

The struggle for Stone-dry walling: the ambition to protect both processes and products

Michela Marisa Grisoni¹

¹ Politecnico di Milano, Milan, Italy, michela.grisoni@polimi.it

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Abstract

Quoting from the inscription into the Intangible Cultural Heritage List (2018), the art of dry-stone walling concerns “the know-how” related to making stone constructions that explains the interest towards the product process as well as the product itself. The protection of the ability in stones selection and their placement, without mortar or dry soil at most, has moved the attention from walls to walling too. As a result, the idea of authenticity should be rediscussed to preserve not only some existing monuments and amazing landscape, but a living heritage and a sustainable land use. A risk occurs in some coastal areas, both maritime or front lake, and in the valleys, of the Alps or the Apennines. These places are the most sensitive to residential and receptive exploitation; as a result, an aesthetic landscape perception is taking advantage against its structural conception and the authentic art construction for dwelling (buildings), farming (terraced arrangements) or husbandry (cow-walls). The awareness of the role of dry building for the consolidation of the slopes, the protection of the mountain and the harmonious relationship between environments and species the inscription would preserve, is misunderstood. In Italy some evident ambiguities are occurring into practice and local behaviours. Although the inscription has invited preservation program, the governance of the art of terraced arrangement seems often reduced to a picturesque disposal; misunderstood if not betrayed in its authenticity both as a product and as a process. Some case studies are proposed to point out this slipped issue, considering the Lake of Como as an elective observation area. By the presentation of some real examples, both virtuous and critical, a discussion and comparison with other contexts, both national and international, should eventually be favoured.

Keywords: intangible cultural heritage, landscape preservation, front-lake areas, sustainability

1. Introduction

Everyone should recognize that a reinforced concrete wall covered with stones is something other than a traditional stone-dry wall. Nevertheless, we must admit landscape not only is becoming artificial but sometimes also reconstructed in a masked and affected manner.

It might be supported the intention for collective needs satisfaction, and the private right to change one own property must be recognized. On the other hand, it is hard to understand why

false replicas should be accepted as true. We are neither the only nor the first, to say that the stone-dry wall technique is threatened. While excuses can be granted to wild animals, unwitting destroyers, they cannot be for human beings who are expected to be of a less instinctive and more sensitive attitude. Respect and protection ask for a civic sense, green and ecological awareness which are often used as ideological slogans and then dismissed into practice. One would also expect human being educated to a more sophisticated beauty ideal because we do

not see how replicas and reproductions can aesthetically return lost originals. It is hard to believe they allow to respect and preserve, to rescue and protect the perceptive and formal aspects of the landscape, at least. It is believed that even these aspects are made worse as not only their authenticity is betrayed (if it has been destroyed or its features changed the replacement is evidently no longer the original), but it often changes the nature of the materials themselves.



Fig. 1. An authentic stone-dry walls made using the Moltrasio limestone (Photographed by the author, January 2022)

Not only coatings are replacing the authentic stone-dry walls, but materials are not natural anymore as they often are the result of a ‘regeneration’ process.

1.1. A dangerous drift

There is an undoubtful interest into the production of the so-called ‘manufactured stone’ when supported by an organic vision of the architectural product and its relationship with the landscape. The research on colours or for light and shadow effects related to the context, the attention for the tactile feelings and all the experiences brought by the surface finishing, as well the reference to traditional good building practices, are appreciable issues.

Some concerns arise when the outcome of this technological research is advertised as “a new material connected to the passage of time”; so that it becomes the tool to convey patinas and time passing effects. The material becomes ambiguous and, even if unintentionally, architecture will be equally false. Into the field of building

conservation, where the word itself should ban the use of misleading replicas, it is thus believed that manufactured stone must be regarded with great mistrust. The point is to assure it will not be reduced to an alibi for disguising contemporary insertions into the landscape instead of honestly facing them. The aim should be to avoid a slipping onto the plane that separates truth from fiction, sustainability from speculation, reason from pretext.



Fig. 2. A catalogue type of the so-called manufactured stone ‘Pietra Moltrasina’ (<https://www.geopietra.it>)

Those who are responsible for society needs and a good design quality, can much affect the building products market. This last is based for the best profit and just adapts to demand. Until stone coatings are asked or approved to mitigate the environmental impact (without considering the shortage of original materials, the closure of quarries and supply difficulties), the producers will strive to find a replacement. Finally, the market of surrogates will be favoured, the opportunity of a discussion on authenticity and sustainability of old techniques and materials will be lost.

In the region under study, the closure of the quarries is an important aspect. It warns that the relationship between inhabitants and their environment has changed; it reminds how building practices have also changed; it alerts the disappearance of craftsmen which know how extract and collect, work and arrange local stones to build stone-dry architectures (Balzarini, Cani, Zerbini 2001).

Unfortunately, the increasing interest for the so called ‘terraced landscapes’ seems to clumsily deal with some of these aspects: that is, territorial and local communities’ historical studies are lacking and the strategies for living and working those environments in contemporary time are still disoriented.

In those places where the holiday house market is lively and the desire for luxury real estate prevail over the local tradition, the rural landscape is under pressure. Because of the global market, the relationship between the building product and the local construction economy is changing. Customers are demanding buyers. Foreigners, looking for their own place, will partly adapt and partly will ‘infect’ the local culture. The most varied results will occur, not perforce the most negative intersections, anyway something to deal with.



Fig. 3. New terraced landscape in Cernobbio (CO), Italy (Photographed by the author, January 2022)

To protect stone-dry walling from dangerous short circuits (between original and replicas) and to mediate different design cultures (difficult but stimulating) wide perspectives are required. Preservation must not isolate itself in the past or manage historical places only for tourism. Even if this is done for a slow and green attitude or a pleasant and positive use, they both are reductive approaches. The highest and main concern should be the negative effect caused by the lack of a daily care and maintenance.

Albeit it is a well-known fact, it worth to repeat that stone-dry walls are not immutable artifacts

but complex ecosystems (Darlington 1981). Thus, we are not just talking about amazing ‘lake view terraces’ to be entrusted to some economic activity exploitation but of landscapes as a fruitful and productive, a wise and expert interrelation between man and his habitat. It may offer to the architect a game of shape and volumes, but it should be essentially a balanced “result of the action and interaction of natural and/or human factors”¹.

1.2. An existing and living heritage?

The inscription of the art of stone-dry walling in the WHL as intangible cultural heritage (2018), therefore among the practices rather than the products, assumes these aspects. But the inscription is an intent that requires subsequent supervision so that too much attention does not become an aggression (Harrison & Hitchcock 2005; Cuccia 2018). The many workshops held to explain the construction rules and to investigate local variations, tend to counterbalance the risk that the art of stone-dry walling enters the market as a new product (Carminati, Invernizzi 2012; Scaramellini, Varotto 2008; Fontanari, Patassini 2008; Sangiorgi, Calvi, Branduini 2007; Spalla 1985). Because it is a matter of preserving the product as practising the technique, it is not only a matter of perception but of constructive commitment (Alberti, Dal Pozzo, Murtas et alii 2018).

Even if comparisons between different and international contexts are desirable, we assume the constructive aspects as illustrated throughout a wide literature (Ambrosi, Degano, Zaccaria 1990; Hart 1980; Radford 2001; Snow 2001; Congost Colomer et alii 2010). In this paper we would rather emphasize how terraced landscapes and artifacts that are their structural part and articulation (walls but also connections, mule tracks and paths, icehouses and barns, stables and shelters) are the result of an active and not passive attitude; stone-dry walling is a process rather than a product whose preservation requires

¹As in the *European Landscape Convention* (2000), art. 1.

skilled workers and not only users. Restoration is not enough. An on-going program for a daily care and maintenance activity is required. It is a matter of landscape governance and management which involves civic engagement and awareness.

Before recommending uncertain and spontaneous revivals, it must be also reminded that 'terraces' are the outcome of the way in the past agricultural land was owned or rented, used, or improved, redeemed, or inherited. Until a recent past, some areas were still huge estates in the hands of a few figures (single private subjects but also religious or civil institutions). To protect their property and to increase their income, they assigned some portions following different agreements (perpetual contract lease or emphyteusis) (Zaccani, Palatiello 1984). In less than a century, these reasons have changed, those agreements decayed, those lands set free and inherited by a multitude of heirs. These heirs are often unaware of and disregarding the rural culture because they moved away to other activities and lifestyle (Bianchi, Merzario 1999). Anyone who has faced rural history studies knows land ownership parcelling because of modern and contemporary society.

Many difficulties occur when reactivating these places, whose renewed property asset involve many subjects. We should eventually recognize these changes in the social and economic structure and their results on the landscape. Many projects struggle to take off when this is forgotten; they fail on difficult new agreements with untraceable or detached subjects. However, it is hard to believe a solution would be to rejoin small lots in one with an institutional act.

The assignments to tenants played an essential role to produce the terraced landscapes. Since the tenancy had a fixed fee, it encouraged the tenant to improve it so to increase the income it would generate. It was in the tenant's interest to be careful with the land. The agreement, a use right without holding transfer, also carried an implicit form of coexistence and cohabitation. The

property became a place where owners and tenants interacted; they were both encouraged to a shared use, that is, not exclusive, of 'their earth'.

Furthermore, the assignments were just few, small, separated portions inside a wider estate. There were at least two reasons for this: the intention to limit tenants from easy future collections; the choice to arrange horticultural activities according to soil nature and sun exposure. The result was a mosaic of cultivated small lots spread in a more natural one. Thus the 'greenways' that allow animals to move, remained safe; fencings too were reduced because both tenant and owner had to ensure mutual accessibility; that is, beyond the dry-stone walls, there was a network of walkways and paths, cart and mule tracks, placed not only along the borders but within the property itself; a kind of rib that made the mountain 'permeable', lively and truly inhabited. It is believed that the current slogans for mountains repopulation, for inner areas care, must push towards this direction. The suggestive idea to grant sites for a symbolic price should not allow the newcomers to enclose themselves as exhausted citizens and inexperienced, 3.0 farmers. Some case studies should hopefully clarify the concepts expressed.

2. A focus into practice

Italy and the province of Como, that is, the northern western end of Lombardy, on the border with Switzerland is the proposed case study. These sites share geomorphological features and, for the future, a perspective on Canton Ticino, at least, should be opened to compare both historical and actual practices of promotion and enhancement, maintenance, and recovery of terraced landscapes.

On this occasion, we only refer of Como, whose governing institutions are updating their planning and landscape protection tools, including the preservation of "terrazzamenti" as a pursued

goal². We do not refer to the entire province, characterized to the south by flat to light undulating soil. The main interest is around the lake whose steep slopes have forced men to gain their space against the wild forest and to shape them as terraces more useful for rural activities (potatoes and onions, vineyards, chestnuts, and mulberries above all).

Three different case studies will be discussed to highlight the following: the opportunity to link historical investigation and landscape management (the first case study), the ambiguity inherent in a formal and non-structural recall of these artifacts (the second one) and, finally, an experience of true preservation of both product and practice (third one).

2.1. Case study 1. Uncertain revivals

Faggeto Lario (CO) and its mountain hamlets (Molina, Lemna and Palanzo) are located on the eastern side of the lake of Como. They appear as lost in a woodland (mostly of beech and chestnut trees), furrowed by deep valleys. Everywhere, up its bank, the lake reliefs are engraved by streams and pointed with small, amazing settlements. Historical paths often connect them. The so-called Strada Regia, a medieval route which connects Brunate to Bellagio, the renowned resorts, runs halfway up the coast and crosses these the villages which are now joined as unique municipality. The actual boundaries extend from the lake bank (202 asl) to the top of Monte Palanzone (1436 asl). It is a steep, somewhat rugged ground whose inhabitants earned space by reshaping the slope. A terraced landscape shows the interaction between man and his habitat. Local stones have been placed to adapt to and live the slope: not only dry-stone walls have been built to retain soil but also connections (like stairs, mule and path tracks) and any other accessory constructions to climb and live it.

Recent scientific research has highlighted these artifacts as the landscape structure and its cultural identity. It is also proved that these terraces were historically reserved to viticulture but also to horticulture and orchards; not only in Faggeto Lario but in all the so-called ‘triangolo lariano’³. Some regards these studies as a paradigmatic opportunity to use historical research for planning, to use history as a guideline for ‘future’ buildings activity. Local municipalities acquired these results for the development of the Territorial Governance Plan (PGT) and now are implementing the suggested instructions⁴.



Fig. 4. The terraced landscape in Palanzo of Faggeto Lario (CO), Italy, Lake of Como is on the background.

Beyond its doubtfully connection with the town-plan, these studies strike for their cognitive framework and their transmission to practice, combining historical research and design. On the other side, the guidelines often take a very, if not too much, uncompromising, and prescriptive position⁵. They probably try to prevent some lasting but inappropriate practices; but they also deny a discussion for a high-quality contemporary design. The PGT identifies in the terraced landscape an exclusive qualitative element, a subject for territorial promotion, including tourism, even if looking at its alternative and sustainable forms.

²The local Territorial Provincial Coordination Plan PTCP, approved in 2006 and now (2020-21) proposed for an up-date, is focusing on the ‘traces of the agriculture landscape’; see <https://www.provincia.como.it/piano-territoriale-di-coordinamento-provinciale-ptcp-e-varianti>

³ It includes Blevio, Castel d’Arzona, Torno, Nesso, Pognana, Velsio and Zelbio.

⁴ The research program has been completed in 2012 by Carolina Zecchin, Vincenzo Todaro, Alessandro Verga, architects and members of the working group leads by Prof. Valeria Erba of Department of Architecture and Urban Studies at Polytechnic of Milan. See <http://www.paesaggiolarioemonti.it>.

⁵ They deal with both architectures an open spaces; they express suggestions but also forbidden works.

This idea has some critical point, as argued by those directly involved. The first point concerns the upper-level institutions which still seem to play a weak role⁶. The second one questions the economic feasibility of an effective large scale preservation action. It cannot rely only on the public body means neither it can authoritatively be managed by the private business initiative. A private stakeholder is desired, optimistically hoping that he will act for a collective interest beyond his own.

There is perhaps also a third critical point: it touches the match between: tourism and cultural heritage, public and private interest. These are dangerous games because players are often rivals. Tourism remains a market based on products to be offered. If stone-dry walling is really a process and not only a product, we must look into tourism exploitation carefully. Eventually, it may be considered its evolution into a kind of authentic experience: that is, to propose a kind of civil service and to engage visitors in the maintenance and care of the places during their passage⁷.

2.2. Case study 2. A land use excess

To focus on the active role required both by landscape and architecture preservation, we look southern on the opposite lakeside to Cernobbio. Compared to the previous area, it is closer to the chief town, Como, but to Milan, too. Cernobbio is an easy 'landing'. A fast highway which connects Milan to Switzerland is close; trains and then boats joint its eastern neighbouring area (the Brianza) and the metropolis itself to the amazing lake. A funicular, which raises from the city centre (Como) up to the hill (Brunate) proves how a network of public transport can affect a place and generate its architecture. Getting in Como by train from the centre of Milan can take the same time than crossing the metropolis in rush hour;

but it is more comfortable and less stressful. The villas built along the banks, or the slopes of the lake are the consequence: the golden refuge of the bourgeoisie (De Carli 1985). This too is heritage: a legacy left by generations of seasonal guests who loved the lake over centuries and left an extraordinary and sometimes extravagant anthology of styles and villa types (from Neo-Renaissance to Liberty, from Decò to Rationalism). To all these, the PTCP assigns the same identity; without distinguishing the urban area from banks and slopes it is fostering an extensive building exploitation⁸. It seems to feed the actual lifestyle which is greedy for on-rent lake view rooms and luxury locations for private events. Less than a century is enough to feel the change. The upper Cernobbio (Rovenna), in the past an autonomous village is now a crowded place. Rovenna take the first sun of the morning. Thus, the farmers shaped the slopes to arrange flat ground more suitable for horticulture.

In 1914 a paved new road cut the thick and dense plot of paths and shortcuts, mule, and cart tracks, they have designed throughout the centuries. The new 'carriage' road crossed the terraces and connected the small hillside settlements. It is this bends snake that you still follow to climb gently and easily the hill enjoying desirable 'panorama'. While entering the First World War, the construction of the road was carried out to the detriment of the many dispossessed owners, to reach the top (where there is the state border and a military barracks) more quickly. Between the two World Wars, the modern route has favoured building activity for residential purposes. Many villas were built which have often changed the traditional orientation to get more comfortable access and panoramic views.

If this choice is permanent, the dynamics can hopefully be corrected. Overlapping of

⁶ The PTCP is under up-dating, as told.

⁷ Among the many: the recent training course held in Brunate (August 2021); <https://www.lariomania.it/corso-introductivo-di-formazione-sullarte-dei-muri-in-pietra-a-secco-percorso-di-conoscenza-e-progettazione-del-territorio-comasco-brunatese/>; but also the video "Racconti da Palanzo". Storie, testimonianze, memorie edited by Marzio Tomasini and the

named Alessandro Verga. They also increase offerings for stone-dry walls restauration or new elevation <https://www.collettivomilarepa.it/lavori-di-muratura-a-secco/>.

⁸ PTCP 2006, Plan A2.c: see Landscape Territoriale Unit (UTP) 21, named 'Convalle di Como e Valle del Breggia'.

cultures should be better managed. It must be said, for instance, that the accessibility should obviously be always allowed admitting easy access, but these reasons should not be admitted as an excuse to change for private use the old paths; that the false dry-stone walls do not mitigate the impact of the reinforced concrete pools but are the failure of landscape preservation which is a matter of soil permeability and not only of points of view and panorama. This land-use exploitation stresses the hydrogeological balances and ecosystems. Even the proposed house re-numbering is not harmless. The actual numbering is damned because chaotic, while ‘chaos’ reveals a structural meaning before formal appearance.



Fig. 5. Rovenna over Cernobbio (CO), Italy. The image has been posted in 1939, the photography shot in 1930 at least (private collection)



Fig. 6. Rovenna over Cernobbio (CO) Italy, today. (Photographed by the author, January 2022)

2.3. Case study 3. Humble existence

Cernobbio is the very place where landscape and building preservation is in a struggle with the real estate market and novelty seduction.

Piazza Santo Stefano, the third case study and formerly an independent municipality, nowadays is a Cernobbio hamlet too, but compared to others, it is differently located: lower and more internal, it offers a few panoramic points of view. Not surprisingly, one of the most extensive authentic and well-preserved stone-dry walling system and its dwellings can be seen here, outside the epicentres of the maximum values per square metre.

But this is not enough to save it. The humble maintenance work ensured daily by an elderly tenant is also required.

3. Conclusions and cultural framework

With the word ‘Anthropocene’, Crutzen and Stoermer identify a “a geological time unit” as “potential addition to the Geological Time scale” (Crutzen, Stoermer 2000).⁹ Since then, the neologism has spread among many different scholarly communities to denote the present geological interval, in which many conditions and processes on Earth are profoundly altered by human impact. Thus, as Helmut Trischler recently argued, this word is having “a dual careers, first as a geological term and second as a cultural term” (Trischler 2016). Its final entrance as a geological time unit is under evaluation by the International Commission on Stratigraphy (ICS), the acknowledgment depending on a grid of markers (Zalasiewicz et al. 2019). According to the current definition, published by the Sub-commission on Quaternary Stratigraphy – ‘Working Group on the Anthropocene’, landscape change due to “erosion and sediment transport which is associated with urbanization and agriculture” is one of the phenomena associated with the Anthropocene¹⁰.

⁹ It is well known that we owe to Paul Crutzen (1933-2021), the Dutch civil engineer and Nobel prized researcher for his pioneering studies on atmospheric chemic, and Eugene

Stoermer (1934-2012), the American biologist, the word ‘Anthropocene’.

¹⁰<http://quaternary.stratigraphy.org/workinggroups/anthropocene/>

As architects and preservationists, we know that the way we design 'habitat' to improve sustainability and favour the green economy is important for the not too distant future. Many solutions adopted in the past could be reconsidered. Some building construction traditions should eventually be revalued, and lost cultures recalled; as they are good solutions for a respectful and safe ground use, like authentic terraced landscapes were. To reduce human impact on our Planet is not just a matter of mitigation or a sly reduction of visual impact. A structural attention is necessary along with considering how human behaviours influence rapid changes in the biosphere both on land and in the sea, as a result of habitat loss, predation, explosion of domestic animal population and species invasions.

While Anthropocene is taking acknowledgment as a 'geological era', we hopefully should enter a new one. The Planet counteract human aggression like a continuing stroke. The art of dry walling, which is an active and ongoing work, based on daily care and clever mindful maintenance, expresses this ideal for struggle. To practice this 'art' is a true preservation task because we take care not only of historical or artistic values but of the cultural and sustainable know-how it retains; thus, tangible and intangible heritage are joined. It is about satisfying not only a personal but a collective need. It involves acting on different ecosystems and at different scales, of architecture and the environment.

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