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



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Universitat Politècnica de València

VERNACULAR HERITAGE: CULTURE, PEOPLE AND SUSTAINABILITY

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



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Is there a future for marginal communities?

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Topic: T4.1. Conservation and restoration projects of vernacular architecture

Abstract

In relatively marginal and isolated settings, changes in socio-cultural contexts and population reduction have contributed to the decay, abandonment and gradual disappearance of traditional ways of living and vernacular heritage. Associations and foundations often play a key mediating and facilitating role in countering these phenomena, supporting the survival of local communities and tangible and intangible expressions of heritage. In the context of the seminar cycle “Rehabilitation of traditional heritage and local development”, ten international case studies of unconventional practices of community-rooted rehabilitation from North and West Africa, South-East Asia, Latin America, and Southern Europe were selected. The cases were analysed through a multi-criteria approach to interpret common features and links in three dimensions: 1) organization and structure of associations and foundations; 2) technical methodology of recovery interventions, emphasizing the mobilization and transmission of traditional knowledge and skills; 3) generative potential for self-sustaining initiatives and community empowerment. Qualitative and quantitative data have been gathered based on a literature review of publications and reports, international seminars, meetings, and semi-structured interviews. The results highlighted the strong relationship between the external actors' success in rooting themselves in the local context and the empowerment of communities as well as the settling of their practices over time. The greatest opportunities for economic and cultural development are those in which a holistic vision in the care of the community and its cultural landscape was adopted. The reinforcement of the role of local craftspeople and inhabitants also proved to be crucial. The study showed that caring for a living heritage and its community implies a sensitivity for the past but also an updating and a creative reinterpretation of heritage in response to present and future demands.

Keywords: *cross cultural comparison; rehabilitation of traditional heritage; transmission of construction techniques; sustainable local development.*

1. Introduction

This article is part of an ongoing research project funded by the Inter-university Department of Regional and Urban Studies and Planning (DIST) of the Politecnico di Torino. Some associations and foundations were invited to participate in the three editions of the seminar “Rehabilitation of traditional heritage and local development” (RTHLD), organized between 2019 and 2021 by DIST in cooperation

with the School of Specialisation in “Architectural and Landscape Heritage” (SBAP). Between them, ten international case studies of unconventional practices of community-rooted rehabilitation, from North and West Africa (Terrachidia, Tr), South-East Asia (Tibet Heritage Fund, THF; Maruyama Gumi, MG; Dry Stone Walling School of Japan, DSW), Latin America (Medesus, Md; Fundación Altiplano, FA), and Southern Europe (Palombar, PI; Associazione Canova, AC;

Fondacioni Gjirokastra, FG; Architect Aleksandar Radovic Foundation, ARF) were selected. However, this international perspective is in no way meant to flatten the differences between the various cases under analysis. The research proposes a cross-cultural, multi-disciplinary and transversal reading, focusing on the peculiarities of the single cases. The specific and heterogeneous ways of operating on heritage and their contribution the benefit of local communities are analysed.

2. Rehabilitation of traditional heritage and local development

The case studies operate mainly in the restoration of a minor and non-monumental heritage, functional and aimed at satisfying basic needs (Rudofsky 1964): dwellings in villages (FA, Md, ARF, MG, AC) or in the historic quarter of towns (THF, FG), structures connected to rural contexts and productive activities, such as dry stone walls (DSW and PI) or dovecotes (PI). It is often a private-owned heritage. Alongside this, public (ARF, FG) or religious heritage, such as mosques and gathering spaces (Tr), temples, churches and monasteries (THF, FA, Md, ARF). It is an indigenous, contextual heritage, that belongs to a place, and that is common and shared in a community or region.

In addition to the recovery of heritage, the thread connecting the cases studied is the relative fragility and marginality of the local contexts: border territories, in some cases recently acquired, high-altitude areas, difficult climates, rugged landscapes, distance from large centres, lack of basic services and

infrastructure, lack of job opportunities, where population is shrinking and ageing. In other respects, however, these are strong areas, which have remained more protected, managing to maintain their distinctive and traditional characteristics, both in certain social structures and from a cultural point of view. The use of traditional knowledge as a human development asset, through technically and culturally appropriate rehabilitation, and the adoption of a holistic approach to the living heritage and landscape, are creating opportunities for self-sustainable local development (Magnaghi, 2010) of such marginal areas. Associations and foundations are contributing to preserving diversity, counteracting standardisation, globalisation and cultural homogenisation, and to maintaining livelihoods, enabling the survival of human communities (Bocco in Bocci et al., in print).

3. Methodology

The main sources are the testimonies offered by representatives of associations and foundations during the RTHLD seminars (in presence in 2019 and virtual in 2020 and 2021). The lectures were followed by round tables with experts and activists, to which participants from the previous editions were invited. These events aimed to establish an international network of collaborations, generating debate on relevant issues such as tourism, interaction with local communities, multidisciplinary, innovation, generative potential. The drafting of the proceedings (Bocci et al. in print) was then the occasion for interviews and further investigations.

Case Study	Tibet Heritage Fund	Medesus	Fundación Altiplano	Palombar	Associazione Canova	Fondazioni Gjirokastra	Maryama Gumi	Terrachidia	The Dry Stone Walling School of Japan	Architect Aleksandar Radovic Foundation
Acronym	THF	Md	FA	PI	AC	FG	MG	Tr	DSW	ARF
Foundation year and place	1996 Lhasa, Tibet, CN	1997 Arequipa, PE	2000 Arica, CL	2000 Santo Adrião, PT	2001 Crevaldossola, IT	2001 Gjirokastra, AL	2007 Wajima, JP	2012 Madrid, ES	2012 Tokushima, JP	2016 Niš, RS
Type	NGO, NPO	NPO	Foundation, NPO	NGO, NPO	Association, NPO	Foundation, NGO, NPO	NPO	NGO	NGO	NGO, NPO
Place(s) of intervention	Tibet: Lhasa, Amdo, Kham; Beijing (CN), Nongom sun (MN), Sikkim, Ladakh (IN)	Valle del Cocha (PE)	Arica and Parimacota and other regions of CL	Trás-os-Montes (PT)	Val d'Ossola (IT)	Gjirokastra and Berat (AL)	Oku Noto (JP)	M'Hamid Oasis, MA; Chinguetti, MR	Itinerant in all JP	Gostuša and Justiniana Prima, RS; Trebinje, BA
Scale of the intervention	at present 1 old town and some villages	many villages in a rural area	34 communities on 16,000 km2	some villages in a rural area	at present 1 village	2 cities	some villages in a rural area	some villages	many agricultural areas	2 villages and 1 archeologic site
Funding	grants from other NPOs, fundraising campaigns, government funding 145,000 €/year	government funding, international cooperation grants, local partner funding	government fundings, private donations, sale of services 1.2 million €/year	government funding, public institutional funding	membership dues, institutional grants, sale of courses	EU grants, donations, government funding 2.5 million € in 15 years	sale of services, public fundings	sale of courses, sale of institutional funding around 30,000 €/year	sale of courses	EU grants, government funding, grants from other NPOs
Origin of the initiator(s)	outsiders (other continents) who live there	insider (same region)	outsiders (other regions) who live there	insiders (same region)	outsiders (other countries)	insiders	outsiders (other region) who live there	outsiders (other country)	outsiders (other region)	outsiders (other region)
Active members	5 (artist, architects, others)	1 architect	> 60 (interdisciplinary team)	12 (5 biologists, 2 engineers, others)	<5 (architects, builder)	>5 (interdisciplinary team)	2 (architect, biologist)	6 architects	2 (landscape planner, builder)	<5 (architects)
Subject areas	restoration, handicrafts, planning	planning, restoration, handicrafts	restoration, cultural activities	environmental protection, cultural activities, education	restoration, cultural activities	restoration, cultural activities	landscape design, restoration, cultural activities	restoration, education	landscape design, restoration, education	restoration, education
Collaborations	universities, NGOs	International cooperation, NGOs, institutions, SMEs	universities, NGOs, local government, SMEs	NGOs, universities, SMEs	universities	universities, local institutions, SME	universities, local schools, local government, GIAHS	universities, NGOs, local government institutions	universities, NGOs, local government institutions	institutions, universities, local government
Method	workshop-school in building-site	building-site school, building-site	building-site school (employment + learning), workshop	short courses (1 weekend), work camps (8-15 days)	workshops (7-10 days), building site	building-site, workshops	workshops, short courses	workshops (2/3 weeks long)	short courses (2 days)	workshops, summer school, volunteer camps (2 months)
Number of initiatives	over 60 projects in Leh	rehabilitation of 8 village houses	140 initiatives (2002-2019)	58 international voluntary work camps	around 50 workshops (2002-2019)	over 50 projects	several warehouses restored in few years	17 historic buildings (2012-2020)	around 100 courses (2013-2009)	< 5 interventions
Object(s) of restoration	private houses, religious and historic buildings	private houses, temples	private houses, temples	dovecotes, dry stone walls and other constructions	houses, dry stone walls	monument houses, public and historic buildings	private warehouse	public and religious buildings, gates	dry stone walls	private houses, religious and public buildings
Participants	local masters, inhabitants, young practitioners	local masters, inhabitants	local masters, inhabitants	students, enthusiasts, local masters	students	students, enthusiasts, local masters	students, inhabitants	students, young people	students, inhabitants, enthusiasts	external masters, students, enthusiasts
Sources and documentation	buildings study, local masters, expertise from outside	old generations, local masters, expertise from outside	old generations, local masters, expertise from outside	local masters	local masters, buildings study	expertise from outside	old generations, local study	inhabitants, local masters, expertise from outside	old generation, buildings study, local masters	old generation, buildings study

Table 1. Organization and structure; Technical methodology.



Alongside this, the documentation made available online by the associations and foundations was used: all of them, with the exception of Md and MG (the latter only has a blog updated in 2014), have a website and use at least two social channels of communication. In addition to scientific and dissemination publications, manuals, annual reports, interviews, documentaries and participation in seminars and conferences, it was also considered important to analyse information extracted from their social channels. For space reasons, only primary sources and main websites have been listed in the references.

4. Cross cultural comparison

The associations and foundations were analysed through a multi-criteria approach in three dimensions, summarised in paragraphs 4.1, 4.2, 4.3 and in Tables 1, 2 and 3. Associations and foundations are referred to in the text following an order of relevance. A parallel multidisciplinary study was carried out between the case studies, using the information gained from each as a source of analysis and observation of the others.

4.1. Organization and structure

This section, summarised in Table 1, describes some general characteristics of the associations and foundations in order to identify their scale in terms of geographical, economic and workforce. In selecting the case studies, preference was given to initiatives that have been active for at least a decade (ARF excepted) and are still active. Many of the initiatives have evolved significantly over the years (FA, THF, Pl): it was decided to focus on the current situation, adopting 2019 as the reference year, for a pre-pandemic perspective.

Associations and foundations operate mainly as facilitators, coordinators and supervisors of interventions, and fundraisers. Rarely the initiators are people from the communities or

the region (Pl, FG, Md); in most cases they are outsiders from other continents (THF), countries (Tr, AC), or regions (MG, DSW, ARF, FA), who have settled since long (this is not the case of Tr, DSW, ARF, though). Almost always increasing is the number of people involved from the surroundings in their permanent staff; this is particularly significant in FA, THF and Pl, where they exceed 50%.

Multidisciplinary teams cooperate in some cases (FA, TH), while architects predominate in all cases except Pl and DSW. In many cases external support and collaboration are sought in universities and in sister organisations. These broad and horizontal competences allow associations and foundations to deal not only with heritage restoration, but also with environmental protection and conservation (Md, Pl, MG, Tr), landscape design (Md, DSW, AC), management planning (THF), agricultural production (MG, Md, and the Codpa Wine School of FA), improvement of basic services and infrastructure (ARF, Tr, THF, Md, FG), education (Pl, MG), and research. There is a strong focus on keeping the craftspeople's traditions alive (FG, FA, Tr), with initiatives such as THF's Himalayan Bauhaus: a platform to preserve, train, and adapt the wisdom of traditional arts and crafts and apply it to new creations (De Azevedo, Hirako in Bocci et al. in print). Alongside this, are initiatives related to the promotion and rediscovery of the local culinary heritage (MG, FA, FG, ARF), festivals (FA, Md, Pl, FG, AC), and the inclusion of local traditional ceremonies at specific moments in the rehabilitation processes (FA, THF) or the valorisation and use of indigenous languages (FA).

Almost all initiatives relate in some way to tourism – a possible resource but at the same time a threat. FA has developed the Ruta de las Misiones responsible and sustainable tourism plan, which involves and supports local SMEs and promotes the area through

editing guidebooks and information (similar actions have also been carried out by THF, Tr, FG, and Md with the community tourism model implemented in Sibayo, Colca Valley).

Financial resources are generally obtained from public funds and/or donations and grants. In the cases of DSW, Tr, AC and ARF the main source of income is course fees. Sanada Junko (DSW) motivates this strategy with the necessity to be independent from uncertain public subsidies to ensure continuity (Sanada in Bocci et al. in print). In some cases, the population co-finances part of the recovery (THF in Leh). The most significant costs concern building materials and – in case of paid workers involved (FA, Tr, THF, Pl) – salaries.

The scale of the areas of intervention varies greatly, from village systems spread over very large areas (FA, Md, Pl) to the single small village of Ghesc where AC currently operates. In some cases the associations and foundations have moved from one country to another over the years (THF), exported the method (Tr, FA) and provided advice (Tr, FA, Md with FA) in different countries and regions. DSW, on the other hand, is an itinerant school, working throughout Japan.

4.2. Technical methodology

The second dimension is the central theme of this research: the know-why and know-how of heritage rehabilitation interventions, emphasising the mobilisation and transmission of traditional knowledge and skills. In order to guarantee a future for the vernacular, it is necessary not only to focus on the preservation of particular artefacts and buildings, but above all on safeguarding and promoting skills to reproduce them (AlSaiyad in Asquith, Vellinga, 2006; Bourdieu, 1977).

A first point is the methodologies adopted for the mobilisation of traditional skills. The transfer of knowledge generally takes place through a pedagogy that is not based on language. It is rather a practical, dynamic and reactive transmission through an “on site” apprenticeship:

a traditional way of teaching based on the observation of ways of doing and practice of skills (Marchand in Asquith, Vellinga, 2006). This transmission can take place through courses ranging from a few days (DWS, Pl, FA) to one or more weeks (Tr, AC, Pl, ARF, MG, FG), to experiment with some technique, or to (re)build a portion of an artefact. In this case, the duration of the overall intervention loses its relevance: the purpose being focused on training (Cesprini in Bocci et al. in print). However, it must be emphasised that the techniques are often quite simple, and can be learnt in a short time, whereas knowing how to build with these techniques requires more experience. In addition to this, specialised labour is often called upon to complete certain parts that are difficult to manage with self-construction (AC, Tr).

The other recurring form is training field schools in conventional construction sites, with locals being regularly contracted, under the supervision of master craftspeople and experts (FA, THF, Md, Tr). This mode can directly return part of the investments locally, with a positive socio-economic impact on the community, as well as the creation of local skilled labour and teams in contexts where trained local restorers are scarce. At FA the team is organised into senior masters and monitors (often with permanent contracts), training officers and training assistants (hired for each intervention). Skills are transmitted in relays, inspired by the transmission of knowledge from one generation of builders to the next, as it is typical of the tradition, achieving a continuous, self-sustaining and self-training process (Marchand in Asquith, Vellinga, 2006). Theoretical lessons from specialists help to acquire technical and practical skills (Bocci, Yuste, 2020). In some cases, training is also provided through exchange programmes (THF) and learning journeys (FA) abroad, in order to acquire specific skills to grow locally and thus avoid calling specialists from outside – and saving the costs associated with it.

Only rarely the techniques have been codified in catalogues and manuals (MG used information present in blogs). Oral sources are still the main way to transmit traditional techniques, and are mobilised by associations and foundations through involving local residents and builders as trainers in workshops (Tr, Pl). In Tacora, for example, FA revitalised *caruna*, a family tradition for building ceilings that one of the masons remembered (Yuste in Bocci et al. in print). This knowledge is combined with a meticulous study and a careful observation of buildings and artefacts (ARF, AC, THF), following the footsteps of the craftspeople and creating a connection with past generations (Hirako in Bocci et al. in print). Frequently, experts from outside (FG; Akira Kuzumi, the plaster craftsman, in the case of MG), as well as masters engaged in previous projects, are involved, introducing occasionally exogenous techniques such as the *Arga* roof Lhasa which was used in the Beri Monastery (THF). Traditional wisdom is complemented by scientific knowledge (Hagino in Bocci et al. in print) from experts such as Julio Vargas Neumann, who supports FA in the adoption of seismic reinforcement.

	THF	Md	FA	Pl	AC	FG	MG	Tr	DSW	ARF
Beneficiaries	x	x	x	x	x	x	x	x	x	x
Requesters	x	x	x	x					x	x
Decision-makers	x	x	x			x		x	x	
Owners	x	x	x	x		x	x		x	x
Meetings	x	x	x			x		x		x
(Co)financers	x		x			x	x			
Workshops	x	x	x	x	x	x	x	x	x	x
Trainers	x	x	x	x	x			x	x	x
Employees	x	x	x	x	x			x		
Autonomous int.	x		x	x	x				x	x
Maintenance	x	x	x	x	x	x	x	x	x	x

Table 2. Involvement of the local community.

In all case studies the involvement of the local community is foreseen – both craftspeople (THF, Tr, FA, Pl) and the inhabitants themselves. Table 2 shows the different ways of community involvement both in a passive form, as beneficiaries (often as owners of restored buildings), and in an active form: taking part in strategic decisions – regarding planning, priorities, new functions, technical solutions (FA, Tr), selection of masons (Tr) –, participating in the construction and/or contributing economically

(THF). FA and THF have developed community-based approaches to conservation. Learning the techniques and participating in the construction site can lead the inhabitants to achieve autonomy and responsibility in terms of subsequent maintenance operations (Davis in Asquith, Vellinga, 2006; Illich, 1973). Outsiders such as foreign artisans (THF), traditional techniques enthusiasts (Pl, DSW) and students (Tr, DSW, AC) also participate, frequently as volunteers. Several case studies carry out educational activities about the value of heritage with children and teenagers, trying to overcome the negative perception of traditional techniques (Cruz in Bocci et al. in print) (Tr, FA, DWS, MG).

	THF	Md	FA	Pl	AC	FG	MG	Tr	DSW	ARF
Social surveying	x	x	x	x		x		x		x
Inventorisation	x	x	x	x	x	x	x	x	x	x
Protection	x	x	x	x		x		x		x
Conservation	x	x	x	x	x	x	x	x	x	x
Upgrading	x	x	x	x	x	x	x		x	
Adoption in new	x	x					x			
Restoration	x		x			x				
Archaeology	x	x	x	x		x		x		x
Services upgrade	x	x	x	x	x	x	x	x	x	x
Diffusion	x	x	x	x	x	x	x	x	x	x
Consultancy	x	x	x	x	x			x	x	x
Exporting	x	x	x		x			x	x	
Management	x	x	x	x						x

Table 3. Activities carried out.

Table 3 describes the types of activities carried out by the associations and foundations.

To understand the population’s needs and demands, social surveys are used (FA, Tr): THF spent two years carrying out a detailed study of three neighbourhoods in Beijing, looking at both the architecture and the social conditions.

In almost all analysed contexts, in the last decades a cultural gap interrupted the use, transmission and evolution of traditional building know-how as living processes (Laureano, 1995). To counteract the lose of knowledge, the approaches to heritage involve its documentation and inventorisation, with the drafting of technical manuals and catalogues of buildings (THF’s open access Lhasa Archive project; FA’s Ruta de las Misiones; ARF’s catalogue of 256 houses and the draft of a

priority list of intervention; Tr's survey of each ksar; Pl's database of all the 3450 dovecotes in the Northeast of Portugal; DSW's research on the state of conservation of 252 terraced fields in Tokushima). Next to this, is the preservation and conservation of the built heritage. This is often achieved by obtaining monument/heritage status (FA obtained the declaration of National Monument of 28 out of 34 Andean temples; THF worked with the local government to nominate Leh Old Town as a Heritage Zone), as well as with the recognition as cultural landscape (FA).

Heritage, construction traditions and vernacular know-how represent a dynamic, interactive, collaborative and dialogical process, that can be adapted and upgraded to meet current and future needs through (Harrison 2015, Lawrence in Asquith, Vellinga, 2006; Remotti, 1996; Winter, 2013): adaptive reuse for pilot buildings, often linked to tourism, production or cultural projects (Pl, FA, THF, FG, ARF); technical and living conditions improvement (FA, THF, AC); inclusion of "industrial vitamins" (Harper, Borer in Bocco Guarneri, 2020). In addition, traditional construction techniques may contribute to new building (Oliver, 2003; Vellinga in Asquith, Vellinga, 2006) in some kind of neo-vernacular architecture (Hirako in Bocci et al. in print) such as the 2015 Central Asian Museum in Leh by THF.

4.3. Generative potential

This section investigates the generative potential for self-sustaining initiatives and community empowerment.

A first achievement in the socio-cultural sphere is the change in the perception of heritage: the sense of backwardness and poverty, and the initial distrust, have been replaced by interest, care and collaboration. This reinforced the self-esteem of, and raised awareness among, the residents. According to Carmen Moreno (Tr), the collaboration of locals and outsiders helped

this process (Moreno in Bocci et al. in print). Requests for intervention from the population (Pl, THF, FA, ARF, DSW) or local authorities (FA, Tr, FG, Pl, Md) have become frequent. Locals are even promoting autonomous bottom-up rehabilitation, just requiring technical advice from associations and foundations. Significant is the case of AC, which stimulated young locals in buying and renovating buildings (Bocci, Mazelli, 2020).

In the socio-economic sphere, the acquisition of tools and skills has enabled participants to implement independent interventions (Md, MG, DSW, FA), to set up local enterprises and autonomous activities, and to count on a local and autonomous capacity to raise funding (FA).

In addition, initiatives such as Md, Pl, MG and DSW also show appreciable achievements in the preservation of environmental biodiversity and symbiotic relationships between humans and nature (Friedman, 1990; Watson, 2019).

5. Discussion and conclusions

This research highlights how fundamental is the external actors' success in rooting for the empowerment of communities, as well as the settling of their practices over time. Cases such as THF, FA, Md, after more than twenty years of cooperation with local communities have managed to create a relationship of cooperation, trust and mutual esteem. Similar results have been achieved by MG and Pl, even though there is some wariness persists (Hagino in Bocci et al. in print) and residents appear less ready to get involved in the process (Guedes in Bocci et al. in print).

Initiatives that took a holistic view of caring for a community and its built, crafts, intangible, and natural heritage offered greater opportunities for economic and cultural development, fostered the maintenance and creation of diversity, and activated circular economies and local productions (Md, FA, MG, Tr, FG, THF).

During the 2019 RTHLD seminar, participants were asked the question “What after?” (Bocco in Bocci et al. in print), i.e. at which point of the process of competence transmission and community empowerment they felt to be. Only once the independence from external actors is guaranteed, with the creation of self-sustainable local development possibilities (helping communities to earn real money, not subsidies) the processes carried out by associations and foundations can be seen as effectively and successfully concluded. According to this study, THF and FA are the most advanced on this journey. FA set up the Escuela de Conservación Sostenible Sarañani!, a participative and self-managed programme for the restoration of temples, houses and fields carried out by community members (some of whom went through previous training activities also offered by FA), where FA only contributes technical assistance and training. The research shows that caring for a living heritage and its community implies sensitivity for the past but also a creative reinterpretation of heritage in response to present and future demands. A long-term vision is needed to secure the future of marginal communities (THF, FA, Md), which looks for a holistic, self-sustainable local development through specific, community-based responses (Dematteis, 1994).

6. Future perspectives

The research will continue through field analysis of the work of FA and THF. To return the research results to the participants, a fourth edition of the RTHLD seminar is planned for September 2022.

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References

- Asquith, L., Vellinga, M. (eds.) (2006). *Vernacular Architecture in the twenty-first century*. xvii-xviii. Taylor & Francis.
- Bocci, M., Mazelli, R. (2020). In search of a contemporary hyaku-sho. *Journal of Traditional Building, Architecture and Urbanism*, 1, pp. 301–308.
- Bocci, M., Yuste, B. (2020). Recovering the heritage and building traditions of the village of Tacora, Chile. *Journal of Traditional Building, Architecture and Urbanism*, 1, pp. 235–240.
- Bocci, M., Mazelli, R., Bocco, A. (eds.) (in print). *Rehabilitation of traditional heritage and local development*. Politecnico di Torino.
- Bocco Guarneri, A. (2020). *Vegetarian Architecture. Case Studies on Building and Nature*. Jovis.
- Bourdieu, P. (1977). *Outline of a Theory of Practice*. Cambridge University Press
- Dematteis G. (1994). Possibilità e limiti dello sviluppo locale. *Sviluppo locale*, pp. 10-30.
- Friedman, Y. (1990). *L'architettura di sopravvivenza. Una filosofia della povertà*. Bollati Boringheri.
- Harrison, R. (2015). Beyond “Natural” and “Cultural” Heritage: Toward an Ontological Politics of Heritage in the Age of Anthropocene. *Heritage & Society*, 8:1, 24-42.
- Illich I. (1973). *Tools for conviviality*. Harper and Row.
- Laureano P. (2013). *La piramide rovesciata. Il modello dell'oasi per il pianeta terra*. Bollati Boringheri.
- Magnaghi, A. (2010). *Il progetto locale. Verso la coscienza di luogo*. Bollati Boringheri.
- Oliver, P. (2003). *Dwellings: The Vernacular House World Wide*. Phaidon.
- Remotti F. (1996). *Contro l'Identità*. Laterza
- Rudofsky, B. (1964). *Architecture without Architects*. Doubleday & Co
- Watson E. (2019). *Lo-Tek*. Taschen
- Winter, T. (2013). Clarifying the critical in critical heritage studies, *International Journal of Heritage Studies*, 19:6, pp. 532-545.
- THF: <https://www.tibetheritagefund.org/> and http://www.tibetheritagefund.org/old_web_2002/2_lhasa/2_06/2_06_00_en.html
- FA: <https://www.fundacionaltiplano.cl/>
- PI: <https://www.palombar.pt/pt/>
- AC: <https://www.canovacanova.com/>
- FG: <http://www.gjirokastra.org/gjirokastra-foundation/>
- Md: <http://maruyamagumi.blog102.fc2.com/blog-date-201011.html>
- Tr: <https://terrachidia.es/>
- DSW: <https://ishizumischool.localinfo.jp/>
- ARF: <http://www.fondar.rs/>

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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 architecture, tangible and intangible heritage of great importance to European and global culture, represents the response of a society culturally linked to its territory, in terms of climate and landscape. Its construction features are born from the practical experience of the inhabitants, making use of local materials, taking into consideration geographical conditions and 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.

Vernacular Heritage: Culture, People and Sustainability will be a valuable source of information for academics and professionals in the fields of Environmental Science, Civil Engineering, Construction and Building Engineering and Architecture.

