

New proximity tourism opportunities. Hydroelectric heritage: a new alliance between owners and tourist/citizens

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sous la direction de  
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# Villages et quartiers à risque d'abandon

*Stratégies pour la connaissance,  
la valorisation et la restauration*

TOME 1

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Les essais naissent d'une réflexion sur le patrimoine méditerranéen et proposent des idées de recherche sur des études de cas particulières par le biais d'un apport conscient des différentes disciplines architectoniques. La dimension matérielle et technique est exprimée à travers une mise en relation entre des domaines de connaissance strictement interconnectés, ce qui permet de partager non seulement des méthodes et des approches conceptuelles, mais aussi des outils d'investigation et de représentation. Les publications ont pour objectif d'étudier le sens et la signification, la continuité et la diversité culturelle de l'espace dans le bassin méditerranéen.



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TOME 1



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# NEW PROXIMITY TOURISM OPPORTUNITIES. HYDROELECTRIC HERITAGE: A NEW ALLIANCE BETWEEN OWNERS AND TOURIST/CITIZENS

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1925-1929,  
Cadarese  
hydroelectric  
power plant  
in Cadarese,  
Premia  
(Verbano-  
Cusio-Ossola).  
Project  
by Piero  
Portaluppi.  
Foto by Studio  
Publica, 2017.

**Manuela Mattone, Elena Vigliocco**  
Politecnico di Torino-Italia

Cultural tourism is a valuable mean through which actively promote the reactivation and development of those sites that today are in a marginal condition and affected by abandonment.

Traditionally regarded as a cost to society, cultural heritage is now widely appreciated as an essential part of Europe's underlying socioeconomic, cultural and natural capital. In fact, cultural tourism can provide socio-economic advantages, supporting long-term employment, empowerment and other opportunities for local citizens through joint initiatives.

The recent pandemic due to the CoVID19 virus and the necessary restrictions on people's mobility have led to the collapse of the outgoing tourism and to a growing interest in the closer cultural heritage. The growing desire for "nature" and security pushes people to re-evaluate local cultural resources promoting the rediscovery of peripheral locations normally isolated from the tourist routes.

As for the mountain areas, many sites, that in the past were inhabited by numerous local communities taking care of those territories and visited by many winter tourists, are now affected by demographic recession and progressive oblivion. Because of the great presence of water, since the end of the XIX century these areas have host a relevant hydroelectric heritage – dams, power plants, etc. – spread in all European mountain. Today, as if they were not perceived, the elements of the hydroelectric network, representing an important part of the history of these places, are not enough considered for their cultural and historical values. Still active for the same productive purposes for which they were built, they could implement the didactic-cultural offer of the mountain sites and the range of their economic resources, through the development of an innovative, cultural and sustainable tourism<sup>1</sup>.

**Key words:** Proximity tourism, CoVID19, outdoor, hydroelectric heritage

## **From value to impact: Cultural Tourism as driver of economic and territorial development**

The past few decades have witnessed major conceptual and policy developments at both European and international levels which have recognised the multiple and valuable benefits that cultural heritage brings to society as a whole. The concept of value has always been the rationale underlying heritage maintenance and conservation. Therefore, efforts to conserve something are only be made when some value is attributed to it. If on the one hand,

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<sup>1</sup> The article is the result of the joint work of the two authors. In particular, Elena Vigliocco is the author of paragraph 1, Manuela Mattone is the author of paragraph 2. The conclusions have been drafted jointly.

**1920-1923, Valdo hydroelectric power plant in Valdo, Formazza (Verbano-Cusio-Ossola).** Project by Piero Portaluppi. Foto by Studio Publica, 2017.



the current interest in heritage values is caused by the democratisation of heritage and its growing importance in today's society<sup>2</sup>, on the other, the permanent scarcity of funds for heritage management and conservation is now becoming increasingly urgent. Indeed, the costs of heritage are an obvious burden for governmental budgets, whereas the benefits of its maintaining are often intangible and difficult to capture in conventional terms<sup>3</sup>. This has led to a remarkable shift in heritage discourse in contemporary policies. It altered from a conservation-oriented (or object-oriented) approach to a value-oriented (or subject-oriented) one. More often, the value of heritage has been emphasised by arguing that it has a significant social and economic impact on society<sup>4</sup>. This approach tends to use cultural ventures and cultural investments as a means or instrument to attain goals in other than cultural areas such as wealth and job creation or, more currently, social cohesion and community development<sup>5</sup>. A closer integration of economic and social values

<sup>2</sup> De la Torre, M. & Mason, R., 2002. *Introduction*. In: de la Torre, M., ed. *Assessing the values of cultural heritage. Research report*. [Online] Los Angeles: The Getty Conservation Institute, pp. 1-5. Available at: [http://hdl.handle.net/10020/gci\\_pubs/values\\_cultural\\_heritage](http://hdl.handle.net/10020/gci_pubs/values_cultural_heritage) [Accessed: 4 September 2020].

<sup>3</sup> McLoughlin, J., Sodagar, B. & Kaminski, J., 2006. *Dynamic socio-economic impact: a holistic analytical framework for cultural heritage sites*. In: McLoughlin, J., Sodagar, B. & Kaminski, J., eds. *Heritage impact 2005*. Proceedings of the first international symposium on the socio-economic impact of cultural heritage. Budapest: EPOCH, pp. 43-57.

<sup>4</sup> See CHCE Consortium, 2015. *Cultural Heritage Counts for Europe. Full report*. Available at: [www.encatec.org/culturalheritagecountsforeurope](http://www.encatec.org/culturalheritagecountsforeurope) [Accessed: 4 September 2020].

<sup>5</sup> Vestheim, G., 1994. *Instrumental cultural policy in Scandinavian countries*. *International Journal of Cultural Policy*, 1(1), pp. 57-71.





of heritage for sustainable growth and social cohesion is the contemporary goal. Heritage becomes a source of democracy and well-being and cultural tourism can be its driver.

Tourism represents an important element in the social and economic life of the European Community. This sector responds to the legitimate aspirations of individual citizens to travel, to approach different cultures and to rest or carry out recreational activities out of habitual contexts (such as home or work). For many cities and regions of the European Community tourism is a very important economic resource and offers a particularly valuable contribution to social and economic development and cohesion.

According to the Report on Tourism and Culture Synergies, written by the United Nations World Tourism Organization (UNWTO) in 2018, Cultural Tourism represents 39% of global tourism and is aimed at an increasingly broad and inclusive set of cultural heritage. It can be an important tool both for the safeguard of the cultural heritage, promoting its responsible and sustainable use, and for the regeneration of the sites.

Developed in the 1980s as a niche market, cultural tourism is a remove, “type of tourism activity in which the visitor’s essential motivation is to learn, discover, experience and consume the tangible and intangible cultural attractions/products in a tourism destination. These attractions/products relate to a set of distinctive material, intellectual, spiritual and emotional

1923-1924,  
Crevola  
hydroelectric  
power plant in  
Crevoladossola,  
Formazza  
(Verbano-  
Cusio-Ossola).  
Project by Piero  
Portaluppi.  
Foto by Studio  
Publica, 2017.





features of a society that encompasses arts and architecture, historical and cultural heritage, culinary heritage, literature, music, creative industries and the living cultures with their lifestyles, value systems, beliefs and traditions”<sup>6</sup>. It finds motivation in the growing interest of visitors to know, discover, experiment and enjoy the material and immaterial cultural heritage of the site visited.

As is stated by UNWTO in September 2019, Tourism has seen continued expansion over time, and the travel & tourism (T&T) industry plays a vital role in the global economy and community. In 2018, the industry helped generate 10.4% of world GDP and a similar share of employment, and has shown enormous resilience over the last decade. As far as Europe is concerned, in 2019, the T&T industry employment has reached the value of 14.939.000, with a total impact of 3,9% of the employment. Tourism and in particular cultural tourism can actively contribute to the acquisition of essential economic incomes necessary to guarantee both the preservation of the assets and to the reduction of phenomena such as depopulation and abandonment, with positive effects both locally and regionally. Free from seasonality and practiced by visitors who are interested in getting in touch with local communities and inclined to spend a greater amount of money in the recreational/educational

<sup>6</sup> See UNWTO, *Tourism and Culture*, <https://www.unwto.org/tourism-and-culture> [Accessed 8 August 2020].



**1920-1923, Valdo hydroelectric power plant in Valdo, Formazza (Verbano-Cusio-Ossola).** Project by Piero Portaluppi. Foto by Studio Publica, 2017.

activities proposed if compared to other types of tourists, cultural tourism constitutes a valid incentive for the creation of new job opportunities. In fact, the increase of the demand in terms of goods and services in the locations visited determines the start of new business activities in the recreational, hospitality, transport sectors, implementing and diversifying job offers and reducing the unemployment rate. Through responsible and sustainable “exploitation” of cultural resources, cultural tourism is able to give rise to positive externalities useful both for local regeneration and development, and for the preservation of that heritage with respect to which it has specific interest.

Nevertheless, the positive experience of cultural heritage and cultural tourism are not yet universal. In many places, both urban and rural, rich cultural assets have not been recognised for the potential they hold to regenerate and renew. The level of development of cultural tourism among certain regions and sites is still unbalanced, with deprived remote, peripheral or deindustrialised areas lagging behind whereas high demand areas being overexploited in an unsustainable manner. Therefore, it is necessary to define new strategies and solutions to release the locked-up potential of that cultural heritage so as to unleash the possibilities for its growth and development.

Over the last few years, there have been numerous initiatives aimed at developing proposals which, by combining the various resources (cultural, landscape, naturalistic) located in the territories, offer the possibility of enlarging the number of users potentially interested in enjoying them. This can actively contribute to the revitalization of these





sites, reactivating those territories that today are in a condition of marginality. As stated by Sandro Danesi, «lesser-known territories have the same development potential as top-quality small and medium [...] enterprises, despite being little-known»<sup>7</sup>.

In particular, «lesser-known destinations should seek to incorporate [...] elements of excellence that cannot be compared with the content of knowledge and emotion that well-known destinations are able to transmit» so as to offer different experiences and fully exploit their still un-locked potential.

The recent pandemic due to the CoVID19 virus and the necessary restrictions on people's mobility have led to the collapse of the outgoing tourism sector and, at the same time, to a growing interest in the closer cultural heritage, accessible by its own means. Based on the latest preventative measures being taken by countries, [...] the UNWTO has estimated a decrease of between 20% to 30% in international tourist arrivals (Romagosa 2020). Furthermore, the growing desire for “nature” and security pushes the citizen/tourist to re-evaluate local cultural resources, often not enough appreciated. This crisis represents an unexpected opportunity for the development of a proximity and more sustainable tourism able to

<sup>7</sup> Danesi S., 2017. *The role of Cultural Heritage in Commercial Development and Tourism*. Syphonya. Emerging issues in Management, 3, pp. 48-58, <http://symphonya.unicusano.it/article/download/2017.3.05danesi/11506> [Accessed 8 August 2020].





**1912-1917,  
Verampio  
hydroelectric  
power plant  
in Verampio,  
Crodo (Verbano-  
Cusio-Ossola).**  
Project by Piero  
Portaluppi.  
Foto by Studio  
Publica, 2017.



overcome the drawback of the pre-crisis travel and tourism industry. Peripheral locations normally isolated from the tourist routes have now the possibility to intercept these new tourist flows discovering/rediscovers and enhancing their cultural and natural assets. Those sites, affected by under tourism and progressive abandonment (such as mountain territories), should take advantage of this situation and foster their social and economic development offering new tourism solutions based on the local natural and cultural heritage and not contributing to overcrowding.

### **Hydroelectric heritage and new proximity tourism opportunities**

The mountain landscape is strongly characterized by the close dialogue between the natural environment and the inhabited areas connected to that specific territory. Many mountain areas, that in the past were inhabited by numerous local communities taking care of those territories and visited by many winter tourists, are now affected by demographic recession and progressive oblivion. No longer inhabited and “lived”, many sites have been gradually affected by an incipient ruderisation which, over time, has led to the irreparable loss of a tangible and intangible cultural heritage, «fundamental expression of the culture of a community, of its relationship with its territory and, at the same time, the expression of the world’s cultural diversity»<sup>8</sup>.

<sup>8</sup> ICOMOS, *Charter on the Built Vernacular Heritage*, 1999 [https://www.icomos.org/images/DOCUMENTS/Charters/vernacular\\_e.pdf](https://www.icomos.org/images/DOCUMENTS/Charters/vernacular_e.pdf). [Accessed 8 August 2020].

To contain these phenomena, it is necessary to identify assets and elaborate cultural proposals offering new possibilities to activate the interest of a wider public, whose presence would favour the acquisition of the resources necessary for the conservation, maintenance and re-activation of this sites. These resources include the assets connected to the hydroelectric heritage. In the last century, a large number of valleys have been protagonist of a long process of hydroelectric development. Since the end of the XIX century, because of the great presence of water, these areas have hosted a relevant hydroelectric heritage such as dams, power plants, infrastructures and traces of architectural artefacts which testify the history of these areas. Despite the presence of these important assets which modelled and modified the natural landscape, these territories have up to now been valued mainly for their surviving natural and rural features.

Hydroelectric heritage is still only partially investigated and exploited because so far used and located in isolated areas such as natural parks (e.g. Parco del Gran Paradiso and Parco Adda Nord in Italy, Parque de Somiedo in Spain, Parc National des Pyrénées and Réserve naturelle du Néouvielle in France). Therefore, it represents a new tourism opportunity and actions aimed at encouraging its knowledge and valorisation are needed. The artefacts connected to the production of hydroelectric energy represent a real cultural resource that, if integrated with other resources present in those sites, could gain greater visibility and readability contributing to make these areas attractive thanks not only to their landscape resources, but also to the historical and cultural ones. Further researches and innovation are needed to foster sustainable initiatives able to regenerate these territories nowadays at risk because of the progressive abandonment they have been affected since the last decades.

Actually, the elements of the hydroelectric network are significant assets, but, as if they were not perceived, they are still not enough considered for their cultural and historical values. In most cases they are excellent engineering and architecture works that, except for rare cases, up to now have not been adequately studied, nor highlighted. Dams and power stations, often authorial works, represent real “architectural emergencies”. Built for production purposes, they have also been conceived with the aim of promoting and giving luster and greater visibility to the companies producing electricity that these works commissioned. Designers tried to reconcile the logic of exploitation with symbolic motivations and self-representation, identifying a compromise between “artifice” and nature. In Italy, for example, architects such as Gaetano Moretti, Piero Portaluppi, Giancarlo Maroni, Giovanni Muzio, Eugenio Mollino and Giò Ponti were entrusted with the task of designing hydroelectric power stations that, characterised by a particular aesthetic line and a search for quality, would become lasting monuments, a real source of pride for the entire Nation. Let’s consider, for example, the

central Benigno Crespi in Trezzo d'Adda, designed by Gaetano Moretti, rather than the system of power stations built by Piero Portaluppi in the Val d'Ossola - similar to "gems embedded" in the mountains - or even the power plant Ponale, designed by Giancarlo Maroni, laying along Garda Lake bank merging with the surrounding landscape. The works and infrastructures built to produce hydroelectric energy, which in the past, at the time of their construction, had contributed to an increase in tourist flows in mountain areas, thanks to the interventions carried out to ensure accessibility to the valleys, could now offer new opportunities of leisure and cultural growth for the users interested in deepening the theme of the production of hydroelectric energy as well as enjoying the naturalistic and environmental resources. The peculiarity of this heritage is that it is nowadays active for the same productive purposes for which it was built. Nevertheless, it could also become a mean through which implement the didactic-cultural offer of these sites and therefore the range of the economic resources of the investigated territories, promoting its exploitation through the development of a proximity, sustainable and cultural tourism in those territories.

Over the last few years there has been a growing interest, both in Italy and abroad, in the issue of electrification. The dissemination of knowledge promoted by some electric companies (Hydrodolomiti, EDF, interested in fostering knowledge and awareness about their hydroelectric energy production through guided tours) and cultural associations (e.g. the Spanish Fundación ENDESA or the French Fondation Facim interested in enhancing the historical and cultural value of this CH) bears witness to the cultural value of this heritage. Cultural value that could be exploited to revitalise territories and support Urban and Regional development. During the last decades, an increasing integration of topics related to energy production and tourism has taken place. This new and growing interest towards the different electric energy production systems has determined the development of the so-called "Energy Tourism" (eg. Ené.termica in Ponferrada, ES; Galerie Hydraulica Le Planay, FR; Promenades savoyardes de découvertes, FR; Museu da Electricidade in Lisbona, PT).

Investigating hydroelectric landscapes, offers the opportunity to both outline the components of the hydroelectric network and identify the traces of the territory's past configurations and its different resources. Reading this landscape unveils a series of themes and cues to be addressed by means of design, which should aim at integrating the historical hydroelectric infrastructure as a layer of meaning in the contemporary landscape and, therefore, as a cultural resource for Cultural Tourism. The traces of the path that led to the creation of these works are still present on the territory, sometimes hidden, often in a

state of ruin, and incorporated into nature that has gradually take its own spaces back. These traces constitute, to all intents and purposes, historical-cultural testimonies that, properly explained and connected, could become a resource able to attract an Energy and Cultural Tourism not necessarily expert, interested in deepening the different issues related to the production of electricity and to know the history of a country, of what has made its progress possible and of the geographical areas whose water resources are exploited for energy purposes. These same resources could/should be linked to others (such as naturalistic, architectural, cultural or food-and-wine resources) present in the same territories, helping to enlarge the number of users potentially interested in enjoying them. This could lead to the production of positive externalities, able to actively contribute to the revitalization of these sites.

Therefore, the hydroelectric heritage, which nowadays tends to raise more interest in the field of local history and, partially, of industrial archaeology, without significantly enticing the tourism sector as a potential alternative offer, can be a unique and powerful engine of regeneration, sustainable development and economic growth for urban and rural areas. Hydroelectric sites manifest an exceptional combination of industrial assets and themes associated to the natural landscape. Thus, it is necessary to propose concrete ways through which overcome this lack of knowledge and appraisal and make the community aware of both the cultural value of the historical hydroelectric assets and of the activities that could be carried out to facilitate the valorisation process of this heritage and of its territories, fostering Cultural Tourism development in sites which are affected both by depopulation and by a gradual tourist flows reduction. Owners and managers have now the possibility to intercept this new opportunity for the revival/rediscovery of peripheral locations normally isolated from the tourist routes, implementing proximity and sustainable tourism facing the modified tourist demand.

## Conclusion

The development of cultural proposals involving resources variously localized in the territories of the European Community represents a useful tool through which promote the crossing of national borders and encourage intercultural dialogue and mutual understanding of the identities of each member state. In 1987 the Council of Europe launched the program aimed at developing cultural itineraries that offer visitors educational and recreational activities in relation to different themes<sup>9</sup>.

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<sup>9</sup> They are defined by the Resolution on the Cultural Routes of the Council of Europe (CM / Res 2010, 53) "as a project of cultural, educational, patrimonial and tourist cooperation which has as its objective the development and promotion of an itinerary or series of itineraries based on a historical journey, a concept, a person or a cultural phenomenon with a transnational dimension, which holds an importance in understanding and respecting common

The importance of the Cultural Routes as instruments useful for the promotion of intercultural dialogue and sustainable development has been recently underlined by the Kyoto Declaration on Tourism and Culture: Investing in future generations (December 2019)<sup>10</sup>. Once again, the vital role played by the Cultural Routes in the framework of strengthening capacities geared towards the sustainable development of cultural tourism and better understanding of shared values has been stated. Therefore, hydroelectric cultural itineraries and, more generally, hydroelectric cultural tourism can be a new common layout to promote the crossing of national borders and to encourage the mutual collaboration of the Member States, encouraging the establishment of relationships between people and sites which, although different, are united by their history, their cultural heritage and water traces. They can play an important role both in the straightening of the common European identity (Europeanisation) and in the socio-economic development of the territories they cross. Understanding this heritage, telling its history, facilitating its enjoyment can actively engage people, thereby helping to secure integration, inclusiveness, social cohesion and sound investment, all necessary ingredients of smart, sustainable and inclusive growth.

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European values”.

<sup>10</sup> Art. 4.4 affirms the key relevance of “investing in human capacities and the sustainable development of less visited areas, by providing training on cultural and thematic routes and contributing to intercultural dialogue, international cooperation and peace”.

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