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TEMA 5. THE FRUITION OF THE HERITAGE: CULTURAL ROUTES AND LANDSCAPE

DESIGN AND STRATEGIES FOR RURAL HERITAGE ENHANCEMENT

Elena Mussinelli[1]; Andrea Tartaglia[2]; Raffaella Riva[3]; Chiara Agosti[4]

Politecnico di Milano[1234]

ABSTRACT

The research identifies the enhancement of the rural landscape as integration of local identities (landscape and cultural values), quality of the environment (ecological values) and socio-economic factors.

In this theoretical scenario, the Architectural Technology approach operates with multi-scalar and multidisciplinary actions looking forward to the changing needs of the future and orienting the decision process with a specific focus on accessibility, usability, feasibility and respect for local identities.

The paper illustrates some experimentations in emblematic peri-urban contexts of Mantua, where it is necessary to find a balance between environmental protection and heritage enhancement. Starting from ex ante evaluations (according to the embedded case study methods - Scholz 2002) the research proposes culturally informed design solutions able to optimize the projecting act through the lens of architectural technology.

The research has been developed simultaneously on experimental projects and with theoretical considerations to find the strategic axes of intervention with the aim of extrapolating a repeatable method for the environmental design of the rural heritage.

Keywords

Rural landscape, heritage enhancement, environmental protection, multi-function agriculture, quality of usability, architectural technology.

1. INTRODUCTION

The rural landscape is a dynamic system continuously subjected to different needs that modify the landscape itself and its components. It still maintains its productive role but current intensive production and compensation policies tend to reduce biodiversity, homologate the productions and consequently the landscape. This change has produced the abandon of the rural built heritage, not yet appropriate to the current agricultural needs but with elements of cultural and morfo-typological merit. Moreover the social and economic dynamics with the related phenomena of urban sprawl and soil sealing are producing a progressive erosion of the rural areas (Munafò, M. Tombolini, I, 2014). The problem is how to manage this abandon of lands and buildings, coordinating the problem of re-use with the need of the usability, linked to economics, social and environmental elements.

Starting from the European Landscape Convention (Florence 2000) also this kind of landscape, the "everyday landscape", acquire value as places where people leave, as testimonial and as a resource to economic activities. European policies point this direction supporting studies and investments on economic development, cultural and natural heritage enhancement and the business development for non-agricultural activities. On the contrary Italian policies are segmented and sectorial and they consider hermetically separated three topics: "the protection of landscape and heritage, with a strictly conservative and freezing approach; the mitigation of environmental impact, with un approach built on quantitative indicators and ex post technical solutions; the local economic development, related to the incentives and immaterial actions not overlapping the physical characteristic of heritage and social opportunities" (Mussinelli, E. 2014).

Rural areas are the real opportunity to create a development process for economic local system in which agricultural activities have a new role and multifunctional agriculture is a tool to manage landscape and territory. In this way "focus on the management of transformation is essential" (Engelbrektsson, N. Rosvall, J. 2009). It means to develop a territory and to build the heritage of the future with the awareness that every action is "part of a wider and synergic view" (Gustafsson, C. Rosvall, J. 2008) that combines local identity (cultural and landscape values) environmental qualities (ecological and ecosystem values) and socio economic factors. Models and tools must guarantee also the cooperation with authorities and stakeholders, coherently with European placed-based approach (1).

Researches belonging to the Architectural Tecnology (2) area have introduced approaches to manage the complexity of the project. The project intended as "coordination of complex multi-disciplinary contributions" (Zanuso, M. 1981) is a process of knowing and management made by "complex systems, phases, feedback processes, experimental design and multy-disciplinarity" (Losasso, M. 2012). To deal with a project with these prerequisite allows to guarantee the feasibility "providing strategic framework for actions that cannot exclude a knowledge of the impact on the different components of environmental, economic and social issues" (Forlani, M.C. 2014) and rest on consolidated approaches for the re-use project, responding to current needs of usability, protection, eco-efficiency and landscape quality (3).

2. OBJECTIVE AND RESEARCH QUESTIONS

Placing within the discipline of the Architectural Technology, the problem is how to enhance the rural landscape, connecting the protection of cultural and environmental values and socio-economic needs that change through times. This happens through the environmental project. So the objective of this paper is to demonstrate that the environmental project is the place where rural landscape enhancement happens, with the meaning of integration of environmental and cultural values and where actions for the development are managed. The landscape quality is an essential element for the territorial competitiveness, for its ability to attract resources and for the economic development, in terms of quality of agricultural production but also with regard to the introduction of touristic and social activities. In this sense the central point of the enhancement project is the management of the usability, as creation of the territorial network, reuse of buildings, opportunity to access, integration of services and experience. The final outcome is a repeatable strategy, applicable in different contexts.

3. METHODOLOGY

The enhancement process has been studied through some experimental cases study, according to the Embedded Case Study Method (Scholz, R. Tietje, O. 2002). The Embedded Case Study method investigates contemporary problems into the complexity of reality. Heritage cannot be analysed outside its context and transformed to a model with pre-organized solutions, so it is necessary to operate investigating a "phenomenon in depth and within its real-life context" (Yin, R.K. 2009). The case study is a method of research with a high level of complexity, that allows to make a synthesis between qualitative and quantitative data. The conclusions are driven by processes based on both experiential understanding and synthesis process that interrelates and integrates variables, findings, evaluations and various aspects of the cases.

From the methodological point of view, each project moved from the analysis of the territory, in order to make a detailed description of the context, identifying the compositional elements, the relationships that structure the place, the system of values, the constraints and to highlight strengths and weaknesses of the area, in collaboration with stakeholders and local people. Than the projects had been represented with a master-plan that talks about the synthesis framework of actions. Strategic lines of action had been identified and divided into interrelated themes that compose the global system.

The last paragraph shows the description of the inferred strategy of intervention: the project of the usability.

4. EXPERIMENTAL PROJECTS

The projects' context is the peri-urban territory of Mantua and Sabbioneta, both Unesco sites since 2008. The statement of outstanding universal value reports that "[the two cities] meets the required condition of integrity and authenticity, since their most significant architectural and urban components have been preserved over the time, as well as their relationship with the land". The statement underlines the link that occurs between cultural heritage and its environment and landscape.

The three experimental projects deal with the enhancement of rural landscapes with different peculiarity and needs but to trigger a process of usability management is the common key for a sustainable development.

4.1 Bonoris Foundation rural heritage enhancement in the Mincio Park

The project deal with an agricultural system that has to renovate, producing the abandon of lands and buildings. The project on one hand concerns the rationalization of the production on the other hand the re-use of buildings and areas in order to enhance the social, cultural and environmental usability.

The agricultural lands of the Count Gaetano Bonoris Foundation (4) in the Mincio Park (5) is a portion of land that connects the city with a system of protected natural areas, it has preserved its agricultural characteristics and clearly shows its strong cultural history. The agricultural sector is still productive nowadays but the ten courts, characterized by elements of architectural merit are not more appropriate to the current needs. The main purpose of the projects is developing the usability connecting local identities, quality of the environment and socio-economic factors. The development of the usability is the central topic of the project. On one hand with the meaning of proper management of agricultural land and livestock and techno-typological adjustments; on the other hand with the meaning of integration of complementary activities linked to the tourism, services for the community and social activities.

4.2 Enhancement of the South gate of Mantua

In this project the topic of re-use deal with the re-functionalization and the creation of a system of buildings and areas with the aim to create a network with territorial positive effects.

The context of the project represents the transition land between the historic city and the rural landscape where environmental, cultural and social heritage converges. The objective is to find out strategies to enhance the complexity of the area, as element for a potential development with positive returns for the city (7). The context is characterized by the presence of element of historical value and it is surrounded by the environmental system of the Mincio Park, where it is possible to identify different characters: the agricultural vocation with Napoleonic fortification ruins, the urban vocation with the Peri-urban Park and the urban historical park “Bosco Virgiliano” and the environmental vocation with the Natural Reserve Vallazza. Furthermore there are sport facilities is inside the suggestive location of the Mincio Park. The presence of such a rich variety of resources can be enhanced through the organization of routes and points of interest for tourists and citizens that encourage a conscious usability and lead to progressive awareness to the resources of the area.

4.3 Enhancement of rural buildings in GAL Oglio-Po territory

This project deal with a rural landscape like the Bonoris Foundation’s one but the extension and the presence of different owners impedes the restoration of the production system so the project concern the re-use of buildings integrating them into a territorial network.

The project describes an experimentation within the GAL Oglio Po territory, on the connection line between Mantua and Sabbioneta (10). The axis crosses a landscape characterized by its agricultural vocation, with cultivated lands and rural buildings but also naturalistic and environmental elements. The objective of the project is to consider the enhancement of the itinerary, of existent connections and the re-use of some buildings as the starting point for the local development, for touristic usability but also as opportunity for the establishment of a social agriculture experimentation with activities linked to the production and services for the community.

5. STRATEGY: THE USABILITY PROJECT FOR RURAL ENHANCEMENT

Cases study show that the enhancement project has to manage the complexity of resources and needs that change through time and the development happens through the usability project, that goes beyond rigid restrictions and constraints to develop different functions and uses.

5.1 Usability as integration between territorial network and buildings use

The topic of usability is managed in two complementary scales that structure the system: the definition of the activities and their location, so the scale of the building, and the identification of the connection system and related equipment at the territorial scale. The connection system is the connective tissue of the territory, knowing the elements of the territory allows to crate intersections and exchanges and to structure a network of different itineraries (specialized or thematic routes, fast or slow mobility axes etc.). The network of connections and infrastructure acquires importance as a tool for territorial development because its construction becomes an opportunity to involve tools and actions for the enhancement of the landscape.

The recovery of the buildings is established together with this network and unused buildings become the place to integrate, with appropriate interventions, complementary uses related to tourism (reception, rest stop, info point), to community services (leisure, education, training, social activities) or in which enhance productivity within the logic of innovation (eg. the technological barn).

5.2 Usability as design of functions

The activities that articulate the usability offer constitute a network of different and complementary services in coherence with existing elements and lines of development. The definition of new activities is then identified satisfying local needs and shared with the community. The placement of the activities related to the usability cannot be separated from plans and programs, which provide information regarding allowed or prohibited activities and norms of behaviour. Moreover plans and programs provide indications about the degree of protection or preservation, information to be correlated with the type and level of usability. The locations should be chosen also considering the use and the state of conservation of areas and buildings and therefore the possibility of action on them, depending on the nature and the extent of required interventions (reorganization, new plant, requirement of spaces and

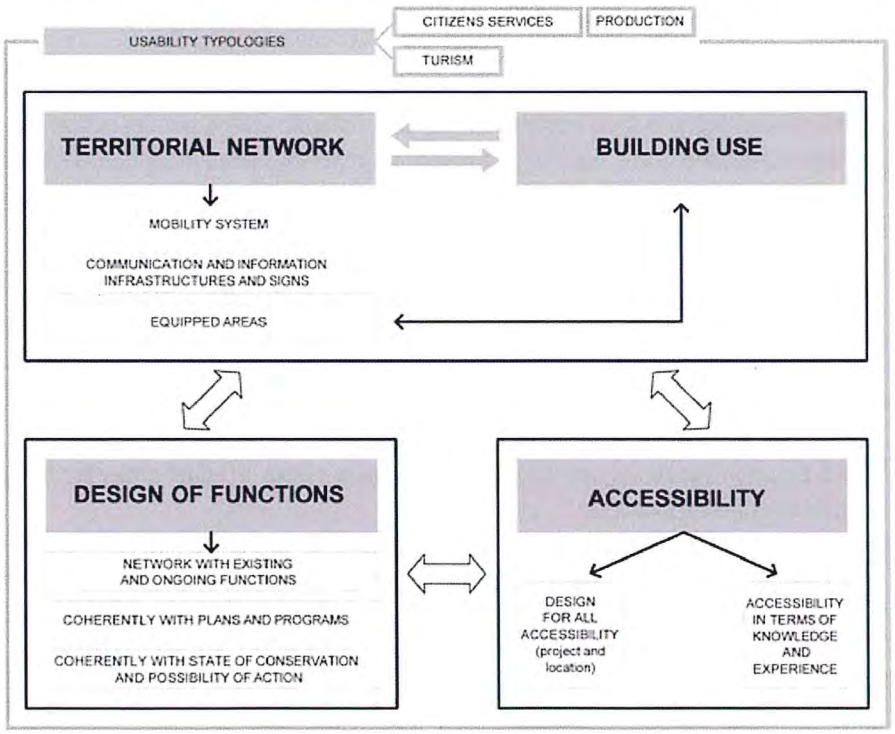
equipment etc.). The inclusion of the activities also depends on the territorial distribution of existing equipment and services, their analysis allows to identify strategic locations, in relation to the system of connections.

5.3 Usability as opportunity to access

The management of the system of usability means selecting types and ways to create the conditions for a respectful, informed and aware use of places. In this sense, the usability intended as an opportunity to access takes on two dimensions: physical and experiential accessibility. The project should ensure that places, goods and services are recognizable, accessible and understandable independently, in terms of comfort and safety by anyone. Consequently the man to refer is a complex entity for which to make a project means to create spaces of real interest to everyone, going beyond the concept of disability and architectural barrier (Lauria, A. 2003). In this way project to guarantee accessibility should not prevail on the context and should not cause loss or alteration of identifying characteristics values.

This approach not only contributes to the ethical and social development of the project but also the cultural and economic one: it meets the needs of enlarged users, with positive implications also for touristic usability: structures and places equipped for extended users can intercept a large range of potential tourists, in addition it becomes a driving force for the enhancement of areas considered marginal.

To enhance cultural heritage means also to allow its usability not yet with a physical meaning but also as "knowing and experiences accessibility" (Sormoen, O 2009). To allow the usability of neglected buildings is the prerequisite to transmit the heritage into the future: the use allows a permanent maintenance and the entrance of economic resources, not to have a profit but to guarantee economic self-sufficiency. Furthermore respectful and cultured interventions allows the users to know and experience an otherwise unknown heritage.



6. CONCLUSIONS

Rural landscape is an emblematic place, a lot of them are located in protected areas, this condition allows to experiment development systems compatible with the production and the unavoidable protection of the landscape. Cases studies show some enhancement projects where the central point is the management of the usability that guarantee the maintenance of living places, peculiar element of the rural landscape.

Strategies for the management of the usability allows the maintenance of places because it guarantees the entrance of economic resources and on the other hand activates a process of re-appropriation and identification of the community in its heritage.

The definition of the element that compose the project is adaptable to different contexts and could be implemented in the short and long period. Moreover the project could be break into different parts, feasible in different steps, depending on available funding, but maintaining a coherent structure. This is possible thanks to the prior creation of a multi-scalar network, a master plan that connect local needs with territorial resources, the definition of strategic axes of intervention and the permanent involvement of citizens, stakeholders and institutions.

NOTE

1. The place based development approach has been identified by the EU policies to make more effective the policies and to improve synergies and multi-disciplinarity. The approach starts from the consideration that "the circumstances and well-being of individuals are influenced by the wider territorial community, its natural and cultural resources and public institutions" (Barca, F. 2009).

2. The Architectural Technology is an Italian discipline that since from its origin has studied approaches to manage the complexity of the project. The research group "Governance design and enhancement for the built environment" of the ABC Department (Architecture Built environment and Construction engineering) – Politecnico di Milano is part of this discipline and deal with the design and management of environmental and urban systems and the governance of transformation and re-use processes.

3. The definition of these requirements for the project has been formalized by the Cluster "Environmental Design" of the SITdA – Italian Society of Architectural Technology, network born in 2007 to connect Italian Universities, to promote researches and transmit the Architectural Technology approach, in cooperation with experts, enterprises and institutions. www.sitda.net

4. The Bonoris Foundation was founded in 1928 by Count Gaetano Bonoris, with the aim of promoting and subsidizing institutions which provided assistance and protection to young people in distress

5. The project described here is the result of the research contract signed in 2012, on August 30th, between Politecnico di Milano, ABC Department) - with the research unit "Governance project and enhancement of the built environment", Laboratory Technology Environment and Management (TEMA), PhD course in "Design and technologies for cultural heritage" - and Count Bonoris Foundation (scientific coordinator Prof. E. Mussinelli). The activity has been developed in cooperation with Mincio Park, National centre for study and conservation of forest biodiversity "Bosco Fontana", Superintendence for architectural heritage and landscape, Province of Mantua with the Department of economic development and agricultural policies, the towns of Mantua and Porto Mantovano.

6. The project "Social Farming in Mantua" has been promoted by the Province with the training company For.Ma. and the Bigattera Multipurpose Centre. The project wants to reintegrate in the society people in distress, through working in agriculture.

7. The research started on the occasion of the International Workshop "Design technologies and innovation in cultural heritage enhancement" promoted by the PhD course "Design and technology for cultural heritage". One of the applications of the research was the project "camminAmbiente. Actions for territorial enhancement between nature, sport and culture".

8. The project "camminAmbiente" was born thanks to the participation into the context "Culture as a common heritage. Shared promotion for the development of the cultural and turistic identity of the Mantuan territory". The project was subsidized by the Province of mantua with the support of Camera di Commercio of Mantua and Cariplo Bank Foundation. Part of the actions was achieved during the year 2014.

9. The actions were developed by CAI – Italian Alpine Club in collaboration with Athletic sport Club "Rigoletto", Mincio Park, Mantuan high schools ("Virgilio" Lyceum and Agrarian Institute "Strozzi"), Social Agrculture of mantua: multi-purpose centre Bigattera – For. Ma with the scientific support of Politecnico di Milano, ABC Department – TEMA Laboratory.

10. Research contract "Census of the landscape heritage in the Oglio Po territory and its state od degradation" signed between Politecnico di Milano, ABC Department - with the research unit "Governance project and enhancement of the built environment", TEMA Laboratory and Oglio Po GAL (Local Action Group) "Land of water" (scientific coordinator Prof. R. Bolici). The research is inside the project of transnational cooperation "LANDsARE. Landscape architecture in European rural areas: new approaches for local development design".

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