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Original Preservation and promotion of the cultural heritage through University, public administration and community engagement / Mattone, Manuela; Frullo, Nadia STAMPA 2:(2022), pp. 639-646. (Intervento presentato al convegno Vernacular Heritage: Culture, People and Sustainability tenutosi a Valencia nel 15-17 september 2022).
Availability: This version is available at: 11583/2971767 since: 2022-09-27T08:13:30Z
Publisher: Universidad Politecnica de Valencia
Published DOI:
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# HERITAGE 2022 INTERNATIONAL CONFERENCE VERNACULAR HERITAGE: CULTURE, PEOPLE AND SUSTAINABILITY

Eds. C. Mileto, F. Vegas, V. Cristini, L. García-Soriano



# VERNACULAR HERITAGE: CULTURE, PEOPLE AND SUSTAINABILITY

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#### Colección Congresos UPV

The contents of this publication have been approved by the Congress Scientific Committee and in accordance to the procedure set out in http://ocs.editorial.upv.es/index.php/HERITAGE/HERITAGE2022

First edition, 2022

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#### Publisher

Editorial Universitat Politècnica de València www.lalibreria.upv.es / Ref.: 6117 01 01 01

DOI: https://doi.org/10.4995/HERITAGE2022.2022.15942

ISBN: 978-84-1396-020-3

Print on-demand

Printer

Byprint Percom, S.L.

Printed in Spain



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International Conference on Vernacular Heritage: Culture, People and Sustainability This book is licensed under a Creative Commons Atribution-NonCommercial-ShareAlike-4.0 International license. Editorial Universitat Politècnica de València http://ocs.editorial.upv.es/index.php/HERITAGE/HERITAGE2022

#### **Preface**

#### C.Mileto, F. Vegas, V. Cristini, L. García-Soriano

Research Centre for Architecture, Heritage and Management for Sustainable Development (PEGASO),
Universitat Politècnica de València, Valencia, Spain

"HERITAGE2022, International Conference on Vernacular Heritage: Culture, People and Sustainability" is organized in the framework of the "VerSus+ | Heritage for PEOPLE" project, co-funded by the Creative Europe Program of the European Union (grant 607593-CREA-1-2019-1-ES-CULT-COOP1) and led by Universitat Politècnica de València (Spain) in partnership with Università degli Studi di Firenze and Università degli Studi di Cagliari (Italy), CRAterre – ENSAG (France) and Universidade Portucalense - Departamento de Arquitetura e Multimédia Gallaecia (Portugal). The "VerSus+ | Heritage for PEOPLE" project focuses on the transmission of knowledge to communities and the general public. It pays special attention to the society of the future (children and young people), as well as local, regional and national authorities in charge of heritage management, and includes specialists and experts in the field of architecture (architects, engineers, cultural managers, historians, ethnographers, university students, etc.) together with craftsmen and companies in the construction and tourism sectors, cultural and social associations, and educational institutions.

Vernacular heritage is a tangible and intangible heritage of great importance to European and global culture. This architecture, born from the practical experience of local inhabitants, makes use of local materials to erect buildings taking into consideration the climate and geography, developing cultural, social and constructive traditions based on the conditions of the surrounding nature and habitat. Above all, it plays an essential role in contemporary society as it is able to teach us important principles and lessons for a respectful sustainable architecture. These lessons from vernacular heritage for contemporary architecture have been extensively studied in the "VerSus: Lessons from Vernacular Heritage in Sustainable Architecture (grant 2012-2792/001-001 CU7 COOP7)" project, co-funded by the European Union between 2012 and 2014, and the "VerSus+ | Heritage for PEOPLE" (2019-2023) project, which follows on from the previous project, focusing on the transmission of this knowledge to society, as seen earlier. The wisdom of vernacular architecture in the field of environmental, sociocultural and socioeconomic sustainability is increasing both in interest and significance in the world today. Climate change, depopulation and the pressure of tourism all pose major challenges, as do the increasingly rapid social changes and loss of traditional trades resulting from the industrialization of the construction process. These challenges alert us to the pressing and growing need for education and increased awareness in society and for the documentation and conservation of architecture within a framework of up-to-date integration into contemporary life, managing territory and heritage assets for the sustainable development of society in the future.

The second project involved in this conference is "RISK-Terra. Earthen architecture in the Iberian Peninsula: study of natural, social and anthropic risks and strategies to improve resilience" (RTI2018-095302-B-I00) (2019-2022), funded by MCIU (Ministerio de Ciencia, Innovación y Universidades), AEI (Agencia Estatal de Investigación), FEDER - UE (Fondo Europeo de Desarrollo Regional, Unión Europea). This project is geared towards the conservation of earthen architecture in the Iberian Peninsula, both monumental and vernacular, which continues to be undervalued and barely recognized. The RISK-Terra project aims to provide scientific coverage of the study of natural threats (floods, earthquakes, climate change), social threats (abandonment, social discredit, demographic pressure, tourist development), and anthropic threats (neglect, lack of protection and maintenance), as well as the mechanisms for deterioration

and dynamics and transformation (replacement, use of incompatible techniques and materials, etc.) to which architecture is exposed. The objective of the project is to establish strategies for conservation, intervention and rehabilitation which allow the prevention and mitigation of possible damage through compatible actions and/or actions to increase resilience.

As these two projects have major points of contact, particularly in relation to the challenges mentioned above, with potential for common reflection, their main themes have been combined in this Heritage2022 conference. The topics established for the conference are: 1. vernacular architecture: matter, culture and sustainability (study and cataloging of vernacular architecture; urban studies of vernacular architecture; studies of traditional techniques and materials; sustainability of vernacular architecture); 2. heritage education (research in heritage education; heritage education and social inclusion; heritage communities; creativity and heritage education); 3. artisans and crafts of traditional construction (intangible heritage: the management of know-how and local construction culture; training in traditional construction crafts; tradition and innovation in traditional construction crafts; plans and experiences for the recovery and maintenance of construction crafts); 4. conservation, restoration and enhancement of vernacular architecture (conservation and restoration projects of vernacular architecture; materials and intervention techniques for vernacular architecture; difficulties and possibilities of using traditional crafts in conservation; management and maintenance of vernacular architecture).

The scientific committee was made up of 102 outstanding researchers from 24 countries from the five continents, specialists in the subjects proposed. All the contributions to the conference, both the abstracts and the final texts, were subjected to a strict peer-review evaluation system by the members of the scientific committee. Out of the 200 proposals submitted, 134 papers by 254 authors from 25 countries from the four continents were chosen for publication. All the articles have been published in print and online in the two-volume book "Vernacular Heritage: Culture, People and Sustainability".

"HERITAGE2022 (Versus+ | RISK-Terra), International Conference on Vernacular Heritage: Culture, People and Sustainability" was held from 15 to 17 September 2022 in in-person and online modality at the Universitat Politècnica de València. The conference was under the aegis of: ICOMOS-CIAV (International Scientific Committee of Vernacular Architecture); ICOMOS-ICICH (International Scientific Committee on Intangible Cultural Heritage); IEB (Instituto Español de la Baubiologie). The organization, publication and implementation of the conference have been made possible thanks to co-funding of the Creative Europe Programme of the European Union for the project "VerSus+ | Heritage for PEOPLE" (grant 607593-CREA-1-2019-1-ES-CULT-COOP1); and the MCIU, AEI and FEDER - UE for the research project "Risk-Terra. Earthen architecture in the Iberian Peninsula: study of natural, social and anthropic risks and strategies to improve resilience" (ref.: RTI2018-095302-B-I00). Furthermore, Escuela Técnica Superior de Arquitectura and PEGASO - Research Centre for Architecture, Heritage and Management for Sustainable Development of Universitat Politècnica de València have also contributed to the whole project.

Finally, we would like to thank all the authors who contributed to the quality, range, diversity and richness of these publications with their articles. We give special thanks to all the partners of the European project "VerSus+ | Heritage for PEOPLE" and the national research project "Risk-Terra" for participating in the conference and helping to spreading the word about it worldwide. We are grateful for the aid of all the members of the advisory committee and the scientific committee for their work throughout the process of revising the abstracts and papers. And, above all, we thank the organizing committee for the complex setting up of the whole conference, the style and language reviewers for their corrections, and all the collaborators for their invaluable work in the management and organization of all stages of the process.

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#### September 15<sup>th</sup>-17<sup>th</sup>, 2022 Valencia, Spain

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September 15th-17th, 2022 Valencia, Spain

Doi: https://doi.org/10.4995/HERITAGE2022.2022.15145

#### Preservation and promotion of the cultural heritage through University, public administration, and community engagement

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**Topic:** T2.2 Heritage education and social inclusion.

#### Abstract

Universities have long been asked to become promoters of actions aimed at increasing society's general level of well-being through interventions with cultural, social, and educational implications via technology transfer and knowledge sharing. Therefore, a mutual collaboration between different researchers of the Politecnico di Torino and local Public Administrations has been consolidated over the last few years in the context of educational and research activities on the conservation and enhancement of the cultural heritage, focusing on vernacular architecture. To provide a proactive contribution in proposing projects to preserve both the cultural heritage and social and economic development of the territories, a new educational methodology with a direct and mutual collaboration of teachers and students with local communities and policymakers was tested. Its primary purposes are to recognize local identities, identify resources and detractors, and define possible trajectories of sustainable development of case studies. Moreover, the projects propose their conservation and enhancement to improve the inhabitants' life quality and protect the local resources through technically and economically sustainable interventions paying specific attention to vernacular architecture's characters, local traditions, territory's peculiarities, potentialities, and critical issues. The results show the central role of establishing an open engagement of the local community and policymakers in complex and sustainable development projects implicating a mediator such as an architect. Hence, it is necessary to reinterpret the "symbolic" values identified by the territorial studies and to signify them (keying) into a restoration project able to frame how the local community identifies itself (framing) towards a model of a sustainable and compatible development project (modelling) for the future recovery of the sites. The case studies confirmed the pivotal role of the universities in educating the students through a multidisciplinary approach towards the complex systems of cultural heritage, engaging and moderating local community instances and the vision of the policymakers.

Keywords: vernacular heritage, preservation, education, community engagement.

#### 1. Introduction

The cultural heritage is widely appreciated as an essential part of Europe's socio-economic, cultural, and natural capital. Nowadays, it is recognised both as an innovative stimulant for growth and employment in a wide range of industries and as an essential contributor to social cohesion and communities' engagement with the preservation of their legacy and environment<sup>1</sup>. As underlined by the Faro Convention, the States of the European Council should promote a participatory enhancement

[https://ec.europa.eu/programmes/horizon2020/en/news/getting-cultural-heritage-work-europe]

<sup>&</sup>lt;sup>1</sup> European Commission, Getting cultural heritage to work for Europe, Directorate-General for Research and Innovation, 2015

process based on the synergistic collaboration of public administrations, private citizens and associations, namely a «heritage community» that, according to the definition given by article 2 of the Faro Convention, «consists of people who value specific aspects of cultural heritage which they wish, within the framework of public action, to sustain and transmit to future generations»2.

Cultural institutions can play an essential role in this process involving researchers, students, public administrations, and local communities in the design of projects aimed at fostering the preservation, enhancement, and exploitation of the potential of cultural heritage, considered a «resource for sustainable development and quality of life»<sup>3</sup>. In particular, Universities have long been asked to become promoters of actions aimed at increasing society's general level of well-being through interventions with cultural, social, and educational implications via technology transfer and knowledge sharing.

In light of this, it was decided to provide an active contribution in proposing projects to preserve both the cultural heritage and social and economic development of the territories. Over the last few years, with the students' involvement in the "Architecture for the Sustainable Project" master's degree course, research and design activities have been conducted to offer compatible and practicable solutions for the protection and enhancement of the widespread cultural heritage of the examined sites.

Based on the data acquired through the discussions among researchers of the Turin Polytechnic and public administrations, projects were proposed according to the needs expressed by the local community. By paying specific attention to the living heritage, local traditions, territories' peculiarities, potentialities and critical issues, proposals were designed to improve the inhabitants' life quality and preserve local resources through technically and economically sustainable interventions.

#### 2. The examples of Magnano and Romano Canavese

The analysis of the research activities conducted in Magnano and Romano Canavese (small towns of medieval origin located at the foot of the Serra Morenica in Piedmont), offers an example of the methodology adopted and results obtained.

Once the resources and values have been identified and recognised, problems and critical issues were highlighted to discuss the limits to their full appreciation. The presence of numerous cultural resources emerged, such as food and wine traditions (e.g. the Festival of Ides of March and Festival of Pignoletto Rosso Corn), natural resources (e.g. the Bessa' Special Nature Reserve), and cultural events (from the Early Music Festival to educational activities and the International Conferences on the clavichord). Nowadays, these elements are only known locally, while they could be appreciated by a wider audience if properly valued.

The set of the identified cultural assets defines the identity characteristics of these places and their inhabitants and, although sometimes littleknown, contribute to defining the specific features of the sites. For a more in-depth knowledge of the relationship between the territories, the inhabitants, and how they perceive the more connoting elements, the direct debate with citizens and public administration turned out to be extremely useful and interesting. It is not possible anymore «to deal [only] with environmental and cultural emerging assets, but it is necessary to [...]



<sup>&</sup>lt;sup>2</sup> Faro Convention, Convention on the Value of Cultural Heritage for Society, 2005.

<sup>&</sup>lt;sup>3</sup> Faro Convention, Preamble.

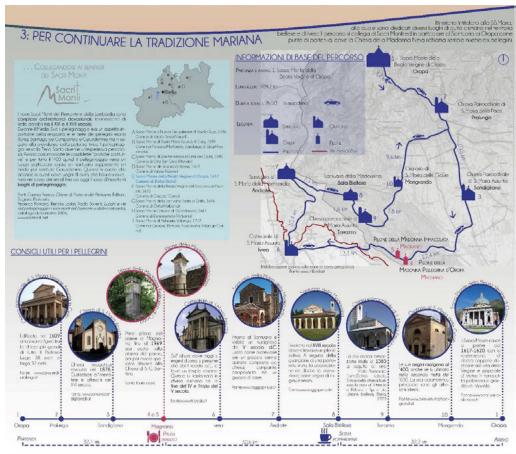


Fig. 1. Analysis of religious itineraries of Magnano's territory.

go into a new field, still to be explored, where the "expert knowledge" of the different disciplines is contaminated with "common knowledge"4, of those who daily inhabit the sites. This comparison contributes significantly to the identification not only of the perception that the inhabitants have of the places but also of their «desiders in terms of conservation, management and redevelopment of the landscape»<sup>5</sup>. Furthermore, it provides valuable support in developing possible intervention strategies aimed at safeguarding and enhancing the identified heritage.

The results of the activities conducted in Magnano and Romano Canavese and the evaluation of the preservation status of the existing heritage have revealed the need to promote actions aimed at its protection, focusing the attention not only on single well-known assets but also on the rich and varied set of resources that characterizes these territories. As Cesare Brandi states in addressing the topic of safeguarding the historic centre of a small town, if «in an ancient city the church, the palace, the square are preserved, and all the rest is destroyed, it will be

Paesaggio condiviso. Dall'urbanistica al governo del paesaggio, Osservatorio del Biellese beni culturali e paesaggio, 2015, p. 3. «desiderata in termini di conservazione, gestione e riqualificazione del paesaggio». Nuovi paesaggi da esplorare, in Dal vissuto alle mappe di comunità, Osservatorio del Biellese beni culturali e paesaggio, 2015, p. 3.

<sup>4 «</sup>più sufficiente – anche se rimane imprescindibile – occuparsi delle emergenze ambientali e culturali, ma occorre [...] addentrarsi in un campo tutto da esplorare, dove il "sapere esperto" delle diverse discipline si contamina col "sapere comune"». Una nuova "costituzione" per il paesaggio, in

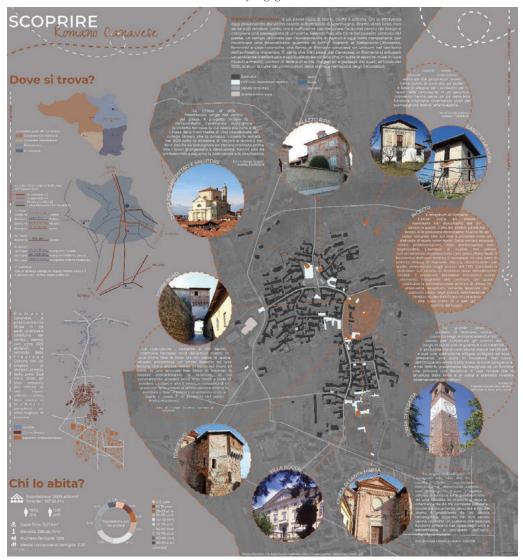


Fig. 2. Territorial analysis and identification of the architectural heritage of Romano Canavese.

like having cut a leg and replaced it with a mechanical limb» (Brandi, 2001, 132). It is, in fact, essential to implement an overall policy aimed at enhancing<sup>6</sup> a broader set of cultural, material and immaterial legacies, which, although fragile, characterise and define the genius loci and could be appreciated by citizens and tourists. It was therefore decided to start from both the insiders (those who habitually live in the places they intend to protect) and the identified cultural assets to arouse the interest of outsiders (such as tourists), who could contribute to acquiring the economic resources necessary to guarantee the conservation of the assets over time.

In light of these considerations, proposals for intervention at different scales have been developed.

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<sup>&</sup>lt;sup>6</sup> As underlined by the Cultural Heritage and Landscape Code, Legislative Decree 42/2004, enhancement represents how it is possible to pursue not only the increase in the use of the cultural

heritage, but also to promote its knowledge and, above all, to improve its current and future conservation conditions.

Regarding the territorial scale, the projects provided actions to promote the network of various resources (historical, naturalistic, cultural, food, and wine) identified thanks to also the dialogue with the local community. Therefore, thematic itineraries have been proposed to contribute to the safeguarding and use of the rich cultural heritage made up of single architectural artifacts and other tangible and intangible assets. The hiking trails, highlighting the «excellent points in a plot to travel», wanted to encourage and facilitate the discovery and/or the recognition of the different resources and the attribution «of [...] value to the contexts in which the objects are located» (Lombardi, Trisciuoglio, 2013), crossing the boundaries of the single sites and involving a broader landscape.

On an architectural scale, steps were taken to promote an appropriate and renewed use of selected buildings through interventions that, by accompanying them in their evolution, intended to make them capable of responding positively to current users' needs. The necessary changes were addressed and designed according to conservative requests arising from the ascertainment of the value of the built heritage (Doglioni, 2008). Therefore, in-depth knowledge of the architectural artefacts was firstly undertaken. The study of their history, the analysis of the transformations they have undergone over time, a geometric/architectural survey, analysis of the construction techniques and materials, and their preservation status were performed. Subsequently, proposals were made to promote the "resignification" of these assets through interventions that, by shaping, transforming, and making them capable of meeting the new potential users' needs, could both foster the restart of the preventive-maintenance process that ceased in recent years and give Them their lost vitality back (Nannipieri, 2014). During the design of the projects, particular attention was paid to compatibility and sustainability aspects. The conservation and reuse interventions should represent an adaptation of the buildings to new needs through the aggregation of new structures that, «indispensable to

the new function, [...] [could give] a formal meaning and material, as well as a functional, characterization to the differences introduced in the pre-existing context» (Dalla Costa, 1994).

#### 2.1. The educational process

The academic activities carried out in Magnano and Romano Canavese were the occasion to experiment with an interdisciplinary teaching method based on establishing a close relationship with the local community. The reference model is the iterative application of the "keying, framing, modelling" method proposed by Kroeber (1963), Shils (1981) and Schwartz (2018). As the pedagogical model was derived from the field of social studies, the two courses faced several methodological challenges such as:

- How can the interdisciplinary subjects involved in the courses be put in synergy with the fictional project-based assignment?
- How can the theoretical knowledge of the courses be operatively transferred to the students, and how can they be taught to interact with external stakeholders?
- How can the academic courses show the complexity of a conservation project to the students to critically educate them to become responsible social agents in preserving the cultural heritage?
- As interaction with local stakeholders is a crucial part of the courses, how can the courses prepare the students to answer the question about today's reasons for conservation versus the creation of new architectures?

The interdisciplinary approach developed in the two courses was designed to overcome the dichotomy of teaching and learning conservation (Keally, 2008) through the iterative process of translating the theoretical framework into a project to practice the interlocutory skills of critical thinking (as an effect of the deutero-learning approach, Bateson 1973). The "keying, framing, modelling" pedagogical model was taken as a reference to answer the questions mentioned above, with particular reference to the fundamental

concept of "value" as the keyword driving the fictional projects proposed by the students.

Therefore, they were asked to reinterpret the identified "symbolic" values and to signify them (keying) into a preservation project able to frame how the local community identifies itself (framing) towards a model of a sustainable and compatible development project (modelling) of Magnano and Romano Canavese. The first challenge was related to the definition of what the "value" is today (Scaduto, 2017) for those two territories; in particular, the students were guided to answer the following questions:

- Which are the prerequisites that enable the identified values to be the driving values of the conservation and reuse projects?
- What is today's validity of the identified values?
- How can the identified values be communicated and explained through the project?
- How can we translate and transfer those values through a conservation project?
- What is the meaning of identifying "value" in today's global world?
- To whom is the conservation project addressed?
- How can we communicate the limitations of the conservation project in such a way that it can still be valued as an enhancement project?
- What is the public role of the architect in the process of keying, framing and modelling the identified values into a conservation project?

The pedagogical model was used to teach a critical way of reading the pre-existence, its complexity, multi-dimensional values and relationship with the context, as well as the potential for reuse of the artefacts whose rehabilitation is designed from the recognition of their intrinsic values and the relationships woven with the territory, and in particular aimed at promoting social, cultural and economic development by leveraging the potential of the site. A second challenge was related to defining what "reuse" is in a conservation project. If the reuse is critically linked to what is existing and is not a priori data, the students were asked to think about what architectural language can translate the history and its stratifications into a contemporary preservation project that necessarily refers to the conservation and compatible reuse of the artefact as the final result of their activity.

The ateliers started with a public debate in which the local policymakers described their vision for both the cases of Magnano and Romano Canavese, followed by a shared visit to the villages. The main focus of the public stakeholders was on the economic and tourism development of the territory through an integrated enhancement project of their cultural heritage. On the other hand, the primary role of the students was to act as mediators among the instances of the private owners, the territorial vision of the policymakers, and the local legislations, conservation principles, standards and best practices. In doing so, their role as social agents was critical in recognizing the cultural heritage as an "extension of the memorial" (Dal Pozzolo, 2018), and the place from which the community can reconnect to its past through the historical memory triggered by a project that can build a relationship between the population, the landscape, the territory and sustainable development. In particular, students became the primary agents of the heritage's acknowledgment process as a cultural heritage to protect, save and enhance, and they also acquired more awareness of the principles of individual and collective responsibility declared by the Faro Convention<sup>7</sup> for its transmission to future generations.

Firstly, the students conducted a historical and territorial analysis of the tangible and intangible assets of Magnano and Romano Canavese to understand which values were the primary drivers of the preservation project. The study implicated a series of in-situ visits and surveys with the involvement of local communities to define a shared masterplan of the local cultural heritage system. At this stage, the main challenges among the students were mainly related to setting a common understanding of the concepts of social and historical memories, community and personal

<sup>&</sup>lt;sup>7</sup> See Convenzione quadro del Consiglio d'Europa sul valore dell'eredità culturale per la società, 2005

identities, and values, landscape, restoration, and conservation principles. Once the main guidelines were settled, the students were divided into small groups of three/four to develop a detailed conservation project within the master plan to integrate the architectural heritage case studies into a recognised overall system. Through the iterative application of the keying, framing, modelling method, the students showed their proposals to the local community, obtaining immediate feedback to be readdressed by the next design iteration.

The atelier ended with a shared presentation of the student's works in front of a representative of the Ministry of Cultural Heritage and Activities followed by a public debate as a final moment of check and critical discussion of the driven cultural mediation process.

Taking up the sociological concepts described by Barry Schwartz<sup>8</sup>, reinterpretation of the identified values through the three phases of keying, framing and modelling places the student/mediator in a preferred perspective position providing a complete and sophisticated overview concerning the involved stakeholders. The first phase of keying is identified with the territorial analysis, while the second phase of framing corresponds to the data interpretation for the preservation project; the third phase of modelling can be identified as the one in which the students translate their analysis into a project proposal. As per expectations, the most critical stage is the second one, as the framing process implies using all the taught paradigms to understand and investigate the boundaries of the conservation and reuse project (Hoadley, 2006). This process is the critical translation of the theoretical framework into the design practice, where the selection process is the most difficult to be communicated through the preservation project (Hoadley, 2006).



Fig. 3. Poster of the public presentation of the results of the Atelier "Compatibility and sustainability of architectural restoration".

#### 3. Conclusions

The activities conducted fostered greater awareness of the identified cultural heritage values in the local community and the students. Furthermore, the keying, framing and modelling method also contributed to highlighting the importance of the role of students as social agents and mediators to guarantee a multidisciplinary approach in the preservation process and to translate the complexity of the different instances into a project of reuse starting from a shared recognition of the territory's values. The proposed teaching model has indeed facilitated an active involvement of the community and public administration in a complex enhancement process where the University assumed the crucial role of guarantor.

Animated by the desire to become the promoters of a participatory enhancement process, based on the synergistic collaboration of public administrations and research bodies, the proposals were donated to the

<sup>&</sup>lt;sup>8</sup> See the article in TOTA, LUCHETTI, HAGEN 2018, p. 36-37.

community of Magnano and Romano Canavese. Implementing the interventions planned at the two territorial and architectural levels could actively promote the conservation and enhancement of the cultural resources of the territories selected as case studies and favour the recovery of that sense of belonging that local communities sometimes seem to have lost. They would help to release the lock-up potential of the cultural resources, which can play an important role both in the enrichment of the quality of citizens' life9 and in the regeneration and sustainable development of the territories.

The article is the result of the joint work of the two authors. In particular, Nadia Frullo is the author of paragraph 2.1, Manuela Mattone is the author of paragraph 1 and 2. The conclusions have been drafted jointly.

#### Acknowledgments

The tables shown in the article are extracted from the work of the students who attended the Atelier in the academic year 2014/2015, Politecnico di Torino, Master's degree in "Architecture for Sustainable Design", Atelier "Compatibility and sustainability of architectural restoration", professors M. Mattone, P. Davico, C. Bonfanti.

#### References

Anvur (2015). La valutazione della terza missione nelle università italiane.

Bonfanti, C., Davico, P. Mattone M. (2014). Magnano e il suo territorio: un patrimonio da scoprire. Progetti per la sua valorizzazione, Politecnico di Torino.

Brandi, C. (2001). Come si salva una città antica (Casale Monferrato), in Brandi, C., Il patrimonio insidiato. Scritti sulla tutela del paesaggio e dell'arte (Capati, M. (Ed.), Editori Riuniti.

Faro Convention, Convention on the Value of Cultural *Heritage for Society*, 2005.

Dalla Costa, M. (1994). Ambiente e Architettura. Conoscenza e conservazione. Considerazioni, Celid, Torino. Dal Pozzolo, L. (2018). Il patrimonio culturale tra memoria e futuro, Editrice Bibliografica.

Doglioni, F., (2008). Nel restauro. Progetti per le architetture del passato, Marsilio, 2008.

European Commission, (2015). Getting cultural heritage to work for Europe, Directorate-General for

Research and Innovation [https://ec.europa.eu/programmes/horizon2020/en/news/getting-cultural-heritage-work-europe]

Gambino, R. (2007). Il ruolo della pianificazione territoriale nell'attuazione della Convenzione, in Cartei, G. F. (Ed.), Convenzione europea del paesaggio e governo del territorio, Il Mulino.

Hallahan, K. (1999). Seven Models of Framing: Implications for Public Relations, in "Journal of Public Relations Research", 11.

Hoadley, U., (2006). Analysing pedagogy: the problem of framing, in "Journal of Education", 40, Jan.

Kealy, L. (2008). Teaching/Thinking/Learning/Doing Conservation and Creativity in Architectural Education, in Musso, S., De Marco, L., (Eds.) Teaching Conservation/Restoration of the architectural heritage. Goals, contents and methods.

Lombardi, P., Trisciuoglio, M. (2013). Itinerari, networking e liste di eccellenza, in Barosio, M., Trisciuoglio, M. (Eds.), I paesaggi culturali. Costruzione, promozione, gestione, Egea.

Ministero Per i Beni E Le Attività Culturali (2005). Convenzione quadro del Consiglio d'Europa sula valore dell'eredità culturale per la società.

Mollica, E., Malaspina, M. (2012). Programmare, valorizzare e accompagnare lo sviluppo locale. Percorsi di ricerca per una guida pratica alla tutela e valorizzazione del territorio, Laruffa Editore.

Nannipieri, L. (2014). Il patrimonio e la libertà, in Trisciuoglio, M., Barosio, M., Ramello, M. (Eds.), Architecture and places. Progetto culturale e memoria dei luoghi, Celid.

Nuovi paesaggi da esplorare (2015). in Dal vissuto alle mappe di comunità, Osservatorio del Biellese beni culturali e paesaggio, 2015.

Scaduto, R. (2017). Il progetto per la conservazione dell'architettura storica nelle tesi di laurea di restauro, in Di Biase, C. (ed.), RICerca/REStauro, Sezione 5, Edizioni Quasar.

Tota, A.L., Luchetti, L., Hagen, T. (2018). Sociologie della memoria, Carocci.

Trisciuoglio, M., (2014). Dalle "learning regions" ai "sentient landscapes", in Trisciuoglio, M., Barosio, M., Ramello, M. (Eds.), Architecture and places. Progetto culturale e memoria dei luoghi, Celid.

Una nuova "costituzione" per il paesaggioi (2015). in Paesaggio condiviso. Dall'urbanistica al governo del paesaggio, Osservatorio del Biellese beni culturali e paesaggio, 2015.



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<sup>&</sup>lt;sup>9</sup> European Commission, Getting cultural heritage to work for Europe, Directorate-General for Research and Innovation, 2015

<sup>(</sup>https://ec.europa.eu/programmes/horizon2020/en/news/getting-cultural-heritage-work-europe)