

INDUSTRIAL HERITAGE AND RURAL LANDSCAPE AS TOOLS OF SUSTAINABLE DEVELOPMENT. AN ECOMUSEUM PROPOSAL FOR THE FABRIANO AREA

Francesco Chiapparino, Andrea Galli***

*Università Politecnica delle Marche, Cirp, Dises - Ancona, Italy

**Università Politecnica delle Marche, Cirp, D3A - Ancona, Italy

Abstract

On the basis of the recent research and institutional literature, the article points out as landscape may constitute a key resource in local development strategies. Its preservation and valorization can enhance processes of both enforcement of the civic identity and economic growth, linked to tourism and a sustainable rural development. Ecomuseums represent a tool to achieve these goals through integrated policies involving community participation, local entrepreneurship, and the landscape assets of a territory. ICT technologies can find innovative applications and cover a relevant role in the activation and promotion of these processes. These suggestions are exemplified by the project of the Ecomuseum of Papermaking proposed for the area of Fabriano, an industrial town of the Italian Apennine hit by the recent economic crisis and featured by a remarkable industrial heritage.

Keywords

Landscape, Industrial heritage, Ecomuseum

1. *Landscape as a key resource*

The landscape-related issues often embrace environmental, social, cultural, aesthetic and economic aspects of a territory, simultaneously (Tress, Tress, De'camps & d'Hauteserre, 2001). The European Landscape Convention (Council of Europe, 2000) defines the landscape as "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors and their interrelations" (art. I a). This definition considers the idea that landscapes evolve over the time under the effect of natural forces and the action of human beings. According to Selman (2006), the landscape represents a key resource, under the ELC's perspective, which embodies both anthropic and natural processes and a chance to sustainable development and to raising people's civic consciousness and sense of responsibility (Priore, 2005).

The Convention proposes different steps in order to involve local communities in landscape policies: increasing awareness among the public and private local actors about the value of landscape; training and education for professionals in the public and private sectors, in

schools and universities; identification of the values assessed to landscape by local communities and assessment with the active participation of the interested parties (Council of Europe, 2000).

Therefore, landscape management is not only a matter of nature protection and heritage conservation. On turn, landscape management should be based on new planning strategies closely related to the environmental, social and economic sustainability (Potschin & Haines-Young, 2006).

It is worldwide accepted that advocating for a well-maintained landscape allows keeping up the quality of key local resources, whose protection brings to an increased value - in terms of both visual landscape quality and ecological functionality - of the territories (Marangon, 2009). This way the landscape might also become the main attraction for tourists in rural settings. Actually, tourism often represents a very important sector for the development of rural territories which today are suffering for abandonments of agricultural activities and for the contemporary industrial crisis, not only from the economic point of view. Keeping a higher landscape quality, indeed, contributes to keeping

higher the quality of the typical agricultural goods harvested within these lands, and it is an efficient vehicle for the promotion and the conservation of the memory of traditional handicrafts.



Fig. 1: Fabiano in the Vatican Gallery of (paper mills are recognizable in the upper Giano river)

But, to do so in a proper and effective way, it is essential to keep a close sight on the principles for a sustainable and responsible tourism (European Commission, 2010). In this context, some years ago, the Italian Association for Responsible Tourism (IART, 2005) had clearly advocated for a: "Tourism implemented according to the principles of social and economic justice in respecting environment and cultures". Responsible tourism acknowledges on the pivotal role played by local communities and local private enterprises as the socially responsible key actors of the sustainable development of the places they live in and work.

As consequence of these reflexions we have to face a main challenge: how to stimulate a broad-based participation of local actors in decision making and local planning? On this direction, many authors (Potschin and Haines-Young, 2006) speak about sustainability science or civic science as new paradigm of integrated science, that deal not just with the promotion of a better public understanding of science, but also with the legitimisation of lay knowledge within the policy-makers decision process.

In our opinion, the implementation of an institution inspired at the ecomuseum fundamental principles appears like an ideal tool to try to put in practice those goals. Indeed, an ecomuseum, as cultural and territorial institution, has been characterised since its origin as a live

place for heritage conservation, school and laboratory, with an educational role aimed primarily at the local community, to promote its development (Rivière, 1985). An ecomuseum is "an expression of a local community which regains possession of its territory and begins to take care of it, by first identifying key elements of the local identity and scope for development of his territory" (Perella, Galli & Marcheggiani, 2010)

Looking at numerous and different international experiences, the ecomuseums have some essential and distinctive features: 1. a unique link with own territory; 2. an effort to interpret the values of the territory and the heritage in a broadest sense, both in a dynamic and in a diachronic perspective; and 3. the direct involvement of the population not only as final user or study subject, but also as a player who, supported by a team of experts, is called on to express its needs and expectations (Sturani, 2005).

This leads to re-discover, enhance and share the heritage of a community through an integrated ecomuseum project that envisages strategic activities as cultural and social initiatives or economic diversification, for instance via the recovery of traditional crafts and the development of new activities.

The ecomuseums perspective represents the ideal approach for boosting participation of local people and cultural heritage valorisation. In particular, some participative "products" resulting from an implementation of a methodologically correct ecomuseum process, such as a "Parish Map", can represent the ideal baseline around which propose cultural initiatives and a set of tools aiming to reinforce awareness and knowledge of landscape values, both as tourists or residents. E.g., the design of thematic routes exploring the landscape heritage of a specific territory with the support of ICT tools. Considering the widening on the Web mass communication media (Gsm, Smart Phones, Tablets, etc.), the idea of developing ICT tools tailored upon specific characteristics of a given territory, could represent a useful strategy to implement an ecomuseum. In particular, the "mobile app" applications for smartphones and tablets, very common and very simply to use, have the possibility to reach the most part of tourists and residents, for this reason this kind of ICT tool can be considered as a basic way to

support all visitors when they are exploring a landscape.

The real problem to face is how to design the logical model inspiring this technological tools. We have become aware that a key element in designing an ecomuseum is the promotion of a real integration among the knowledge by experts, the empirical knowledge rooted in traditional crafts, and the values expressed by local people indicating their vision for future of the place where they live.

In order to propose the implementation of an ecomuseum in the area under study, the Fabriano area in Marche Region (Italy), this paper, in particular, deals with the first phase of the project which aims to reach a better understanding of the historical processes which have characterised the dynamics of evolution of this territory. Furthermore, some basic reflections concerning the second step of this on-going project are in the following part of this article.

The second step of the project, indeed, has to deal with the design of a roadmap able to inspire the main activities to be implemented for giving light to the ecomuseum perspective, and also guiding the planning of tools, among which ICT tools, capable to assist visitors in enjoying the landscape and, at the same time, to produce useful feed-backs for planners.



Fig.2: Fabriano surroundings

2. The role of industrial heritage in setting up local identity

Fabriano is a small town of about 30.000 inhabitants (2015) in Central Italy belonging to the Marche Region. Its territory is the typical hill and low mountain of this portion of the Apennine, featured traditionally by a high incidence of woods and of small property together to the

secular experience of sharecropping farming (*Mezzadria*), which rather shaped more pervasively the rural landscape in the lower hilly areas toward the coast (Calafati & Sori, 2004). Like other regions of the Apennines, it had a good position in the communication network during the Middle Age and the early modern times, when traffic was concentrated preferably at high altitudes and on internal routes. In those periods Fabriano developed significant manufacture vocations: wool, leather, felt, iron (Castagnari, 1986) – hence the name *faber*: smith, plus *Janus*: the name of the river that flows close at Fabriano town. Also these artisan specializations, on the other hand, were linked to the mountain environment, because of its water abundance, the presence of livestock, and the necessity to integrate the scarce agricultural output (Chiapparino, 2011). In particular, during the 14th century the centre assumed a crucial relevance in diffusion of papermaking in Italy and Western Europe. Coming from the Eastern and Arab world through Spain and Southern Italy, paper technology was innovated in Fabriano probably already in the 13th century by the use of a peculiar gumming. In the following decades, Fabrianese papermakers and technicians were present in the whole central and northern part of the peninsula and even beyond the Alps (Castagnari, 2007). This leading position in the sector was lost in the early modern age, when however Fabriano remained quite a relevant production pole of the Papal State. Such a manufactory tradition was then renovated at the turn of the 19th century by the birth of the Miliani paper factories (Gasparinetti, 1963), that in the following century absorbed all the several firms of the area and became one of the most important national group in the branch. Passed to the State property in the 1930s, Miliani was privatized in 2002 and entered the multinational group Fedrigoni, that in 2011 created Istocarta, an independent cultural foundation aimed at the management of the century-old company archive and the enhancement of its important historical industrial heritage.

In parallel with these developments in the paper sector, Fabriano evolved as a middle-rank town of the Papal province, a commercial and artisan centre and, from the first half of the 18th century, an Episcopal seat. This relatively relevant position, and its lasting over time, allowed the town to accumulate quite a

remarkable artistic and architectural heritage. In 1860s, after the Italian unification, its position was then enhanced by the choice of the Giano valley for the pass of the Roma-Ancona railway, one of the few lines crossing the peninsula from the Tyrrhenian to the Adriatic Sea (Bettoni, 2008). This new centrality, together to the dynamism of the Miliani paper factory and other minor activities, preserved the centre from the decline typical of many interior towns, and in general of the mountain areas, during the first three quarters of the 20th century. Many of these elements converged finally in the new, long industrial season subsequent to World War II. In the 1950s Fabriano became the seat of the Merloni group, one of the protagonists of the Italian "economic miracle", active in the domestic appliance sector (Sori, 2005). From the 1970s onwards, then, the town and its surroundings experienced also the diffused industrialization based on the small and middle-size firm, typical of the North-Eastern and Central Italy (Nec), and here focused again mainly on mechanical productions. If this wave of development did not consolidated properly an industrial district, as elsewhere in the Marche region, it nonetheless represented a further step in the growth of the manufacture vocation of the territory and a strengthen of the industrial identity of the town (Pettenati, Paoletti, Mosconi & Pirani, 2006).



Fig. 3: Miliani Paper Factory at the beginning of the 20th century

The crisis erupted in 2007-2008 has hit severely this industrial fabric, bringing bankruptcies and unemployment. The case of Fabriano has been quite exemplar for the Marche region and several other industrial areas of the

Nec. The productive structure of the town, markedly oriented to manufacture and secondary sector, has been affected strongly by global competition, delocalization and international trade recession. In the last years many efforts have been carried out to face the economic difficulties of this area, so that signals of recovery are not lacking. Nonetheless, what the crisis has pointed out is, at least, that Fabriano cannot anymore figure like in the past its future as uniquely linked to manufacture.

The sense of this contribution is just to suggest some elements for a possible valorization of assets of the Fabriano territory relying on its history, its cultural heritage, its environment and the way in which its urban and rural landscape has been shaped by human activities.

3. For an Ecomuseum of Papermaking

The core of the proposal is the creation of an ecomuseum of the paper, to give value the very significant industrial heritage of the town and its surroundings. Such initiative would be implemented in a field for which Fabriano has been very known from the Middle Ages until today: once upon a time for its paper masters and after for Miliani firm, both famous not only at national level. Papermaking, on the other hand, is an integrant part of the more general industrial identity of the town, resulting therefore very representative of its diffused culture and local specificity. In Fabriano there exist already some relevant cultural institutions focused on the paper heritage, so that an important issue for the ecomuseum perspective is to integrate them through new initiatives and coordinate them within a network aimed to a global valorization of the territory and its vocations. Paper, in this sense, would represent ultimately an occasion for a wider enhancing of the environmental, naturalistic, artistic and cultural assets of the region, which are rooted in two main domains: its urban and rural landscape. A widespread and structured network of local museums focused on traditional papermaking may constitute, therefore, a useful tool for re-thinking the local identity, besides promoting local development. All these aspects are to be taken in account in planning a sound roadmap for the ecomuseum implementation, having in mind the specific conceptual approach and the goals for this kind of initiatives, as mentioned above. In particular, the aim to promote an active participation of local

actors to a sustainable development process based on tourism and reception services on one hand, and, on the other, a rural development able to preserve and improve the landscape values of this territory.

Of course, the first step of this roadmap is the identification of the most significant points of interest to be connected within the proposed networking of papermaking heritage.

The ecomuseum could have its pillars in three initiatives, two of which already existing, such as the Paper and Watermark Museum, who is gathering relevant collections of machinery and testimonials on Fabriano history and papermaking in the past; and Istocarta (Istituto europeo di storia della carta e delle scienze cartarie) of the Fedrigoni Foundation, who is managing the Miliani Archive for preserve documents, material evidences and artifacts from the 18th century onwards. A third pole could be constituted by the former seat of the School for paper technicians (later the seat of a decentralized engineering course of the University Politecnica delle Marche, Ancona), built up in the 1950s and including a botanical garden of paper plants and a didactical laboratory for paper production. Its small modern line for paper fabrication could be easily restored and used to show the industrial methods of production, in parallel with the demonstrations of the handicraft process at the Paper Museum.

Furthermore, others important sites of paper heritage are widespread in the territory proximal to Fabriano town.

The closer is the route of little more than one kilometer along the Giano River immediately upstream of the city. The major historical paper mills are located along this narrow valley, which today is the production site of modern papermaking plants Fedrigoni: the large complex of the central Miliani Paper Mill, built between the late 18th and late 19th century, a part of those buildings is currently the seat of Istocarta; the Fornari paper mill, with the multiple water mill of the 18th century, the Campioni paper mill, now restored as dwellings, and all major facilities (canals, locks, depots, etc.) of the past papermaking area. The set of these stratified emergences, belonging to the different stages of the technical evolution of the branch, represent a remarkable example of industrial landscape (Palmer & Neaverson, 1998, 25ff.). Further relevant testimonials are also located in

Esanatoglia, 15 km South of Fabriano, with three old paper mills, and in Pioraco, 30 km of distance, where another historical Miliani factory is also endowed of a small museum.

It must be underlined, moreover, that Fabriano could be thought as part of a set of routes of the papermaking heritage even wider, including remarkable testimonials in this field like the Papal paper mill of Ascoli Piceno, of the 16th century and recently restored (Borzacchini, Eustachi Nardi & Guidotti, 1996) and the Carotti wool factory in Fermignano, near Urbino, former the Ducal paper mill of Montefeltro (Mariani, 2011). A further significant link could be opened with the paper mills of the Menotre Valley, 30 km South of Fabriano on the Umbrian side of the Apennine mountains, which is also the subject of another ecomuseum project (Covino, 2008). There is finally to consider that the papermaking heritage encompasses a whole set of museums and institutions across Italy, from Lucca to Amalfi and Toscolano Maderno, near Brescia: with them it would be useful to strengthen more links and new cultural exchanges.



Fig. 4: Miliani Paper Factory

4. *New arising opportunities*

The idea to give more value and connect the impressive industrial heritage above mentioned could be put in practice through two different initiatives. On one hand, each historical site could be revitalised by organising periodic events, like exhibitions and interactive laboratories, aiming to call people in experiment directly what local craft heritage means from different point of view, it being at the same time material and immaterial (socio-cultural aspects). On the other hand, a network of thematic routes (both real and virtual)

might be created to guide residents and tourists during their trip to visit the sites of interest, as museums or old paper mills, giving light at their curiosity. To this purposes ICT tools give us a lots of opportunities. Many kinds of ICT tools are today available to improve the virtual dimension of the visiting a site or a landscape, however an exhaustive analysis of this topic is not under the objectives of this paper. We just want underline a concept of great importance for an ecomuseum process: a whatever ICT tool could offer, as result of a sound design, the opportunity to communicate to users the experiences and knowledge synthesized by a local community in its Parish Map. Furthermore, giving to users the ability to produce feed-backs, new experiences and new opinions could be insert in the Parish Map that, finally, will become a living document which needs to be fed every day by new contents and annotations. In this framework one more function is added to the ICT tools, their utility is extended beyond the technological support to the tourist inasmuch they can become a fundamental agent in boosting the participation process, so important for planning an ecomuseum and also when an ecomuseum just implemented has to be kept alive. A very interesting experiment, in this direction, has been recently performed (Galli, Di Clemente, Marcheggiani & Scoppolini Massini, 2015) starting from the Parish Map built by Montacuto, Paggese and Acquasanta communities (Province of Ascoli Piceno, Marche Region, Italy). The specific ICT solution here implemented, like an App's prototype, was designed to enable tourists and local community members to explore the most relevant aspect of local rural heritage (i.e. natural and cultural) by means of virtual "local characters" (interpreters of traditional craft or rural activities) which acts as "storytellers" to ease the users during the navigation through the contents, picked up from the Parish Map. The mobile app provides "virtual scenarios" that reproduce thematic itineraries around characteristic areas represented in the "parish maps", with the aim to show the point of view (cultural, environmental, social) of rural communities living there. The App, designed to be used on mobile devices such as GSM, Smartphones and Tablets, has been engineered by ETT srl, a Company headquartered in Genova (Italy), in order to offer thematic itineraries to discover the actual sense of a place.

The same approach, even so the ICT tool which works as synthetically mentioned above, could be applied also in the process finalised at the paper ecomuseum project here proposed for the Fabriano area. But, in that particular context, the involvement of local people and tourists, without doubt very important, might be not enough. The historical centre of Fabriano, indeed, is full of testimonials of Middle Age and Renaissance in architecture and fine arts, not far from Fabriano are located the routes of the Romanic abbeys and hermitages in the surrounding Apennine area, or the karst caves of Frasassi, already object of relevant touristic flows. Moreover, the traditional agriculture and the livestock activities, still present in this area, deliver a wide gamma of goods of quality which are very appreciated by consumers. It follows that participation here can be conceived, therefore, even like the involvement of a set of entrepreneurial activities, in agriculture as in accommodation and tourism services, finally in other sectors strictly linked to the cultural industry and to the quality of the environment where they are located. At the same time, it is quite evident that various incentives and financing funds, at the basis of several public policies at different levels (local, national and Ue, in particular, like the Second Pillar of CAP), are oriented to preserve rural landscapes and improve the sustainable local development. In this sense, this ecomuseum project has the opportunity to polarise directly, through the community participation, both the private entrepreneurial initiative and public investment choices.

5. Conclusions

In the perspective inspiring this article, the Ecomuseum is the ideal approach to trigger a sustainable local development by exploiting the potentials of local cultural heritage, both material and immaterial, and the attractiveness that landscapes offer, through a participative process involving all actors living a specific territory: experts, citizens, entrepreneurs, farmers, cultural operators and, last but not least, the tourists. All this various components, as a matter of fact, are an active part of the urban and – mainly – rural landscape in which they are submerged. This landscape, as it has been widely illustrated along the article, the Fabriano town and surroundings,

holds a very impressive cultural heritage that should be protected and valorised.

The principal aim of the Ecomuseum of Papermaking is precisely to preserve and enhance this landscape, result of the overall interaction of local society with its territory over time. Such preservation, as mentioned above, has the civic finality of maintain the memory and the identity of the community linked to its territory, as well as the aim to foster sustainable forms of development, also in a strictly economic sense.

The active participation of the local community intended in a broad sense, so embracing all kinds of local actors, as it was underlined before, is a milestone at the first stage of the ecomuseal project design and even in the following steps of managing. At this regard, the contribution belonging to a smart use of ICT tools could be really essential. This topic, albeit briefly, has been underlined heartily.

Finally, it's useful remember that a first explorative study on this specific territory, Fabriano and surroundings, was already ultimated some years ago (Perella, 2008) the aim of which was to involve the local communities of the area in a participative process for designing an ecomuseum able to valorise local identities and vocations. Such efforts are to be obviously enlarged, including local administrations, associations, neighborhood groups, voluntary and non-profit organizations, and extended to the managing issues to give a concrete perspective to the project we tried to expose in this article.

If landscape has to be a vital and authentic reality rather than an artificial construction, then it has not to be only preserved, but should evolve on the track of the territorial vocations and the local identities. In this sense, it has to involve also forms of economic growth, which in a context like the Fabriano area can regard mainly, albeit not exclusively, the rural development.

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