



# Encuentro **PRECOM<sup>3</sup>OS**

**DESAFÍOS** de la **CONSERVACIÓN PREVENTIVA**

Seminario para estudiantes doctorales,  
expertos y gestores de sitios patrimoniales.



# CRÉDITOS

---

## COMPILACION Y EDICION:

---

Proyecto vlr**CPM** "World Heritage City Preservation Management"

Arq. Fausto Cardoso Martínez (Editor Responsable)

Arq. Catalina Rodas Vásquez

Equipo del Proyecto vlr**CPM**

## DISEÑO Y DIAGRAMACION

---

Arq. Catalina Rodas Vásquez

Gabriela Torres Balarezo

# ORGANIZADORES

---



UNIVERSIDAD DE CUENCA  
*desde 1867*



## Economics in Preventive Conservation

Author: Stefano Della Torre  
Politecnico di Milano

Keywords: Preventive Conservation; Economy of Built Cultural Heritage; Externalities; Learning and Unlearning, Territorial Capital

### ABSTRACT:

*Historic preservation is often thought as a sector which can live separately from economic concerns, or on the opposite it is proposed as an engine for development. That's why research is needed to explore how and at what extent economic theories can be applied to historic preservation, having as a target the identification of better practices and policies.*

*We can argue that the subject can be dealt with from two main points of view: a) studying historic preservation as a supply chain; b) analyzing historic as an infrastructure for social and economic development according to the models of knowledge economy.*

*The latter part could lead to important achievements if external benefits produced by preservation processes were accurately evaluated. As I tried to show in previous papers, conservation of art works and Built Cultural Heritage may be powerful in cross-fertilizing scientific and humanistic sectors, producing growth of human capital, i.e. of a key factor in sustainable regional development. New advancements try to deal with the more effective concept of "territorial capital".*

*These ideas go to build a conceptual framework which can be used to program conservation activities in the best way: it will be easy to show that a preventive attitude helps to change old schemes, steering practices towards high quality and careful harvesting of educational benefits.*

Many different researches developed Economics of Historic Preservation and Economics of Built Heritage, with the aim of identifying best practices, or trying to show figures which prove the benefits of preservation policies. It is quite obvious that the task is not easy, because of the number of stakeholders involved as well as because many disciplines are needed to assess many different values. Even the basic values of use and existence have to be discussed again in this research context (Moioli 2011). Most economists seem to deal with Built Heritage as if its benefits to local economy were

only given by the use of heritage buildings, and/or by attraction of tourists. Economic evaluation currently focuses on the object or the property as it has been restored. Therefore restoration is usually represented as a cost, which becomes interesting when restoration "mines" an increased value attributed to the property as restored. In Italy, some years ago, the metaphor of culture as petrol was fashionable: as for gold and diamonds there is a mining cost, for architectural heritage there is a restoration cost necessary to make properties available for fruition. This approach, and related assumptions hold, perhaps, when the benefits of historic preservation are assessed in a micro-economic perspective. But cultural heritage has both a private and public nature, so that, when understood as a public good, it deserves different analysis tools. We can argue that the subject can be dealt with from two main points of view: a) studying historic preservation as a supply chain; b) analyzing historic preservation as an infrastructure for social and economic development according to the models of knowledge economy. It's a twofold problem, and the two lines cannot be investigated separately: anyway in this paper I will try to continue my analysis on the second line, while mainly on the first line should impact the outcomes of the phd-research carried on by Rossella Moioli (see her paper presented at this Encuentro Precom3os), who is exploring the benefits of preventive approach to conservation by testing economic categories and tools as applied to conservation of Built Cultural Heritage, underscoring the difference of an economic assessment versus a financial one.

Then my focus here is on the link between Heritage Conservation and Development. In Economy of Culture nowadays the "last cry" is "creativity": does this mean that cultural heritage and cultural heritage activities are going out of fashion? Does this mean that the assumption that the investment in preservation of monuments, sites and cultural landscape should no longer be deemed to be a productive policies according to the state of the art of economic discipline? The answer is that maybe theorists of "creativity" are forgetting preservation activities because scholars and policy makers simply ignore that these activities can be very stimulating toward "learning". It is even too easy to think that preservation is keen to glorify past and its values, such as stability, tradition, nation... But it is not difficult to argument that the best examples in the management of cultural resources show the attitudes of learning organizations, and it is worthy to quote studies concerning some Italian cities, like Florence, where heritage became the factor for a process of clustering diverse activities and economies, including preservation, tourism, research in laser technology... (Lazzeretti, Capone, Cinti 2010; Della Torre 2011).

To detect more factors for the competitiveness of a region, some interesting suggestions can be found in other readings on the mechanisms of economic development, namely the work of Robert Lucas, in the point where he takes profit of Jane Jacobs' ideas about the economy of cities, or regions. In this perspective human capital becomes a key factor: "higher average levels of human capital in an economy raise the level of productivity of everybody in that economy, not just the productivity of those whose human-capital level is higher... it is in this regard that Lucas found Jane Jacobs' books to be particularly stimulating. The externality is of the following sort. A person can exert some effort, pay some cost, and acquire more human capital. With a higher level of human capital – more skill or knowledge – this person's personal productivity and earnings associated with this productivity will be higher. The fact that this individual's higher level of human capital raises the average level in the economy and so the productivity of everybody is not, however, reflected in their personal earnings – it is a benefit outside and not accounted for by the earnings market -- an <externality>" (Nowlan 1997).

As human capital is built into the model of local development, the external benefits of conservation activities can be much more extended: the distinction between production externalities and consumption externalities (Koboldt 1997) could be convincing but not exhaustive. Implementing the analysis started by Glaeser, there are also different understanding of the ways external benefits can be managed and used for development purposes (Glaeser et al. 1992).

In the last decades, Regional Economy focused its research on such themes as local development factors, innovation, mutual externalities exchanged inside a regional border. Models and theories seek to identify the endogenous elements that build up local competitiveness. As built cultural heritage (or "built environment") is a feature of local space, and one of the main factors of its identity, it is obvious that these theories are of the utmost relevance for any research on the economic side of preservation. Models like "milieu inneuvateurs" or "learning regions", largely adopted in the last fifteen years to study local development in developing countries as well as in marginal or urban areas (Capello, Nijkamp 2009), could be useful also to understand the mechanisms by which culture and heritage, and its forms of recognition, determine local "identity", that is Territorial Capital (Camagni 2007, see Fig. 1). The latter concept helps to identify mechanisms of collective learning which are necessary to make innovation happen. As Camagni writes discussing intermediate, mixed-rivalry tangible goods, they are affected by processes

which produce a strong sense of belonging and territorial loyalty (the “local identity”) coupled with a far-sighted business perspective and the social stigmatisation of opportunistic behaviour; this is the ‘milieu’ effect, that may result in favourable collective action, easy public/private agreements, and fruitful local synergies, so that “the milieu itself may be the true territorial capital allowing long-term efficiency in the economic exploitation of local resources” in the direction of producing “Relational capital”, that is something intermediating between Social and Human Capital.

This is the relevant point in my opinion: local resources undergo an economic exploitation not directly (i.e. selling tickets), but creating the conditions which enable local actors to learn and to produce innovation. To be understood, I want to clarify that “innovation” means also cognitive openness, e.g. towards a better understanding of sustainability, sustainable development, growth...

Therefore Regional Economy came across new forms of understanding Culture, including a shift from models based on tourism as the way of boosting heritage potential as a generator of value, to models in which culture gets a new role as the catalyst of innovation (correctly understood). The change has been described as a step from a phase focused on an economic empowerment of culture to a new phase in which the target is a cultural empowerment of economy.

In western countries, as Italy, lot of money is spent every year in conservation works on listed buildings. Such works are mostly a matter of ordinary craftsmanship, but there is a fraction which is matter of high technology: survey, monitoring, diagnostics, fine treatment of materials... In this “better” fraction a commitment is needed to “learn” and to improve skills. The quality of an intervention is often given just by this fraction of sophisticated activities: the higher the “cultivated” part, the higher the attention paid to the monument values, and it can be argued that the externalities will be higher as well. This better fraction is also more ready to step to the innovative process of preventive conservation.

The better fraction of conservation market may be aided by regulation, but also by incentives. We can learn a lot from best practices of Monumentenwacht organizations (Verpoest, Stulens 2006; Cebon Lipovec, Van Balen 2010), as well as from the problems occurred in UK and in Italy when trying to implement similar strategies. The most important lesson learned, in my opinion, is that it will be impossible to get any good result without putting

<b>Rivalry</b> (private goods)  (club goods)  (impure public goods)  (public goods)  Low rivalry	<b>High rivalry</b> (private goods)  (club goods)  (impure public goods)  (public goods)	<u>Private fixed capital stock</u>  <u>Pecuniary externalities (hard)</u>  <u>Toll goods (excludab)</u> <i>c</i>	<u>Relational private services operating on:</u> - external linkages for firms - transfer of R&D results University spin-off <i>i</i>	<u>Human capital</u> - entrepreneurship - creativity - private know-how <u>Pecuniary externalities (soft)</u> <i>f</i>
	(club goods)  (impure public goods)	<u>Proprietary networks</u>  <u>Collective goods:</u> - landscape - cultural heritage (private "ensembles") <i>b</i>	<u>Co-operation networks:</u> - strategic alliances in R&D and knowledge - p/p partnerships in services and schemes <u>Governance on land and cultural resources</u> <i>h</i>	<u>Relational capital:</u> - co-operation capability - collective action capability - collective competencies <i>e</i>
	(public goods)  Low rivalry	<u>Resources:</u> - natural - cultural (punctual)  <u>Social overhead capital</u> - infrastructure <i>a</i>	<u>Agencies for R&amp;D transcoding</u>  <u>Receptivity enhancing tools</u> <u>Connectivity</u> <u>Agglomeration and district economies</u> <i>g</i>	<u>Social capital:</u> - institutions - behavioural models, values - trust, reputation - associationism <i>d</i>
		Tangible goods (hard)	Mixed goods (hard + soft)	Intangible goods (soft)
		<b>Materiality</b>		

Fig. 1.  
Source: Camagni 2007

together a set of actions, while it will not prove to be useful to change a single phase or a single activity, applying only one tool. To make preservation happen, a combination of different tools is needed (Schuster 1997). It will be impossible to get the change from restoration/event to conservation/process only by regulation, or only by incentives, or only by suasion. A mix-design of tools has to be set up. Loans and grants are often designed to go the easy way: sometimes they risk to work for triviality and against quality, as the target is to do, not to do better. This is often the case when the purpose is just restoration. The outputs are far more interesting when restoration is meant as a tool or a leverage to achieve other targets, as for example empowerment of local actors and dissemination of good practices.

Therefore we can trust that preservation can be dealt with as a factor for endogenous development according to the newest models of Knowledge Economy. This assumption holds speaking of the well known preservation

carried out mainly through post-damage restoration. Our commitment now is to exploit this factor focusing on the quality and long-term effectiveness of preservation strategies, that is implementing preventive conservation.

It is generally argued that “preventive and planned conservation” is less expensive and more cost efficient than “after damage” restoration. The claims are “prevention is better than cure”, or “from cure to care”. The traditional metaphor of the restorer as a doctor has been worked out to include preventive medicine. I tried to understand something about the potential of planned conservation in decreasing costs, with the aim of giving the decision-makers a support of figures and formulas (Della Torre 2003, Della Torre 2010/a). Our effort did not go beyond the definition of a factor E, probably depending on time, necessary to take into account the preventive efficacy of a given set of maintenance works. Rossella Moioli is going further, taking into account values and social attitudes, also working on the field in comprehensive wide area projects in which local firms and local authorities are involved (Canziani-Moioli 2010).

The point is that, by moving the emphasis from restoration to maintenance, an improvement of the direct and indirect economic impacts is expected. But impact analyses could overlook some relevant features, as restoration produces value because it produces knowledge, research and reputation, besides better conditions of the property. Preventive and planned conservation maximizes the fraction of educated activities, and of learning (and unlearning) attitude, which can be implemented also in different contexts, where what should be learn has more to do with social practices. This happens because:

- prevention (that is planning in advance) requires study and information management;
- in preventive conservation advanced techniques of monitoring are applied:
- at least in developed countries, even reviving old forms of know-how is, nowadays, the result of a process of criticism and “unlearning”, that is criticizing commonplaces and getting free from the bounds of misunderstood traditions.

Heritage sectors are full of aberrations created by a misuse of heritage itself. For example, there are a lot of odd ideas about traditional crafts and skills. Let me quote what happens in Aosta Valley, where remaking traditional roofs with stone slabs is enforced by local regulations and supported by incentives: but traditional technique dates back just to 1950s, as stones useful for this



kind of work can not be mined locally. In the matter of fact they come from Spain, Greece, Norway and Nepal. Aosta railway station has an area devoted to such a globalized movement of stone slabs. I think somebody should question about the carbon footprint of this regulations born by "culturally correct" preservation concerns. An advanced work of criticism is needed to unlearn what has been vitiated by industrial and commercial attitudes, to discover again the sense of authentic tradition, and to revive old know-how. In western countries, reviving traditional techniques correctly can be said a matter of creativity, as a lot of intellectual commitment is required.

I tried to recognize a set of rules about "learning and unlearning" (Della Torre 2010/b):

- Keeping alive traditional practices which still live: in general they include maintenance, and people have not only skills required to produce things, but also to maintain them, by means of activities which are necessary because of scarcity of resources;
- Unlearning ways of vitiating traditional crafts. When an old technique is revived only for production (or re-production), within a modern framework (mentality, materials supply, Gantt diagrams ...) there can be no authenticity;
- Learning new technologies and new processes;
- Learning from traditional practices and crafts: once we have unlearned wrong use of old techniques, and learned the fundamentals of contemporary research and problem solving, we get able to learn from old techniques.

The art of "learning and unlearning" is a pre-condition for innovation: and this is a very important form of social and economic value. Investments in Built Heritage entail outputs in terms of "capability building" and attitude to innovation (equal to "creativity"?), and produce an outcome just if the conservation process gets regulated according to a long term vision (Della Torre 2010/b). I also think that this outcome could be more relevant to local development than those obtained by any other strategy, because it comes out from activities which affect the long lasting infrastructures of everyday life.

In economic terms, these outputs can be dealt with as externalities which are relevant in the new models linked with Knowledge Economy, as said above. The theme of externalities will therefore be very important in the research agenda: perhaps the distinction between production and consumption externalities may become misleading, as the more relevant contribution to local development is given by means of culture and change of attitude.

Jacobs' externalities promise to be a more productive concept to be developed in this field.

This point is very important, as the assumption has to be investigated that in planned conservation framework, the maximum of externalities for innovation is born. We argue for this thesis as we know that restorations are currently managed without care of the process (that is: they lack management), but once a planned conservation strategy is implemented, any activity is seen as a step of a long term process. Planning entails management, so that externalities are not wasted but harvested. Furthermore, a preventive and planned conservation does not limit to tangible heritage: it deals with intangibles, focusing on people involvement, participation strategies, benefits in terms of capability building. That's why preventive and planned conservation, as it enables to harvest and develop externalities, strengthens the attitude to innovation of a regional system.

## BIBLIOGRAFÍA

- Camagni R., 2007, *Towards a Theory of Territorial Capital*, in Capello R., Camagni R., Chizzolini B. and Fratesi U., *Modelling Regional Scenarios for the Enlarged Europe: European Competitiveness and Global Strategies*, Springer, Berlin
- Canziani A., Moiola R. 2010. *The Learning-Based Cultural District and the Monza and Brianza Case. Learning from Cultural Heritage*. In Mälkki M., Schmidt-Thomé K. (eds.), *Integrating Aims. Built Heritage in Social and Economic Development*, Helsinki University of Technology, Centre for Urban and Regional Studies Publications, pp. 157-179.
- Capello R., Nijkamp P., 2009, *Handbook of regional growth and development theories*, Edward Elgar
- Cebron Lipovec N., Van Balen K. 2010, *Traprevenzione emanutenzione: i "Monumentenwachten"*, in *Pensare la prevenzione. Manufatti, usi, ambienti*, atti del convegno (Bressanone 13-16 luglio 2010), Arcadia Ricerche, Venezia, pp. 193-202
- Della Torre S., 2003. *La valutazione degli oneri economici nella conservazione programmata*, in Della Torre S. (ed.), *La Conservazione Programmata del Patrimonio Storico Architettonico: linee guida per il piano di conservazione e consuntivo scientific*, Guerini, Milano, pp. 133-145
- Della Torre S., 2010/a, *Economics of planned conservation*, in Mälkki M., K. Schmidt-Thomé (eds.), *Integrating Aims. Built Heritage in Social and Economic Development*, Helsinki University of Technology, Centre for Urban and Regional Studies Publications, pp. 141-155
- Della Torre S., 2010/b, *Learning and Unlearning in Heritage Enhancement Processes*, ESA Research Network Sociology of Culture Midterm Conference: Culture and the Making of Worlds (Milan, October 14, 2010). Available at SSRN: <http://ssrn.com/abstract=1692099>

- Della Torre S., 2011, *Creatività e beni culturali: il riutilizzo tecnologico*, in Biscontin G., Driussi G. (eds.), *Governare l'innovazione. Processi, strutture, materiali & tecnologie tra passato e futuro*, atti del convegno (Bressanone, 21-24 giugno 2011), Arcadia Ricerche, Venezia, pp. 121-130
- Glaeser E.L., Kallal H.D., Scheinkman J.A. and Shleifer A., *Growth in Cities*, "Journal of Political Economy", vol. 100, 1992, pp. 1126-1152
- Koboldt C., 1997, *Optimizing the Use of Cultural Heritage*, in Hutter M., Rizzo I. (eds.), *Economic Perspectives on Cultural Heritage*, MacMillan, London, pp. 155-169
- Lazerretti L., Capone F., Cinti T., 2010, *Technological innovation in creative clusters. The case of laser in conservation of artworks in Florence*, IERMB Working Paper in Economics, n° 10.02, April 2010
- Moioli R., 2011, *La componente economica della conservazione preventiva e programmata: interdisciplinarietà e innovazione di processo*, in Biscontin G., Driussi G. (eds.), *Governare l'innovazione. Processi, strutture, materiali & tecnologie tra passato e futuro*, atti del convegno (Bressanone, 21-24 giugno 2011), Arcadia Ricerche, Venezia, pp. 161-170
- Nowlan D.M., 1997, *Jane Jacobs among the Economists*, in Max Allen (ed.), *Ideas That Matter: The Worlds of Jane Jacobs*, The Ginger Press, pp. 111-113.
- Schuster J.M., 1997, *Choosing the right tool(s) for the task*, in Schuster J.M. (ed.), *Preserving the Built Heritage. Tools for Implementation*, University Press of New England, Hanover and London, pp. 32-48
- Verpoest L., Stulens A., 2006, *Monumentenwacht. A monitoring and maintenance system for the cultural (built) heritage in the flemish region (Belgium)*, in Van Balen K., Patricio T., De Jonge K. (eds.), *Conservation in changing societies - Heritage and development*, Raymond Lemarie International Centre for Conservation, Leuven, pp. 191-198