable solar radiation, but also by the distance from the sources of water supplies such as springs and watercourses, which is discriminating especially for well-watered cultivations (Forni, 2001). As far as this is concerned, it is worth remembering that the usual cultivations (cereals, legumes, vines) were not generally irrigated, but the proximity to the water sources involved an unquestionable productive advantage resulting in a significant increase in the production.

4. Planning an economic and sustainable develop of lands

To change it needs lawmakers able to introduce new tools in regional government about transformations of territories. These tools should be renewed on the articles to better protect landscape in all its natural and historical components and sustainable transformation.

Every area can join an high level of quality and be able to compete with other European urban systems. Competition is to give a chance to the concrete development of the economy and the subsequent grown of wealth and well-being of the population.

The new generation of urbanistic plans calls for more complex and detailed study of the territory in order to properly identify its invariants and to be able to:
promote the rational and orderly development of urban and suburban with the least amount of soil;
• protect the physical integrity and cultural identity of the region through the enhancement of the landscape whether environmental or cultural-historical resources
• preserve ecosystems, retrain existing settlements weaves and recover damaged sites enhancing regional and local economic development;
• promote and develop the agricultural landscape, the productions and tourist activities related.

Even Basilicata with the law n. 23/99 has introduced a new planning model based on the new concepts described above but any local authority has planned its territory following the new guidelines. What are the effects created by this impasse? They are a wicked soil consumption, the incorrect use of resources and a general difficult of growing (Abate, et al., 2012). Also in Castel Lagopesole the built has "invaded" the areas zoned for agricultural use rather than the expansion of residential areas provided by the PRG of 1987 still in use. It should be noted that the same situation is found in urban areas of Scalera and Filiano.

Then it’s time that the Lucan territories are liberated from concept of randomness. To achieve this it needs a change of course and it needs to push the region into two directions:

• the correct local planning;
• multidisciplinary understood as the involvement of specific professional support to the planner.

In conclusion, the study conducted on the area of Castel Lagopesole shows that:

• the agricultural capability is a basic element to specify the local ecological network and the enhancement of the agricultural ecomosaic;
• the historical and archaeological research help to identify the key points of the rural system in the built, in the composition of the agricultural weave and in the infrastructure communications (Salzano, 2003).

This is very important to regenerate and protect historical town centers and rural areas and the aim is to bring out the elements most important of the historical landscape and to propose appropriate criteria for planning for their protection and local development.

References


