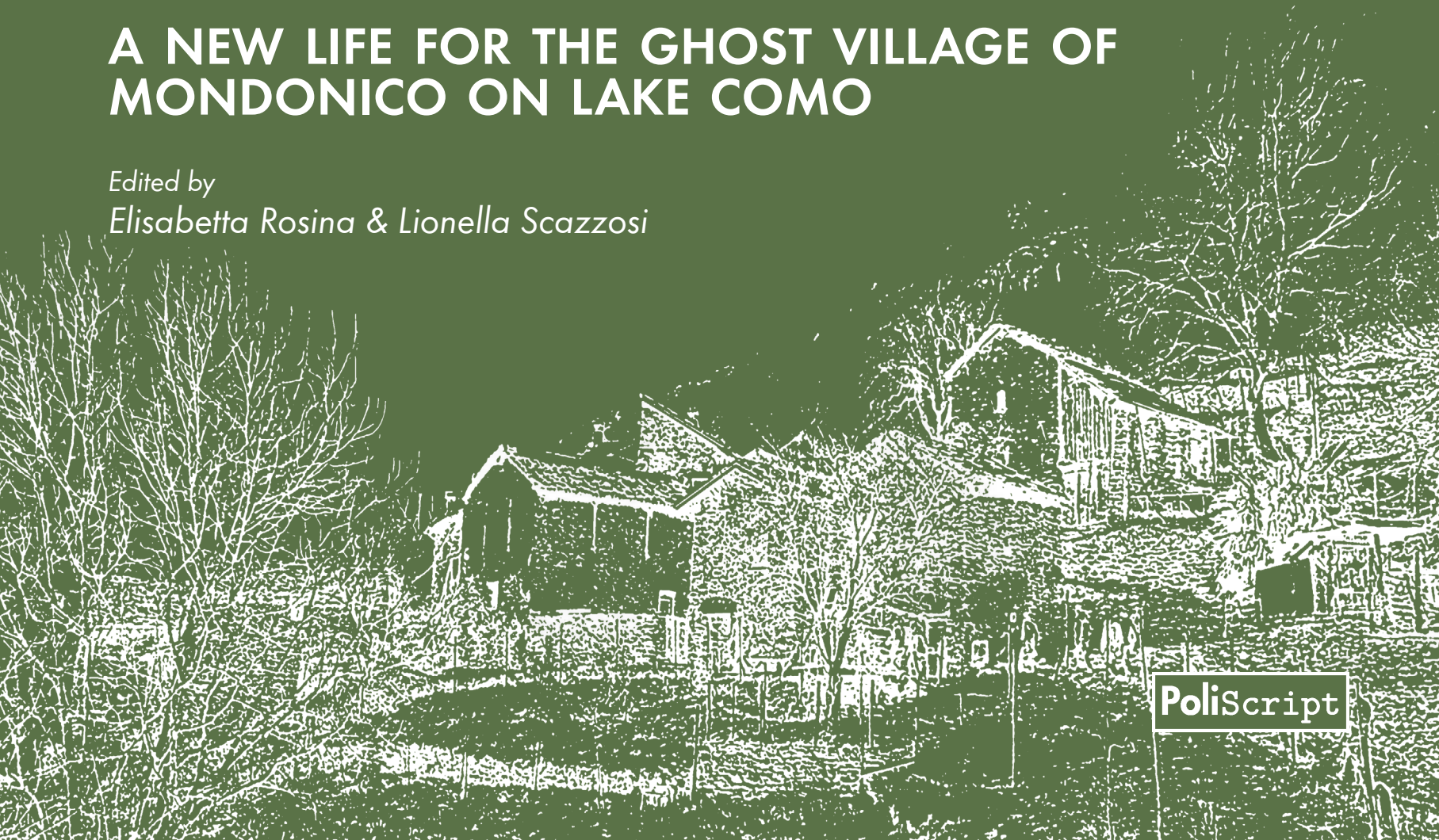


THE CONSERVATION AND ENHANCEMENT OF BUILT AND LANDSCAPE HERITAGE

A NEW LIFE FOR THE GHOST VILLAGE OF
MONDONICO ON LAKE COMO

*Edited by
Elisabetta Rosina & Lionella Scazzosi*



The conservation and enhancement of built and landscape heritage. A new life for the ghost village of Mondonico on Lake Como

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Elisabetta Rosina & Lionella Scazzosi

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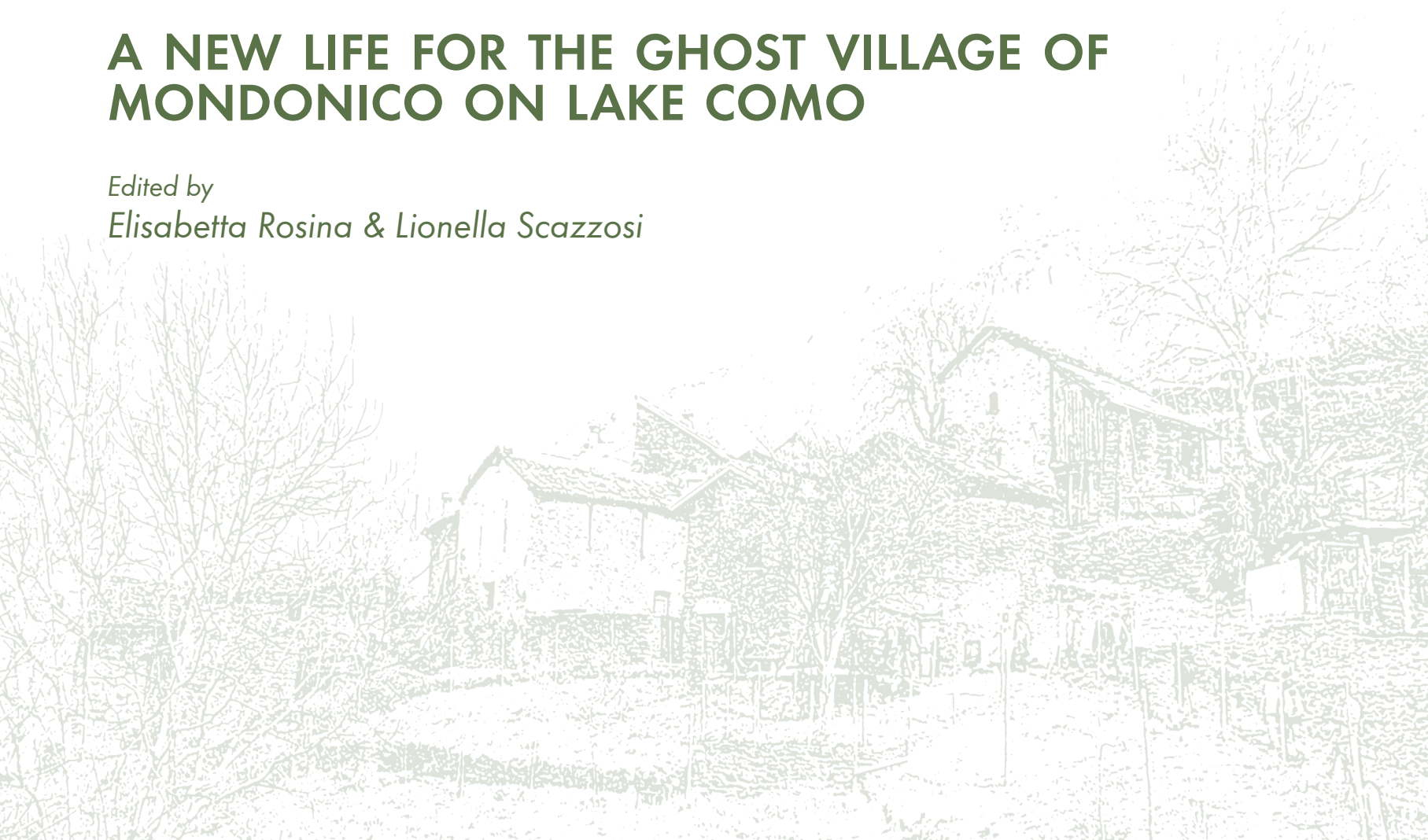
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Preface

Elisabetta Rosina

“Heritage is what we are passed from past generations and have the opportunity to pass to future generations. Both cultural and natural heritage do not remain protected without societal efforts. Therefore, effort need to be made to ensure its conservation for future generations. [...] It is considered that conservation outcomes might improve when natural and cultural heritage experts work more together [...] the past decades have seen cultural and natural heritage theory being explored together.”

(Bennink et al, 2014)

The above reported initial considerations of the review presented by Bennink at the international PPC Conference in 2014 assess the current broadening of the research on Cultural Heritage. The literature review presents also the gaps of global oriented methodologies and tools for prevention and maintenance. The aim of the book is to present an improvement to overcome the limits of leading sectorial researches. The analysis and enhancement of complex systems as heritage in historic landscape necessarily require a synthesis of the multidisciplinary approach so often evoked in theory, whilst so seldom displayed on real study cases. Therefore, the authors proposal consists on merging different scales and levels of the analysis tools and especially the criteria for the multiscale revitalization of neglected spread historic fabric (both of rural and urban settlements) in remarkable landscape. The authors display the proper disciplinary methods in the first part of the book (*“The historical landscapes and settlements: fundamentals of the analysis”*) and decline it on a common case study, for testing the robustness of theories in the cultural clash of different approaches. All the contributions are useful in themselves, and acquire more value thanks to the common convergence to overcome their local application that

could appear focusing on Mondonico village. The study case is Mondonico village, an outstanding remain of the recent past in Lecco lake area. Its unicity consists in many features, typical of 18th-19th century villages in the mountain, that keep intact after almost 70 years of partial neglect. The relationships between the ancient center and the surrounding breathtaking landscape (natural and built) are still mostly perceivable, despite the unconscious, rushed appreciation of few tourists passing by. The local community, living in Dorio since early 20th century, still refers to the old village for few agricultural activities on the mountain slope and for the cultural/religious reasons due to the presence of the old church, still in function. Nevertheless, the pressure of exploitation for new construction of the surrounding landscape is rapidly increasing, due to the exceptional view on the lake and mountains and the improvement of the existing facilities/connection with the lakeshore. As an example, a recent stock of in line hosing, with brilliant colors and contemporary features, rises at half slope, along the paved road from Dorio to Mondonico. The isolation of the village constitutes both a threat for the conservation for the maintenance of the rural historic characteristics of the settlement and an opportunity for enhancing it, due to the possibility to beckon new attention and investment for the revitalization. The authors of the book focused on the study for the conservation and enhancement of the landscape and village with the aim to refine and display the methodological tools for the analysis and project. In fact, the book gathers the contribution of different approaches or the conservation/enhancement of the built landscape: the analysis and project of conservation of historic landscape and buildings, refurbishment and enhancement of ancient centers, study for the valorization of the built heritage.

The first part of the book also deals with the different

analysis led on Mondonico case study. They support the discussion of guidelines for intervention and the projects. The scale of the analysis is multiple, from the territorial one to the building one (the church, as an example of a representative building). The analysis methodology is the content of specific contributions, as well as the results and their discussion that support the following phase of the study.

The second part of the book deals with Mondonico conservation and enhancement (*"Conservation and enhancement of the village and the landscape"*).

The information, including the data related to the population, current uses of the buildings and paths, expectation of the inhabitants, etc. came under a further step of analysis, the SWOT analysis.

SWOT analysis served as catalyst filter to combine the different data into the threat and opportunity for the valorization of the site, the strong potentiality to hinge on and the weakness to mitigate in the project for new uses and the most aware conservation plan.

The introduction to the project of conservation and new uses refers to the update, commonly accepted criteria at the base of the present debate on restoration and conservation, and underline the possible common field between the different disciplines for improving the quality of the existing architecture.

Despite of the differences of the intervention on the existing historic buildings of restoration, conservation and refurbishment, the authors achieved a multidisciplinary methodology for the analysis and the proposal of enhancement of the village and its surroundings. The effort resulted in the achievement of a shared knowledge, obtained by different analysis tools (the documentation of buildings and site, surveys, visual and experiential analysis of the landscape, the assessment of the state of conservation, materials and built

ding techniques).

Therefore, the second part of the book also deals with the enhancement, and it focus on the production of different tools to lead the projects towards the fulfillment of the needs of conservation and everyday use.

In fact, the authors defined the guidelines for both the maintenance of the particular and unique features of Mondonico and the construction of new buildings, the masterplan localizing the new functions and connections at urban scale, and the criteria and strategies for the project of the new architectures.

The authors present three alternative examples of new uses of the village, similar for the respectful use of the existing and the philosophy of the intervention, with different impact on the site and the population resident in Dorio and Mondonico.

Moreover, one of the proposals broadens the view from the village to the landscape for its enhancement: the proposal aim is to mend the historical settlement to its landscape thanks to the creation of a new system of relationships.

References

- Bennink, R., Salazar, N.P, Paulowitz, B., Badman, T., Roders A.P. (2014). How alike are cultural and natural heritage? A literature review on global Heritage monitoring systems. In Della Torre, S. (ed.). *Proceedings of the International Conference "Preventive and Planned Conservation"*, vol. 1, pp. 67-84. Florence, Italy: Nardini Editore



Presentation

Domenico Palezzato, Italia Nostra

The possibility to think a future for the ancient centers, that seem “survivors” to our contemporary world, it is a part of the expectation that any of us (the lovers of the memory of the past) would put in his experiences. At present, Mondonico could be a real project. The work started at Politecnico put the realistic basis for preserving the “ghost village” as it is, as it will never have to die, as it has to keep living to tell its stories and history.

The study offers all the scientific documentation, the historic and cultural knowledge to support a new vision of Mondonico. The aim is to change the interpretation of the site that should become from the simple strolling, for browsing houses and things belonging to the past that seem to be impossible to recall at present.

On the contrary, if it is true that the speed is the only essence of the everyday life, it is true as well the will to stop out, step back, of the whole noise overflowing transversally the life. Therefore, we need of places where to stop. People lived the time of the neglect, and today starts the time of recapture peaceful places as Mondonico is.

We have several of similar places on our land, and each of them has specific and unique features. Mondonico is unique, as all the other places are unique;

the distinctiveness of Mondonico is due to its history, location, reasons of the neglect, and together its conservation, the modernity that many times touched lightly it without transforming it.

Mondonico, located on the lake, it is not a village of the lake, it never lived of the lake.

Perhaps, the key to read the future of the village is in this characteristic. At present, the lake is a heritage of Mondonico, as view, and the village did not deserve this special luxury up to now, but now is possible to earn the ransom.

The study Politecnico team seems to center the project solutions that are feasible, and that could lead to the rebirth and awakening of the small urban center.

The proposals are not alternatives, they symbiotically collaborate. A laboratory for the Agricultural faculty, to keep the initial activity that always allowed Mondonico to be independent; the use of the land surrounding the center that supplied the resources to live and, more often, to survive.

The spread hotelling, to diffuse the agricultural activity and host the guests that want to “stop and look”. These two activities feed each others produce the necessary energy.

The village is already a museum at open air, and it

could keep it especially with the present approach to the museum, that forgot to mummify itself and it is become an object for living in the future.

Mondonico enclave has been a moneybox, with very few withdrawals, and its treasure is there yet.

Mondonico patiently waits, looking at the lake, motionless as the lake is, keeping still for preserving, sure of its new and infinitive life.

And all this will happen thanks to the work that this book shows.



THE HISTORICAL LANDSCAPES AND SETTLEMENTS: FUNDAMENTALS OF THE ANALYSIS

THE LANDSCAPE



Landscapes as systems of tangible and intangible relationships. Small theoretical and methodological introduction to read and evaluate Rural Landscape as Heritage

Lionella Scazzosi

Introduction

Purposes

The present contribution aims to give some theoretical and methodological layouts on rural landscape – but also on landscape in general – reading, in addition to other consolidated, but insufficient, reading methods. As is known, reading is the necessary basis to define strategies and actions for preservation, appropriate innovation, re-qualification and management of its heritage values.

This contribution is part of a process of theoretical and methodological elaboration, that aims to define some basic concepts regarding policies for the quality of landscapes, meant as the achievement of ‘appropriate’ solutions for the continuous transformation process characterising each landscape (Scazzosi 1993;

2002; 2004; 2008; 2009; ...), in this case, as part of them, each rural landscape.

Many different economic, social, cultural, environmental, productive and political reasons are in motion to perceive rural landscape not only as a productive space, but also as heritage and – as all kind of heritage – as a resource to improve the quality of each and every space around the world and the quality of life of the people.

Rural landscapes as heritage is a recent field of reflections and actions. As each new heritage field, it needs some clarifications in term of terminology and methodologies to study and actions to take.

Structure of the contribution

The structure of this contribution includes two Sections. The First Section – “*Theoretical basis*” – is dedicated



Fig. 1 and following in the next pages of this chapter – Engraving of the two shores of Lake Como, from Como to the ‘Tremezzina’ road, by Giuseppe Giudici (year 1863). Giuseppe Giudici engraved the picture in 1863, on behalf of Giovanni Battista Brambilla. Gaetano Brigola printed the engraving first in 1865 (Tipografia Redaelli of Milan). An explanatory text, entitled “Nuovissima guida panoramica da Como alla Tremezzina” (“New panoramic guide from Como to the ‘Tremezzina’ road”), accompanies the engraving. (Picture taken from: Longatti, 1994)

to the theoretical basis.

A first part of this Section is devoted to definitions regarding rural landscapes and to the scope of the concept of ‘rural landscape’.

Another part lists some key characteristics of rural landscapes (dynamism and inertia; change and duration), with the aim to highlight what types of historical and cultural permanencies – tangible or intangible – it is possible to find in their current status, and are useful to analyze rural landscapes as heritage.

The sequent part is devoted to the knowledge of ‘rural landscape’. It lists the main consolidated methods of reading of the rural landscape. It highlights that they are insufficient to read the heritage features.

The last part of the first Section proposes an additional methodological approach, focused on stressing the relationships among the landscape components.

Firstly, it introduces some examples to clarify the approach. Secondly, it gives the main general theoretical references used for the elaboration of the proposed approach (‘systems theory’). Furthermore, it describes the – more or less – direct use of this approach which other disciplines have done in studying rural landscapes (especially ecology, geographical or historical studies).

The second Section – “Practical guidelines and examples” – is more operational. It highlights the advantages and the modalities of using systemic approaches

to read the rural landscape as a heritage to know and assess, to start actions for its preservation and appropriate transformations. This section underlines that the approach is useful for rural landscapes, and for other landscapes.

Firstly, a premise summarises what implies the landscape knowledge focused on the action. It describes what are the main steps of the action process (landscape knowledge, landscape quality objectives, implementation tools), referring to the main International consolidated juridical and cultural documents.

Another part describes the advantages of the systemic approach to read rural landscapes as heritage more in deeper. This part gives some practical methodological orientations to analyze rural landscapes as heritage: how to study, show and represent a rural landscape system.

The example of the historic landscape system of “short transhumance” wants to be a model to show the items of a general form template (see the paragraph “Focus on the ‘landscape system’ of short transhumance” in the chapter “Knowledge of rural landscape systems: and international proposal of a classification”, by Raffaella Laviscio). The aim of this form template is to help to describe landscapes as historic systems. The form template is also tested in describing the case study of Dorio/Mondonico historic landscape system of short transhumance (see “The ‘landscape system’ of Dorio/Mondonico short transhumance”).



I. Theoretical basis

1. Rural landscape definitions

1.1 Rural Landscape as a dynamic tangible and intangible object

A rural landscape is a dynamic and complex object: it has changed over time in response to physical and natural events and laws and to human intervention: as each landscape, rural landscape is a physical object, and, at the same time, it is its social cultural perception (*European Landscape Convention - ELC, 2000*). ELC is the main international reference text (at European level and for many other cultures), summarising the contemporary cultural and political concept of landscape.

Transformation processes of rural landscape are realised both by exceptional actions but mainly by everyday activities of people and communities; it is managed, day by day, by many public and private actors (citizens, farmers, owners, administrators, associations, technicians, etc.) and by cyclic and exceptional natural phenomena (Scazzosi 2007; 2011; 2015).

As a physical object, a rural landscape can be perceived by people through their five senses (sight, hearing, smell, feel and taste): using a metaphor, landscape is like huge 'architecture' - similar to giant

outdoor rooms, mostly built by natural materials (soil, sky, vegetation, animals, etc.) and manufactured materials (stones, bricks, woods, mortar, metals, ...). It is always dynamic.

At the same time, it is a functional space for humans: its spatial organisation is the tangible consequence of productive human activities using and transforming natural resources over the centuries (Scazzosi 2011; 2015). The tradition of human geography and historical studies clearly demonstrated that landscapes and rural landscapes are the expression of the physical asset of the economical, productive, social, cultural organisation of the various communities who made them up.

In addition, as each landscape, Rural Landscapes are usually object of meaning and values attributed by people, perceiving it through ancient and contemporary culture: they can receive meanings, as clearly demonstrated by many scholars, above all M. Halbwachs (Halbwachs, 1950) and S. Schama (Schama, 1997) and officially consolidate in the ELC definition of landscape, where the concept of 'perception' has to be understood as social cultural perception: "*'Landscape' means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*" (ELC, 2000, art.1; ELC Guidelines, 2008).



1.2 Scope and categories of Rural Landscapes

Rural Landscapes can be terrestrial and maritime and all of them contribute to food production for humans. Rural Landscapes encompass many practices in use over the centuries: agricultural, forestry, pastoral, fishery and aquaculture, wild-resource. It can encompass productive activities as well as picking activities. Usually, the majority of rural landscapes include and combine many of these practices – and related physical elements – into a unique place: physical elements are interdependent and function together as a system of relationships (Scazzosi, 2015).

Rural landscapes can be on the ground, underground, in the air, in the water. They could embrace rural spaces as well as peri-urban areas or small spaces within built areas. They can be well managed and/or degraded or abandoned areas. They could be industrialised or maintained by traditional cultivation practices. They could be huge spaces and entire systems as well as fragments inside other kind of landscapes, such as urban landscapes. They can be considered of outstanding universal value or everyday places (Scazzosi, 2007; 2015). This concept of rural landscape is coherent with the ELC cultural approach, affirming that all spaces can be considered “landscapes”: “...this Convention applies to the entire territory of the Parties and covers natural, rural, urban and peri-urban areas. It includes land, inland water and marine areas. It con-

cerns landscapes that might be considered outstanding as well as everyday or degraded landscapes” (ELC, 2000, art.2).

1.3 Rural Landscape official definition

The above conceptual elaboration has been the basis of the discussion among many experts producing *ICOMOS-IFLA Principles Text on Rural Landscapes as Heritage* (2017), endorsed and adopted, as a doctrinal text, by the General Assembly of ICOMOS in Delhi, December 2017 (see the *ICOMOS-IFLA Principles* in the next chapter) after a large discussion on draft texts by International Scientific Committees and National Committees of ICOMOS and other experts and international cultural organisations.

“Rural Landscape: For the purpose of this document, rural landscapes are terrestrial and aquatic areas co-produced by human-nature interaction used for the production of food and other renewable natural resources, via agriculture, animal husbandry and pastoralism, fishing and aquaculture, forestry, wild food gathering, hunting, and extraction of other resources, such as salt. Rural landscapes are multifunctional resources. At the same time, all rural areas have cultural meanings attributed to them by people and communities: all rural areas are landscapes.

Rural landscapes are dynamic, living systems encompassing places produced and managed through tradi-



tional methods, techniques, accumulated knowledge, and cultural practices, as well as those places where traditional approaches to production have been changed. Rural landscape systems encompass rural elements and functional, productive, spatial, visual, symbolic, environmental relationships among them and with a wider context.

Rural landscapes encompass both well-managed and degraded or abandoned areas that can be reused or reclaimed. They can be huge rural spaces, peri-urban areas as well as small spaces within built-up areas. Rural landscapes encompass land surfaces, subsurface soils and resources, the airspace above, and water bodies" (ICOMOS-IFLA Principles 2017, I. Principles, I.A. Definitions).

Principles Text 2017 is one of the outputs of the World Rural Landscape Initiative (WRLI) (www.worldrural-landscapes.org) launched by ICOMOS-IFLA International Scientific Committee on Cultural Landscapes (ISCCCL) in 2012, aiming to develop knowledge and policies to protect, enhance and manage rural landscape as heritage in a more coherent way and strategy at general/world level, giving some tools to facilitate mutual understanding among scholars, technicians and professionals as well as farmers and people (Glossary, methodological suggestions for International Atlas, raising best practices and orientations, bibliographical references).

2. Rural landscape as heritage and its characteristics (dynamism/ inertia and changes/duration)

2.1 Dynamism and inertia

A key feature of rural landscapes is their *dynamism*, and, at the same time, their *inertia*; these characteristics have consequences on types and characteristics of tangible and intangible historic permanencies.

Rural landscape characteristics, as an expression of the interaction between man and nature and its dynamism and inertia, are summarized and described in the definition of Cultural Landscapes type "Organically Evolved Landscapes" (Category II), subcategory "Continuing Landscapes", introduced in 1992 by UNESCO (WHC Guidelines, 2008) for the implementation of the World Heritage Convention, Paris 1972 (WHC, 1972). This category pertains to landscape that "retains an active social role in contemporary society closely associated with a traditional way of life and where the evolutionary process is still in progress". In addition, "at the same time, it exhibits significant material evidence of its evolution over time" (WHC Guidelines, 2008). This category underlines the idea that only some rural landscapes maintain and exhibit tangible evidence of its evolution over time.

However, all rural landscapes have a long history and are more or less full of material and immaterial tra-



ces of its inevitable dynamism. The majority of rural landscapes around the world retains permanencies of dynamics and evolutions over time of human relationships with nature.

To verify this assumption in the specific case of rural landscapes, it is necessary to explain and articulate what 'duration' and 'permanencies' concepts mean and imply in terms of production of tangible and intangible permanencies.

2.2 Duration and permanencies of tangible components

Duration of tangible components and characteristics of rural landscapes is related with cyclical and temporary types of change due to natural laws and to agricultural and livestock activities (crop rotations, seasonal variations, botanical species evolution, human innovation in animal uses, etc.).

Durations and permanencies of tangible elements of rural landscapes can be very different and depends mainly on natural materials, techniques to work natural materials and types of human use of them. Duration of tangible elements can be very different each other and is given both by natural laws and human actions on life of vegetal and mineral materials. Some examples can be useful to understand: a tree of a tree-line has life shorter than a stone of a dry stonewall; each tree has its own life, a natural life cycle depending on

species, but it may be changed by human decisions or, sometimes, by their mistakes.

Usually, a radical and sudden change of rural landscapes is not easily feasible, because it could require the change of cultivation techniques and abilities of local farmers too, as well as compatibility with geographical and environmental characteristics of places and economic and social condition. Often, huge innovations of land use, crop production and livestock management (for example due to the industrialisation of agriculture) change a large part of the look of places, for example and particularly in the field division, but generally they are not destructive of the main long-term structures and characteristics of places, such as terracing, water systems, structure and shape of field, etc. Usually, permanencies are stronger when, in the past centuries, sites have been the result of deep and radical physical construction activity, because it has required heavy and huge investments in terms of money, materials, work, techniques, social and productive organization to create, use and manage it: usually, earthworks, terracing, pipes, roads, drainage, complex morphological structures of fields, such as earth rooms of rice fields, water meadows, reclamations, etc. have high levels of tangible permanence, in many parts of the world.

Over the centuries, humans have primarily preferred reuse and additional work to inherited rural spaces,



adapting them to market requirement and to functional, social, cultural, political changes, then radically and deeply changing structures and features of places. Inertia of rural landscape has these types of deep reasons (Lebeau, 1969)¹.

Cultivation methods (“systèmes de culture”) have a inertia (“inertie”): “Une fois constitués, les systèmes de culture se perpétuent, en effet, avec une inimaginable rigidité, pendant des siècles et des siècles”.

Actually, farmers base their security and their life on them and their abandonment is a strong and deep disruption with the past, the heritage of past generation and their knowledge: «Le paysan fonde sur ces systèmes de culture sa sécurité et sa vie, il leur subordonne son habitat et ses mœurs, il leur associe des croyances et des préjugés. Dès lors, abandonner un système agricole, c’est n’est pas seulement pour le paysan substituer un groupe de culture à un autre, c’est rompre avec tous un passé, ruiner tout l’héritage des générations antérieures». Loyalty to a rural method is faithfulness to a security and certitude coming from a deeply experienced past «a système qui a fait ses preuves et autour duquel s’est cristallisée une civilisation: qui est devenu sacré» (Lebeau, 1969: 12).

Permanencies can be read at macro, medium and micro-scale too. Also in a single tree you can read the history of climate, pruning techniques, vegetation and environmental changes, as well as social and cultu-

ral organisation and history of populations during the centuries, as well demonstrated by rural micro-history and geography (Vecchio, 2011; Cevasco, 2011).

2.3 Duration and permanencies of intangible components

Other types of permanencies and their duration can be considered: they are *intangible permanencies*: from techniques, to cultivation skills and practices to cultural traditions of people, etc. A list of the main categories can be suggested. Oral memory, music and songs, traditions, customs; uses and living practices, symbolic attributions, meanings and values are sedimented over the centuries in the collective culture, educated or uneducated, local and/or non-local populations. It also includes knowledge of local nature and environment, climate characteristics, and related suitable production techniques. Intangible permanencies live in the memory and cultural perception that populations – local and non-local – currently have. They can be read through listing, mapping and understanding:

- the social representation of places, historical and recent, built through the transmission of the meanings attributed by expert culture (literature, historical and recent iconography, reports of travellers, photography, cinematography, tourist guides, writings by travellers, writers, etc.);



- the meanings attributed to places or elements by local populations, often coming from practices of use (recreational, sporting, religious, festive, socializing, settling) or associated with parties, personalities and historical events, celebrations, traditions, etc. (local or regional, or national or social groups, etc.);
- legislative and regulatory acknowledgments, which represent forms of official recognition of cultural values that have settled on places over time.

They are transmitted through generations. Sometimes they are lost and/or transformed, sometimes new ones are added. This culture changes during time as all kinds of cultures do. Intangible permanencies are in the culture of inhabitants, such as farmers, citizens and of local and non-local users: countryside was – and is – a symbolic place for citizens, intellectuals, artists, travellers and tourists, as well as farmers and local populations.

2.4 Rural landscape as heritage

Summarising and using metaphors, rural landscape in its physicality is a large *archive* of historical tangible and intangible documents. But it is not static: it is a living and dynamic *archive*, changing like its material and immaterial components, because of the transformation processes and, at the same time, the inertia

of places. It is a *deposit* of tangible and intangible documents regarding the history of nature and of people, who built them, modified and transmitted them. It is part of the cultural heritage, if we want and we know how to read it. The character of these documents is similar to a '*palimpsest*', i.e. a type of ancient written document reused many times, adding, erasing, changing the same material base (Corboz, 1983): a palimpsest can be depleted, degraded, abandoned, threatened, but rarely has it been totally destroyed.

For these reasons rural landscapes can be analysed by the point of view of heritage, as ICOMOS-IFLA Principles 2017 affirm with the definition of Rural Landscape as heritage: "*Rural landscape as heritage: Refers to the tangible and intangible heritage of rural areas. Rural landscape as heritage encompasses physical attributes – the productive land itself, morphology, water, infrastructure, vegetation, settlements, rural buildings and centers, vernacular architecture, transport, and trade networks, etc. – as well as wider physical, cultural, and environmental linkages and settings. Rural landscape as heritage also includes associated cultural knowledge, traditions, practices, expressions of local human communities' identity and belonging, and the cultural values and meanings attributed to those landscapes by past and contemporary people and communities. Rural landscapes as heritage encompass technical, scientific, and practical knowledge, related*



to human-nature relationships. Rural landscapes as heritage are expressions of social structures and functional organizations, realizing, using and transforming them, in the past and in the present. Rural landscape as heritage encompasses cultural, spiritual, and natural attributes that contribute to the continuation of biocultural diversity. All rural areas can be read as heritage, both outstanding and ordinary, traditional and recently transformed by modernization activities: heritage can be present in different types and degrees and related to many historic periods, as a palimpsest” (ICOMOS-IFLA Principles 2017, I. Principles, I.A. Definitions).

3. Rural landscape knowledge and ‘systemic’ approach

3.1 Most widely used methods for rural landscape knowledge and their insufficiencies

Knowledge is strategic for each policy, strategy, plan, project and action related to landscapes (preservation, innovation, re-qualification and management) (ELC, 2000; LOTO, 2005): it is valid also for rural landscapes as a type of them.

But usual methods and tools to describe, analyse and map rural landscapes are not effective enough to stress clearly and in detail their heritage characteristics and values and their contemporary status, aiming

to support the definition of action strategies.

Rural landscape as heritage – as defined above – is not understandable only analysing rural productive activities or mapping land uses and land cover. Nor is it the sum of its constituent parts or elements, considered as points, lines, surfaces (functional and residential buildings, roads, rows and hedges, isolated trees and trees areas, forests, natural and artificial waters, land plots, crops), listed in inventory and mapped. Nor is it only the result of the sum or combination or interrelations among natural specificities individually analysed as layers (morphology, geology, climate, hydrology, vegetation, settlements, roads, etc.) and related human physical by-products of their interaction during the centuries. Nor can it be understood using only landscape characteristic visual analysis. Nor is it enough telling events, features and transformations taking place over the centuries, using historians and geographers’ analysis and their narrative texts and/or the list of archives maps and documents and explaining specific human interaction with nature and environment (Scazzosi, 2002; 2011). Most of these reading methods are used by territorial and urban planners and designers, agronomists and naturalists, also landscape architects, at detailed scale and large scale.

These methods are useful but partial, because someone considers some aspects (i.e. productive activities)

or some layers or some elements of landscape characters, some others are full of informative texts, but do not map sufficiently their information. Usually they do not highlight features of historic functional organization of rural activities and do not clarify reasons of each component explaining the relationships among them. As in the case of agricultural landscape (Fairclough 2010), land cover, land use, rural activities are not landscapes: actually, the term 'rural landscape' is a shorthand for 'the contribution of rural activities to landscape'.

In addition, classification of rural landscapes has not been widely performed until now (Makhzoumi & Pungetti, 1999; Fairclough, 2010) and in many cases, is only a point of view closely related to ecological sciences (Hazeu et al., 2011) or to soil use and types of production (Balestrieri, 2015; Moran, 2010) or to collection and elaboration of hard data like in the case of statistic data bases and maps (*Corine Land Cover* at European level, and research centres at national or local levels, as ISTAT and ISPRA at Italian level). Landscape description needs interpretative characterisation rather than recording of data.

For landscapes in general, the main diffused description tools are *Landscape Character Assessment* (LCA) produced and mostly used in UK, *Landscapes Atlas* in France, *Landscape Atlas* in Belgium, Catalonia and Spain (see the chapter "*Knowledge of rural landscape systems: an international proposal of a classification*", by Raffaella Laviscio): usually, they are focused on the description of geographical and natural features; on sensory perception (especially visual) of landscape characteristics; they tell historical events and cultures and cultural perception by local and non-local people. In these methods, description is realised mainly by texts, accompanied by some historic and contemporary maps, images, pictures, photos, sketches. Usually

they are multidisciplinary or interdisciplinary products. *Historic Landscape Characterisation* (HLC) is a specific tool produced in the UK and mostly based on mapping permanencies of historical lay out in current status of landscapes (Herring, 2015). Its contribution is important, but it is not enough to describe all heritage characteristics of all rural landscapes and could be improved (Fairclough, 2010).

In synthesis, no one is also focused on rural landscapes as a physical asset that is an expression of economic, productive, social, cultural organisation of people, building them and living in it, in the past and today: no one analyses, describes and maps sufficiently and diffusely the history and time depth of rural landscapes (Scazzosi, 2002: 28-29 and 49-50).

Partial exceptions, but working only at large scale (European level or world level) use a method based on a mixture of land cover, topography and farming practices and settlements characteristics (Lebeau, 1969; Meus et al., 1990; Meeus, 1995) and few references tell broad aspects of settlement patterns and environmental relationships (Grove & Rackham, 2001; Emanuelsson, 2009).

At a more detailed scale, landscape planning instruments can have some quite similar analysis of rural landscapes (as "*Carta dei Morfotipi Rurali*" in the recent "*PIT*" - Territorial and Landscape Plan of Tuscany Region in Italy: www.regione.toscana.it/-/piano-diririzzo-territoriale-con-valenza-di-piano-paesaggistico): this very interesting type of source deserves specific research.

At a more detailed scale, an interesting exception and reference is the *Atlas of the Irish Rural Landscape* (1997), describing by text, maps, sketches and photographs rural areas in the main broad sense of landscape meanings. Summarising with a short sentence: if it is clear that landscape is not land, also rural lan-

dscape is not only rural land or productive activities.

3.2 New reading method perspectives

Moreover, landscape – and rural landscape – can be considered similar to ‘*ensemble*’, i.e. one of Cultural Heritage categories, elaborated during the XX century when the concept of Cultural Heritage has been changed and developed, broadening from historical single monuments and works of art: it has become more complex and includes objects composed by many component, as historic centres, small settlements and villages, garden cities, urban landscapes. The concept of *ensemble* has been officially introduced and endorsed in Charters for Heritage safeguarding, especially the *Venice Charter 1964* (French version) and in the *World Heritage Convention* (WHC, 1972). Making a comparison, a rural landscape can be studied and graphically represented like a historic centre: this one is not a sum of buildings, but it is characterised by a complex system of relationships and spaces among buildings that create specific features, like streets, squares, gardens, but also boundaries and delimitation among buildings, skylines, etc. All together – single buildings and open spaces – create the uniqueness of each centre. Rural landscape components and spaces should be approached in a similar way, highlighting relationships that bind and link the different landscape elements, create spaces and build a formal and functional unity.

Another similarity can be useful to analyse rural landscapes enhancing and developing the concept of *ensemble*. The metaphor goes: rural areas can be considered a *machine* for the production of food for human sustenance (Scazzosi, 2015). Carlo Cattaneo, one of the most important Italian scholars, studying the history of the river Po plain and its rural landscape and agriculture in the XIX Century, described the deep

and huge scale rural works that North Italian populations realised in the plain and proposed the similarity with “*machina*” (Cattaneo, 1844).

The rural machine is made up of components and spatial structures, built with vegetable, mineral and animal materials; its physical characteristics are the expression of productive and social orders realised by populations. The metaphor of the machine promotes a functional understanding of rural landscapes; it can be used to analyse, understand and describe not only the past but also contemporary status of them. At the same time, the history of rural landscapes and their material and immaterial traces left in contemporary features can be more easily read and understood.

Both in the case of *ensemble* and *machine* similarities, the key specificity of the reading approach is to focus on the relationships among components.

3.3 Some examples

Some examples can be useful to explain an approach based on the study of relationships among components in the case of rural landscapes.

Italian villas, from the Roman era to the nineteenth century, organized huge rural areas (their properties) in a functional system and subsystems: the property (“estate”) was a large farm, where the core mansion (villa with gardens and its service buildings) had, not only representative functions (created by high quality of their architecture), but was the headquarter to manage many “farms” (rural houses and their related agrarian fields). All property was a functional unit, consisting of several sub-units, linked by a functional and a specific productive organisation, but also by social organisation and legal relationships (between owners, managers and farmers). At the same time, they were a landscape: a space characterised by spatial and scenic features and where its components

were linked usually also by symbolic significances. Rural landscape created by villa settlements were an historic rural landscape system.

Many of them still characterise structure and landscape of huge rural areas of Italy (in Veneto, Piedmont, Tuscany, Lazio, Campania). But also in other countries there are rural properties, usually known as "estates", created in the same way and over many centuries ago, still readable and partially or totally in use (especially in Europe, as in United Kingdom, Germany, France and in North America, as in the Southern States) (Scazzosi, 2015).

In Europe since the Middle Ages, monks' settlements realised great works of agricultural management (land reclamation, forestry equipment, etc.) and have managed their land for food production, also often supporting close by cities. For example, in the Po Valley (Italy), the abbeys were the centre of the organisation and management of several sub-units ("grange") and they coordinated several sub-sub-units (farms); farms were scattered around grange at distances related with environmental constraints and functional opportunities (travelling time to reach the fields by farmers by foot and on animals, fertility and workability of soils, social organization of family labour, types and degree of technical skills, presence of water, sun exposition, types of natural vegetation and environmental characteristics, etc.) (www.campocascina.polimi.it) In mountain areas (especially the Alps) the rural productive organisation of abbeys also involved forestation activities and wild breeding of cattle, sheep, pigs realising different landscape systems and units (www.campocascina.polimi.it).

Rural landscapes related to the cultivation of agave for the production of beverages, for example in Mexico, are still understandable in their characteristics and motivations, reading physical elements and their

role in the production chain (morphology, waterways, forests, trails, villages, furnaces, terraces and agave cultivation fields) and understanding the ancient organization of the life of the workers (small houses for households close to the fields, market constraints controlled by land owners, few road and truck connections and difficulties in moving). Rural landscape systems related to coffee, tea and other similar productions could be read in a similar way in other continental Regions such as in Asia and Central and South America.

Another example is the long-distance transhumance, a form of pastoralism widespread in Central and Southern Europe, especially in Spain, Italy, France, Balkan countries such as Romania and perhaps in other parts of the world. In the South of Italy tracks were organised ("tratturi"), creating a long and extensive network of main roads and minor routes, for the transhumance of sheep from the south to the centre of Italy in Spring and Autumn to reach grazing lands: hundreds of miles long, these wide paths allowed the slow movement of animals and provided, along the way, meadows of grass for their sustenance. Along them there were many facilities, like buildings to provide shelters and food for men, and to supply water and open spaces for overnight stops of the flocks. In addition, there were some market areas and a system of custom houses and areas for commercial activities of cattle and related products. The transhumance system is still largely present and readable in South Italian rural landscapes. In Spain it had a different spatial and functional organisation, realising a sort of circular annual journey and pathways network involving huge parts of Spanish territory (cañadas system) (<http://ri-aam.events>; www.cirad.fr).

Another system of settlement and use of land for agriculture, wood and pasture related to seasonal mo-

vement of cattle has been in use for many centuries especially in the European mountains (over 1,000 m a.s.l.) realising a kind of short transhumance. It is organized in two or three stations depending on local altitude. A first station is for the permanent settlement of humans and animals (villages with small cultivation, like vineyards, vegetable gardens, fruit gardens and productive chestnut groves). Two – or one – other stations for seasonal use: the first one is a mid-height station (to use during the month of May, “maggengo”) composed by one or more buildings for shepherds and shelter for cattle; the second one is a summer high pasture with a small building for shepherds and only occasionally shelters for cattle (depending on the climate). In lower mountain areas there is just the mid height station (see the chapter “The ‘landscape system’ of Dorio/Mondonico short transhumance” for more details).

3.4 Theory of systems as reference

This type of analytical approach uses a *systemic method*, because it highlights relationships among the elements of landscape more than focusing on all elements.

The concept of ‘system’ has been one of the most important revolutionary tools (Bertalanffy, 1968; Emery, 1980; Foerster, 1987) for many scientific disciplines of the 20th century (social science, psychology, physics, mathematics, engineering, biology, ecology, etc.) and a new scientific way of knowing the world and doing research and science. Systemic thinking is a style of thinking and of problem solving. It is different from the previous usual rationalistic approach where a single element is studied and added to the other elements, in a sort of linear addition, like in classical sciences related to cartesian and previous culture.

In addition, it highlights relationships among elements

more than focusing on the specific characteristics of each element.

There are natural and human made systems. Natural systems may not have an apparent objective, but they can be interpreted as purposeful by an observer. Human made systems are created to satisfy a stated need. They must be designed to work as a coherent entity.

The systemic approach is not a completely new knowledge approach for rural landscapes.

Theory of systems is explicitly used by environmental and ecological disciplines (Golley, 1993; Ferrazzi & Pezzi, 2013), elaborating ecosystem concept: “*The whole system [...] including not only the organism-complex, but also the whole complex of physical factors forming what we call the environment*” (Tansley, 1935). More in detail: “*an ecosystem is a community of living organisms in conjunction with the nonliving components of their environment (things like air, water and mineral soil), interacting as a system*” and “*these biotic and abiotic components are regarded as linked together through nutrient cycles and energy flows*” (Odum, 1971).

The notion of a “*landscape system*” is broadly used by sciences describing environmental units and their elements, as landscape ecology: landscape is “*a heterogeneous land area composed of a cluster of interacting ecosystems that is repeated in similar form throughout*”; landscape ecology science “*explores how a heterogeneous combination of ecosystems – such as woods, meadows, marshes, corridors and villages – is structured, functions, and changes*” (Forman & Godron, 1986).

It is clear that in this approach, the main point of view and related objectives and actions are focused on environmental systems, i.e. the environmental dimension or living and non-living dimension.

That is different from the proposed use of a systemic approach to analyse historical and cultural dimensions, even if landscape ecology usually considers human history and cultural traces too, in its approach. The systemic approach is used by historians and geographers, especially of the 20th century (Bloch, Braudel, Sereni, Lebeau, Gambi, Quaini) producing many and extensive studies highlighting that the construction of settlements and of productive use of land are determined by agronomic and forestry reasons, but also demographic, sociologic, economic, technical, cultural, as well as environmental ones (Vecchio, 2011; Cevasco, 2011).

Lebeau synthesised this concept very well, using the word “*structure*” to highlight and explain reasons and characters of functioning of agrarian landscapes: «*On donne le nom de «structure agraire» to «Cet ensemble de liens durables et profonds entre l’homme et le sol, que traduisent les paysages ruraux»* (Lebeau, 1969). The notion of “*agrarian structure*” is larger than rural habitat and agrarian morphology, because it is essentially explanatory («*une notion plus large que celle, purement descriptive, d’habitat rural et de morphologie agraire, une notion essentiellement explicative*»). Diversities of rural landscapes strike observers, but there are many structural kindred among all rural landscapes («*les diversités [...] frappent les observateurs*», but there are «*certaines parentés structurales entre tous les paysages ruraux*»). Structural diversities and kindreds are connected to diversities of huge factors driving organisation and use of space for agriculture: agronomic, demographic, sociologic, economic, technic («*Diversité et parentés structurales sont liées aux diversités des grands ‘facteurs’ qui commandent l’aménagement de l’espace par l’homme agriculteur*»). They are: «*agronomiques, démographiques, sociologiques (au sens large), économiques, techniques*»)

(Lebeau 1969; 2011:11).

By the points of view of historical and geographical disciplines the concept of system connected with rural landscapes may seem obvious - and is obvious. It is not obvious - and it is new - to use and integrate these cognitive traditions to act in terms of landscape policies, adding new tools that have been specifically defined for the action.

Trying to synthesize a *definition, landscape system approach* has the goal of highlighting the complex of functional, spatial, visual, semantic *relationships* among *components* of places that shaped the unity of their design, implementation, management and transformation over the centuries: relationships and components can be both tangible and intangible. The physicality of places reflects social and productive organizations and the cultural approach that populations have been used to generate and manage them and the way which humans have experienced their relationship with the natural specificities of places over the centuries.

In reality, the concept of a system can be used more widely than for rural landscapes alone and sometimes is already used. It can highlight relationships among landscape components as in networks of castles and medieval military towers and trails; churches and religious buildings and elements; windmills and their network of canals and roads; historic routes such as pilgrims’ routes or commercial routes (such as salt routes or silk routes), etc.

II. Practical guidelines and examples

4. Premises: steps to process landscape actions

Knowledge and respect for inherited features are the milestone to manage landscapes. Fundamental stages

in the process leading to landscape action are well summarised by the main international reference documents (ELC 2000 and its official Guidelines 2008) and by some methodological international research to improve ELC (LOTO, 2005).

ICOMOS-IFLA *Principles on Rural Landscape as Heritage* confirm this approach (see the *ICOMOS-IFLA Principles* in the next chapter) and it is not far removed from the approach used also in *Management Plans for World Heritage Sites* (ICOMOS, 2010):

1. Landscape knowledge;
2. Landscape quality objective definition;
3. Implementation instruments.

Landscape knowledge means: “The identification, description and assessment of landscapes constitute the preliminary phase of any landscape policy. This involves an analysis of morphological, archaeological, historical, cultural and natural characteristics and their interrelations, as well as an analysis of changes. The perception of landscape by the public should also be analysed from the viewpoint of both its historical development and its recent significance” (ELC Guidelines 2008, I.1.B).

More in detail, landscape knowledge requires:

- comprehension and analysis of specific characteristics (*description*). Diverse approaches and tools reflect diversity of cultural concepts; in any case, landscape needs to assure a cross-disciplinary time and space approach and avoid disciplinary compartmentalisation;
- quality problem identification (*assessment*). A useful tool for this activity is SWOT analysis, highlighting strength, weakness, opportunities and threats. It is a tool born for strategic planning, elaborated during the 70s for economics (Humphrey, 2005) and widely used in many other disciplines (see the chapter in this book “*Landscape quality objec-*

tives: from analyses to design”, by Bardi & L’Erario, to have an example of how to use this type of analysis for landscape projects);

- recognition of value systems (*social value assessment*), assigned to places by interested parties and populations concerned, local and non-local. Expert analysis added to various forms of public involvement are the most useful tools. (ELC, 2000, artt. 6 C and D; Guidelines, 2008, II.2)².

Landscape quality objective definition and goals “should in particular improve landscape quality, or at least not bring about a decline. The effects of projects, whatever their scale, on landscape should therefore be evaluated and rules and instruments corresponding to those effects defined. Each planning action or project should not only match, but also be appropriate to the features of the places” (ELC Guidelines, 2008, I.1.H).

To be effectively realised, landscape objectives imply work of technicians but also an active public and stakeholder involvement.

Landscape policy instruments to realise landscape quality objectives are: protection, managing and/or planning (ELC, 2000, art. 1). Landscape actions are usually a combination of *conservation, innovation, re-qualification*. More in detail for rural landscapes, landscape policies must “*Define strategies and actions of dynamic conservation, repair, innovation, adaptive transformation, maintenance, and long-term management*” (Principles, 2017, II.B.3).

They are conducted over one and the same territory: certain parts and features can be protected, others should be intentionally adapted creating a new landscape – or part of it – for new uses, others rehabilitated if some elements/parts are degraded (ELC Guidelines, 2008, I.5).

Conservation is always a dynamic process: the concept includes the idea that landscape is subject to

changes which, within certain limits, have to be accepted and can be guided and oriented to be “appropriate” (Scazzosi, 2011; ELC Guidelines, 2008, I.5). The concept of *dynamic conservation* is used in forestry management disciplines and other biophysics or agrarian approaches and it is adopted by FAO *Globally Important Agricultural Heritage Systems – GIAHS* (www.fao.org/giahs). It can be used for all rural landscapes in general, not only for outstanding ones.

Innovation and re-qualification imply to be ‘appropriate’ to realise landscape quality objectives. The word “*appropriate*” is very important because the concept implies considering relationships and the respect of current inherited features and what the limits of transformation are in order to avoid unnecessary destruction (Scazzosi, 2011): appropriate means that each new intervention has to consider and to begin from the knowledge of inherited characteristics of places and has to be conceived and proposed not to be inserted into them after being designed, but considering them at the beginning of the project.

Management is a key action because the dynamism of places always require a time perspective: to guide and give orientation to the inevitable transformations of the future (ELC 2000, art.1; ELC Guidelines 2008, I.5; ICOMOS-IFLA Principles, 2017, II.B). It should also be considered a necessary complement of planning and designing exceptional interventions: meaning not only care and maintenance, but, above all, long term management.

Active involvement of all actors and stakeholders is crucial to reach effective landscape policies, because of the huge amount of people living and transforming landscapes day by day, as recognised by international documents and treaties such as ELC (ELC 2000; ELC Guidelines, 2008); *Faro Convention* (2015); do-

cuments at World level, connected to UNESCO policies and ICOMOS activities, such as the recent *ICOMOS Delhi Declaration on Heritage and Democracy 2017* and especially for Rural Landscapes (Principles, 2017, II.C.2. and 6.); methodological approach and planning practices (Scazzosi, 2011; 2015).

5. Why read a rural landscape as a ‘system’?

The notion of a ‘system’ to read and understand landscapes and rural landscapes as heritage is a conceptual tool useful in each phase of strategies and project process.

It is useful in a cognitive area – landscape and especially rural landscape as heritage – in which clarity of terminological, conceptual, methodological sharing has not yet been reached as tools for action among scholars and practitioners, such as historians, geographers, botanists, naturalists, agronomists, foresters, landscape architects and planners, as well as among stakeholders like citizens, farmers, technicians and administrators.

It can explain – not only describe – the historical functioning of rural landscapes such as food production organisation and its material and immaterial components. It can provide functional reasons of the existence of physical elements and intangible culture and skills that constituted them in the past. It permits to identify components that still constitute them, even if only partially (see the concept of integrity, below).

It serves for the *description* of physical characters and, at the same time, for the *interpretation* of the functioning of places, both in their past and contemporary status.

It permits the identification of *landscape heritage units* and their *relationships* with the context, for all types of landscape policies: knowledge, protection, planning and management of rural landscapes, as well as

awareness of their characteristics and values and their communication with people and stakeholders.

It permits the *identification, classification and comparison* of rural landscapes at all scales: both geographical levels (as large Regions of the World) and administrative levels (National, Regional, Local). In case of one of the outputs of WRLI, the *Atlas of World Rural Landscapes* (www.worldrurallandscapes.org), the research and activity is creating and experimenting a tool to identify and systematise the different types of rural landscapes of the world and permit a more efficient comparison among them.

It can support *World Heritage Centre* activities, because it can be used to better define boundaries and zones to protect and manage World Heritage Sites in the implementation of the *World Heritage Convention, 1972* (core and buffer zones), according to the orientations established by WHC Guidelines 2008 (WHC Guidelines, 2008).

It permits an improvement of the evaluation of rural landscapes *integrity*, comparing old structure of the units, its changes over the centuries and its current tangible permanencies: it does not mean only measuring and mapping how many historic buildings or how many hectares of fields or the number of trees or of meters of canals are still in situ and in use (quantitative information and data); or if the same uses of soil are maintained or traditional techniques are still in use.

It means understanding whether all these tangible components (or some of them) of the historic rural landscape *machine* are still physically present in the current landscape. And if they (or some of them) are still 'working', related physically and functionally to each other (qualitative information) and, at least, describe and compare current possible changes of their work related to heritage. Whether intangible components and values are still part of the culture and of the me-

mory of local and non-local people/populations.

It permits the reading and evaluation of the phenomena of *alteration or destruction* of landscape units by *intrusion, division, fragmentation, reduction*, that can destroy or damage spatial, functional and symbolic relationships among components of each unit. It highlights possible loss or damage of the rural quality and heritage integrity (Landscape Report, 2005), transferring some parameters born of ecological approaches.

It can be used for tangible and non-tangible permanencies as well.

It can be used at various scales and different instruments (territorial and landscape policies and plans as well as in territorial and landscape design).

It also permits the preparation and realisation of an simple and targeted interpretation of rural heritage as the basis of many forms of communication of place characteristics: reasons and modalities of historic "food production work"; of values attributed to its places by people in the past and in the present; etc. It is useful for visitors and tourists (temporary and permanent exhibitions, media applications, museum and Eco museums, etc.), but also for the different players involved or engaged in local rural landscapes policies (from farmers to local administrators, from technicians to citizens, from owners to non-profit cultural associations, etc.).

6. How to study, show and represent a rural landscape system

Some practical methodological orientations are useful to use a systemic concept to read landscapes - rural landscapes - such as tangible and intangible heritage. They are realised using and adapting the main references of systems theory (Bertalanffi, 1968; Emery, 1980; Foerster, 1987), its use in many disciplines and

some more practical explanations (“*Systems theory*” in Wikipedia; “*Systems Theory*” in Encyclopaedia Britannica; “*Sistemi, teoria dei*” in Encyclopaedia Treccani).

The main suggestions to use systemic thinking for landscapes are:

- start from the recognition of identification of components and relationships;
- a system can be made up of tangible and/or intangible components;
- a system is described by its structure and purposes and expressed in its functioning (landscape machine): they are the system properties;
- in terms of effects, a system is more than the sum of its parts, because it expresses synergy or behaviour;
- every system is delineated by its spatial and temporal boundaries. It is surrounded by its context and can be influenced by it;
- a system can encompass some subsystems. A sub-system is a set of components related to each other, which is a system itself, and a component of the larger system. A subsystem description contains information defining the characteristics of its surroundings controlled by the system;
- defining boundaries of a system means choosing which entities are inside the system and which are outside because they are not part of it;
- systems can be analysed both quantitatively and qualitatively.

Historical and geographical studies are fundamentals, but also analysis of the current state of places: system thinking is useful for both.

The first ones highlight characters of places and their changes and permanencies during the centuries in term of uses, tangible and intangible characteristics, uses, meanings, etc. (*diachronic reading*)

The second one highlights permanencies of past systems in the current status of places (*synchronic reading*).

Systems reading gives wide opportunities and helps to understand the current features and functioning of rural landscape, highlighting units, relationships and their consequences on a landscape’s tangible and intangible features.

The main items of the form for the description of a landscape system should provide: identification of the tangible and intangible components; description of the relationships among them; of its functioning; of the productive processes and the related social structures; its historical origin and changes occurred over time; the geographical distribution (see Table 1).

7. Mondonico case study and its Rural Landscape System

In the Mondonico case study, systemic thinking and the historical “rural landscape system” concept imply the consideration of the village (and its buildings) in its historical functional relationships with the wider territorial context, at various scales, that was the reason of its existence.

Reading Mondonico in terms of system means identification of many units:

- A first unit is each *building complex* with its related contiguous elements: garden and kitchen garden, path, large or small open spaces strictly related to the building functionalities;
- A second unit is the *historic village* made up of buildings related to each other and with collective spaces, like paths, small squares, terraces, a productive chestnut wood. They realise an ensemble;
- A third unit is the *rural landscape system*, made up of the mountainous places that people of the village created, managed and used over the

Form structure to describe a landscape system

1. Designation: indication of the name of the landscape system according to the WRL classification.
2. Object and location: definition of the system and of its peculiarities (on what the landscape system is based on?).
3. Historical origin of the landscape system.
4. Geographical distribution of the landscape system.
5. Landscape system description/structure: individual elements and the relationships between elements that characterize the system; discussion of possible variables (which are the main common characteristics of the landscape system that are recognizable in several case studies? Which are the specific characteristics of the case study?).
6. Productive processes: description of products and processes of the rural activity.
7. Tangible components: list of the physical elements of the system (built elements, functional furnishing, open spaces, morphological structures, crops, infrastructures, vegetative elements, etc.).
8. Intangible components and/or social structure: description of immaterial components which constitute or constituted the basis of the local culture; description of the social organization referring to the kind of management, to the family structure, to the social hierarchy.
9. Historical changes: information on changes that have occurred over time, in relation to tangible and intangible components of the landscape and to the relationships between them.

centuries: woods and forest, meadows, trails, building, features, medium and long routes connecting them, and involving all the mountain.

For further information see the chapter "The 'landscape system' of Dorio/Mondonico short transhumance". The form proposed is based on a first methodological use of the 'system approach', in describing 'short transhumance' (Scazzosi, 2010) and on methodolo-

gical experimentations of the World Rural Landscapes Atlas (www.worldrurallandscapes.org) (see the chapter "Knowledge of rural landscape systems: an international proposal of a classification", by Raffaella Laviscio).

Endnotes

(1) Inertia is well explained, in its deepest motivations, by the geographer René Lebeau who presented one of the first synthetic comparisons among characteristics of rural landscapes of the world (especially referring only to agricultural landscapes) and proposed an essential glossary to foster a worldwide dialogue among scholars (Lebeau, 1969).

(2) ELC 2000, art. 6C:

"C. Identification and assessment.

1. With the active participation of the interested parties [...] and with a view to improving knowledge of its landscapes, each Party undertakes:

- a. i. to identify its own landscapes throughout its territory; ii. to analyse their characteristics and the forces and pressures transforming them; iii. to take note of changes;
- b. to assess the landscapes thus identified, taking into account the particular values assigned to them by the interested parties and the population concerned."

Guidelines 2008, II.2.1:

"Landscape knowledge should be developed according to an identification, description and assessment process, which includes:

- an understanding and description of the specific physical characteristics of the sites in their current conditions, revealing the traces left by natural and human processes and recognising that landscape characteristics result from the action of natural and/or human factors and their interrelations;
- examination of their developmental processes and highlighting the past, present and foreseeable time related forces due to either human or natural factors and the possible pressures and risks facing landscapes;
- recognition of characteristics and value systems based on analysis by experts or knowledge of the social per-

Table 1 – The form structure, based on the elaboration by the ISCC Working Groups for the World Rural Landscape Initiative

ceptions of landscape.

This knowledge can be gained through various forms of public involvement in the process of landscape policy definition and through analysis of the geographical distribution of the population."

References

- AA.VV. (1975). *I paesaggi rurali europei*. Proceedings of the International Congress by the "européenne permanente pour l'étude du paysage rural", 7-12 May 1973. Città di Castello, Italy: Arti grafiche Città di Castello
- Aalen, F.H.A., Whelan, K, Stout, M. (eds) (1997). *Atlas of the Irish Rural Landscape*, Cork, Ireland: Cork University Press (1st edition)
- Bertalanffy, L. (1968). *General System Theory. Development, Applications*. New York, USA: George Braziller (Italian translation: *Teoria generale dei sistemi. Fondamenti, sviluppo, applicazioni*. 1983 and 2009. Milan, Italy: Mondadori)
- Cattaneo C. (1844). *Notizie naturali e civili su la Lombardia*. Milano, Italy: Bernardoni
- Cevasco, R. (2011). Dopo Sereni: dal paesaggio agrario al patrimonio rurale. Le nuove fonti, In Quaini, M. (ed.), *Paesaggi agrari. L'irrinunciabile eredità scientifica di Emilio Sereni*. Milano: Silvana Editoriale
- CEMAT (2003). *Guide Européenne d'Observation du Patrimoine Rural-CEMAT*. 13th session of the "Conférence des Ministres responsables de l'aménagement du territoire", Ljubljana (Slovenija), 17th September 2003
- Corboz, A. (1983). Le territoire comme palimpseste. In *Diogenè*, vol. 121/1983, pp. 14-35
- Cosgrove, D.E. (1984). *Social formation and Symbolic Landscape*. Madison, Wisconsin, USA: The University of Wisconsin Press
- Council of Europe (2000). *European Landscape Convention*
- Council of Europe (2008). *Guidelines for the implementation of the European Landscape Convention*. Adopted by the Committee of Ministers on 6 February 2008 at the 1017th meeting of the Ministers' Deputies
- Cura paesaggio salute persone research project, Politecnico di Milano & Fondazione Sviluppo Cà Granda, Milan, Italy (www.campocascina.polimi.it)
- D'Angelo, P. (2001). *Estetica della natura. Bellezza naturale, paesaggio, arte ambientale*. Bari, Italy: Laterza
- Di Bene, A., Scazzosi, L. (2005). *The Landscape Report*. Rome: Gangemi Editore
- Donadieu, P. (1998). *Campagnes urbaines*. Paris: Actes Sud/E.N.S.P. (Italian translation: *Campagne urbane*. Roma: Donzelli, 2006)
- Emanuelsson, U. (2009). *The rural landscapes of Europe. How man has shaped European nature*. Stockholm: Formas
- Emery, F.E. (ed.) (1980). *System Thinking. Selected reading*. Harmondsworth, London, UK: Penguin Books (Italian translation: *La teoria dei sistemi. Presupposti, caratteristiche e sviluppi del pensiero sistemico*, 1994, 5th ed. Milan, Italy: Franco Angeli)
- Fairclough, G. (2010). Part III: Complexity and contingency: classifying the influence of agriculture on European landscapes. In Kruse, A., Pungetti, G. (eds.). *European Culture expressed in Agricultural Landscapes. Perspectives from the Eucaland Project*, pp. 115-148. Rome: Palombi
- Foerster von, H. (1987). *Sistemi che osservano*. Roma: Astrolabio
- Forman, R.T.T., Godron, M. (1986). *Landscape Ecology*. New York, USA: Wiley & Sons
- Fowler P. J. (ed.) (2003). *World Heritage Papers 6*. Paris: UNESCO
- Giovannini, C., Torresani, S. (2004). *Geografie*, Milan. Italy: Bruno Mondadori Editore
- Golley, F.B. (1993). *A History of the Ecosystem Concept in Ecology*. New Haven, Connecticut, USA: Yale University Press
- Grancini, L., Prusicki, M., Rossi, A., Scazzosi, L. (2005). *LOTO. Landscape Opportunities for territorial Organisation. Guidelines and pilot actions*. Milan, Italy: Regione Lombardia
- *Grande atlante geografico d'Europa e d'Italia* (1995).

- Novara, Italy: Istituto Geografico De Agostini
- Grove, A.T., Rackham, O. (eds.) (2001). *The nature of Mediterranean Europe: an ecological history*. New Haven, Connecticut, USA: Yale University Press
 - Institut de recherches sur les civilisations de l'Occident moderne (1989). *Les paysages culturels européens: héritage et devenir. 17. colloque de l'Institut de recherches sur les civilisations de l'Occident modern*. Paris: Presses de l'Université Paris-Sorbonne
 - Halbwachs, M. (1950). *La mémoire collective*. Paris: Les Presses universitaires de France (English translation: *On collective memory*)
 - Herring, P. (2015). *Historic Landscape Characterisation*. Available from: www.researchgate.net/publication/265916514_HISTORIC_LANDSCAPE_CHARACTERISATION/overview [February 23rd, 2018]
 - Hugh Clout, M. (1991). The Recomposition of Rural Europe: a Review. *Les milieux deltaïques et leurs aménagements*, In *Annales de Géographie*, n. 561-562, pp. 714-729
 - ICOMOS (2010). *Management plans and the World Heritage Convention. A Bibliography*. Available from: www.icomos.org/centre_documentation/bib/Management_plans_bibliography.pdf [February 23rd, 2018]
 - ICOMOS-IFLA International Scientific Committee on Cultural Landscapes (2013). *World Rural Landscapes Initiative* (www.worldrurallandscape.org)
 - Krzywinski, K., O'Connell, M., Küster, H. (eds.) (2010). *Cultural Landscapes of Europe, Fields of Demeter, Haunts of Pan*. Wildeshausen, Germany: Aschenbeck & Oeljeschlüger
 - Kruse, A., Pungetti, G. (eds.) (2010). *European Culture expressed in Agricultural Landscapes. Perspectives from the Eucaland Project*. Rome: Palombi
 - Lebeau, R. (1969). *Les grands types de structure agraire dans le monde*. Paris: Éditions Masson (7th edition: Armand Colin Editeur, Paris, 2011)
 - Lohrberg, F., Lička, L., Scazzosi, L., Timpe, A. (eds.) (2016). *Urban Agriculture Europe*. Berlin: Jovis
 - Longatti, A. (ed.) (1994). *Sognato Lario, lunate sponde. Il mito del Lario romantico*. Como, Italy: Nodo Libri
 - Luginbühl, Y. (2012). *La mise en scène du monde: la construction du paysage européen*. Paris : CNRS Editions
 - Makhzoumi, J., Pungetti, G. (1999). *Ecological Landscape Design and Planning: The Mediterranean Context*. London: Spon
 - Meeus, J.H.A., Wijermans, M.P., Vroom, M.J. (1990). Agricultural Landscapes in Europe and their Transformation, In *Landscape and Urban Planning*, n.18/1990, pp. 289-352
 - Meeus, J.H.A. (1995). Pan-European landscapes. In *Landscape and Urban Planning*, vol. 31/1995, pp. 57-79
 - Odum, E.P. (1971). *Fundamentals of Ecology* (3rd ed.). New York, USA: Saunders
 - *Paysages, paysans: l'art et la terre en Europe du Moyen Age au 20. Siècle* (1994). Paris: Bibliothèque nationale de France. Réunion des Musées Nationaux
 - Quaini, M. (ed.) (2011). *Paesaggi agrari. L'irrinunciabile eredità scientifica di Emilio Sereni*. Milano: Silvana Editoriale
 - Rackham, O. (1986). *The history of the Countryside*. London, UK: J.M. Dent & Sons
 - Renard, J. (2005). *Les mutations des campagnes. Paysages et structures agraires dans le monde*. Paris: Armand Colin
 - Renes, H. (2010). European agricultural landscape history. In Kruse, A., Pungetti, G. (eds.). *European Culture expressed in Agricultural Landscapes. Perspectives from the Eucaland Project*. Rome: Palombi
 - Scazzosi, L. (1999). Politiche e culture del paesaggio in Europa e negli Stati Uniti: una lettura trasversale. In Scazzosi, L. (ed.). *Politiche e culture del paesaggio. Esperienze internazionali a confronto*, pp.17-36. Rome: Gangemi (English summary in: Scazzosi, L., 2001. *Landscape policies and cultures. New comparisons*, pp. 158-170)
 - Scazzosi, L. (2002). Leggere e valutare il paesaggio. Confronti/Reading and assessing the landscape. Comparisons. In Scazzosi, L. (ed.), *Leggere il paesaggio*.

- Confronti internazionali/Reading the landscape. International comparisons*, pp. 19-59. Rome: Gangemi
- Scazzosi, L. (2009). *Agrarian Landscapes*. In Council of Europe, *Landscape and Rural Heritage/Paysage et patrimoine rural*. Sixth meeting of the workshops of the Councils of Europe for the implementation of the European Landscape Convention. Sibiu, Romania, 20th-21st September 2007. Council of Europe – European Spatial Planning and Landscape, vol. 88/2009, pp. 77-87. Strasbourg: Cedex
 - Scazzosi, L. (2010). Part IV: Landscape Assessment and Policies, IV.5: Conclusions. In Kruse, A., Pungetti, G. (eds.). *European Culture expressed in Agricultural Landscapes. Perspectives from the Eucaland Project*. Rome: Palombi
 - Scazzosi, L. (2011). Limits to transformation in places identity. Theoretical and Methodological Questions. In Agnew, J., Claval, P., Roca, Z. (eds.). *Landscape, identity, development*, pp. 9-24. Farnham, UK: Ashgate Publishing
 - Scazzosi, L. (2015). Preservare la machina agraria. Per una lettura e una valutazione del paesaggio rurale storico. In Cornaglia, P., Giusti, M. (eds.), *Il risveglio del giardino. Dall'hortus al paesaggio, studi, esperienze, confronti*, pp. 318-331. Lucca: Maria Pacini Fazzi
 - Segre, L. (ed.) (1993). *Agricoltura ambiente e sviluppo economico nella storia europea*, Milano: Franco Angeli
 - Sereno, P., Sturani, M.L. (eds.) (1998). *Rural landscape between state and local communities in Europe past and present*. Proceedings of the 16th session of the standing European conference for the study of rural landscape. Turin, Italy, 12th-16th September 1994. Alessandria: Edizioni dell'Orso
 - Schama, S. (1995). *Landscape and Memory*. New York, USA: Knopf
 - Tansley, A.G. (1935). The use and abuse of vegetational terms and concepts. In *Ecology*, vol. 16 (3), pp. 284-307
 - UNESCO (1972). *World Heritage Convention. Convention Concerning the Protection of the World Cultural and Natural Heritage*. Paris: UNESCO
 - UNESCO (2008). *WHC Guidelines, Operational Guidelines for the implementation of the World Heritage Convention*. Paris: UNESCO
 - Vecchio, B. (2011). I caratteri originali della storia rurale italiana: dalle "Annales" a Sereni, a Gambi e al giorno d'oggi. In Quaini, M. (ed.), *Paesaggi agrari. L'irrinunciabile eredità scientifica di Emilio Sereni*, pp. 73-83. Milan, Italy: Silvana Editoriale
 - Verhulst, A. (1995). *Le paysage rural: les structures parcellaires de l'Europe du Nord-Ovest*. Turnhout, Belgium: Brepols
 - Reference from the Internet: *Systems theory*, Encyclopaedia Britannica, www.britannica.com/topic/systems-theory [23rd February 2018]
 - Reference from the Internet: *Sistemi, teoria dei*, Encyclopaedia Treccani, www.treccani.it/enciclopedia/tag/teoria-dei-sistemi [23rd February, 2018]
 - Reference from the Internet: *Teoria dei sistemi*, Wikipedia on-line Encyclopaedia, https://it.wikipedia.org/wiki/Teoria_dei_sistemi [23rd February 2018]

ICOMOS-IFLA Principles concerning Rural Landscapes as Heritage

The text reported in the following is the “*ICOMOS-IFLA Principles concerning Rural Landscapes as Heritage*”. The document is promoted by ICOMOS-IFLA International Scientific Committee on Cultural Landscapes. It was endorsed and adopted, as a doctrinal text, by ICOMOS (19th ICOMOS General Assembly & Symposium, Delhi, India, 11th-15th December 2017). IFLA World Council adopted the Document on 20th October 2017 in Montreal (Canada).

The document is the output of a large discussion among ISCL Working Group members and contributions by the International Scientific Committees and the National Committees of ICOMOS (*International Council of Monuments and Sites*), by IFLA (*International Federation of Landscape Architects*) and by many experts and International cultural organisations.

PREAMBLE

Rural landscapes are a vital component of the heritage of humanity. They are also one of the most common types of continuing cultural landscapes. There is a great diversity of rural landscapes around the world that represent cultures and cultural traditions. They provide multiple economic and social benefits, multifunctionality, cultural support and ecosystem services for human societies. This document encourages deep reflection and offers guidance on the ethics, culture, environmental, and sustainable transformation of rural landscape systems, at all scales, and from internatio-

nal to local administrative levels.

Acknowledging the global importance of culturally-based food production and use of renewable natural resources, and the issues and threats challenging such activities within contemporary cultural, environmental, economic, social, and legal contexts;

Considering the United Nations *Universal Declaration of Human Rights* (1948), the United Nations *Convention on Biological Diversity* (1992), the UNESCO *Universal Declaration on Cultural Diversity* (2001), the United Nations *Declaration on the Rights of Indigenous People* (2007), the *International Treaty on Plant Genetic Resources for Food and Agriculture* (Food and Agriculture Organisation, 2011), and the United Nations *2015 Sustainable Development Goals* (in particular but not limited to Sub-Goal 11.4¹), which state that all human beings have the right to adequate, healthy, and secure sources of food and water;

Considering international documents such as the *Venice Charter for the Conservation and Restoration of Monuments and Sites* (1964), the UNESCO *Convention Concerning the Protection of the World Cultural and Natural Heritage* (1972); the ICOMOS-IFLA *Florence Charter on Historic Gardens* (1981), the ICOMOS *Washington Charter for the Conservation of Historic Towns and Urban Areas* (1987), the ICOMOS *Nara Document on Authenticity* (1994), the UNESCO *Convention for the Safeguarding of the Intangible Heritage* (2003), the ICOMOS *Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas* (2005), the UNESCO *Recommendation on the Historic Urban Landscape* (2011), the ICOMOS *Florence Declaration on Heritage and Landscape as Human Values* (2014), the ICOMOS *Florence Declaration on the Links Between Biological*

and Cultural Diversity (2014), and the UNESCO Policy to integrate a sustainable development perspective within the processes of the World Heritage Convention (2015) which relate to the heritage and cultural values of landscapes;

Considering regional and national documents related to rural landscapes, including the *European Landscape Convention* (2000), the *European Rural Heritage Observation Guide* (CEMAT, 2003), the Council of Europe's *Faro Convention on the Value of Cultural Heritage for Society* (2005), the *Tokyo Declaration on the Role of Sacred Natural Sites and Cultural Landscapes in the Conservation of Biological and Cultural Diversity* (2005), the *Santiago de Cuba Declaration on Cultural Landscape in the Caribbean* (2005), the *Latin American Landscape Initiative* (LALI) (2012), the *Australia ICOMOS Charter for Places of Cultural Significance* (The Burra Charter) (1999-2013), the *IFLA Asia Pacific Region Landscape Charter* (2015);

Considering the UNESCO *World Heritage Centre Operational Guidelines for the Implementation of the World Heritage Convention* (2015), which, from 1992, primarily designate rural landscapes as 'Continuing Cultural Landscapes';

Considering the *ICOMOS-IFLA ISCCL Milano Declaration on Rural Landscapes* (2014) concerning rural landscapes as heritage;

Considering the International Union for the Conservation of Nature (IUCN) recognition of Category V Protected Landscapes and Seascapes in their management system, the IUCN efforts of sustaining pastoral nomadism (*World Initiative on Sustainable Pastoralism*, 2008), the joint ICOMOS-IUCN initiative "Con-

necting nature and culture" and the importance of people interacting with their environment in ways that sustain bio-cultural diversity (including agrobiodiversity, as well as cultural and spiritual values);

Considering the *FAO Globally Important Agricultural Heritage Systems* (GIAHS) program that aims to identify and safeguard remarkable land-use systems and landscapes with heritage value and rich in globally significant agricultural biological diversity and knowledge systems;

Considering other documents solely related to aspects of rural landscapes, such as the *Charter of Baeza on Agrarian Heritage* (2012), the *Recommendations of the World Heritage Thematic Expert Meeting on Vineyard Cultural Landscapes, TokaiTokaj, Hungary* (2001) and recommendations of many other thematic expert meetings on rural cultural landscapes as heritage;

ICOMOS and IFLA

Commit to expand their cooperative actions by adopting the dissemination and use of the following principles in order to promote the understanding, effective protection, sustainable transformation, and transmission and appreciation of rural landscape heritage as part of human societies and cultures and a crucial resource across the world.

The principles presented in this document seek to address loss and adverse changes to rural landscapes and their associated communities through the recognition, safeguarding, and promotion of their heritage values. Its goal is to promote an appropriate balance between economic, social, cultural, and environmental aspects.

I. PRINCIPLES

A. Definitions

- *Rural Landscape*. For the purpose of this document, rural landscapes are terrestrial and aquatic areas co-produced by human-nature interaction used for the production of food and other renewable natural resources, via agriculture, animal husbandry and pastoralism, fishing and aquaculture, forestry, wild food gathering, hunting, and extraction of other resources, such as salt. Rural landscapes are multifunctional resources. At the same time, all rural areas have cultural meanings attributed to them by people and communities: all rural areas are landscapes.

Rural landscapes are dynamic, living systems encompassing places produced and managed through traditional methods, techniques, accumulated knowledge, and cultural practices, as well as those places where traditional approaches to production have been changed. Rural landscape systems encompass rural elements and functional, productive, spatial, visual, symbolic, environmental relationships among them and with a wider context.

Rural landscapes encompass both well-managed and degraded or abandoned areas that can be reused or reclaimed. They can be huge rural spaces, peri-urban areas as well as small spaces within built-up areas. Rural landscapes encompass land surfaces, subsurface soils and resources, the airspace above, and water bodies.

- *Rural landscape as heritage*. Refers to the tangible and intangible heritage of rural areas. Rural landscape as heritage encompasses physical attributes – the productive land itself, morphology, water, infrastructure, vegetation, settlements, rural

buildings and centers, vernacular architecture, transport, and trade networks, etc. – as well as wider physical, cultural, and environmental linkages and settings. Rural landscape as heritage also includes associated cultural knowledge, traditions, practices, expressions of local human communities' identity and belonging, and the cultural values and meanings attributed to those landscapes by past and contemporary people and communities. Rural landscapes as heritage encompass technical, scientific, and practical knowledge, related to human-nature relationships. Rural landscapes as heritage are expressions of social structures and functional organizations, realizing, using and transforming them, in the past and in the present. Rural landscape as heritage encompasses cultural, spiritual, and natural attributes that contribute to the continuation of biocultural diversity. All rural areas can be read as heritage, both outstanding and ordinary, traditional and recently transformed by modernization activities: heritage can be present in different types and degrees and related to many historic periods, as a palimpsest.

B. Importance

Rural landscapes have been shaped over millennia and represent significant parts of the earth's human and environmental history, ways of living, and heritage. Many areas of the world are vital sources of food, renewable natural resources, associated world view and wellbeing for local and indigenous communities, as well as for visitors and tourists. Landscapes used for the production and/or harvesting of plant and animal species, including edible resources, demonstrate the entangled connections between humans and other species across broad areas. The diversity of agricultu-

ral, forest, animal husbandry, fishery and aquaculture, wild-resource, and other resource practices is essential for the future adaptation and resilience of global human life.

The heritage values of rural landscapes are recognised in some heritage inventories, such as the UNESCO World Heritage List as '*continuing cultural landscapes*'. The values may be recognised in regional, national, and local heritage inventories and protected area regimes. Identification of rural landscapes values at any level aims to provide awareness of rural landscapes' tangible and intangible characters and values, and is the first and necessary step to promote the sustainable conservation of such areas and transmission of their associated knowledge and cultural meanings to future generations.

C. Threats

Increasing human populations and climate change make rural landscapes vulnerable to risks of loss and/or abandonment or radical change. The threats to rural landscapes reflect three inter-related types of change:

1. Demographic and cultural (population growth in urban areas and depopulation in rural areas, urban expansion, intensive infrastructure works, development pressures, loss of traditional practices, techniques, local knowledge, and cultures);
2. Structural (globalization, change and growth of trade and relations, economic growth or decline, intensification of agricultural practices and techniques, change of land and loss of native pastures and of domesticated species diversity);
3. Environmental (climate change, pollution and environmental degradation including non-sustainable resource mining, impacts on soil, vegetation, and air quality, and loss of biodiversity and agro-biodiversity).

D. Challenges

Heritage should play a significant role in the recognition, protection and promotion of rural landscapes and biocultural diversity due to the significant values it represents. Heritage can contribute to sustaining and increasing the adaptation and resilience of rural landscapes by supporting rural and urban inhabitants, local communities, governments, industries, and corporations as integral aspect to managing the dynamic nature, threats, risks, strengths, and potentialities of such areas. Conservation of the integrity and authenticity of the heritage should focus on assuring the standard and quality of living of local populations working and living in rural landscapes. As all heritage, rural heritage is an economic resource: its use should be appropriate and should provide vital support to its long-term sustainability.

E. Benefits

Rural landscapes are critical resources for the future of human society and the world environment: they provide food and raw materials as well as a sense of identity; they represent economic, spatial, environmental, social, cultural, spiritual, health, scientific, technical and, in some areas, recreational factors. In addition to food and raw materials, rural landscapes contribute to land conservation (nature, environment, soil, hydrographic networks) and the transmission of rural cultures (techniques, knowledge of environment, cultural traditions, etc.) to future generations. Rural landscapes often provide distinct economic and tourism benefits when closely associated with the communication and enhancement of their heritage values.

Over the past decades, environmental and cultural heritage have been the subject of increasing international, interdisciplinary, and transdisciplinary research. Communities as knowledge-holders or local initiatives and

collaboration among stakeholders, rural and urban inhabitants, and professionals have contributed to conservation, awareness, and enhancement of rural landscapes as a valuable shared resource. Many international, national, and local public administrations have supported this idea through their legislation and policies.

F. Sustainability of rural landscapes

Many rural systems have proven to be sustainable and resilient over time. Various aspects of these systems can inform future management of rural activities and support conservation and improvement of biocultural diversity and peoples' rights to adequate quantities and good quality of food and raw materials.

As landscapes undergo continuous, irreversible, and inevitable processes of transformation, rural landscape policies should focus on managing acceptable and appropriate changes over time, dealing with conserving, respecting, and enhancing heritage values.

II. ACTION CRITERIA

Specific measures are: understand, protect, sustainably manage the transformation, communicate and transmit landscapes and their heritage values.

A. Understand rural landscapes and their heritage values

1. *Recognise that all rural landscapes have heritage values, whether assessed to be of outstanding or ordinary values, and that such heritage values will vary with scale and character (shapes, materials, uses and functions, time periods, changes).*
2. *Document the heritage values of rural landscapes as a basis of effective planning, decision-making, and management. Inventories, catalogues, atlases and maps provide basic knowledge of rural landscapes to spatial planning, environmental*

and heritage protection and management tools, landscape design and monitoring.

3. *Develop base-line knowledge of the physical and cultural characteristics of rural landscapes: the status of the rural landscape today; its historical transformations and expressions of tangible and intangible heritage; historic, inherited, and contemporary socio-cultural perceptions of the landscape; past and present links (spatial, cultural, social, productive, and functional) between all elements (natural and human-made, material and immaterial) of rural landscape systems; and the stakeholders involved in both their past and present. Inventorying and cataloguing aim to describe rural landscapes in the current state but also to identify changes over the time.*
4. *Inventory and catalogue rural landscapes at all scales (world, regional, national, local). These tools should integrate local, traditional and scientific knowledge and use systematic methods that are readily achievable and suitable for use by both specialists and non-specialists in all countries in order to collect and compare rural landscapes internationally and locally. In order to achieve an effective database, inventorying and cataloguing activities should consider complexity, costs of human resources, timing of data collection and organisation, and involve both experts and local inhabitants.*
5. *Develop knowledge to enable comparison of rural landscapes at all levels (world, regional, national, local), monitoring historical changes to rural landscapes and support shared learning and collaboration from local to global scales and among all public and private stakeholders.*
6. *Recognize local populations as knowledge-holders who in many cases help to shape and main-*

tain the landscape and should be involved to the building of collective knowledge.

7. *Promote extensive and ongoing cooperation among public institutions, non-governmental organizations, and universities for research, information sharing, technical assistance, and coordination of a wide variety of knowledge building activities at all administrative levels.*

B. Protect rural landscapes and their heritage values

1. *Review and implement legal and policy frameworks to ensure biocultural sustainability and resilience in use and transformation of rural landscapes with respect to global, national, local threats, risks and opportunities.*
2. *Implement policies via laws, rules, economic strategies, governance solutions, information sharing, and cultural support. The complex character of rural landscapes necessitates development of both specific and cross-sectoral policies that consider broad cultural, social, economic, and environmental factors.*
3. *Define strategies and actions of dynamic conservation, repair, innovation, adaptive transformation, maintenance, and long-term management. These should seek to balance global and local approaches, and ensure the involvement and cooperation of all stakeholders and communities in their effective design and daily management.*
4. *Consider that rural landscape heritage values are economic, social, environmental, cultural, spiritual and spatial and that awareness of the values of each rural landscape enables the management of appropriate and effective future transformations.*
5. *Prepare effective policies based on informed local and other knowledge of the landscapes, their strengths and weaknesses, as well as potential th-*

reats and opportunities. Define objectives and tools. Program actions with regard to long, medium, and short-term management goals.

6. *Define monitoring strategies to review the effectiveness of implemented policies and reassess short, medium and long-term goals, related to the monitoring results.*
7. *Consider that effective policy implementation is dependent on an informed and engaged public, on their support for required strategies and involvement on actions. It is essential to complement all other actions. Public administrations should support pro-active and bottom-up initiatives.*

C. Sustainably manage rural landscapes and their heritage values

1. *Consider bio-cultural rights within food and natural resource production. Implement planned management approaches that acknowledge the dynamic, living nature of landscapes and respect human and non-human species living within them. Respect, value, and support the diversities of cultures and various peoples' approaches to nature.*
2. *Recognize key stakeholders of rural landscapes, including rural inhabitants, and the local, indigenous, and migrant communities with connections and attachments to places, their role in shaping and maintaining the landscape, as well as their knowledge of natural and environmental conditions, past and present events, local cultures and traditions, and scientific and technical solutions trialed and implemented over the centuries. Acknowledge that the good standard and quality of living for rural inhabitants enables strengthening of rural activities, rural landscapes, and transmission and continuity of rural practices and cultures.*

3. Consider the connections between cultural, natural, economic, and social aspects across large and small landscapes, in the development of sustainable management strategies for rural landscapes as heritage resource.
4. Consider the interconnections between rural and urban landscapes. Rural landscapes are a resource for urban inhabitants' quality of life (recreation, food quality and quantity, firewood, water and clean air quality, food gardening, etc.) in all metropolitan areas of the world. Urban areas can provide economic opportunities for rural landscape products and integrated other activities as recreation, education, agritourism, demanded by citizens (multifunctionality). Cooperation between rural, peri-urban, and urban inhabitants should be actively encouraged and practiced, both in sharing knowledge of rural landscapes' heritage and the responsibilities for their management.
5. Find a balance between long-term sustainable (economic, social, cultural, environmental) resource use and heritage conservation, and the short-term needs of rural workers' quality of living, which is a prerequisite for the continuation of activities that generate and sustain rural landscapes. Quality of living consists of both income and social appreciation, provision of public services including education, recognition of culture rights, etc. This requires finding appropriate ways and solutions in which living heritage values can be recognized so that change and adaptation are to be compatible with the conservation, use, and communication of heritage values, as well as with the economic enhancement of rural landscape heritage.
6. Support the equitable governance of rural landscapes, including and encouraging the active

engagement of local populations, stakeholders, and rural and urban inhabitants, in both the knowledge of, and responsibilities for, the management and monitoring of rural landscape as heritage. Because many rural landscapes are a mosaic of private, corporate, and government ownership, collaborative working relationships are necessary.

D. Communicate and transmit the heritage and values of rural landscapes

1. Communicate awareness of the heritage values of rural landscapes through collaborative participatory actions, such as shared learning, education, capacity building, heritage interpretation and research activities. Develop participatory plans and practices that involve civil society, private organizations, public authorities, and amongst both urban and rural inhabitants.
2. Increase awareness of the means and methods for transmission of traditional and technical knowledge and practices and develop case studies to do so and disseminate best practices.
3. Support shared learning, training, and research using diverse tools, approaches and cultural practices, including cultural mapping, information-sharing, education, and on-site training involving stakeholders, such as local communities, heritage specialists, professionals of various disciplines, schools and universities, and the media.

Endnotes

(1) "Strengthen the efforts for the protection and safeguarding of the world's natural and cultural heritage" (United Nations Agenda 2030).



From Universal to Local: safeguarding and sustaining the built vernacular heritage

Gül Köksal

Vernacular architecture is a very open, comprehensive concept. It is in fact used as a shortcut and a synonym for several different practices, and theoretical stands on those practices. These include primitive or aboriginal architecture; indigenous architecture; ancestral or traditional architecture; folk, popular, or rural architecture; ethnic architecture or ethno-architecture; informal architecture; the so-called “anonymous architecture” or “architecture without architects;” and even “non-pedigree” architecture. Despite having a long history that dates back to almost two centuries, only over the past decade vernacular architecture studies have become established into mainstream architectural discourse.

Until the mid-20th century, vernacular architecture was generally perceived as a folkloric element representing the ethnic fabric that was built by its user with local material and conventional processes and did not get enough attention due to the tendency of the history of architecture to emphasize high quality designs. To attach importance to vernacular building traditions in terms of architectural knowledge is a tendency that was developed only after the second half of the 20th

century (Rudofsky, 1964; Rapoport, 1969 and 1990; Oliver, 1997). These traditions called the “Architecture without Architects” have been the subject of a research of many years concentrating mainly on building form, function and material. This approach aiming mainly at conserving vernacular architecture had difficulties in reaching its goal due to, as stated by Rapoport, “*the conflict between perceptions bearing vernacular values determined by a certain architectural opinion and the masses who live in environments bearing these values although they no longer want to live there and who are in a continuous change*”. Trying to resolve this conflict through approaches such as “ecotourism”, “agritourism” and “rural tourism” with vernacular architecture as an “authentic product” belonging to an idealized but lost past is just another way of effectively marginalizing it (Urry, 1995; Vellinga, 2006). This is because this understanding inevitably detaches the vernacular architecture and rural settlement patterns from the future and probably leaves behind only a content that is meaningful for vacations and touristic pleasure. However, interpreting the knowledge of the vernacular architecture with respect to the present is

one of the possible ways to rebuild architecturally the relationship between man and nature on a more rightful platform.

A close relationship exists between vernacular architecture and economy-politics, basically globalization. Globalization, whose effects constantly increase all over the world, causes not only monotypes, similar-looking cities but also forces rural areas to get integrated with the urban centers in their surroundings. The first steps in the blurring of the sharp distinction between rural and urban areas can be counted as the weakening of the earthbound production and the migration from rural areas to cities driven by the impacts of Industrial Revolution. Neoliberal policies, which are later in 21st century, named as the "global crisis" show that urbanization plays an important role in the process of absorbing surplus capital and this occurs in a more growing geographical scale.

Although the rate of blurring of the sharp distinction between rural and urban areas occurred in different values, it has been developed by forming a series of spaces based on permeable relations in many regions. This process leads to rapid urbanization of areas and abandonment of rural regions by the effects of global economic - politic systems. Hence "*The report of World Urbanization Prospects 2014*" published by UN Economic and Social Council states that 54% of World population now lives in cities; this number is expected to be 66% in 2050. It is also emphasized that Africa and Asia - home nearly 90% of world rural population - will become urbanized fast consequently infrastructure, education and health problems will emerge. The researchers, working on these threats nationally and internationally, pursued various researches and prepared publications. Vernacular architecture and rural areas are deeply affected by these situations.

On the other hand, lessons for contemporary architecture that can be drawn from the spatial traces of the past. Hence, this paper approaches the vernacular architecture subject in methodological terms, in a way not only to understand and document the relevant spatial experience but to learn from it as well. In this perspective, the tradition is not so much a characteristic of a building, but it is a process of transmission of knowledge from one generation to the other. Therefore, vernacular is not just as something which is static at a particular time, but it is a process which does not only continue but also changes. And it changes as culture changes and as the economy changes, and as the available materials change. Building and daily life relationship can be observed by looking at the vernacular architecture.

The vernacular architecture is threatened by the forces of economic, cultural, and architectural homogenization. In other words, our daily life is threatened by homogenization which is called globalization. Intangible values of vernacular architecture and traditional architecture are important as their tangible values if we consider the lost of continuity with the traditional techniques and skills that got lost in the last generations that happened since the WWII in western countries. Focusing on just tangible values, it is not possible to connect the material and life, but also connections could be missing.

The present study is principally about the current theoretical approaches to the vernacular architecture and its sustainability problems in different cultures. Main objectives of this study are, to discuss the approaches aimed at the integrated preservation of these areas in terms of physical, social, economical, environmental and cultural aspects and sustainable development, by determining original values and preservation problems of vernacular architectural heritage areas. Mo-

reover, aim of the paper is to question the lessons to be learnt from vernacular architecture, and to find ways to integrate these into the architectural education and application practices through modern design.

A Brief Review on Literature of Vernacular Architecture

Despite the fact that the issue of vernacular architecture goes back to the 19th century as a discipline of review, its inclusion in the agenda of mainstream architecture took place in the first half of the 20th century. Examining daily/ordinary architecture excluded from monumental and public architecture, vernacular architecture is dealt with under various titles and with different perspectives. Different aspects were included within the scope of vernacular architecture due to extraordinarily rapid changes observed in the living conditions towards the end of the 20th century. There are architects, anthropologists, planners, sociologists and other researchers who have been interested in this field for many years, and they have carried out studies on different continents such as Africa, Asia, Europe, the Middle East, Latin America, and North America. There are many ways in which we can study vernacular architecture. For instance, in his encyclopedic work, *“Encyclopedia of Vernacular Architecture of the World”*, Paul Oliver (1997) lists twenty different approaches to do that. These include, Aesthetic, Anthropological, Archaeological, Architectural, Behavioral, Conservationist, Developmental, Ecological, Ethnographical, Geographical, Historical, Museological, just to name a few. For example, architectural studies can uncover technological and organizational principles and bring techniques of analysis to vernacular buildings. They may also have bearing on future architectural design. In this respect environment-behavior

studies have emphasized the importance of behavioral patterns in relation to buildings and their personal and community rural or urban settings. Applications of vernacular research can have bearing on the approach taken to study buildings, thus the conservationist approach is concerned with the protection and preservation of the fabric of old vernacular buildings. A developmental approach also looks to the future, evaluating the potential of traditional building to meet world housing problems, and the economic or technical support that may be needed.

Similarly, architect Bernard Rudofsky, in the 1960s, suggested a number of lenses through which one can examine Vernacular Architecture. They include shelter, peasant or rural, traditional architecture, indigenous, primitive, pre-industrial, etc. On the other hand, Dell Upton lists object-oriented studies, socially-oriented studies, culturally-oriented studies, symbolically-oriented studies and design-oriented studies (1983).

Oliver explains, the approaches are not intended to be condensed synopses of the disciplines concerned, but only to show how these have bearing on, interest in, or benefit to the study of vernacular architecture. Although all approaches have been brought together in one section it should be noted that they are broadly of three classes. The first is disciplinary and is supported by a body of knowledge, such as an archaeological approach. The second may be interdisciplinary and is conceptual, for instance a spatial approach, while the third is methodological as in the case with recording and documentation (1997). This combination of different approaches will allow both professionals and laymen alike to grasp the essential clues in reading our living environment. Assessing the subject matter in all aspects requires an inter-disciplinary study that should be supra-disciplinary, with the aim to ensure integration by way of exceeding the ambiguous limits

of the disciplines.

Another node of the subject afforded in the literature (Al Sayyad, Hobsbawn, 1992) is *"All traditions are invented. The question is when and how do they acquire popular acceptance?"*, that explore how tradition is formed by other factors beyond the internal dynamics of the society, such as colonization, global depressions, etc. These factors are sometimes more dominant, faster and affecting the transfer between generation than the internal dynamics of communities. The time of transfer between generations can even take as little as the life cycle of an individual.

On the other side, the global effects of vernacular architecture should not be neglected at present, because of the well know "butterfly effect", that states that "small causes can have larger effects" exists also for architecture. The butterfly effect is a concept.

Problematic of construction technique and materials in vernacular architecture

Vernacular architecture is the most widespread way to build, and at least 90% of the world's architecture is vernacular. In this estimate, several sources coincide (among them the Centre for Vernacular Architecture Studies) on evaluating that only ten percent of the world's building stock has been designed by architects. Another source, cites an even more conservative five percent estimate made in 1964 by Konstantinos Doxiadis (Rapoport, 1969). Earth and wooden materials are diffusively used as natural materials in the six continents; construction techniques adopting the deployment of such materials in terms of the sustainability and protection of vernacular architecture are commonly spread. Wood is intensively preferred in industrialized communities, particularly in earthquake zones, as it is an industrialized material: wood is

a material coming from its integrated context and it deeply affected the culture of building (construction formation code system, wood production technology, natural resource consumption), house building industry, and even the mortgage system.

Earth material has been unable to be industrialized in comparison with wood, despite its having been used for centuries due to the fact that it is heterogeneous, because it has some properties which are hard to measure and for several other reasons. However, academic and practical studies regard the improvement of this material¹.

Some architects still implement earth architecture. The most famous, well-known and early examples among these architects is Hassan Fathy (New Gourn / Egypt). The studies of Hassan Fathy constituted the subject of much research, both in positive (collaborative effort between the architect, craftsman and the eventual users of the building; turning to local materials and traditional forms and building techniques) and negative aspects (created by him an alternative aesthetic in "the Arab style" to the modern movement). Some other architects, like Anna Heringer (Bangladesh), Diebedo Francis Kere (Burkina Faso) on the other hand, perform different implementations trying contemporary use of traditional material.

The perspective of the use of earth and wood materials in the western world should be examined in a multi-dimensional manner: the preferable use is in economically poor communities, where access to the other structural materials is limited, and in a limited area although it is a sustainable material. Earth and wood are not preferred when there are accessible material alternatives probably because the underlying reason thereof is not related only to the attributes of the materials, but is linked also to the preferences in this direction and the construction industry trend. The use

of advanced technology and materials is regarded, as “development” in Western societies, including in the architecture schools, therefore the common usage of earth material in the “developed” countries in the current political system is very low. Nevertheless, the selection of material will be able to be considered in a different way in an environment offering different architectural production conditions.

Production process of architecture, participation and vernacular architecture

In a public participatory design process, the opinions of the community (The users) are sought out in this process. However, in vernacular architecture the architect actor does not lead the process of design the community satisfies their needs with their own means and the architect actor participates in the process of designing vernacular architecture. Thus, it should be supposed that the architectural design and implementation processes are different from other conditions in vernacular architecture production.

About the aspects to be brought forward from tradition to today (Legitimizing tradition)

Some part of the academic world is sustaining that the wish to protect the past is rather related to forms, with the aim not only examining the past but also recognizing what important lesson we took from it. For example, Paul Oliver argued that there is no such thing as a traditional building but rather buildings that embody certain vernacular traditions. He urged us to focus our attention on the practice of transmission as a way of understanding the vernacular and maintaining it (1997).

Today, the reproduction of the traditional is ensured in many areas of the world through such imitations as the neoclassical or through marketing the past as a consumption object (Al Syyad, 2014). However, the heritage from tradition should not be reduced to physical outcomes and objects. Tradition is an important source, it is a leading guide thanks to many backgrounds it offers as life experience/practice/transfer/continuity/transformation, etc. What, why and how was preferred by the past communities and the processes resulting from their selections, the reactions against these processes and the resultant changes are an invaluable treasure. Reviewing this treasure with different perspectives will lead to different perceptions.

The transfer of the tradition in its essence is not the transfer of a commodity or just only an idea itself. It is the transfer of wisdom and experience from the elder to the younger.

The physical product is not the only important thing. Although the product is mortal like people, taking care, maintenance and conservation can prolong the possibility of meeting the values by experiencing the physical remains of the past. Actually, the things that really worth being transferred for all are hidden in daily, ordinary things instead of magnificent work pieces. Life consists of daily, simple and ordinary things for all of us and the conservation/valorization of the witness of this life is the best investment for giving the necessary roots to the future generation.

Endnotes

(1) Some research works were published by Pontificia Uni., the University of Kassel is one of the organizations undertaking research in this regard. The Cal-Earth Institute (The California Institute of Earth Art and Architecture) is doing environmentally friendly earthen studios, experiments and rural facilities in California (www.calearth.org). Nader Khalili

published "Sandbag Shelter and Eco-Village", "Emergency Sandbag Shelter - Quick Training Guide". National and international conferences about earth architecture are the Rammed Earth Conference. Current publications on this issue are by Gernot Minke, those search the current and future usage problems of earth material and analyze contemporary usage models.

Bibliography

- ALSayyad, N. (ed.) (2001). *Consuming Tradition, Manufacturing Heritage: Global Norms and Urban Forms in the Age of Tourism*. New York, USA: Routledge
- ALSayyad, N. (2014). *Traditions: the "Real", the Hyper, and the Virtual in the Built Environment*. Taylor and Francis. London: Routledge
- Asquith, L, Vellinga, M. (eds.) (2006). *Vernacular Architecture in the Twenty-first Century: Theory, Education and Practice*. London, UK: Taylor and Francis
- Brunskill, R.W. (1971). *Illustrated Handbook of Vernacular Architecture*. New York, USA: Universe Books
- Glassie, H. (2000). *Vernacular Architecture*. Bloomington, USA: Indiana University Press
- Heath, K. (2009). *Vernacular Architecture and Regional Design: Cultural Process and Environmental Response*. Oxford, UK: Architectural Press
- Hobsbawn, E. (1992). *The Invention of Tradition*. Cambridge, UK: Cambridge University Press
- Oliver, P. (1997). *Encyclopedia of Vernacular Architecture of the World*. 3 vol. Cambridge: Cambridge University Press
- Oliver, P. (2003). *Dwellings: The Vernacular House World Wide*. Reprint. London, UK: Phaidon
- Rapoport, A. (1969). *House Form and Culture*. Englewood Cliffs, New Jersey, USA: Prentice Hall - Foundations of Cultural Geography Series
- Rapoport, A. (1990). *Defining Vernacular Design. Vernacular Architecture: Paradigms of Environmental Response*. Aldershot, UK: Avebury
- Rudofsky, B. (1964). *Architecture without Architects: An Introduction to Nonpedigreed Architecture*. New York, USA: Museum of Modern Art; New York
- Upton, D. (1983). The Power of Things: Recent Studies in American Vernacular Architecture. In *American Quarterly*, vol. 35, N. 3, pp. 262-279
- Urry, J. (1995). *Consuming Places*. London, UK: Taylor and Francis
- Vellinga, M. (2006). Engaging the Future: Vernacular Architecture Studies in the Twenty-first Century. In. Asquith, L., Vellinga, M., *Vernacular Architecture in the Twenty-First Century: Theory, education and practice*, pp. 81-94. London, UK: Taylor and Francis,
- Vellinga, M., Oliver, P., Bridge, A. (2007). *Atlas of Vernacular Architecture of the World*. London, UK: Routledge

Knowledge of rural landscape systems: an international proposal of a classification

Raffaella Lavisio

The background. Rural landscape classifications

All over the world rural landscapes are highly modified landscapes, in response to natural factors and economic and social needs (Antrop 2005, Luginbühl 2012). They are the result not of the work of an individual, but of a whole community, not of a programmed and planned project, but of techniques transmitted and improved upon from generation to generation.

Thus, they are an expression of people's identity and therefore a heritage to protect and enhance (Lavisio, 2014, Lavisio and Scazzosi, 2015).

This is not a recent awareness, but initiatives and studies that emphasize the cultural dimension of rural landscape are still few (Lavisio, 2014). However, there are not specific tools for its knowledge and its descriptions are often reduced to the use of the land (Fairclough, 2010).

The identification of description criteria of a cultural object as complex as rural landscape is still an essential action before any operation for its protection and

enhancement (ICOMOS-IFLA, 2017).

From this awareness, one of the aims of the *World Rural Landscapes Initiative* (see Lionella Scazzosi's chapter in this book), is the definition of a "*World Rural Landscape Atlas*" aimed at providing a clear and shared framework for recognizing the peculiarities of rural landscapes in every part of the world.

Landscape knowledge (not specifically the rural landscape one) has been formalized in recent years in the «landscape atlas». There are many experiences that, both in Italy and abroad, have led to the creation of «landscape atlas» to describe huge areas of land from a landscape point of view. These are heterogeneous materials, elaborated by individual scholars and administrative bodies, and most of them apply to the theme of landscape in general, without delineating a specific approach to the rural one. So, the French *Atlas de Paysage*, produced on the basis of ministerial indications from the various regional administrations (such as the *Atlas de la Haute Savoie* and the *Atlas du Poitou-Charentes*) and the *Catàlegs del Paisatge of Catalogna* processed in view of spatial planning

(as *El Cataleg del paisatge de les Terres de Lleida* or *El Cataleg del paisatge de Camp de Tarragona*). In Great Britain the *Landscape Character Assessment Guidances* are very widespread, the German *Landschaftsplan* and the *Atlas des Paysages of Wallonie* are also quite well known.

In general, the reading method aims at identifying many different landscape units, through which the territory is divided into homogeneous and continuous areas based on geographic, climatic, orographic, hydrographic, soil use, vegetation, settlement models) (Naveh and Lieberman 1994). The study of the history of the place appears, in general, more summarily, while some weight is allocated to the identification of local cultures, both historical and recent. The modes of representation are the most varied and include simple photography, commented photography, sketches. These are generally atlases developed on a national scale, if not regional.

Nowadays, maps are generally produced on a regional scale, and they are sectoral and based on quantitative data (Balestrieri, 2015); they arise, in most cases, from classifications based on environmental data (climate, elevation, parent material and land cover, Mucher, 2010) or socio-economic (type of production, population density, Hazeu, 2011) and graphically completed by overlapping different layers of information.

Existing programs of historical landscape mapping (such as the "*Historic Landscape Characterization*" of *English Heritage*, quite widespread throughout Europe) are based on an archaeological approach, on the formal recognition of the single landscape unit, hardly putting them in relation with each other.

Research specifically dedicated to rural landscape at a scale that exceeds that of the single nation and whose knowledge and classification stresses cultural

aspects (Velarde, 2010) is few and far between. Dating back to the second half of the 20th century, there are two published studies that still guide all attempts to classify rural landscapes of the world.

R. Lebeau's (1969) is the first; it is one of the basic manuals for the study of agrarian structures and provides basic definitions that have long guided the work of researchers, geographers and non-geographers. For René Lebeau, an agrarian structure is intended as the whole of the durable and deep connections established between man and the land based on agronomic, demographic, sociological, economic and technical factors¹ (Lebeau 1969, 2011: 11). According to him, the agrarian structure gathers the study of the rural habitat² or the characters of the built-up area and its forms of aggregation, the agrarian morphology³ intended as the modality of modeling the soil surface to optimize its use according to the orography and exposure of the site, to improve its physical-chemical characteristics functional to the development of the practices; and the system of culture.

J.H.A. Meeus (1990) published another significant study that, to study the integration between agriculture and landscape. He came to a classification of the European agrarian landscape based on thirteen described "types", highlighting formal aspects (linked to local morphology, field design, layout of the buildings), socio-economic aspects (linked to the type of cultivation and cultivation methods), and historical ones, synthetically referring to the origin of that type of landscape.

Based on these two «holistic» studies, more recent research, the "*Eucaland project*" (2010), attempts to classify the European agrarian landscape that includes processes, activities and functions as well as the appearance of a place, highlighting the historical and agricultural dynamics, the characteristics of continuity

and change. The model of agricultural settlement is always taken into consideration: not the fields and the farms, but the model of settlement that constitutes each type of landscape and the social structures associated with it.

It is, therefore, increasingly approaching a reading of rural landscapes as “landscape systems” where observable forms are the visible sign of the complexity of the organizational, functional, social, symbolic relationships that are held together by them (see Scazosi’s contribution in this book).

The World Rural Landscape classification

Starting from this holistic approach, guidelines for the reading of rural landscape systems have been developed within the WRL Initiative. They are articulated on two experimental reading levels whose construction has been the opportunity to provide a framework of existing knowledge concerning rural landscape classification at world and national level; to reflect on criteria more suitable to a classification based on a cultural approach; to discuss more effective tools to represent and communicate this content.

The first level of reading consists of a general classification of world rural landscapes (Table 1).

Referring to the criteria used for UNESCO sites and the classification developed by FAO under the Globally Important Agricultural Heritage Systems GIAHS program (which globally recognizes agroecosystems rich in biodiversity deriving from the co-adaptation of an anthropic community with the surrounding environment), the classification identifies seven main categories of land value enhancement systems (soil retaining systems, water management systems, cultures associated with each other, live fences, cultures associated with livestock, forestry, livestock systems,

other systems) articulated in several subclasses.

The identification of each class is the result of the combined consideration of several aspects (kind of crop production, kind of livestock, land regime, and so on) (Tricaud, 2013) and wants to underline, starting from the nomenclature, a “morphological” approach to the landscape that mainly concerns the study of landforms and man-made landscape, and the consequent relationship between man and land (Makhzoumi and Pungetti 1999). The focus is on how human needs have modified natural factors through social and cultural structures.

Class identification necessarily passes through an inevitable simplification; this approach shall not ignore the complexity of existing systems that not only cross these typologies, but most often combine several species, several systems of soil exploitation, and land tenure regimes intermediate between the main types.

The identification of a class is accompanied by the definition of more widely spread geographic areas and some specific examples.

The description of each class is specified with reference to the *rural morphology*; the *rural structure*; the *rural settlement* (as defined by Lebeau); and the historical character intended to clarify the origin of each class of landscape.

The classification underlines common characteristics rather than particularities by identifying the predominant aspects of rural landscapes over quite large areas, rather than single elements and specificities; it is the result of a landscape characterization and interpretation, rather than of a data recording.

Now, the classification consists of a list and has not yet produced a map that could mapping rural landscape classes. It is intended as an open project and needs to be tested and modified based on what could also emerge from the more detailed reading of landscape

Table 1 - *World Rural Landscape Classification*: the classification, elaborated by the ISCL Working Group, lists the major world rural landscape systems identified based on the land value enhancement. The main classes (seven) are articulated in several subclasses; for each of them the distribution all over the world has been identified. The classification is intended as an open output and awaits testing in several countries that WRLI could involve.

RURAL LANDSCAPE SYSTEM		DISTRIBUTION
1. Soil retaining systems/Retenue du sol		
1.1	Structures created by soil movement and planted and cultivated terraces in temperate areas/ <i>Structures créées par le mouvement du sol et terrasses plantées et cultivées dans les zones tempérées</i>	Mediterranean, Europe, West Asia, Mexico
1.2	Flooded rice terraces/ <i>Terrasses rizicoles inondées</i>	East Asia (Philippines, Indonesia, Vietnam, South China, ...), Madagascar
1.3	Tropical cultivated terraces/ <i>Terrasses cultivées tropicales</i>	East Africa (Ethiopia, Kenya, ...)
2. Water management/Gestion de l'eau		
2.1	Oasis/Oasis	Sahara, Arabian Peninsula
2.2	Irrigated land/ <i>Périmètres irrigués</i>	Whole world
2.3	Drained land/ <i>Périmètres drainés</i>	Whole world
2.4	Polders/Polders	Netherlands, Japan, China, Bangladesh, ...
2.5	Cultivated swamps, floating gardens/ <i>Marais cultivés, jardins flottants</i>	Europe (North of France) swamp of the Tigris (Iraq), Xochimilco (Mexico), Inle Lake (Burma), Bolivia
3. Cultures associated with each other, live fences/Cultures associées entre elles, clôtures vives		
3.1	Annual associated crops/ Cultures annuelles associées	Mexico (Association corn-bean-pumpkin known as the "Three Sisters" or Milpa)
3.2	Open fields/Champs ouverts	Europe, North America
3.3	Enclosed fields/ Bocages	Western Europe, Bamileke in Cameroon, ...
3.4	Agroforestry/ Agroforesterie	Mediterranean (<i>coltura promiscua</i>), Mexico (chewing gum)
4. Cultures associated with livestock/Cultures associées avec élevage		
4.1	Pastures, ranching/ <i>Sylvopastoralisme</i>	Europe, Mediterranean, West Africa, New Guinea (<i>dehesa, montado, Faidherbia, ...</i>), North America
4.2	Aquatic systems/ <i>Systèmes aquatiques</i>	China (rice fields with fish)
5. Forestry/Sylviculture		
5.1	Tropical hardwoods/ <i>Feuillus tropicaux</i>	Tropical humid regions
5.2	Temperate hardwoods/ <i>Feuillus tempérés</i>	Temperate and cold regions
5.3	Resinous/ <i>Résineux</i>	Temperate and cold regions

6. Livestock systems/Systems d'élevage		
6.1	Nomadic herding/ <i>Nomadisme</i>	Northern Eurasia (Reindeer), Sahara (camel and sheep), Sahel (zebu), Central Asia (horses, camels and sheep)
6.2	Long transhumance/ <i>Long transhumance</i>	Mediterranean, Australia (sheep and goats)
6.3	Short transhumance/ <i>Court transhumance, «remues»</i>	Alps (cattle), fells of England and Scotland (sheep)
6.4	Sedentary or semi-sedentary extensive grazing/ <i>Pâturage sédentaire ou semi-sédentaire extensif</i>	North America, South America, Australia and New Zealand (cattle), Argentina, Spain
6.5	Intensive sedentary grazing/ <i>Pâturage sédentaire intensif</i>	Western Europe (cattle)
7. Others		
7.1	Salt cultivation landscapes/ <i>Salines</i>	Mediterranean, China, Europe, Bolivia (Salar de Uyuni), Australia, New Zealand
7.2	Aquaculture: fish farming / <i>Aquaculture: pisciculture</i>	China, Southeast Asia, East Africa, ...
7.3	Aquaculture: crustaceans (shrimps)/ <i>Aquaculture: crustacés (crevettes)</i>	Madagascar, Latin America, ...
7.4	Aquaculture: shellfish farming (e.g. oysters)/ <i>Aquaculture: conchyliculture (huîtres, moules)</i>	North West Europe, Mediterranean, South-east Asia, Southeast, West Africa, ...

systems. The two steps of reading, rather than sequential, are to be understood as complementary.

The reading of rural landscape systems

The second level of reading is that which specifies the rural landscape systems within each identified class.

For this purpose, a survey sheet has been defined, that describes the main landscape systems that are widespread on a world scale, highlighting, first, their common characteristics, and also their peculiarities depending on the geographical location (see the paragraph "Focus on the 'landscape system' of short transhumance" in this chapter).

The description provides the identification of the components of the system, of its functioning, of the production process, of the social structure, its origin and the

changes that have occurred over time, its geographical distribution.

The description follows a «holistic» approach that starts from the axiom that 'the whole is more than the sum of its parts' (Naveh, 1984: 35) and considers landscape a multilevel stratified system comprehensive of ecological, social and cultural aspects, where all elements are related to each other and form one complex system (Antrop, 2000)

Thus, the description of each landscape considers both ecological, spatial, historical and socio-economic dimensions, perceptive, sensorial and social dimensions.

From an environmental point of view, for example, it must describe climate, exposure, altitude and crop choices, consortia and cultivation systems that result from it.

The description of the space will capture the man-made forms both in the built part and in the open one of each rural landscape: the typology of the settlement, the relation to the soil morphology, the type of buildings, the materials, the size and shape of the fields, repetition of forms, agrarian arrangements, space relationships between fields, forests, grasslands, irrigation systems, and so on.

The visible shapes will reveal, to a historical reading, their origin and the motivations that have generated them. The emphasis, on one side, of the permanencies, on the other, of the changes, will lead to action-oriented knowledge.

The social dimension will investigate the economic and behavioral factors expressed in the agricultural structure and will be readable through agricultural practices, cultivation techniques, economic systems, property/tenancy relationship.

Finally, the reading of the perceptive dimension will highlight both aspects related to sensory perception (variety of landscape, colors, seasonal changes, sounds, noises, odors tied to both natural elements and human labor), as well as those due the interpretation and the meanings attributed by the people and expressed in customs and traditions, typical products, sacredness of some forms, renown of places and practices.

Tangible and intangible components are described themselves and in relation to each other highlighting the system to which they give rise.

The survey includes textual descriptions accompanied by graphic and cartographic drawings (photographs, schemes, historical maps). The representation of the contents is a crucial element in the communication of the systemic approach: conceptual schemes and maps are essential to give back the understanding of relationships and processes.

Focus on the 'landscape system' of short transhumance

In order to exemplify this kind of approach and a possible development method, some first sheets have been developed. Landscape systems particularly widespread in Europe have been chosen where the similarity with the "machine" is particularly evident and where, despite the considerable changes that have occurred over the centuries, the signs of the original system clearly persist.

Among these the one related to the system of short transhumance, to which the experience of Mondonico belongs.

The landscape system of 'short transhumance' is a *mountain landscape system* (Scazzosi, 2010). It is the most common system of historical rural organization in the Alps, Apennines and other mountain areas in Europe. The origin of the landscape system dates probably back to the high Middle Ages.

It bases on a system of settlements and ground use (agricultural, forest and pasture), related to seasonal movement of cattle.

The landscape system can be organized in two or three stations (Fig. 1):

- A station with a *permanent use*: located in the low valley. It is made up of a village with small cultivated areas around (vineyards, vegetable garden, fruit garden) and a chestnut grove;
- One or two stations with a *seasonal use*: pastures made up of one or more buildings for the shepherd and sometimes shelters for cattle (depending on the climate and the altitude at which pastures are located, mid-height valley or high valley).

Pathways connect the permanent and the seasonal stations.

The landscape systems of 'short transhumance' have the following common further **characteristics**:

- *Movements*: these are related to the seasonal movements of cattle. During winter and spring, cattle remain in the villages in the low valley. During the warmer seasons shepherds bring cattle to the spring pastures and then to the high pastures in summer. At the end of summer, the movement of cattle is the contrary: from high pastures to the low valley;
- *Repetitiveness*: it is possible to identify several short transhumance landscape systems in the same territorial area, which are similar to each other in relation to agricultural processes, tangible elements and agronomic or religious practices (Fig. 2);
- *Autonomy*: each system works autonomously from the others. Nevertheless, each system can interact with others close to it;
- *Dimensional variability*: it relates to the local geomorphology and the mountain height. Two main kinds of system, according to the dimensional variability (Fig. 3): 1. Two stations system: typical of low mountain areas, divisible in low valley (permanent use) and mid valley (seasonal use); 2. Three stations system: typical of high mountain areas; divisible in low valley (permanent use), mid-height area (seasonal use, from spring) and high pastures (seasonal use, only during the summer).

The following **productive processes** commonly characterize the landscape systems of 'short transhumance': *cattle grazing* (and cattle feeding) in different stations (village and pastures) during the seasons for milk, meat and cheese production; *small cultivations* for the sustenance of the population, close to the vil-

lage; a *productive chestnut grove*, cultivated for chestnuts, leaves and wood harvest production; *mixed forest* for wood harvest and spontaneous products pick-up (like mushrooms, wild fruits,...); *pine-wood*, mainly for wood harvest.

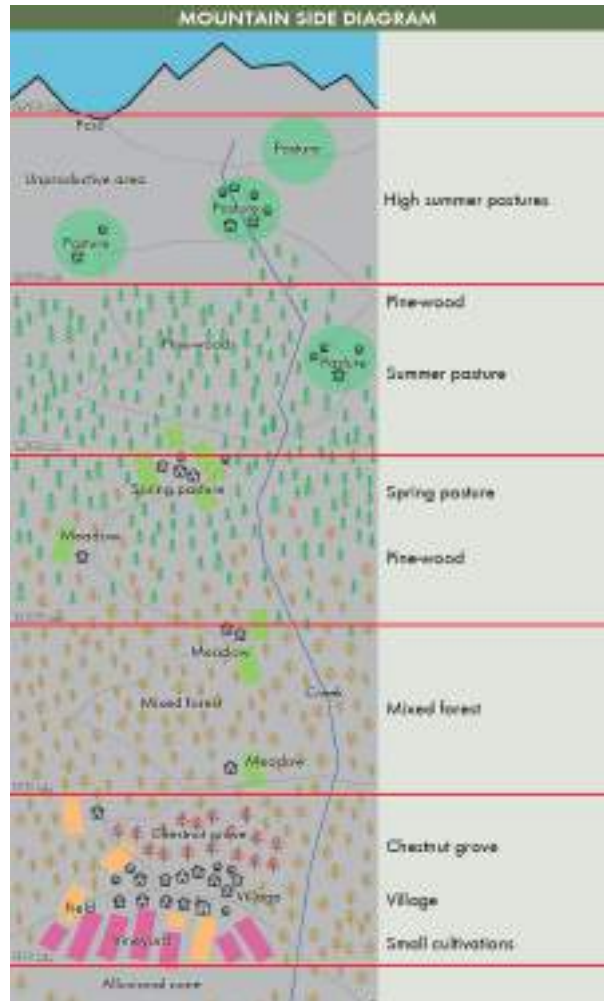
The *landscape architecture* of the landscape system bases on **tangible components**. The list below categories the common tangible components of the landscape system of 'short transhumance', according to their physical location in the system itself.

1. Low valley (*permanent use*): 1. Village: usually composed by residential buildings, stables for cattle, buildings and tools for processing and conservation of food (like driers for chestnuts), a religious building (church). In several cases it is possible to find cultural and religious artistic expressions on building walls like frescoes; 2. Small cultivations: usually vineyards, vegetable garden, fruit garden; usually located on terraces held up by dry-stone walls; 3. Productive chestnut grove: usually located behind the low valley village, on the mountain side; 4. Pathways and open-spaces between buildings: places for social practices, meetings and human and animal movements;
2. Mid-height valley (*seasonal use*): 1. Small settlements or isolated buildings for shepherds (with scattered and functional furniture) and sometimes shelters for cattle in mixed forest; 2. Spring pastures for cattle grazing; 3. Pathways: for the connection of the low valley to the high valley, for the cattle and wood transport; 4. Small places to sit down and take a break along the paths; 5. Fountains to give water to cattle during transhumance movements; 6. Religious buildings (small chapels) or symbols (crosses) along the pathways to the pastures;

Fig. 1 [left] – Short transhumance: structure diagram of the landscape system (three stations) (source: Scazzosi, 2010)

Fig. 2 [right, top] – Each 'short transhumance' landscape system is autonomous from the other ones (photo: Lake Como, Alps, Italy) (source: Scazzosi, 2010)

Fig. 3 [right, bottom] – A three station system in the high mountains area over 1000 m. a.s.l. (left). A two station system in low mountains (right) (source: Scazzosi, 2010)



- High valley (seasonal use): 1. Isolated buildings for shepherds (with scattered and functional furniture); 2. Religious buildings (small chapels) or symbols (crosses) located near the buildings or pastures; 3. Summer pastures for cattle grazing; 4. Mixed forest and pine-wood; 5. Pathways: for the connection of the low valley to the high valley, for the cattle and wood transport.

The **intangible components** are usually referable to the specific 'short transhumance' case studies. It is possible to classify them according to the following groups:

- Places with the attribution of specific names or meanings by people, related to oral memory: 1. Places related to transhumance and other agricultural processes (settlements, forests, pastures,

pathways, ...) which usually have a name in the local dialect; 2. Places related to religious aspects of social life: churches, chapels along pathways, crosses on the tops of mountains; 3. Meeting points along the pathways from the low valley to the high valley;

- *Rituals related to transhumance and religion:* 1. Celebrations related to transhumance: cattle blessing before leaving the low valley to the high pastures, ceremony for the cattle coming back to the low valley from the alpine pastures; 2. Religious rites: patron saint's festival, rites related to the other religious buildings or signs (chapels, crosses, ...);
- *Other cultural traditions:* 1. Music, songs and musical instruments related to the transhumance; 2. Traditional customs, work instruments, and clothes related to the transhumance.

Conclusions and perspectives

The mapping promoted by the WRL Initiative intends to focus on processes, as well as on historic and inherited tangible and intangible forms and components. It is aimed at recognizing historical systems of rural landscape that are still readable by identifying complex macro-areas.

This is a complex and, in some ways, pioneering operation involving many researchers all over the world taking part in the initiative.

Working at a world scale is itself a factor of complexity; the bibliography on the issue is quite poor and lacking synthetic descriptions that go beyond the specificities of national scale if not in terms of production and land use; it also requires the overcoming of local specificities, making it possible, in each case, for each region to find itself within the global framework.

The world scale also requires the selection of reading

keys that can easily adapt to different contexts and that start from a shared base such as already is the case with the studies for the candidacy to the UNESCO World Heritage List.

It is an ongoing process and these initial results must be considered simply as a starting point instead of a point of arrival, a tool to raise awareness of both the problem and the potential of a rural landscape classification at a global level.

It would be also a practical tool able, for instance, to fill the gaps of the World Heritage List, where rural landscapes, although present, do not have a specific classification able to stress their nature of evolving and continuing landscapes (Tricaud, 2013).

Today the sites of the World Heritage List are chosen on the basis of a series of criteria valid for all types of cultural heritage and on the basis of a study of the places, whose method is structured to demonstrate its absolute uniqueness and representativeness, compared to others of the same type in the world, as well as to evaluate its integrity and authenticity.

In the case of rural landscapes, compliance with the criteria is not easy: partly due to the fact that the comparison between rural landscapes of the same type is difficult especially due to the lack of a wide, systematic, articulated and in-depth literature at global level and due to the lack of an organic identification of the types.

The development of the knowledge models proposed within the WRL Initiative can therefore be a useful tool in this direction.

On the basis of the criteria defined above, the next steps of the project foresee the indication, for each country, of the main landscape systems. Within the identified systems, individual landscapes, representative of each culture, can be described. The knowledge of the experts, studies and ongoing research are cer-

tainly an adequate source from which to draw. At the same time, landscape being a collective construction in which everyone (whether expert, politician, planner, farmer) has his own responsibility, both individual and community, and the call from many to the participation of the populations in landscape conservation and management processes. (*Convention for the safeguarding of the intangible cultural heritage*, UNESCO, 2003; *Recommendation on the historic urban landscape*, UNESCO, 2011), poses the challenge of activating participatory paths in the construction of the Atlas as well.

The next steps of the research will be to clarify the most appropriate tools for the activation of these processes towards the construction of an atlas that, by providing an appropriate knowledge base, is capable of guiding policies aimed at the protection and enhancement of rural landscapes.

Endnotes

(1) "Structure agraire à cet ensemble de liens durables et profonds entre l'homme et le sol, que traduisent les paysages ruraux. C'est une notion plus large que celles, purement descriptives, d'habitat rural et de morphologie agraire, une notion essentiellement explicative" (Lebeau, 1969).

(2) "L'habitat rural est le mode de répartition des maisons paysannes à l'intérieur d'un finage donné" (Lebeau, 1969).

(3) "On appelle système de culture l'association de plantes choisie par une société rurale pour tirer parti de ses terres, l'assolement et les techniques qui sont liées à la culture de ces plantes" (Lebeau, 1969).

Bibliographic sources

- Antrop, M. (2000). Geography and landscape science. In *Belgeo*, Belgian Journal of Geography, vol 1-2-3-4/2000, pp. 9-36. Available from: <http://journals.openedition.org/belgeo/13864> [February 8th, 2018]
- Antrop, M. (2005). Why landscapes of the past are important for the future. In *Landscape and Urban Plan-*

ning, vol. 70/2005, pp. 21-34. Amsterdam, Netherlands: Elsevier

- Antrop, M. (2012). Intrinsic values of landscapes. In Papayannis, T. & Howard, P. (eds.), *Reclaiming the Greek Landscape*, pp. 31-42. Athens: Med-INA
- Agnoletti, M. (ed.) (2011). *Paesaggi Rurali Storici. Per un catalogo nazionale*. Bari, Italy: Laterza
- Balestrieri M. (2015). Theories and Methods of Rural Landscape Classification in Europe: the Italian Approach. In *International Journal of Rural Management*, vol. 11(2)/2015, pp. 156-174. Thousand Oaks, California, USA: SAGE Publishing
- Bevilacqua, P. (2007). Linee generali per la costituzione di un Catalogo del paesaggio agrario italiano. In Di Bene, A. & D'Eusebio, L. (eds.). *Paesaggio agrario: una questione non risolta*. Roma: Gangemi
- Fairclough, G. (2010). Part III: Complexity and contingency: classifying the influence of agriculture on European landscapes. In Kruse, A., Pungetti, G. (eds.). *European Culture expressed in Agricultural Landscapes. Perspectives from the Eucaland Project*, pp. 115-148. Rome: Palombi
- Hazeu, G.W., Metzger, M.J., Mucher, C.A., Perez-Soba, M., Renetzeder, C., Andersen, E. (2011). European environmental stratifications and typologies: an overview. In *Agriculture, Ecosystems and Environment*, vol. 142/2011, pp. 29-39. Amsterdam, Netherlands: Elsevier
- ICOMOS-IFLA (2017). *Principles Text on Rural Landscapes as Heritage*. 19th ICOMOS General Assembly. 11th-15th December 2017, Delhi, India
- Kruse, A., Pungetti, G. (eds.). *European Culture expressed in Agricultural Landscapes. Perspectives from the Eucaland Project*. Rome: Palombi
- Laviscio, R. (2014). Il paesaggio agrario come bene culturale. Spunti per una classificazione volta alla tutela e alla valorizzazione. In Bonini, G., Visentin, C. (eds.). *Paesaggi in trasformazione*, pp. 671-678. Bologna, Editrice Compositori
- Laviscio, R., Scazzosi, L. (2015). Cultural approaches towards a World Rural Landscape Recommendation.

- In Di Stefano, M. (ed.). *Heritage and Landscape as Human Values*. Conference Proceedings. Proceedings of the 18th ICOMOS International Symposium. Florence, Italy, 9th-14th November 2014. Naples, Italy: Edizioni Scientifiche Italiane
- Lebeau, R. (1969). *Les grands types de structure agraire dans le monde*. Paris: Éditions Masson
 - Luginbühl, Y. (2012). *La mise en scène du monde: la construction du paysage européen*. Paris : CNRS Editions
 - Makhzoumi, J., Pungetti, G. (1999). *Ecological Landscape Design and Planning: the Mediterranean Context*. London: Spon
 - Meeus, J.H.A., Wijermans, M.P., Vroom, M.J. (1990). Agricultural Landscapes in Europe and their Transformation. In *Landscape and Urban Planning*, vol. 18/1999, pp. 289-352. Amsterdam, Netherlands: Elsevier
 - Moran, E.F. (2010). Land Cover Classification in a Complex Urban-Rural Landscape with Quickbird Imagery. In *Photogrammetric Engineering & Remote Sensing*, vol. 76(10), pp. 1159-1168.
 - Mûcher, C.A., Klijn, J.A., Wascher, D.M., Schaminée, J.H.J. (2010). A New European Landscape Classification (LANMAP): A Transparent, Flexible and User-oriented Methodology to Distinguish Landscapes. In *Ecological Indicators*, vol. 10/2010, pp. 87-103. Amsterdam, Netherlands: Elsevier
 - Naveh, Z. (1984). Towards a transdisciplinary conceptual framework of landscape ecology. In Brandt, J. & Agger, P.W. (eds.). *Proceedings of the 1st International Seminar on Methodology in Landscape Ecological Research and Planning*. Roskilde, Denmark, 15th-19th October 1984. pp. 35-45. Roskilde, Denmark: Roskilde Universitetforlag
 - Naveh, Z., Lieberman, A. (1994). *Landscape Ecology: Theory and application* (2nd ed.). New York, USA: Springer-Verlag
 - Renard, J. (2005). *Les mutations des campagnes. Paysages et structures agraires dans le monde*. Paris: Armand Colin
 - Scazzosi, L. (2004). Reading and Assessing the Landscape as Cultural and Historical Heritage. In *Landscape Research. Journal of the Landscape Research Group*, vol. 29(4)/2004, pp. 335-355
 - Scazzosi, L. (ed.) (2010). Assessment of policies considering cultural heritage in European agricultural landscapes. In Pungetti, G., Kruse, A. (eds.). *European Culture expressed in Agricultural Landscapes. Perspectives from the Eucaland Project*. Roma: Palombi Editore
 - Segre, L. (ed.) (1993). *Agricoltura ambiente e sviluppo economico nella storia europea*. Milano: Franco Angeli Editore
 - Sereni, E. (1961). *Storia del paesaggio agrario italiano*. Bari, Italy: Laterza
 - Tricaud P.M. (2013). Agricultural landscapes in a World Heritage context, In *World Heritage*, vol. 69/2013, pp. 60-63
 - Velarde, M.D. (2010). Methods for describing European agricultural landscapes: definitions, cultural character and values. In Kruse, A., Pungetti, G. (eds.). *European Culture expressed in Agricultural Landscapes. Perspectives from the Eucaland Project*, pp. 115-148. Rome: Palombi
 - Verhulst, A. (1995). *Le paysage rural: les structures parcellaires de l'Europe du Nord-Oves*. Turnhout, Belgium: Brepols



Reading the landscape. The experience of Mondonico

Raffaella Laviscio

Objectives

Mondonico is a small village in the municipality of Dorio, province of Lecco, in the district of the Mountain Community of Valsassina, Valvarrone, Esino and Riviera.

It is a quite singular episode of landscape preservation, in all its components, and represents evidence of a tangible and intangible culture that has disappeared elsewhere.

Despite its exceptional history, due to significant social changes, over time it has been gradually abandoned and is no longer in use. Being aware that there is no conservation without use, an urgent need for a new focus for the village arises; therefore, it is necessary to identify compatible uses, able to combine the specificities of the place with new models of development.

The knowledge of the characteristics that, today and in the past, have made the landscape of Mondonico what it is today, is the preliminary necessary step to an effective project: it is necessary to take into account its natural and human, tangible and intangible compo-

nents and the relationships that bind them in a unique and unrepeatable way. Only the knowledge and respect of the characteristics of the place could allow a project to transform the landscape in an appropriate way.

The methodological framework: the landscape characterization for knowledge oriented to the project

How to get that knowledge? Which analysis should be done to ensure a systemic reading of the landscape? Methodological criteria were developed in a national and international context to read and evaluate the landscape in its individual elements.

The most globally widespread approach seems to be the British one that develops mainly visual and historical analyses (referring, in particular to the British methodologies such as the *Landscape and Visual Impact Assessment*, the *Landscape Character Assessment*, the *Historic Landscape Assessment*).

Following the European Landscape Convention's prin-

principles that emphasize the social perceptive dimension as well, the guidelines 'The landscape management of the territorial transformations: guidelines and pilot actions' of 2005¹ proposes a method that is now quite common in Italian territorial planning tools, as well as in numerous studies on the subject.

Considering the landscape as a system of tangible and intangible features, the method proposes the following main analyses:

- A spatial analysis to define the characters that form the "structure" of a territory like: geomorphology, hydrography, vegetation, agricultural landscape, settlement and infrastructure system;
- A historical analysis to understand the transformations of a landscape during the time (diachronic analysis) and the traces of the past still readable (synchronic analysis);
- A sensory analysis to recognize the landscape variety perceived by senses (visual, olfactory, sound perception). The visual analyses have always a great weight and require the recognition of the panoramic aspects of the places from points of ordinary accessibility as well as scenic points and routes;
- A social perception analysis to interpret symbolic meanings attributed to the places by people (in the past and today); iconography, literature, poetry, filmmaking can help to accomplish this analysis.

This general method was applied to Mondonico and, taking into account the limits imposed by the case, has allowed the construction of a reference knowledge framework for the development of the design assumptions.

It is important to complete the reading of all landscape features with a reading of the 'landscape system', to comprehend and highlight how it "works", its origin

processes and the tangible (or intangible) permanencies through the centuries². This reading is necessary to identify:

- the integrity and relevance values of the landscape;
- suitable, coherent and sustainable new uses.

During the analyses phase of Mondonico and its landscape, the sensorial perception analyses, with the exception of the visual analysis, had been omitted (analysis of sound perception, analysis of olfactory perception). Nevertheless, the sensorial perception analyses are fundamental for a further characterization of a landscape.

Reading Mondonico: method and tools

Steps of the analysis

The study of the landscape can be, therefore, very complex; it requires interdisciplinary, follow up research, readings at different scales, desk studies and surveys.

In the case of Mondonico, we wanted to give a finite time limit to the study; the different phases of the analysis were carried out not sequentially but simultaneously allowing each investigation to enrich the other. Moments of desk study of the wide documentation already available have been alternated with moments of fieldwork. Meetings and interviews with the stakeholders also helped to acquire various types of knowledge in a short time. The gained knowledge has been expressed using sketches, schemes and mapping; these tools are an easy way to organize information, visualize relationships and communicate them.

The main steps of investigation have been:



Fig. 1- The photographic survey. The survey documents the village at three levels:
 1. Views from outside the village (from the opposite side of the lake to perceive its full extension);
 2-3. The panoramic views around the village (looking towards north and south it is possible to admire exceptional views of the mountains around the lake and it is possible to look down to the lake without any obstacle);
 4-5. The paths inside the village and the buildings (the pictures of the buildings along the main street, the interiors, the details, were very useful to the surface mapping and further analysis of the buildings).
 (source: Corbella, 2014)

1_ Recognition of the place's architecture

Based on the survey of the characteristics that form the "structure" of the territory: geomorphology, hydrography, soil use, settlements and infrastructure system, historical permanencies, formal organization of the built and not built spaces, specificities determined by the use of materials (natural and man-made, traditional and new, vegetable and mineral), the construction techniques (terracing, rural buildings, etc.) and the spatial relationships between the elements. Based

on the ortho-photo and starting from the suggestions given by landscape planning tools and by survey, a landscape map was drawn: it recognizes the essential features of Mondonico. Specific studies have been devoted to the understanding of local dry-stone wall specificities, through the accurate survey of parts of them and the acquisition of the techniques used for their restoration and maintenance through interviews with local operators.

2_ Recognition of the historical values of the place

The historical significance of the place has been recognized through a cartographic reading at a territorial scale in two steps³:

- An historical reading for meaningful periods (*diachronic*) that leads to an understanding of changes occurred over time and which concerns the use of agricultural land, the paths, watercourses, buildings/settlements, the agricultural movement (vertical and horizontal transhumance), elements that are now lost;
- An historical synchronic reading that has allowed for the recognition of the traces of the still readable past (permanencies: buildings, paths, terraces) and with which new transformation projects deal.

3_ Recognition of the visual characteristics of the place

After recognizing the major connections between Mondonico, Dorio and the lake, a detailed photographic survey⁴ creates full visual perception of the place. Through photos, sketches and schemes, the relationship between the elements, the panoramic values of some points of view, the visual perception of certain features have been interpreted. The local survey has been completed by a reading to a greater distance (from the lake and the opposite shore), capturing the broader visual relationships between the village and its context.

4_ Recognition of the social perception of the place

Through the preparation of a questionnaire and interviews with the local population, data on meanings attributed to the place, the deepest problematics and the aspirations of the population have been acquired.

5_ Recognition of the "landscape system"

Finally, the description of Mondonico 'landscape

system' allowed to highlight how it "works", the landscape structure, the productive processes (historical and current), the tangible and intangible landscape components. Maps and diagrams allowed the comprehension of the relationships between the landscape components and features (read the detailed study "The 'landscape system' of Dorio/Mondonico short transhumance").

Sources

The study has favored sources that were immediately available, wishing to check the feasibility of the analysis in a limited time and their applicability in all contexts; a great deal of time has been dedicated to the survey.

In particular, the location's architecture has been recognized by direct observation, supported by the reading of the planning tools developed on different scales in relation to the landscape of Mondonico and Dorio (particularly the PTCP Territorial Plan for Provincial Coordination of Lecco and the PGT Plan of Government of the Territory of the City of Dorio).

The study of the historical land registers (cadastre of Maria Theresa in 1773, Lombardo-Veneto cadastre in 1860, New Cadastre of 1898), of cartography of the Military Geographical Institute (of the end of the XIX century) and of the historical iconography available in the Archives of the Municipality of Dorio has allowed to understand the historical evolution of the village and its present-day consequences.

The visual analyses have been based essentially on survey; various photographic campaigns were carried out from the public access roads and paths, from scenic points within the area, but also from the lake (by survey by boat) to ensure the analysis of the village in relation to its broader lake and mountain context.

Knowledge of current social perception was acquired

through interviews to the population and to some of its representatives (the mayor and local historian), as well as through the consultation of official documents such as the PGT whose strategic decisions express the beliefs and aspirations of the community.

The knowledge of the processes that denote Mondonico as an example of 'landscape system' of short transhumance is the result of the previously acquired analyses, further bibliographic and cartographic studies and interviews to local people members.

Study scales

Analyses were carried out at three different scales of study:

1. A territorial scale which allowed to place Mondonico in the broader system of Como Lake, highlighting the road and rail connections, the membership of the landscape systems of Monte Legnone and Como lake (including, at this scale, the morphology and the design of the ridges, the hydrography, geology and land use, the forest system and the vegetation types, the structure of settlements and the rural system);
2. An intermediate scale that considers the village of Mondonico in the broader context of the town of Dorio highlighting its structural, functional and visual relationships;
3. A detailed scale aimed at creating a deeper knowledge of the historical development of the village and its landscape, as well as the visual relationships between the village and the lake.

Discovering Mondonico

The territorial framework

A reading of the landscape at a territorial scale highlights Mondonico's membership of a territory made

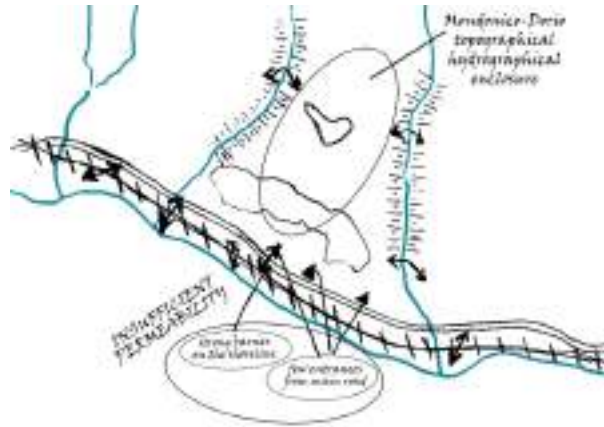


Fig. 2 - The geomorphological structure: the sketch puts in evidence the physical structure of the landscape featuring two valleys excavated by mountain water runoff that create an enclosure in which Mondonico belongs.

up of a complex system of valleys and mountainous reliefs. The steep slopes, coming to a peak on the lake, are the result of glacial modelling and are crossed by mountain streams that descend to the lake, giving rise, here and there, to geomorphological features such as ravines and waterfalls.

The presence of lake water and its temperature control function allows a varied vegetation, including olive groves and vineyards on the shores, oaks and chestnuts of the valleys, beech and larch forests and pastures up to the mountain. This diversity of crops, together with the fish resources and mineral and energy resources, has given rise to an intensive exploitation of the territory thanks to the extensive creation of embankments and terraces.

The settlement system is characterized by villages arranged along the line of infrastructure; their growing expansion has led to the fragmentation of the agricultural landscape and the loss of the original axis lines that characterized the anthropic landscapes until the 50s.

The infrastructure connections consist of lakefront paths that connect the various lake cities: the railway line Milano-Sondrio and the provincial road 72, and,

further inland, the national road SS36, traffic heavy with some sections in tunnels.

These are strong signs in the area, with a long history. The current provincial road 72 was born, in fact, as a military road in 1817 designed by the engineer Carlo Donegani. Its design, audacious for its time, introduced construction techniques and unusual dimensions, upsetting the old road system.

Even the construction of the railway line, between 1873 and 1894⁵, intervened in the area by producing substantial changes: the paths that guaranteed links between the village and the lake, were less visible and the tendency of linear growth was reinforced. The stations are designed as small palaces, of a certain architectural elegance.

The area is also rich in historic buildings and paths of historical and cultural interest.

The relationship between Mondonico and Dorio

At a closer scale, the landscape reveals a great sensitivity due to the combination of the typical elements of the lake with the landscape variety of the prealpine slopes. The elements that feature are, therefore, on one hand the close relationship with the lake, on the other hand the presence of high slopes (with an altimetric trend that goes from about 200 m above sea level up to a peak of m.1.722); they have determined the development of a special relationship between the natural and the anthropic landscape.

Most of the municipality of Dorio and the whole village of Mondonico lies between two valleys excavated by mountain water runoff. They define the boundaries of the villages creating a physical and visual enclosure to the area.

Human activity has mainly developed near to the infrastructure system and in particular, near to the railway station. This represents both an agile connection with

the national rail network and a barrier between the urban area and the lake, influencing landscape and touristic use.

The infrastructure mentioned above provides a horizontal connection of the town of Dorio to the lake system; vertical paths connect, however, the village of Mondonico to the old town of Dorio. These two villages, interspersed with olive tree cultivations, mulberry trees historically used for silk production and small agricultural fields, are connected by three paths historically used for seasonal cattle movements between Mondonico, the village of Dorio on the coast and the grazing lands at altitude.

These connections are now rarely used; their progressive abandonment grows with the development of the connections along the lake (and the development of industry) and causes the loss of legibility of the "vertical" landscape system based on transhumance.

The agricultural landscape of the area is strongly based on the presence of terraces created to exploit the slopes for agricultural purposes stabilizing the land through the creation of dry stone walls.

There are other elements of historical and architectural interest such as the Church of St. George, the church of St. Rocco, the military architecture of Rocco Lorla, some archaeological remains of Celtic origin.

The village of Mondonico

The landscape study at a more detailed scale gives an understanding of further specificities of Mondonico. The village can be reached only along the path known as "Wayfarer path" or by steps that cross Mondonico connecting it with Dorio below and the pastures upstream.

Wayfarer path is the main Mondonico path; it is a well-known road that runs along the eastern shore of Como Lake, mainly used by hikers. There are not de-

tailed studies that explain its origin and its nomenclature; its dating and recognition is difficult and uncertain due to the lack of adequate written historical sources and realia (artefacts of known origin that accompany the infrastructure); however, some scholars attribute it to the Roman and Middle Ages. During this age, the path was called "Via della Riviera" and constituted, along with the Valsassina road and the road of Bitto, an important trade route.

The study of eighteenth-century registers does not show a precise definition of the path, but rather a network of small roads characterized by winding paths that connect the different villages, without a link road over long distances. Thus, the "Via della Riviera", today Wayfarer path, was born from the connection of different paths with equally different denominations (Via Ducale, Via Regia, Strada dei Cavalli, and Via dei Viandanti) and it is not the result of a common will, or of a single plan. Its route across inaccessible slopes has always discouraged investment in its improvement and has led to the opening of new routes along the coast being preferred.

Within Mondonico, the Wayfarer path can be distinguished in two branches, the northern section and the southern section. The northern section presents traditional characteristics and has a floor cobbled with small cutting stones wedged into the soil previously having been prepared and levelled. These characteristics have been lost in the southern part of the path due to the contemporary modifications and the insertion of unsuitable materials.

The stairs of access from the village are built with a similar technique, spacing the pavement with large stones that allow for more stable support points for the climb. Currently the paving of these pathways is highly deteriorated and paving with non-traditional techniques was also made towards the town. In the

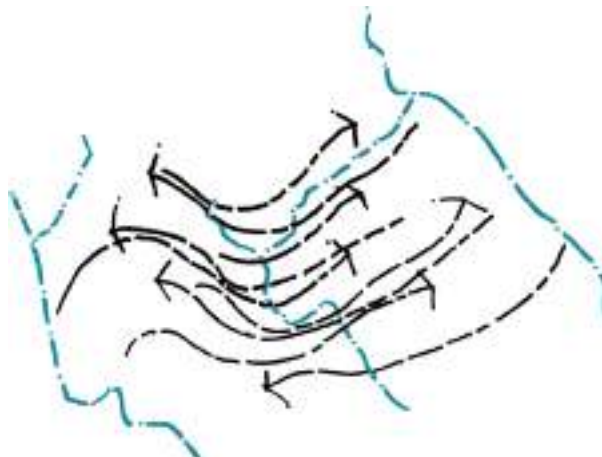


Fig. 3 - The horizontal orientation of the dry-stone terraces: the landscape's design of Dorio and Mondonico is the result of the combination of vertical and horizontal lines: watercourses and their valleys are shown in the vertical lines; terraces are shown, instead, in horizontal lines, which are more evident than the vertical ones.

remaining areas, paving with large stone slabs is present.

The vertical connections, as mentioned, are historical traces of the traditional seasonal movements related to transhumance, so that during the summer the cattle were brought to graze on the high mountains, while in the winter they remained in the village. These paths today are impassable by modern means of transport. The absence of vehicular connections is certainly one of the factors that has contributed to the preservation of the ancient center of Mondonico.

The village consists of rural houses (intended for dwellings, stables and barns) built in bearing masonry using irregular dry stones (granite, serpentine, soapstone) or assembled with lime mortar, with large

Fig. 4 - Vegetation and paving survey: different kinds of trees are present in the village: in particular, we can observe beech and cherry trees that line the trail and a walnut tree in the middle of the central square of the village. Other vegetation (mosses, lichens, chrysanthemums) is now due to abandonment. Mondonico is surrounded by woods to the south; to the north there is a large pasture surrounded by mixed woods (brown, maple, walnut, cherry, oak and lime trees, fir and larch trees). Regarding the paving, it is mainly made up of cobbles (rounded stones of small-medium size which are half-buried and placed close together). The two entrances to the village are dirt roads, often grown over with grass; they become cobbled paving near the square. The trail parts that pass steeper slopes have steps and side walls in stones. Coming from Panico, parts of the dirt roads have recently been replaced by concrete, sadly disrespecting local characteristics. (source: Corbella, 2014)



components used to define the basements, angles and sides of the openings. The architraves, however, are often made up of wooden elements (fir, larch, chestnut coming from the woods nearby the village). The stairs have the same building techniques and the step treads are thin slabs of local sedimentary rocks or cut from blocks of rocks. Usually, a timber balustrade protects the open side of the stairs. Also, the original roofings are characterized using the stone. The stones were collected on site.

The uniform use of materials and typologies (small buildings on two levels with direct access to each level; stairs also made with dry stones stacked and topped with large monolithic stones; presence of small openings facing the lake, gable roofing) have given unity and recognition to the village. These are important features from a landscape point of view; inattentive maintenance procedures (unfortunately already in use) could negatively compromise them (see Paola Branduini's chapter).

The houses are connected to the open landscape by small terraces that were semi-public pathways towards the lake, with small squares and places to rest.

The picture of the village of Mondonico is completed by terraces for agricultural usage. They represent the most prominent and influential landform on the site: following the orographic shape of the land, they give a horizontal movement to the landscape despite the vertical movements of the watercourses that flow from the mountains to the lake.

Even the retaining walls of terraces, as the rest of the settlement, are made using the traditional technique of dry stone walls constructed by split irregular stones (although, also in this case, recent interventions have used concrete for partial reconstructions). These structures are perfectly integrated with their surroundings, respecting the topography and using local materials for their construction. Traditionally planted to cultivate grapes, olives and fruit trees, they are today used as meadows.

Not least the small church of St. George (for details see Pozzi & Silvetti's chapter) represents a visual landmark of the village due to its white plaster and the bell tower; the place also offers a resting place and a Belvedere.

The landscape architecture that we can see today is the result of transformations and not something that occurred over the centuries as evidenced by the historical analysis conducted at a territorial scale (for details see Andrea L'Erario's chapter on the historical analysis). The analysis highlights the development of settlements and transport infrastructures, the construction of terraces and land use over the centuries. We can attribute a precise historical value to each of these elements.

The study of the landscape of Mondonico has been completed with investigations into sensorial percep-

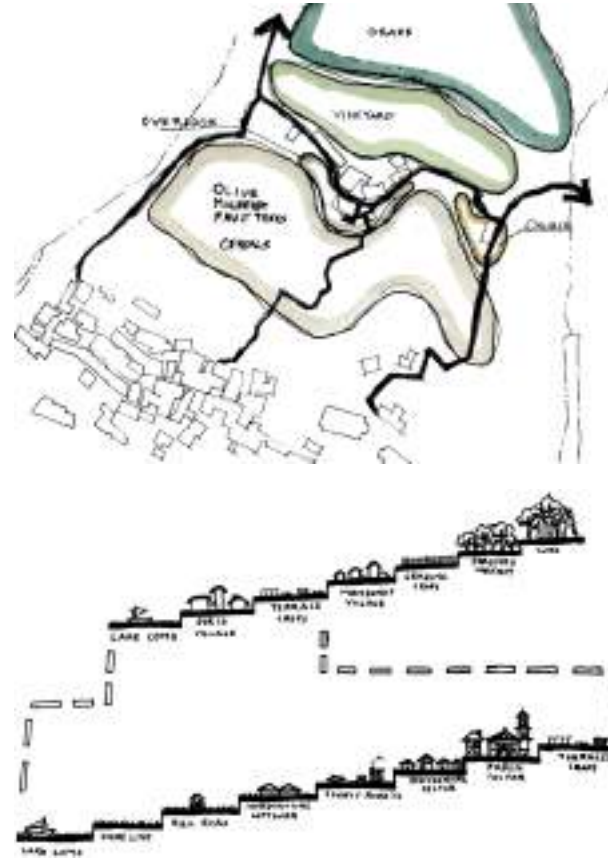


Fig. 5 - The relationship between built up and open spaces: the sketches highlight the vertical distribution of built up spaces and agricultural land connected by three paths historically used for seasonal cattle movements. This hierarchy is a clear feature of the place and comes from the adaptation of human practices to the physical and climatic characteristics of the location.



Fig. 6 - The chromatic value of the site: the sketch emphasizes the chromatic difference between Mondonico (in grey) and Dorio. The chromatic unity of the village comes from the uniform use of the local stone and represents a landscape character to be preserved.

tions and particularly visual ones, emphasized by the presence of natural slopes and terraces overlooking the lake.

An overall view of Mondonico and Dorio, appreciable by navigating the lake, shows all of the structural features of this piece of landscape in a single glance: the valleys that surround the two villages and it underlines the ridge on which they sit, the terraces that form the open space between the two villages, the woods around them. The relationships between the different parts emerge clearly, hinting at the historically existing functional links between them (settlement on the lake, cultivated terraces, settlement on the hillside, woods and pastures) and the clear division between open and built up spaces.

It affects the colour difference between the two villages: the soft colours, as many villages on the lake, of Dorio, the colour of the stone and, therefore, quite camouflaged within the context, in the village of Mondonico.

Moving to the mainland, the major visual connections of the area, both towards Lake Como and the mountains, open up from the lake front and the Wayfarer path; also terraces and paths that run along them are scenic elements from which we can have privileged views of the lake. The dry walls, in particular, can strongly influence the view: looking from the bottom upwards, they are perceived in their entirety, although they do not allow for deep views and give a sense of enclosure; from above, instead, they disappear from view and leave a sense of openness.

Different visual characteristics are appreciated from the paths that vertically connect the two villages: the views gradually open up as you leave the densely built up village to reach the open spaces. Inside the settlement of Dorio, in fact, the density of buildings is an important visual barrier that permit only certain views

like the one that opens up near the new church of St. George. If these paths do not give panoramic views, nevertheless they allow the onlooker to focus on certain formal characteristics that mark the specificities of the two settlements, one characterized by typical elements of contemporary habits and life, the other by a language increasingly tied to the natural environment and the historical origin of the places.

The church of St. George in Mondonico remains an important visual landmark, a focal point for those who climb from Dorio and a Belvedere for those who face the lake from the open space around it. It is also a nodal point for the observation of the village of Mondonico.

Another nodal point for the view of the village is the northern access point along the Wayfarer path; another one is along the access road from Dorio (via Mondonico). The compactness of the settlement, characterized by small buildings and narrow passages in contrast to the wide open spaces that surround it, is clearly perceptible.

Entering the village, the narrow views along the paths open into the small public spaces that also allow for views of the lake and the mountains. We can appreciate the scale relationships between the buildings and the dominance of those that, used in the past for public functions, are larger than the other structures and feature different finishing and a better state of preservation.

Directions for a preservation project

The analysis has revealed a landscape extremely rich from an historical perspective due to the survival of traditional techniques, the right balance between what is man-made and natural and the panoramic value of the area.

Mondonico case study represents a complex 'landscape system'.

Nowadays, its historical "uses" and the relationships between the landscape components are partially lost. Their knowledge and comprehension are fundamental for the coherent and sustainable refunctionalization of this place.

What are the guidelines for a possible re-functionalization project? In the following the author lists some suggestions useful for the proposals of reuse of Mondonico village and its landscape presented in this book⁶:

1. Mondonico is an archive of material culture, techniques and traditions that have been lost elsewhere: the new possible function must take heed of these qualities;
2. It is a piece of rich and varied history: we need to find ways to tell the stories in addition to preserving the tangible heritage;
3. Its landscape system is tied to agricultural practices: guaranteeing continuity in this function (with the introduction of new types of agriculture: community gardens, educational gardens, agro-tourism and so on) could be a great resource;
4. The panoramic values of the views are rich: we must not only preserve them but do so, so that they become a starting point for new ways of enjoying the area;
5. Mondonico and its location are a unique example of a system of horizontal and vertical connections of a structural, functional and visual nature: it is necessary that new projects recuperate any connections that have been lost;
6. The man-made elements (buildings, paths, terraces) have a clear and uniform structure, colour and material language: it is necessary to preserve it by adapting the contemporary language to it

while avoiding effects of camouflage and banalization;

7. Mondonico presents a balanced distribution of open and built-up spaces and a clear hierarchy between the elements: we must preserve these features avoiding additions when unnecessary and in any case respecting the relationships of scale.

A fruitful dialogue between what already exists and what will come is the most appropriate way for a project that, becoming part of the spirit of the site, gives that spirit new life.

Endnotes

(1) Result of the community cooperation project L.O.T.O. - INTERREG III B CADSES, promoted and coordinated by the Region of Lombardy and with the participation of other Italian and foreign regions.

(2) Lionella Scazzosi well explains the theoretical principles of the reading of the landscape as 'landscape system' in the first chapter of this book ("*Landscapes as systems of tangible and intangible relationships. Small theoretical and methodological introduction to read and evaluate Rural Landscape as Heritage*").

(3) For the result of the historical analysis of Mondonico's landscape see Andrea L'Erario's chapter in this book ("*Recognizing the cultural value of Mondonico: a historical analysis for the reading of the landscape*").

(4) The paper "The assessment and documentation of the Mondonico village", by Laura Elisabetta Malighetti in this book, provides some interesting studies related to the visual analysis of the landscape, such as the photographic survey and the building materials analysis.

(5) This is confirmed by the historical analysis described by Andrea L'Erario in his paper. The railway appears only in the New Cadastre map of 1898.

(6) See the chapters by Tiziana Bardi & Andrea L'Erario, Laura Elisabetta Malighetti, Mattia Alberganti et al. in the second part of the book.

References

- AA.VV. (2005). LOTO. *Landscape Opportunities for Territorial Organization. Landscape Management of Territorial Transformations. Good Practices and Existing Knowledge*. Roma: Gangemi Editore
- Benetti, D., Langé, S. (cur.) (1996). *La dimora alpina*. Cooperativa Editoriale "Quaderni Valtellinesi"
- Borgi, A. (1992). *Sentiero del viandante: lungo la riviera orientale del Lario verso Valchiavenna e Valtellina*. Lecco: Azienda promozione turistica del Lecchese
- Comune di Dorio (2012). PGT Piano di Governo del Territorio. Documento di piano. Available at www.comune.dorio.lc.it/index.php/pgt [March 11th, 2018]
- Countryside Agency, Scottish Natural Heritage (2002). *Making sense of place. Landscape Character Assessment. Guidance for England and Scotland*
- English Heritage (2008). *Conservation principles. Policies and guidance for the sustainable management of the historic environment*. published by English Heritage. Available at <http://content.historicengland.org.uk/images-books/publications/conservation-principles-sustainable-management-historic-environment/conservationprinciplespoliciesguidanceapr08web.pdf> [March 11th, 2018]
- Laviscio, R. (2008). *Le relazioni tra bene paesistico e confesto*. In Langé S., Chora. *Il paesaggio riconosciuto*. Milano: Franco Angeli Editore
- Marcarini, A. (2005). *Il sentiero del viandante: a piedi da Abbadia Lariana a Colico lungo il lago di Como*. Sondrio: Lysis
- Provincia di Lecco (2004-2014). Piano Territoriale di Coordinamento Provinciale. Available at www.provincia.lecco.it/territorio-2/ptcp-2
- Virgilio, G. (2012). *Il Sentiero del Viandante: arte, storia e cultura tra lago e montagna*. Lecco: Tipografia commerciale

The 'landscape system' of Dorio/Mondonico short transhumance

Lionella Scazzosi, Raffaella Laviscio, Andrea L'Erario

1. Designation and case study

Mountain landscape system. *Short transhumance.*

Dorio/Mondonico landscape system of short transhumance, Lake Como, Alpes, Italy.

2. Location

The Dorio/Mondonico landscape system is located in the Dorio Municipality, area of Lake Como, in the region of Lombardy, Italy.



Fig. 1 – Location of Dorio/Mondonico landscape system: territorial scale (map source: Google Earth; graphic elaboration: Andrea L'Erario)



Fig. 2 – Location of Dorio/Mondonico landscape system: Provincial scale. The map shows the boundaries of the Municipalities of Lecco Province, which are located in the Alpine area or overlooking Lake Como. The main urban center of the Province (Lecco) and Dorio Municipality are in red. (map source: Google Earth, graphic elaboration: Andrea L'Erario)

3. Short description

The landscape system of short transhumance of Dorio/Mondonico is a “two stations” system of settlements, related to seasonal movement of cattle (mainly cows, and few sheep) from the villages located in front of the lake to the alpine pasture. In this specific case study, there is not a real “low valley”: the settlements are located in front of Lake Como, because of the land geomorphology.

The “low” settlements of the landscape system were Dorio, Mondonico, Torchiedo and Panico. In the Middle Ages, Mondonico was probably the main settlement of the low valley. Century by century, local people moved to the settlement located along the shoreline of Lake Como, which was historically called Solmogno (and then changed name to Dorio). Dorio became the main settlement. Four small alpine settlements (Perdonasco, Sparesè, Vezzèe and Falgaröö) were the spring/summer stations. People brought cattle at “Valliscione” pasture as well, near the four alpine settlements listed before. The “Valliscione” pasture was a Municipal land property for civic use.

Farmers from the low valley settlements used to give custody of cattle to shepherds. Shepherds used milk to make cheese. Some farmers living in Dorio used to board cows on small boats to bring them to the town of Dongo, located on the other side of Lake Como. From Dongo, shepherds used to bring cows to the high pastures of Albano Valley.

The landscape system also related to the agricultural and forest ground use. Agricultural terraces still characterize the area between Dorio and Mondonico. Currently they are not cultivated. A chestnut grove and mixed forest characterize the area above Mondonico settlements.

4. Landscape system structure

The stations of Dorio/Mondonico short transhumance system

Dorio/Mondonico short transhumance system was characterized by two “stations”:

- The first with a permanent use: four settlements (Dorio, Mondonico, Torchiedo and Panico), which are surrounded by agricultural terraces, a chestnut grove and mixed forest. There are two small churches (Dorio and Mondonico).
- The second station was the alpine pasture (seasonal use). Small rural settlements (Perdonasco, Sparesèe, Vezzèe and Falgaröö) and the “Valliscione” pasture characterized the second station. There is a small chapel in Sparesèe village.

Altitude of transhumance stations

- Low settlements (Dorio, Mondonico, Torchiedo and Panico): 220-320 m. a.s.l.
- Alpine settlements and pastures: between 600 m. a.s.l. (Perdonasco) and 750-850 m. a.s.l. (“Valliscione”)

Physical connections (pathways)

A path connects the permanent use station to the alpine pasture station. This path was historically called “The pathway to the mountains” (“El sentèe di moont”). Nowadays, this path is called “Wayfarer path”.

Another path connects Mondonico to the chestnut grove and the mixed forest located on the mountainside behind the village (“Municipal road called ‘of the woods’”, “Strada comunale detta dei boschi”).

5. Productive processes

Before the 60s-70s

- Small cultivations on the terraces: vineyards, vegetable garden (potatoes, beans, etc.), fruit garden; for the sustenance of local people. There were agricultural terraces near each low valley settlement (between Dorio and Mondonico, near Panico and Torchiedo);
- Productive chestnut grove: chestnut harvest in the autumn, wood harvest, and undergrowth cultivation harvest (mushrooms, berries, etc.);
- Mixed forest (low valley): wood harvest and undergrowth cultivation harvest (mushrooms, berries, etc.);
- Pine-wood (high valley): wood harvest;
- Pastures (high valley): for cattle grazing (and therefore for cattle feeding) in warmer seasons.

Today

- No agricultural activities on the terraces;
- Sheep breeding (few animals) only in Mondonico;
- No seasonal movements to the high pastures.

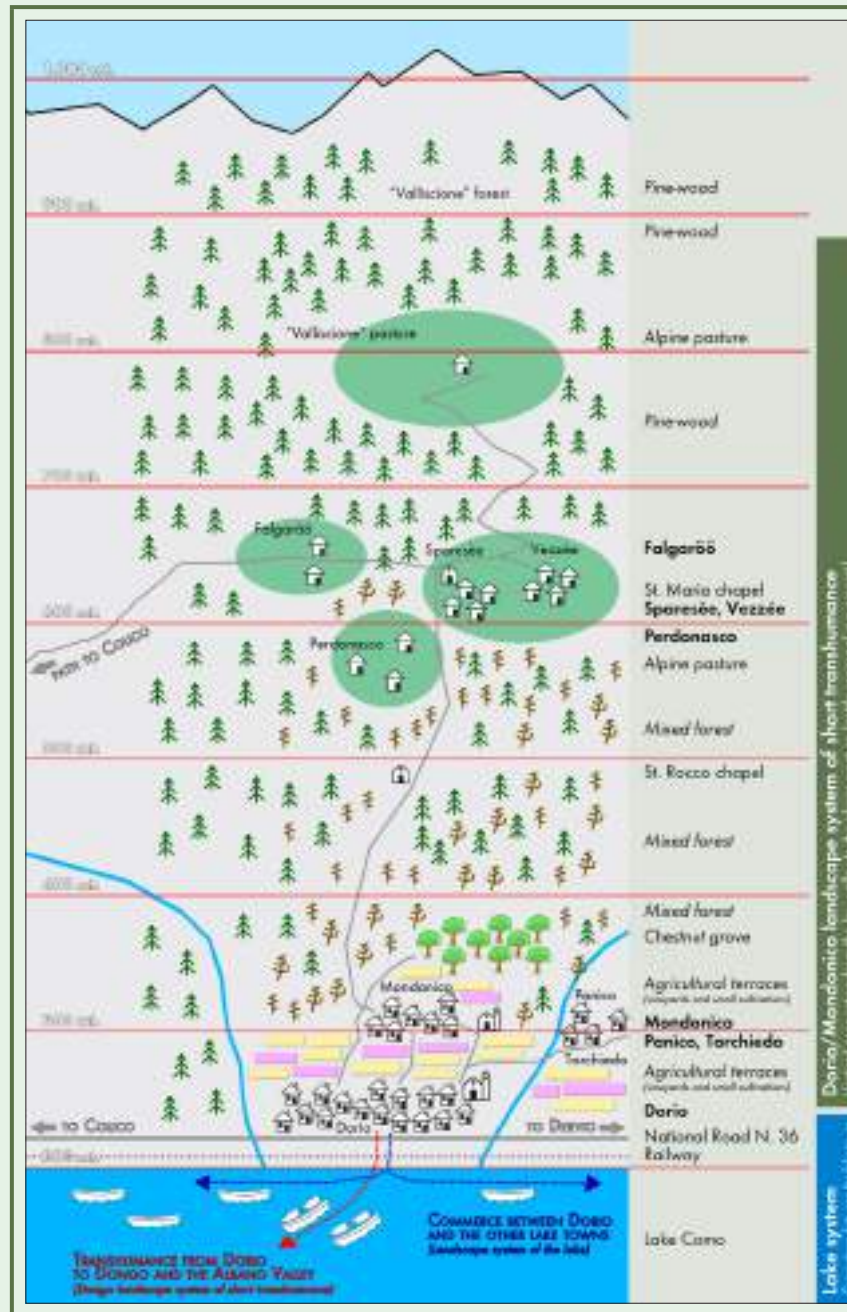


Fig. 3 - Diagram of the historical structure of the Dorio/Mondanico landscape system of short transhumance. The diagram also shows the interaction between the Dorio/Mondanico landscape system and other landscape systems related to Lake Como (graphic elaboration: Andrea L'Erario)

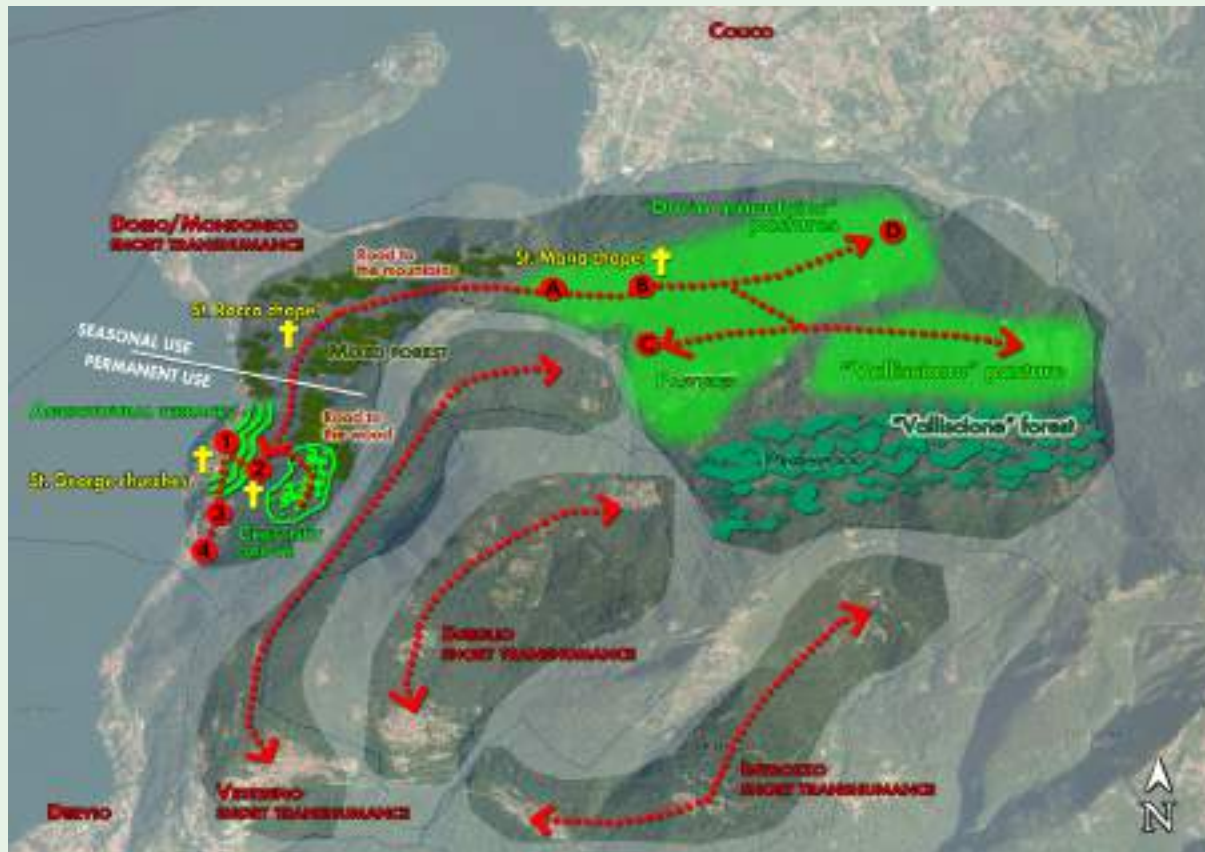


Fig. 4 - Historical structure of Dorio/Mondonico landscape system of short transhumance (settlement legend: Low valley - 1. Dorio, 2. Mondonico, 3. Panico, 4. Torchiedo; High valley - A. Perdonasco, B. Sparesè, C. Vezzée, D. Falgaröö). The map also shows the supposed areas and main connections of the landscape systems of short transhumance adjacent to that of Dorio/Mondonico (map source: Regione Lombardia, graphic elaboration: Andrea L'Erario)



Fig. 5 - Historical structure of Dorio/Mondonico landscape system of short transhumance (map source: Google Maps, graphic elaboration: Andrea L'Erario)

6. Tangible components

Low sector of the landscape system

- Settlements (Dorio, Mondonico, Panico and Torchiedo): buildings with different uses characterized the villages (houses, stables and small and buildings for food transformation and conservation). In Mondonico, the stables were located near the houses. In Dorio village, buildings had also more differentiated uses, according the cadastral list of owners and properties (see Rosina and Silvetti's chapters about the historical research on land property registers). In some cases, stables and houses were in the same building: stables downstairs and houses upstairs. Near the stables, there were manurehills. There are two churches, both dedicated to St. George, one in Dorio and the smallest in Mondonico;
- Agricultural terraces and dry-stone walls: are located between Mondonico and Dorio. In the past there were terraces near Panico and Torchiedo villages as well;
- Chestnut grove: located behind Mondonico, on the mountain side;
- Mixed forest: located all around the villages and along the pathway to the high valley;
- Creeks, fountains and water mills: short watercourses. Water was channelled to be used for human beings, animals, and for the watermills. The watermills are located in the area called "Watermills Valley" ("*Valle dei Mulini*");
- Pathways: there are two main pathways. The first one is called "road to the mountains" and links the low valley to the pastures. The second one is called "road to the wood" and links Mondonico to the chestnut grove. Other small pathways connect Dorio to Mondonico through the agricultural terraces and Dorio to Panico and Torchiedo;
- Places for social practices: several open spaces are recognizable between Mondonico and Dorio buildings. They were used as community open-air areas for meeting and working.

High valley

- Alpine settlements (Perdonasco, Sparesèe, Vezzée, Falgaröö): Sparesèe and Vezzée are two small alpine villages. Small isolated buildings characterized Perdonasco and Falgaröö. The buildings were mainly houses for shepherds. Stables were few and small. In some cases, shepherds and cows lived in the same room. In the buildings, there was only scattered and functional furniture. Pastures and pine-woods surrounded the settlements;
- Chapels (St. Rocco and St. Maria "*Regina dei Monti*" chapels): the first chapel is located along the path "to the mountains" (currently called "*Wayfarer path*"), the second one is located in Sparesèe village;
- Mixed forest and pine-wood: located on the mountain sides. They surround settlements and pathways;
- Pastures ("*Dorio mountains*" pastures and "*Valliscione*" pasture): located around the four alpine settlements and near the area known as "*Valliscione forest*". Nowadays the ancient pastures are covered by pine-woods;
- Pathways: the main path linked the alpine villages and pastures to the low valley ("*Road to the mountains*"). Secondary small paths linked the alpine settlements to each other, and to the pastures.

LOW SECTOR OF THE LANDSCAPE SYSTEM (permanent use)



The "low" settlements in front of the lake



Mondonico village



St. George church



House (on the right), stable and barn (on the left)



Building for food conservation



Terraces and dry-stone walls



Pathway



Fountain

Fig. 6 - Tangible components of Dorio/Mondonico landscape system of short transhumance (low valley) (photos: Andrea L'Erario, Alessia Silveti, Silvia Erba, 2014)

HIGH VALLEY (seasonal use)

The pathway from Mondonico to the pastures (called "Road to the mountains")



The pathway



The pathway



Fountain along the pathway



The pathway



St. Rocco chapel

Alpine pastures ("Dorio mountains" and "Valliscione" pasture)



Alpine settlement of "Dorio mountains". In the foreground there is a fountain. On the left there is a small religious aedicule and there is a fresco on the façade of the central building. The aedicule and the fresco are both dedicated to St. Maria.



A fountain, probably for animals, along the water course of a creek



St. Maria chapel in Sparesè village



Perdonasca settlement with isolated buildings



Pine-wood

Fig. 7 - Tangible components of Dorio/Mondonico landscape system of short transhumance (high valley) (photos: Andrea L'Erario, 2014; Dorio Municipality)

7. Intangible components

In the past there were three religious rites in St. George church in Mondonico, which were related to agricultural and pastoral life:

- 17th January (St. Anthony the Abbot): blessing of animals and stables;
- 24th April: blessing of silkworm eggs;
- April: "Rogazioni" (also called "Letani"). Prayer ceremonies for sowing success. They aimed to ask God to bless water, men's work, fruits and vegetables.

There were also two laical ceremonies:

- March: a ceremony called in the local dialect "Ciamà l'erba";
- 23th April (St. George): rite of the bonfire.

There were no rituals specifically related with transhumance. Transhumance was called, in the local dialect, "monticazione". Mondonico transhumance is described in historic documents of 1398 ("Statuti comunali di Dervio-Corenno").

Three traditional religious rites are still alive:

- The St. George bonfire (Fig. 8);
- The short pilgrimage to St. Maria "Regina dei Monti" chapel in July (Fig. 9).
- The short pilgrimage to St. Rocco chapel in August (Fig. 10);

Local dialect (translation of the names of some landscape tangible components or places)

- High valley house with a small stable: *casina*
- Building for chestnut dehydration: *agrèe* or *grèe*
- Building for milk transformation and cheese conservation: *baite* or *baitel*
- Building for vegetable dehydration: *lobbie*
- Chapels: *gisoo*
- Open-air area for coal merchants: *ajal*
- Alpine pasture: *alp*



Fig. 8 - St. George bonfire (photo: Dorio Municipality)



Fig. 9 - The pilgrimage to St. Maria chapel (photo: Dorio Municipality)



Fig. 10 - The pilgrimage to St. Rocco chapel (photo: Dorio Municipality)

8. Historical changes

Since the 60s, the Dorio Municipality population has decreased (from 487 people in 1961 to 337 to 2011, National Census data). Nowadays, few aged people take care of the landscape.

Few sheep are located in a small stable in Mondonico. There are no cows anymore. Therefore, the transhumance practice is not necessary anymore. This caused the abandonment of the high valley pastures. The ancient pastures are now covered by pine-wood, which grew spontaneously (Fig. 11-12).

Few people have continued to cultivate on the agricultural terraces. Most of them are abandoned. Some cultivations, like the vineyard, have disappeared (Fig 15-16).

The name of a short path from Dorio town to the northern side of the mountain recalls the ancient agricultural practice: it is still called "to the vineyard" ("*Alla vigna*").

Because of its state of neglect, trees cover most of the terraced land. Trees grew spontaneously. Currently it is possible to recognize clearly the landscape architecture of terraces and dry-stone walls in the area between Dorio and Mondonico settlements. In other areas of the low valley, the terraced landscape structure is not easily recognizable. In particular most of terraces around Panico and Torchiedo settlements has disappeared due to urbanization, as well as some terraces around Dorio town along Lake Como shoreline (Fig. 13-14)

The other tangible landscape components of the historical landscape still exist: the pathways, the chapels, the small settlements with their buildings. However, they have lost their ancient use. Some of them have a touristic role (like the Wayfarer path, which is the ancient pathway to the pastures).

All Mondonico buildings are in decay. Nowadays, the ancient buildings for shepherds in the high valley are houses for summer holidays.

Dorio town, which is the main settlement, is still populated throughout the year.

The intangible components of the landscape are mainly lost. Few aged local people know the historic construction techniques of terraces and dry-stone walls, and can pass down the intangible 'landscape memory'.



Fig. 11 - The historical map (18th century) shows the pasture areas, inside the green line (map source: ASCo; graphic elaboration: Andrea L'Erario)



Fig. 12 - The current map shows that the ancient pastures no longer exist. Today forest covers the pasture areas, in the green line (map source: Regione Lombardia; graphic elaboration: Andrea L'Erario)

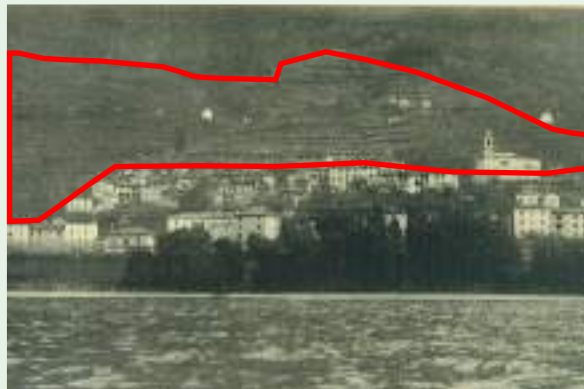


Fig. 13 - The historical photo, taken in the 30s, clearly shows the area with the agricultural terraces, between Dorio and Mondonico (photo: Dorio Municipality)



Fig. 14 - Nowadays, most of the historical agricultural terraces between Dorio and Mondonico are no longer cultivated and are covered by trees (photo: Andrea L'Erario, 2014)



Fig. 15 - The historical photo shows the vineyard cultivation on the agricultural terraces of Mondonico (early 20th century) (photo: Dorio Municipality)



Fig. 16 - Nowadays, the terraced land located between Dorio and Mondonico is no longer cultivated (photo: Andrea L'Erario, 2014)

Sources and references

- Interview to Roberto Pozzi (January 18th, 2018)
- National Census, Istat (Istituto nazionale di statistica, Italian National statistics Institute)
- Pozzi, R. (2014). *L'arco balenò nelle nostre vite: sguardi di futuro*. Lecco: Cattaneo Editore
- Pozzi, R. (2016). *L'arco balenò nelle nostre vite: sguardi e scelte*. Lecco: Cattaneo Editore



Recognizing the cultural value of Mondonico: a historical analysis for the reading of landscape

Andrea L'Erario

The importance of the historical analysis for the reading of landscape

Italian landscapes are the result of centuries of land transformations for agriculture and animal husbandry. For the reason above, landscapes can be read as a sequence of historic layers. Also natural landscapes, in Italy, usually have a high degree of historical complexity. Leonardo Rombai, historian and geographer, wrote:

*"Italy is the most 'built' European country. Italian landscapes were subject to several series of land transformations and adaptations for three millenniums, by different historical civilizations."*¹

The individuation of the historical layers of a landscape permits recognition of the 'landscape memory'. This is important for:

- A correct and complete comprehension of historical and cultural values of the landscape;
- A higher quality of landscape preservation and

enhancement projects.

This is clear for the Mondonico landscape. For all these reasons, it was important to make a historical analysis for a correct reading and comprehension of Mondonico's rural 'landscape system'.

A historical analysis helps to recognize material and immaterial elements of a landscape: paths, buildings, vegetation, etc. This analysis is important to understand how landscape has evolved through centuries due to the economic or social changes.

This kind of analysis is also important to understand that a 'landscape' is not only what it is possible to see with our eyes: the 'landscape' is the result of the relationship between human beings and nature. Quoting the European Landscape Convention:

*"'Landscape' means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors."*²

Mondonico case study has been a good opportunity to test directly 'on site' a possible application method

for a 'preliminary' historical analysis of a rural historical landscape.

The approach of the 'preliminary' historical analysis of the landscape, which is described in this chapter, helps to focus attention on³:

- the territorial scale (i.e. the 'landscape system');
- the intermediate scale (development of urban or rural settlements through the centuries)

For the study of a more detailed scale of the landscape (i.e. historical materials of the 'landscape architecture': wood, stones, etc.) a more in-depth analysis is necessary.

In this case a 'preliminary' historical analysis should be:

- Fast: in the case of little time available, or to focus the attention immediately on the most important landscape features;
- Basic and essential: in the case of a low number of historical available sources.

Despite its simplicity, this kind of historical analysis should always base on historical documents of prime importance for the study of the evolution of a historical landscape (in particular historical maps, such as the historical cadastral maps).

For these reasons, a 'preliminary' historical analysis represents the 'step zero' of a complete historical analysis of a landscape.

This approach could help professional experts or students to focus immediately on few fundamental landscape features, to be sure to achieve all the research objectives avoiding to waste time.

'Preliminary' historical analysis of Mondonico rural landscape: objectives

Mondonico's territorial morphology is characterized

by a complex 'landscape architecture': in the past, men built the system of terraces and dry stone walls on the whole side of the mountain facing Lake Como. Human beings modified the morphology of the Mondonico mountain slope for agriculture and livestock breeding. Terraces, paths and woods supported the need of food and other primary resources for human survival.

The Mondonico rural landscape has been evolving for centuries because of the close relationship between human beings and nature. This important consideration was the basis of this historical analysis.

The 'preliminary' historical analysis is fundamental for the 'landscape reading': the historical rural Mondonico landscape could not be read only from an aesthetic and visual point of view.

Visual and aesthetic analysis help to recognize the most important landscape features at present. On the contrary, these kinds of analysis do not help to recognize the historical values of landscape elements.

The **expected results** of the 'preliminary' historical analysis of the Mondonico landscape deal with the comprehension that:

- a *historical landscape* is composed of a series of '*historic layers*' (one for each historical landscape transformation);
- a historical '*landscape architecture*' is not permanent and has been evolving for centuries;
- the historical landscape elements should be read as '*built heritage*', like rural or urban historic settlements and buildings;
- a historical landscape is a *palimpsest*: human beings built landscape elements in different periods of history;
- Mondonico's landscape is a *historical rural lan-*



Fig. 1 – The comparison of two photos, a historical one and a current one taken in the same place, is important and useful to understand what are the landscape elements of the past we can still recognize at present. The photos represent the survival of Mondonico buildings and terraces had survived from the past without transformations. On the contrary, at present there are not traces of vineyards on terraces. Agriculture is no longer practised on terraces (photos: ACDo, beginning of 20th century [left]; Andrea L’Erario, March 2014 [right]).

andscape which is characterized by a high cultural value;

- Mondonico’s landscape was characterized by a ‘vertical system’ of relationships between Lake Como, Dorio town, Mondonico itself and the mountain (‘short transhumance’ landscape system).

The final results of the ‘preliminary’ historical analysis has been simple and useful to help to make the best proposal for the new use of Mondonico village and for landscape enhancement.

The ‘preliminary’ historical analysis of Mondonico’s rural landscape helps to recognize only the physical permanencies (terraces, paths, buildings, vegetation) and not immaterial ones.

A more in-depth historical analysis is useful to complete the ‘preliminary’ historical analysis. A more in depth analysis concerns, for example, the consultation and reading of several documents in historical archives (i.e. historical property registers, see Rosina and Silvetti’s chapters in this book), or interviews to local people. In particular interviews of the elders are very important to understand which were the immaterial

relationships between landscape features in the past and if the relationships are still alive. All these further activities usually requires a lot of time.

Historical sources for the ‘preliminary’ historical analysis

Historical sources are very important to conduct a ‘preliminary’ historical analysis of a landscape with good results. However, there are two very useful and important kinds of historical sources for a ‘preliminary’ analysis: maps (for Mondonico landscape: historical cadastral maps⁴ and I.G.M.⁵ maps) and historical iconography (photos and postcards).

These historical sources are often easy to read and analyzed. Without them, it is not possible to conduct this analysis:

- *Historical iconography*: photographs and postcards are quick and easy tools to understand the quantity of physical landscape permanencies and the level of their material conservation in the small area of landscape shown in the picture (Fig. 1);

Fig. 2 – Thanks to a correct interpretation of the historical map above (Maria Theresa cadastre, 18th century) it is also possible to understand the historical landscape system of ‘short trashumance’ between Dorio, Mondonico and the mountain. On the top of the side of the mountain above Mondonico, the map shows two further small villages. Around these two villages, there were the mountain pastures. For further information see the chapter “The ‘landscape system’ of Dorio/Mondonico short transhumance”. (map: ASCO, 18th century⁶; graphic elaboration: Andrea L’Erario, 2016).



- *Historical maps*: they are often more difficult to read and understand. The presence of an expert in the reading of historical maps is fundamental to avoid mistakes. The historical cadastral maps are particularly important because they graphically describe and represent some landscape features in a precise year in history (Fig. 2-3). Some historical cadastral maps are very detailed and describe all the main elements of a landscape (i.e. land use, cadastral parcels, roads, rivers, etc.) (see Rosina and Silveti’s chapters in the first part of this book for further details).

Outcomes of the ‘preliminary’ historical analysis of the Mondonico landscape: diachronic and synchronic maps

The ‘preliminary’ historical analysis for the reading of landscape is finalized to draw two types of thematic maps: diachronic and synchronic maps⁷. These thematic maps could be simple and practical drawings. The historical sources available to study Mondonico’s landscape allowed the drawing of some thematic maps to understand how Mondonico and its landscape have evolved through the last three centuries:

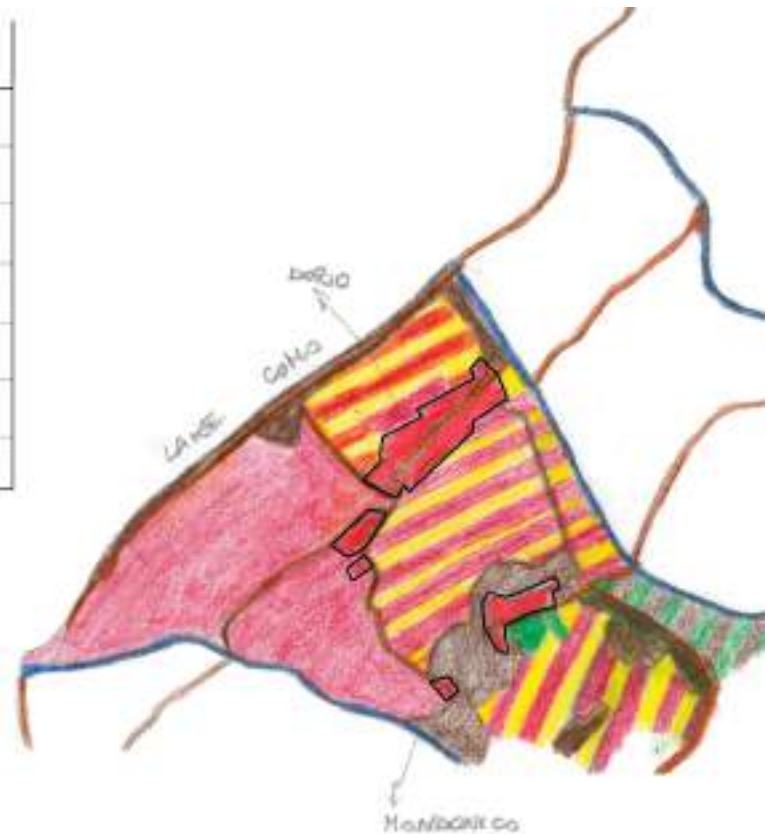


Fig. 3 – A careful analysis of historical maps helps to recognize the ‘landscape architecture’. In this case, it is possible to recognize on the map the ‘landscape architecture’ of the terraces between Dorio and Mondonico thanks to a simple analysis of shapes of historical cadastral lots (map: ASCO, 1860⁸; graphic elaboration: Andrea L’Erario, 2016).

Fig. 4 - Diachronic map of the historical analysis of the Mondonico landscape. The map shows the land use in the 18th century. Different colours represent different cultivations. On the historical cartographic basis⁹ (Maria Theresa cadastre), each cultivation is represented with a specific symbol, which is always recurrent on this kind of map: for this reason we can understand the land use in the early 18th century is clearly distinguishable. The diachronic map below shows the existence of both Dorio and Mondonico during 18th century (dark red areas). Mondonico is the smallest settlement.

symbol on the map	color	landscape element
	blue	rivers
	orange	roads
	green	grass
	brown	woods
	pink	cereals
	yellow	vineyards
	red	buildings

In the XVIII century there were both Dorio and Mondonico



Territorial/Landscape scale: four diachronic maps and a final synchronic map;

Intermediate scale: diachronic sketches representing the settlements of Dorio and Mondonico historical development.

It is important to alternate the reading of historical sources with the numerous landscape inspections, to check the correctness of the considerations made during the analysis.

It is useful to follow this simple rule to draw a good quality **diachronic map**: it is helpful to copy the

landscape elements represented on historical maps (fields, settlements, cultivations, terraces, paths, etc.) with different colors to identify important information which could be 'invisible' to the eye at a first glance.

It is important to draw a diachronic map for each historical threshold for which is available a historical map (for Mondonico landscape: historical cadastral maps: 18th century, years 1860 and 1898; current map year 2014). The choice of little and primary information is very important for the success of the 'preliminary' historical analysis.

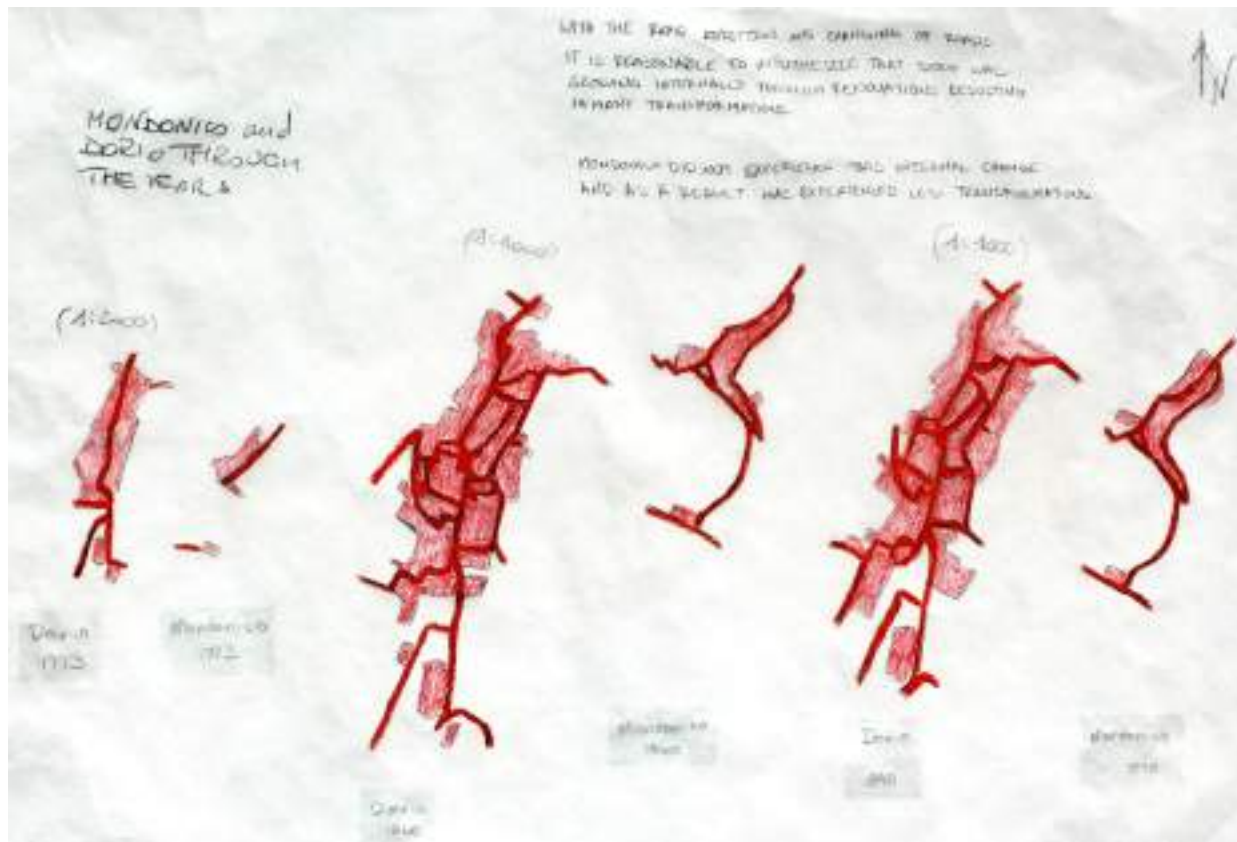


Fig. 5 – Diachronic sketches of the development of Dorio and Mondonico between 18th century and 1898¹⁰. It is evident the small dimensional increase of the two settlements. This is confirmed by the analysis of historic property registers led by Rosina and Silvetti (see their chapters in the first part of this book).

The diachronic maps of the Mondonico landscape (Fig. 4-5) help to understand that:

- Dorio and Mondonico are both historic villages and not only Mondonico. Both Mondonico and Dorio are represented on the 18th century map. Thanks to this, it is possible to understand the Dorio-Mondonico historic relationships and how many connections were in the past between the two settlements: this helps in the analysis of the historical 'landscape system' ('short transhumance' system), not only, understanding connections is to understand development and potential in the

future;

- terraces, paths and the two historical settlements have been the characteristic elements of this rural landscape for centuries.

The **synchronic map** is the final and most important outcome of the 'preliminary' historical analysis. This thematic map could be drawn by "overlapping" all the diachronic maps onto a current map.

For Mondonico case study, the synchronic map helps to think at Mondonico-Dorio rural landscape as a historical 'layered' landscape, which has been evolving for centuries.

Fig. 6 – Synchronic map: the landscape elements could be represented with different graphic signs. The same color is used to represent different landscape elements ‘built’ in the same historical threshold.

	< 18th century	18th cent-1860	1860-1898
Buildings	Red rectangle	Red rectangle	Yellow rectangle
Roads/paths	Red line	Red line	Yellow line
Rivers	Dotted line	Dotted line	Dotted line
Railway			Yellow line with cross-ticks
Terraces		Red dashed line	

Like the diachronic maps, it is useful to follow a few rules to draw a simple and immediate reading synchronic map (Fig. 6):

- *Graphic signs*: it is useful to draw the most important elements of the Mondonico landscape with different graphic signs to distinguish them (a different graphic sign for each landscape element);
- *Colors*: it is important to use the same color to represent different landscape elements ‘built’ during the same historical threshold.

Thanks to the synchronic map, it is possible to understand the antiquity of some landscape elements and so the landscape values, historical and cultural.

The synchronic map of Mondonico’s landscape (Fig. 7) also allows to suppose why Mondonico became a ghost village: Dorio grew in importance during the Nineteenth century thanks to the implementation of the infrastructural system along the shoreline of Lake Como (the railway and the National road, see Laviscio’s chapter, “*Reading the landscape. The experience of Mondonico*”, Rosina and Silveti’s chapters in the first part of this book for further details). In this way, it was easier to provide food and other goods to Dorio’s population. Connections have evolved horizontally along the lake, as opposed to the historical vertical connection system between the lake and Mondonico. Before the railway construction, the commerce of goods between Dorio and the other towns built along the shoreline of Lake Como, like Dervio or Varenna, was easier by boat.

After the railway construction, the ‘vertical’ relationship between Dorio and Mondonico lost in importance and it was gradually completely replaced by the new ‘horizontal connections’ along the shoreline of Lake Como.

Conclusions: positives and limits of the ‘preliminary’ historical analysis

Despite the little time available and the limited number of historical sources (maps and photos) for the ‘preliminary’ historical analysis of the Mondonico landscape, all objectives have been achieved with good results. This kind of analysis achieves a basic and fundamental level of knowledge about the evolution of landscape to define a project of enhancement of a historical rural landscape or a historical settlement or to be able to conduct further research.

This is evident for the proposals of reuse of Mondonico village and of enhancement of its landscape: it has been possible to understand the values of the neglected village and so to think to proposals for a sustainable reuse also thanks to this kind of historical analysis. The proposals of reuse of Mondonico village are presented in the second part of this book (see the chapters by Tiziana Bardi & Andrea L’Erario, Laura Malighetti and Mattia Alberganti).

The ‘preliminary’ historical analysis helped to understand that Mondonico ‘landscape architecture’ is not permanent and fixed in the history: it has been evolving for centuries thanks to human work and it can be read as a series of ‘historical layers’.

Furthermore, the ‘preliminary’ historical analysis helped to understand the historical and cultural values of Mondonico’s landscape and that it should be protected and enhanced not to lose the historical ‘landscape architecture’ of terraces and dry walls in



Fig. 7 – Synchronic map: Mondonico ‘landscape palimpsest’. The map shows the evolution of terraces and settlements through the centuries and the addition of the railway along the shoreline of Lake Como.

a near future. Paola Branduini’s paper in the book provides some practical tools and criteria for the sustainable conservation of Mondonico’s ‘landscape architecture’.

On the other hand, the ‘preliminary’ historical analysis does not consider:

the analysis of historical property registers related to historical cadastral maps;

the analysis of immaterial aspects of landscape (traditions, recipes, immaterial relationships between landscape features, etc.) and the social perception of landscape by local people.

This historical analysis represents a preparatory step (‘step zero’) to the following ones to conduct a complete historical analysis of the Mondonico rural lan-

dscape. The ‘preliminary’ historical analysis can help in finding a strong platform for the future enhancement of Mondonico and its landscape.

Elisabetta Rosina and Alessia Silveti have conducted further historical research and more in-depth analysis on the Mondonico rural landscape. They analyzed the historical cadastral property registers kept in the National historical archive of Como. Their paper in this book describes in-depth the historical land use of Mondonico terraces and the land ownership system. Rosina and Silveti’s research represents the second step of the historical research (prepared, most of the time at the Historical National Archive of Como), after the ‘step zero’ of the ‘preliminary’ analysis.

Endnotes

(1) Translation by the author. Italian text: "L'Italia è il paese più costruito d'Europa Esso è stato sottoposto, nel corso di circa tre millenni, a un'opera colossale di plasmazione e di adattamento che ha coinvolto più civiltà". (Rombai, 2002: 38)

(2) European Landscape Convention, Article 1, Definitions.

(3) See Raffaella Laviscio's paper in this book ("*Reading the landscape. The experience of Mondonico*")

(4) Mondonico and its landscape are described in three historic cadastres: Maria Theresa cadastre (Catasto Teresiano, 18th century), Lombardo-Veneto cadastre (year 1860) and New cadastre (Nuovo Catasto Terreni, year 1898). All maps are at ASCO, Como.

(5) I.G.M., Istituto Geografico Militare (Military Geographical Institute), Florence. The author refers to I.G.M. maps drawn at the end of Nineteenth century.

(6) Shelf-mark: ASCO, Fondo UTE, Catasto Teresiano, serie mappe, Dorio, cart. 336, foglio insieme (172.-1760).

(7) A diachronic map is a thematic map for the description and the graphic representation of urban/rural landscape physical features and 'landscape architecture' in a precise moment in history; a synchronic map is a thematic map for the description and the graphic representation of all landscape permanencies. The cartographic basis for a synchronic map is always a current one.

(8) Shelf-mark: ASCO, Fondo UTE, Catasto Cessato o Lombardo Veneto, serie mappe, Dorio, cart. 155, foglio rettangolo n. 20 (year 1860).

(9) Shelf-mark: ASCO, Fondo UTE, Catasto Teresiano, serie mappe, Dorio, cart. 336, foglio rettangolo n. 5 (year 172.).

(10) Shelf-marks: ASCO, Fondo UTE, Catasto Teresiano, serie mappe, Dorio, cart. 336, foglio rettangolo n. 5 (year 172.); ASCO, Fondo UTE, Catasto Cessato o Lombardo Veneto, serie mappe, Dorio, cart. 155, foglio rettangolo n. 20 (year 1860); ASCO, Fondo UTE, Catasto Cessato-Aggiornamenti, serie mappe, Dorio, cart. 155, foglio rettangolo n. 20 (year 1898).

Bibliographic sources

- Bortolotti, L. (2002). *Storia, città, territorio* (3. ed.). Milano: Franco Angeli Editore

- Branduini, P., Scazzosi, L. (2014). *Paesaggio e fabbricati rurali. Suggestioni per la progettazione e la valutazione paesaggistica*. Santarcangelo di Romagna: Maggioli Editore
- Cocioli Mastroviti, A. (2003). *Oltre il giardino: fonti e cartografia per la lettura del paesaggio (secoli XVI-XIX)*. In Guerci, G., Pelissetti, L., Scazzosi, L. (eds.), *Oltre il giardino. Le architetture vegetali e il paesaggio*. Florence: Leo S. Olschki
- Council of Europe (2000). *European Landscape Convention*. Florence, Italy
- Rombai, L. (2002). *Geografia storica dell'Italia: ambienti, territori, paesaggi*. Florence: Le Monnier
- Scazzosi, L. (ed.) (2002). *Reading the landscape. International comparisons / Leggere il paesaggio. Confronti internazionali*. Rome: Gangemi Editore
- Scazzosi, L., Zerbi, M.C. (eds.) (2005). *Paesaggi straordinari e paesaggi ordinari. Approcci della geografia e dell'architettura*. Milan: Guerini Editore
- Sereni, E. (1960). *Storia del paesaggio agrario italiano*. Bari: Laterza Editore
- Sereno, P. (1987). *L'archeologia del paesaggio agrario: una nuova frontiera di ricerca*. In M. Boriani & L. Scazzosi (cur.), *Natura e architettura. La conservazione del patrimonio paesistico* (pp. 52-72). Milan: Città studi
- Zangheri, R. (1980). *Catasti e storia della proprietà terriera*. Turin: Einaudi Editore

Historical sources (historic maps)

- ASCO Archivio di Stato di Como (National historic archive of Como);
- I.G.M. Istituto Geografico Militare (Military Geographical Institute), Florence, Italy.
- Historic iconography:
- ACDo Archivio Comune di Dorio (Historic archive of the Municipality of Dorio).

THE SETTLEMENT



Identification of the ancient centres of Mondonico and Dorio since the 18th century through comparison of historic property registers

Elisabetta Rosina

The authors analyzed historic documentation consisting in maps of the Dorio area and a list of property owners in the historic archives of Como. This analysis and comparison deal primarily with maps dating back to the 18th century: “*Seconda stazione*”¹, “18 marzo 1873” and “*aggiornamenti 1898*”, the version updated in 1889². In addition, a bibliography of development on Lecco Lake shores and a historical documentation, regarding the history of the churches of Dorio and Mondonico, completed the research.

The information contained in the historic property registers allowed the researchers to identify the extension of the ancient historic centres and the shape of the urban blocks, and made it possible to understand the development and transformation of the ancient town centres, in particular for the town of Dorio.

The authors compared the maps, considering the differences in the accuracy and graphic representation among the maps, mainly due to different map purposes, and the availability of tools for survey, scale, and

graphic codes.

The recent air photogrammetry permitted recognition of the perimeter and provided location of actual buildings by localizing them in the older maps³.

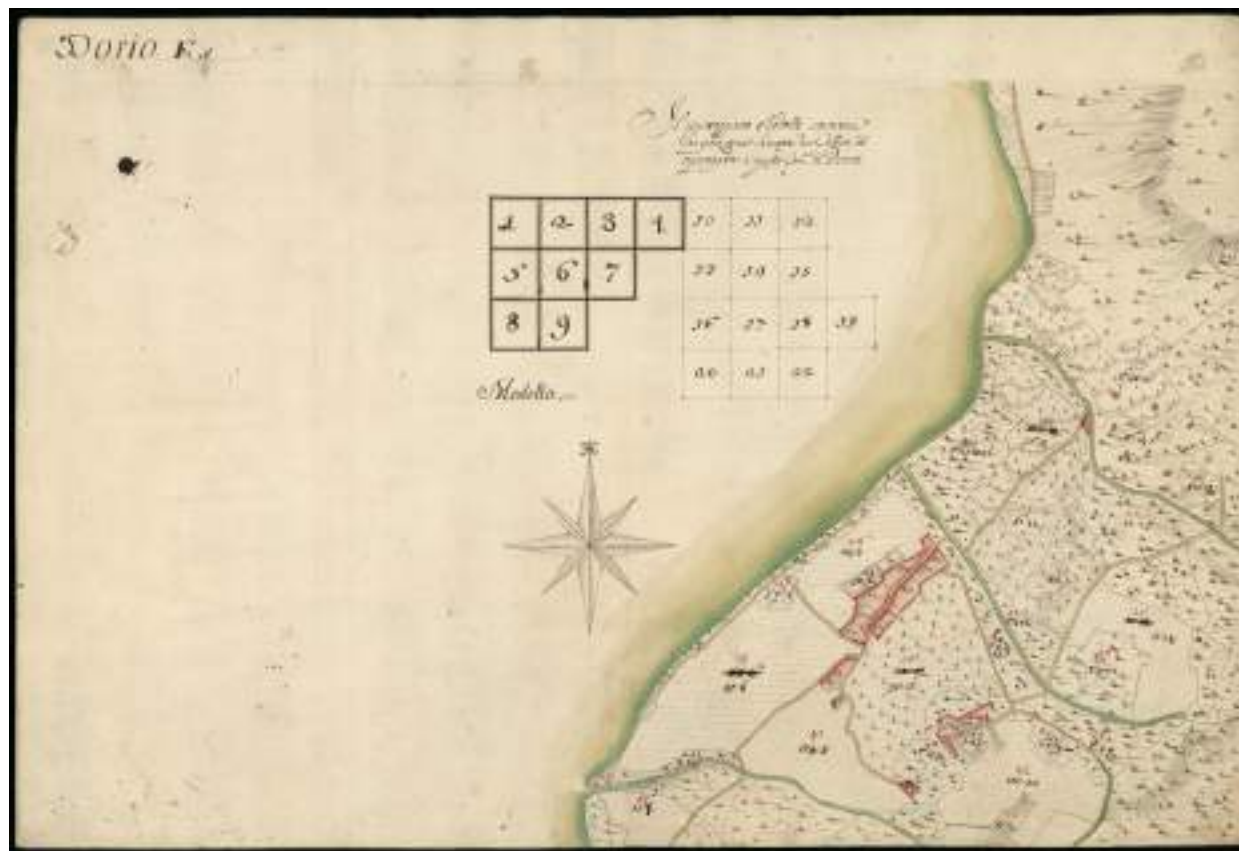
Mondonico and Dorio villages are particularly suitable for the micro-analysis method because their ancient centres still maintain many of their historic features, while the presence of materials even permits detection of the most ancient structures.

So far, the ongoing research has not taken into consideration any notarial deeds other than purchase and sale of buildings, nevertheless it is possible to notice the permanence of the same families (or at least of the same surnames).

Mondonico

The authors compared Page 5 of ASCO¹ (Fig. 1), the map of the following property register², the Lombardo Veneto map³ (property sale register from 1860 to

Fig. 1 – Maria Theresa cadastral map, 18th century.
(source: ASCO¹)



1903) and the 1898 updated document⁴ (Fig. 2). The centre of Mondonico is easily recognizable in the 18th century property register, given that the residential area seems to be almost like it is today.

Nevertheless, the low level of accuracy of the block and building shapes and of the annexed fields do not allow a precise evaluation of all the transformations occurring after the 18th century. Despite the low level of accuracy, the first remarkable differences are in the path that connects the village to the lakeside and Dorio.

In the 18th century map, the main path from Dorio to

Mondonico is "Via ai Boschi" (the name at present), which in the 19th century map was named "Strada Comunale da Dorio ai monti". The entrance to the village is from the East, on the opposite side of the entry today. There are no connections between the village and the Church of Saint George.

In the 19th century map, the Church of Saint George is connected to Dorio by what is now the main path from Dorio, and the so-called "Strada comunale da Dorio a Panico".

In neither of the two maps there is mention or sign of the present Wayfarer Path ("Sentiero del Viandante").



Fig. 2 - Lombardo Veneto cadastral map, year 1898. (source: ASCO⁴)

Another clue that the path did not exist in the past (see the document dated 1746 and referring to the arrival of the bishop Giuseppe Pozzobonelli in Dorio in the third part of this book "*Historical documentation*").

The village of Mondonico is settled along the only street that connects the village to Dorio from the East, and three cadastral maps (873, 874, 875) represent its plant, where the buildings do not have any dif-

ference in graphic symbols for courtyards, gardens, herbal gardens and buildings. The extension of the cadastral maps, corresponding to the same urban blocks in the 19th century map, reported in Table 1.

In the 18th century map, it results a strong reduction in the areas next to the cadastral maps, which could be due to many factors.

In the 19th century map, many properties are highly

Table 1 - Comparison of the extension of buildings in the cadastral maps of Mondonico, 18th and 19th centuries.

Property extension (18th century map)	Map number (18th century)	Property extension (19th century map)	Map number (19th century)
344.25	873	196.35	457, 458, 459, 461, 463, 467, 468, 3223
374.96	874	202.89	441, 1771, 440, 450, 451, 452, 453, 454, 455
122.71	875	71.99	443, 444, 447

fragmented, there are many owners, and they are different even in every block of the village. The average size of the houses is about 20 sq.m. each, whilst in the 18th century map a bigger variation in their size can be seen, ranging from about 21 to 113 sq.m.

In the 18th century map, the use is primarily residential. Only in cadastral map 875, is the owner shown as the parish church of Sant'Agata Tremenico, and the property includes a part of the "massaro" house (farmhouse).

In the 19th century map, on the other hand, the uses are all recorded as stables and barns, apart from the farmhouse (the only building with this specific use) in cadastral map 461; the owner is Bettega Sacerdote Pietro, Antonio, Teodoro, Sacerdote Giovanni and Sacerdote Francesco brothers of *quondam* Ambrogio, with an extension of 4 *pertiche* (about 26.18 sq.m). The economic value is 1 or 2 Austrian liras, higher than the value of other buildings of the same size: the income is higher because of a more profitable use and/or a higher volume (although the plan shows the

same size, this house was probably taller than other similar ones).

There are some changes in the cadastral map updated in 1898: the plan of Saint George church shows a rectangular ledge along the northern side: this is the ossuary (see the next chapter regarding the churches in Mondonico and Dorio). This can be recognized in an early 20th century postcard (an undated postcard) as well.

In the 1898 updated map, there are two new buildings (maps 972 and 466) with a similar size to the others. Another variation is present in map 436, in which the shape of a small building has a sign that shows a connection with the land beside it: both, the building and the land, were property of the same owner. The building was probably a storage shed for agricultural use. Similarly, a shed for farm tools, or a small warehouse, is located in map 3233, replacing the previous larger stable and barn. On the contrary, the new building in map 473 is wider than the previous one.

Ongoing bibliographic research has not yet supplied any further documents regarding deep changes to the ancient centre of Mondonico since the end of the 19th century.

Dorio

The comparison of the 18th and 19th century land registers document the evolution of Dorio's historic centre, Page 5, ASCO¹, the map of the estate register², the Lombardo Veneto map³ (property sale register from 1860 to 1903) and the 1898 updated document⁴.

In all the maps, the development of the centre is along the longitudinal axis (the present "Via Cesare Battisti") that crosses the centre in a North-South direction. The

"*Contrada di mezzo*" street maintains the same direction and extension as that in the 19th century map, excluding the new crossroads. In map 869, indeed, it was inside an urban block, in the 18th century land register, and it was the property of ten owners. Its use was residential. In the 1898 updated document, there is also a small blue rectangle in that area, probably representing a water supply (a wash tank or a fountain). The irregular shape of the crossroads is probably due to the need of opening new entrances for the buildings on the sides of that rectangle (maps 94, 95 and 88, 19th century map). The use is still recorded as farmhouses in the 19th century, as it was in the 18th century.

In the 19th century maps, at street level, the pattern of the urban fabric shows a number of perpendicular alleys to the main street ("*Contrada di mezzo*"). The drawn alleys show that paths were not outside, but ran through the buildings. Moreover, the drawn alleys have signs indicating large steps and a steep slope. On the contrary, the "*Contrada di mezzo*" drawing does not show steps; the street was probably a road open to vehicles. Another interesting result comes out from the comparison of the 18th and 19th century maps: a new road. Upstream from the village, it runs in the parallel direction to "*Contrada di mezzo*", with a similar width, and is almost flat, it follows the natural curves of the land.

In the 18th century map, upstream from the central street, the urban blocks maintain a compact shape, on the other side, in 18th and 19th century maps, the downstream blocks have ragged edges. Indeed, there are many empty spots along the exterior perimeter (for example: cadastral maps 74 and 103, 19th century): the empty spots represent courtyards or gardens. These cadastral maps show the half of what represented in the 18th century maps. For example, in cadastral

map 868 (18th century), the surface area of the block is about 757 sq.m.; while in the 19th century map, the surface of the total built area is 386 sq.m.

Comparison of cadastral map 871 (18th century) with the 19th century maps (it corresponds to maps 72, 71, 70, 69, 68, 66) also shows a decrease in the extension of the buildings and fragmentation of the estates. In the 19th century map, the upstream eastern block contains recent small buildings (not present in the previous maps), used as stables and barns.

The new Church of Saint George was built in 1858 on the same site of the previous church (even if now it is dedicated to the Holy Virgin), separate from the historic town centre. It has a large parvis, the only large open space in the village.

A new path, connecting Dorio and Mondonico, appears in the 19th century map: it is the "*Strada Comunale da Dorio a Mondonico*", from the southeastern edge of Dorio to the Church of Saint George in Mondonico. It runs through the village of Mondonico, and represents the best connection between the small village and the old church.

In the map, there is also a new road, the "*Strada Comunale da Dorio alla Nazionale*", connecting the village with the new two-lane road, open to vehicles, along the lakeside, connecting Lecco and Colico.

At last, the path connecting Dorio's church with the cemetery is named "*Strada Comunale da Dorio a Torchiedo*" in the 19th century map, and it also connects with the hamlet of Torchiedo.

The development of Dorio village at the end of 19th century: final observations

Comparison of the property registers shows that Dorio village substantially did not change between the end of 18th and the first half of the 19th century, even

Table 2 - Comparison of the extension of buildings in the cadastral maps of Dorio, 18th and 19th centuries.

Property extension in the 18th century map	Map number (18th century)	Property extension in the 19th century map	Map number (19th century)
108	863	176.72	55, 56, 47, 58
243	864	268.35	43, 44, 46, 47, 49, 50, 51, 53, 54
560.25	865	543.24	21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 35, 37, 39, 40, 3028
87.75	866	111.27	10, 14, 16, 17, 18, 19, 20
299.97	867	255.25	11, 2, 8, 7, 5, 12, 13, 15, 5227, 6
756.74	868	386.16	105, 104, 81, 74, 103, 102
531.76	869	523,6	100, 101, 99, 98, 95, 96, 94, 93, 92, 88, 91, 90, 89, 87, 86, 97
374.96	870	379.61	83, 85, 84, 76, 77, 78, 79, 75, 73
308.96	871	248.71	72, 71, 70, 69, 68, 66

though the population increased fourfold (134 people lived in Dorio in 1790, 369 people in 1853). Most of the new inhabitants probably built their houses in the part of the land where the risk of landslide was lower, in the hamlets of Torchiedo and Panico.

Graphic representation of Dorio village consists of only nine cadastral maps in the 18th century (n 863-871), showing properties belonging to many different owners (for example, the property in map 868 belongs to 17 owners). The use described as "part of a house for owner's use" is the same for all the buildings (despite of map 868, where the use is "part of a house, stable and herbal garden", owner Dell'era Antonio quodam Eugenio, extention2 2/4 tavole).

On the contrary, in the 19th century cadastral maps, there is much more numbering (there are 85 partitions) and many more owners: one owner may own one or two rooms. The high number of owners does not mean that every owner was living in each room, as it was a family house; the use of the room was probably not continuously residential, or the rooms were not continuously used every day of the year, it depended on

the cycles of agricultural activities and livestock breeding. Dorio had its expansion at the end of the 19th century, along the national road, on both sides, and mainly on the upstream side (9 upstream buildings, 1 on the lakeside), as documented in the updated map of 1898. The updated map is very interesting, and it shows many variations in the last few years before the new century.

The main change is the railway station and railway project (built in 1903): the shape of the station is penciled in on the 1898 map. In this map, the station project provided annexed buildings and space (cadastral maps 121, 122, 130, 131, 3229) as it would be built 5 years later (apart from the southwestern building). Moreover, in the 1903 updated map, the cadastral map 133 is divided into maps 133 and 269, and there were two more buildings in addition to the already existing one in map 132. The inauguration of the railway between Colico and Bellano took place in 1894, and the tunnels through the mountains slopes beside the lake were completed within a few years. In this way, the trains could safely travel between the two



Fig. 3 - The project of the railway, built in 1903. (Municipality Archive of Dorio)



locations, but Dorio station did not yet exist: the station opened a few years later, between 1899 and 1903. Another important event gave its contribution to the development of Dorio: the construction of the Bettega spinning mill. In the map updated at the end of 19th century the factory already exists: the headquarters and the spinning wheels are in maps 235, 236, 238, 241, 242, outside the village, beyond the cemetery,



Fig. 4 [left] - The project of the railway, built in 1903. (Municipality Archive of Dorio)

Fig. 5 [right, top] - Overview of Dorio (1927): on the left the road "Strada Comunale da Dorio alla Nazionale" connecting the village with the new two-lane road, open to vehicles, along the lakeside; it connected Lecco and Colico and it was built in the 19th century. On the right the railway connecting Dorio to Milan (south direction) and Sondrio (north direction). (source: picclick.it/Cartolina-Saluti-Da-Dorio-Lago-Di-Como-Viaggiata-321656524331.html#&gid=1&pid=1)



Fig. 6 [right, bottom] - The Dorio's railway station in 1920. (source: picclick.it/Cartolina-Dorio-Como-La-Stazione-260908919269.html)

Fig. 7 - Detail of the factory
(source: ASCO⁴)



Fig. 8 - The factory's
view from the lake.
(source: picclick.it/Dorio-Lago-di-Como-Panorama-S-L-261107818309.html)



Fig. 9 - Detail of the map
showing the new cemetery
(source: ASCO³)



on the lakeside. Because the railway station did not yet exist, a red pencil line towards Lecco shows the access road in maps 131, 148, 151, 153.

The spinning mill was an important resource of work for the local people; but the commercial practice declaration, dated to 1903, (see the document listed as n 20) states that a large part of its employees were women (33 out of 39), so most men did not work there.

Nevertheless, the opening of the factory in 1895 increased job opportunities for the local community: the 1897 census recorded that 85 families were living in the municipality, and therefore one or more members of almost one third of the local families worked at the factory.

The factory area also changed, although the number of workers did not register a big increase in the first thirty years of 20th century (list of workers in 1939, listed as document n 24): in 1903, there were 33 registered workers, while in 1939 there were 36. The restoration of the factory was therefore probably necessary to modernize the production plant and warehouses and for an optimization of the spaces and facilities. The factory was basically expanded to the north side (cadastral map 1184) and small new buildings appear in map 1240 (a pencil drawing shows the new warehouses) and towards the south side (map 242).

The railway cut through the industrial site along the north-south axis, and so there was the need of a new entrance to the area. The new access road was a southward extension of the old consortium road "al Molino". To the south, the extension connected the "Stelvio" national road to the factory by an underpass, permitting vehicles to transit under the railway line; to the north, a pedestrian underpass connected the main road with the factory street.

Cadastral map 1240 also shows a new direct connec-

tion to the lake from the modified old consortium road "al Molino".

The building shown on map 238 was demolished to clear up the land for the new railway line; furthermore, the same owner unified cadastral maps 235 and 236 into a single map (numbered 236 since that date).

The lakeside maps also registered many changes due to reinforcement of the lakeshore (with additional pebbles and soil, to prevent any overflow of the lake towards the railway tracks, in addition to the higher level of the railway if compared to the shore level).

Another important construction project in those years was enlargement of the cemetery and adjacent areas, already shown in red ink on cadastral maps 209, 1761, 368 in the 19th century map.

The 1898 updated map also shows a large residential expansion of Dorio to the upstream direction of the "Stelvio" road: from the railway station to cadastral map 205, the land remained without constructions, but from map 630 to the end of the village, 18 new buildings were added. Among these, the map includes new municipality headquarters (map 203), which were already penciled on the 19th century map, in addition to three of the 18 buildings added later.

In these years, Dorio had its greatest growth in the number of residences, and the most common type of new buildings was the three-floor family house, built next to the new road, with a small garden in the back (usually a holiday house for families coming from nearby cities, such as Milan). Some buildings were also built along "Via del crotto" on cadastral maps 627, 231, 225, 198, 108. All these maps are the result of a fragmentation of the map 108 (19th century), with the exclusion of map 627.

On the other side of the road, towards the lake, only

one building was built in addition to the station and the factory, probably because of the steep slope of the shore, which discouraged any further development of the village in this direction.

Some variation also took place in the town's old centre. Small and isolated buildings rose at the edge of the village (cadastral maps 1150, 4068, 964); some empty urban areas in the dense urban fabric (map 50) were filled in, and the enlargement of the building can be noticed on map 73. Moreover, we can notice further fragmentation in land ownership (map 403 and 327), small buildings construction, new pedestrian paths crossing the fields, a new urban fabric from the east side to the west side (the new consortium road of Perlo) of the town, and the change of the Parish Youth centre (map 62).

Endnotes

(1) Shelf-mark: ASCO, Fondo UTE, Catasto Teresiano, serie mappe, Dorio, cart. 336, foglio rettangolo n. 5 (172.)

(2) Shelf-mark: ASCO, Fondo UTE, Catasto Teresiano, serie mappe, Dorio, cart. 336, foglio dei Beni di II Stazione (172.-1760)

(3) Shelf-mark: ASCO, Fondo UTE, Catasto Cessato o Lombardo Veneto, serie mappe, Dorio, cart. 155, foglio rettangolo n. 20 (year 1860)

(4) Shelf-mark: ASCO, Fondo UTE, Catasto Cessato-Aggiornamenti, serie mappe, Dorio, cart. 155, foglio rettangolo n. 20 (year 1898)

Comparison between the owners of Dorio and Mondonico urban blocks owners listed in the historic property registers

Alessia Silveti

Introduction

The following text is the comparison between the extension and ownership of the buildings in Dorio and Mondonico, according to the listed property units as listed in the cadastral maps of 18th and 19th centuries.

The extension is reported with the historic measurement systems (different between the 18th and 19th centuries). In the caption the author indicates the approximate values in the present metric system. The aim of the comparison is to study the change of listing requirements (due to the change of the political regime and the advancement in effectiveness of the administrative techniques and legal framework) and the subdivision of properties in the 19th century. Moreover, the cadastral records list also the use typology of buildings, and many observations come also from the few change of the uses of both the productive buildings and the residential ones. The typologies listed in 19th century show also another important information for the historic study of the city centers: the ownership remaining on the land unity after the demolition of the building (as an example: see Table 4, land unit 50). These areas constituted the few urban voids in a strictly interlocked urban texture, and have been replaced in the further with recent buildings and new functions.

The comparison has been particularly useful also for determining the families with the highest number of properties and largest properties. Together with the use of the land, the ownership is indirectly of the relationships between families and the kind of their wor-

king relationship (if existing). Therefore, the comparison could indicate further direction of documentation and archive research, on the basis of the name of the most influential families and their attorneys.

Comparison of the cadastral maps of Dorio

Cadastral maps 55, 56, 57 and 58 in the 19th century map (Table 2) substitute the cadastral map 863 of the 18th century map (Table 1). The subaltern 1, 2 and 3 of 18th century map does not have any subaltern in the 19th century map. In the next updated map (dating back to 1898)

The subaltern are independent maps, and there is the addition of a new one (the courtyard in map 55). The surface of the urban block increases (108 sq. m in the 18th century, 177 sq. m in 19th map).

Cadastral maps 43, 44, 46, 47, 49, 50, 51, 53 and 54 of the 19th map (Table 4) substitute map 864 of the 18th century (Table 3).

Maps 43, 44, 46 and 47 in the 19th century (and further update map) substitute subalterns 1, 2, 3, 4, 5 and 6 of the 18th century map. In addition, in the 19th century additional five cadastral maps (49, 50, 51, 53 and 54) resulted in the same block.

The surface of the urban block is 243 sq. m in the 18th century map, and it increases up to 268 sq. m in the 19th century map.

The cadastral maps 21-33, 35, 37, 39 and 40 of the 19th century (Table 6) substitute map 865 of the 18th century (Table 5). In the 18th century map are listed 13 subalterns in this block. In the 19th century only the maps 21, 30 and 25 have two or three subalterns. The surface of the urban block decreases (560 sq.m in 18th century map, 543 sq.m in 19th century map).

The cadastral map 866 of the 18th map has four subaltern (Table 7); in the 19th century map, the urban block is divided into maps 10, 14, 16-20, without subaltern maps (Table 8).

In the 19th century map, the cadastral maps 10, 14, 16

and 17 substitute the subalterns in the 18th map. Moreover, in the 19th century map there is the addition of the new maps 18, 19 and 20, therefore the surface of the urban block increases (from 87 sq. m to 113 sq. m).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (tavole)
863	1	Andreani Carl'Antonio qd. Pietro Antonio	Farmhouse	2 ³ / ₄
	2	Regalino Carl'Antonio qd. Gio Battista	Part of owner house	2 ² / ₄
	3	Dell'Era Gio qd. Ambroggio	Other use of the owner house	3 ³ / ₄

Table 1 - 18th century map. The total amount of the urban block is 4 tavole (108 sq. m).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (pertiche)	Income (Austrian liras)
55	A2		Courtyard	3	0.15
56	G2		Farmhouse	11	14.52
57	A2		Farmhouse	9	9.09
58	D25		Farmhouse	4	8.58

Table 2 - 19th century map. The total amount of the urban block is 27 pertiche (176.7 sq. m).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (tavole)
864	1	Andreani Carl'Antonio qd. Pietro Antonio	Part of the farmhouse	4 1 ¹ / ₄
	2	Garolini Gio Batista qd.	Other part of the owner house and courtyard	2 3 ³ / ₄
	3	Conca Giacomo qd. Pietro	House of the owner	4 1 ¹ / ₄
	4	Dell'Era Pietro qd. Giorgio	House of the owner and courtyard	1 1 ¹ / ₂
	5	Anganazzi Giuseppe qd. Gio Pietro e prete Giuseppe e Andrea qd. Domenico	Rented house	4 1 ¹ / ₄
	6	Dell'Era Tomaso qd. Pietro	House of the owner	2 3 ³ / ₄

Table 3 - 18th century map. The total amount of the urban block is 9 tavole (sq. m 243).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (pertiche)	Income (Austrian liras)
43		B68	Stable and barn	2	2.64
44		G65	Farmhouse	3	6.06
46	1	B126	Farmhouse	4	6.06
	2	P20	Site at upper level		2.64
47	1	F9	Cellar	2	2.64
	1	F13	Site at upper level		2.64
49		B191	Farmhouse	3	7.26
50		B110	Area of demolished house	5	0.25
51		L4	Farmhouse	10	9.09
53		L4	Farmhouse	4	4.62
54		A2	Stable and barn	8	3.03

Table 4 - 19th century map. The total amount of the urban block is 41 *pertiche* (sq. m 268.3).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (tavole)
865	1	Anganazzi Giuseppe qd. Gio Pietro e prete Giuseppe e Andrea qd. Domenico	Site of the house	3 ¼
	2	Dell'Era Carlo qd. Giorgio	House of the owner	3 1/2
	3	Bettega Maria Elisabetta qd. Gio	House of the owner	2 ¾
	4	Dell'Era Tomaso qd. Gio.	Part of the house of the owner	2 ¼
	5	Bettega Nicolao qd. Pietro	Other part of the house of the owner	¾
	6	Bettega Pietro Antonio qd. Giacomo	Part of the house of the owner	¾
	7	Dell'Era Cargasacchi Caterina qd. Maino	Part of the house of the owner	4 ¼
	8	Azzalino Tomaso qd. Angelo	Part of the house of the owner	1

9	Dell'Era Cargasacchi Caterina qd. Maino	Part of the house of the owner	1
10	Azzalino Tomaso qd. Angelo	Part of the house of the owner	1 ½
11	Petazzi Tomaso qd. Gio	Part of the house of the owner	2 ¾
12	Parolino Carl'Antonio qd. Agostino	Part of the house of the owner	1 ¼
13	Calvi Carolina e Margherita	Part of the house of the owner	1 1/4
1	Anganazzi Giuseppe qd. Gio Pietro e prete Giuseppe e Andrea qd. Domenico	Site of the house	3 ¼

Table 5 - 18th century map. The total amount of the urban block is 20.75 tavole (sq. m 560.2).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (pertiche)	Income (Austrian liras)
21	1	B125	Farmhouse	2	2.65
	2	B120	Cellar		3.03
22		B185	Farmhouse	2	4.62
23		B120	Courtyard	3	0.15
24		B135	Stable and barn	2	7.35
25	1	B100	Cellar	3	2.66
	2	B120	Site at the first level		2.66
	3	B130	Site at the second level		1.98
26		V2	Cellar	2	3.03
27		B100	Farmhouse	2	5.28
28		B176	Site at the ground level	3	1.98
29		D29	Farmhouse	4	6.06
30	1	B12	Part of farmhouse	12	16.05
	2	B130	Part of farmhouse		5.28
31		B28	Farmhouse	2	9.24
32		B120	Stable and barn	2	1.32

33	G85	Farmhouse	5	6.06
35	F11	Farmhouse	10	7.92
37	F5	Farmhouse	6	12.54
39	C25	Farmhouse	8	17.16
40	D33	Farmhouse	12	13.86
3228	B104	Site at the ground level	3	1.98

Table 6 - 19th century map The total amount of the urban block is 83 *pertiche* sq. m 543.2).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (tavole)
866	1	Suddetto	Part of the house of the owner	1
	2	Bettega Nicolao qd. Pietro	Part of the house of the owner	0.25
	3	Calvi Tomaso qd.	Part of the house of the owner	1
	4	Penna Giuseppe e Giorgio qd. Francesco	Zerbo	1

Table 7 - 18th century map. The total amount of the urban block is 3.25 *tavole* (sq. m 87.8).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (pertiche)	Income (Austrian liras)
10	B48		Site at the ground level	1	1.32
14	B120		Area of a demolished house	2	0.18
16	B58		Farmhouse	6	5.94
17	F5		Stable and barn	2	0.66
18	B58		Farmhouse	3	3.96
19	B120		Farmhouse	1	3.96
20	B185		Coutyard	2	0.01

Table 8 - 19th century map. The total amount of the urban block is 17 *pertiche* (sq. m 111.3).

The cadastral maps 11, 2, 8, 7 and 5 of the 19th century substitute map 867 of the 18th century map and its five subalterns (Table 9). Despite of other five cadastral maps add to the urban block, and the total amount of the surface block decreases in the 19th century map (Table 10).

The cadastral maps 868 of the 18th century has 17 subalterns (Table 11). The map of 19th century of this urban block (Table 12) reports only six owners (the same six of the subalterns in the 18th century map), and the surface of the area decreases (757 sq. m in the 18th century map, 386 sq. m. in the 19th century map).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (tavole)
867	1	Dell'Era Andrea qd. Cristoforo	Part of the house of the owner	2
	2	Dell'Era Catterina qd. Gian Battista	Part of the house of the owner	
	3	Bonazzola P.te Gio Francesco qd. Sebastiano	Part of the house of the owner	
	4	Parolina Domenica e Catterina qd. Carlo	Site of house and courtyard	
	5	Garolino Severo e Carlo qd. Gio Battista	Part of the house of the owner	
			Part of the house of the owner	
			Part of the house of the owner	

Table 9 - 18th century map. The total amount of the urban block's surface is 11 tavole (sq. m 300).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (pertiche)	Income (Austrian liras)
11		P35	Farmhouse	5	4.62
2		B76	Farmhouse	5	9.24
8		B104	Farmhouse	4	9.24
7		B194	Farmhouse	1	2.64
5		C25	Farmhouse	8	2.64
12		F12	Farmhouse	8	5.23
13	1	B89	Farmhouse	2	1.32
15		B89	Farmhouse	2	1.98
5227					
6		F13	Stable and barn	4	2.64

Table 10 - 19th century map. The total amount of the urban block's surface is 39 pertiche (sq. m 255.3).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (tavole)
868	1	Dell'Era Antonio qd Eugenio	Part of the house of the owner	1/4
	2	Dell'Era Antonio Croce qd. Antonio	Site of the house	2 1/2
	3	Dell'Era Antonio qd. Eugenio	Part of house, stable and herbal garden of the owner	2 1/2
	4	Parolino Prete Giacomo qd Carlo	Part of the house of the owner	1 1/4
	5	Parolin o Andrea qd. Emilio	Part of the house of the owner	1 1/4
	6	Parolino Severo Carlo qd. Gio. Battista	Part of the house of the owner	1 1/4
	7	Parolino Pietro Antonio, Carl'Antonio qd. Gio Battista	Part of the house of the owner	4 1/4
	8	Bettega Nicolao qd. Andrea	Part of the house of the owner	1 1/2
	9	Bettega Martino qd. Andrea	Part of the house of the owner	1 1/4
	10	Calvi Garolina Margherita qd. Giacomo	Part of the house of the owner	1 3/4
	11	Bettega Nicolao e Martino qd. Andrea	Part of the house of the owner	1 1/2
	12	Azzalina Marta qd. Nicolao	Part of the house of the owner	1 1/2
	13	Azzalino Tomaso qd. Angelo	Part of the house of the owner	1 1/2
	14	Azzalina Marta qd. Nicolao	Part of the house of the owner	1
	15	Petazzi Tomaso qd. Gio.	Part of the house of the owner	1
	16	Suddetto	Part of the house of the owner	2
	17	Petazzi Giuseppe qd. Gio	Part of the house of the owner	1

Table 11 - 18th century map. The total amount of the urban block's surface is 27,8 tavole (sq. m 756.7).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (pertiche)	Income (Austrian liras)
105		D20	Site at the ground level	16	14.52
104	1	D30	Cellar	1	0.66
	2	D20	Sites at the ground level and at upper level		1.32
81		G25	Farmhouse	3	5.23
74		G25	Farmhouse	15	15.84
103		G25	Farmhouse	21	21.12
102		B68	Farmhouse	3	9.09

Table 12 - 19th century map. The total amount of the urban block's surface is 59 *pertiche* (sq. m 386.2).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (tavole)
869	1	Bettega Gio qd Baldassare	Part of the house of the owner	$\frac{3}{4}$
	2	Petazzi Giuseppe qd. Gio	Part of the house of the owner	$1 \frac{3}{4}$
	3	Parolina Catterina qd. Cipriano	Part of the house of the owner	$4 \frac{1}{4}$
	4	Parolino Severo e Carlo qd. Gio Battista	Part of the house of the owner	$1 \frac{1}{4}$
	5	Parolino Andrea qd. Gio	Part of the house of the owner	$2 \frac{1}{4}$
	6	Pozzi Nicolao e Giuseppe qd. Vittore	Part of the house of the owner	$2 \frac{1}{4}$
	7	Bettega Bernardino qd. Andrea	Part of the house of the owner	$1 \frac{1}{2}$
	8	Calvi Carlo qd. Tomaso	Part of the house of the owner	$1 \frac{1}{4}$
	9	Petazzi Tomaso Giuseppe qd. Gio	Part of the house of the owner	$1 \frac{1}{4}$
	10	Dell'Era Pietro qd. Giorgio	Part of the house of the owner	3

Table 13 - 18th century map. The total amount of the urban block's surface is 19.5 *tavole* (531.8 sq. m.).

In the 18th century map, the cadastral map 869 has 10 subalterns (Table 13). In the 19th century map these ten subalterns are maps 100 (with two subalterns), 101, 99 (with two subalterns), 98, 95 - 93; in addition, new maps are 86-92 and 97 (Table 14). Despite of the new addition, the total surface of the block decreases (from 532 sq. m in 18th century to 524 sq. m in 19th century).

In the 18th map, the cadastral map 870 has ten sub-

alterns (Table 15); in the 19th century map, the cadastral maps are ten (73, 75-79 e 83-85) without subalterns (Table 16). The total extension of the surface does not change.

In the 18th century map, the cadastral map has five subalterns (Table 17); in the 19th century map, the cadastral maps are six (addition of n. 66) (Table 18). Despite of the addition, the total amount of the block's surface decreases (from 309 sq. m to 248 sq. m).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (pertiche)	Income (Austrian liras)
100	1	P35	Site at ground level		2.64
	2	B187	Upper site at ground level		6.06
101		P35	Farmhouse	6	5.28
99	1	P35	Farmhouse	7	6.06
	2	B187	Cellar		1.32
98		B173	Farmhouse	5	4.72
95		F9	Farmhouse	2	5.28
96		P35	Farmhouse	2	3.96
94		F13	Farmhouse	5	7.92
93		B176	Stable and barn	4	3.03
92		B187	Farmhouse	2	4.62
88		M8	Farmhouse	4	6.06
91		B104	Stable and barn	2	1.98
90		G6	Stable and barn	2	1.98
89		G31	Stable and barn	6	3.96
87		B162	Farmhouse	3	7.26
86		B137	Farmhouse	2	3.03
97		P28	Farmhouse	14	17.16

Table 14 - 19th century map. The total amount of the urban block's surface is 66 pertiche (523.6 sq. m).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (tavole)
870	1	Dell'Era Cargasacchi Catterina qd. Maino	Part of the house of the owner	1 ¼
	2	Parolino Gio Battista qd. Domenico	Part of the house of the owner	1
	3	Regalino Carlo qd. Gio Battista	Part of the house of the owner	¼
	4	Andriana	Part of the house of the owner	¼
	5	Dell'Era Giovanni qd. Ambrogio	Part of the house of the owner	5 ¼
	6	Dell'Era Carlo qd. Domenico	Part of the house of the owner	¼
	7	Bonazzola prete Gio Francesco qd. Sebastiano	Part of the house of the owner	¾
	8	Dell'Era Azzalina Catterina qd. Gio Battista	Part of the house of the owner	1 ¼
	9	Pozzi Nicolao e Giuseppe qd. Vittore	Part of the house of the owner	2 ¼
	10	Dell'Era Carlo qd. Domenico	Part of the house of the owner	1 ¼

Table 15 - 18th century map. The total amount of the urban block's surface is 13,8 *tavole* (375 sq.m).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (pertiche)	Income (Austrian liras)
83		D19	Farmhouse	3	4.62
85		P34	Stable and barn	8	3.03
84		P38	Stable and barn	4	2.64
76		G2	Stable and barn	4	3.96
77		B182	Stable and barn	4	3.09
78		D25	Stable and barn	3	1.98
79		B182	Stable and barn	5	2.64
75		B182	Farmhouse	32	32.18
73		G12	Farmhouse	7	6.06

Table 16 - 19th century map. The total amount of the urban block's surface is 58 *pertiche* (379.6 sq.m).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (tavole)
971	1	Polti Giuseppe qd. Giuseppe	Part of rented house	1/4
	2	Pettazzi Garolina Santina qd. Tommaso	Part of the house of the owner	2 1/2
	3	Polti Giuseppe qd. Giuseppe	Part of rented house	1 1/3
	4	Dell'Era Catterina qd. ...	Part of the house of the owner	2 1/4
	5	Cura di S. Giorgio di Dorio	Part of the house of the owner	5 1/4

Table 17 - 18th century map. The total amount of the urban block's surface is 11.3 *tavole* (309 sq. m).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (pertiche)	Income (Austrian liras)
72		P13	Parish house	18	72
71		D 28	Farmhouse	2	2.64
70		G12	Farmhouse	4	8.58
69		G6	Farmhouse	4	7.92
68		G12	Farmhouse	3	2.64
66		G2	Farmhouse	7	9.24

Table 18 - 19th century map. The total amount of the urban block's surface is 38 *pertiche* (248.7 sq.m).

Comparison of the cadastral maps of Mondonico

In the 18th century map, the cadastral map 874 has ten subalterns (Table 19); in the 19th century map, the cadastral maps are only nine (441, 1771, 440, 450-455) (Table 20), and the total amount of the block's surface decreases (from 375 sq. m to 203 sq. m).

In the 18th century map, the cadastral map 873 has six subalterns (Table 21); in the 19th century map, the cadastral maps are seven (457-459, 461, 463, 468 and

3223) (Table 22), and the total amount of the block's surface decreases (from 344 sq. m to 196 sq. m).

In the 18th century map, the cadastral map 875 has two subalterns (Table 23); in the 19th century map, the cadastral maps are three (443, 444 and 447) (Table 24), and the total amount of the block's surface decreases (from 123 sq. m to 72 sq. m).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (tavole)
874	1	Cura di S. Giorgio di Dorio	House of the owner	1
	2	Eredità giacente del qd. Giacomo Lauri	Part of the house of the owner	2 ¼
	3	Dell'Era Azzalina Catterina qd. Gio Battista	Part of the house of the owner	1 ¼
	4	Cura di S. Agata di Tremenico	Porzione di casa	¾
	5	Lauri Giacomo e Carlo qd. Antonio	Part of the house of the owner	2
	6	Parolini Gio Battista qd. Domenico	Part of the house of the owner	2
	7	Bettega Pietro Antonio qd Giacomo	Part of the house of the owner	1
	8	Petazzi Tomaso qd. Giovanni	Part of the house of the owner	¾
	9	Lauri Giacomo e Carlo qd Antonio	Part of the house of the owner	2 ¾
	10	Cura di S. Giorgio di Dorio	Part of the house of the owner	1

Table 19 - 18th century map. The total amount of the urban block's surface is 13.8 *tavole* (375 sq. m).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (pertiche)	Income (Austrian liras)
441		P28	Stable and barn	4	3.24
1771		G12	Stable and barn	3	2.16
440		B187	Stable and barn	4	2.16
450		F5	Stable and barn	4	1.62
451		B98	Stable and barn	4	3.24
452		B158	Stable and barn	2	1.62
453		C51	Stable and barn	3	1.62
454		G2	Stable and barn	4	2.16
455		C3	Stable and barn	3	2.16

Table 20 - 19th century map. The total amount of the urban block's surface is 31 *pertiche* (202.9 sq. m).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (tavole)
873	1	Calvi Garolina Margarita qd. Giacomo	Part of the house of the owner, registered in map 34	2 ³ / ₄
	2	Parolino prete Giacomo qd. Carlo	Part of the house of the owner, registered in map 34 1/1	1 ¹ / ₄
	3	Lauri Giacomo e Carlo qd. Antonio	Part of the house of the owner, registered in map 34 1/1	4 ¹ / ₄
	4	Eredità Giacente del qd. Giacomo Lauri	Part of the house of the owner, registered in map 34 1/1	1 ¹ / ₄
	5	Lauri Giuseppe qd. Giovanni	Part of the house of the owner, registered in map 34 1/1	1 ¹ / ₄
	6	Lauri Carlo e Giacomo qd. Giacomo	Part of the house of the owner, registered in map 34 1/1	2

Table 21 - 18th century map. The total amount of the urban block's surface is 12.8 tavole (344.3 sq. m).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (pertiche)	Income (Austrian liras)
457		D28	Stable and barn	5	3.24
458		G94	Stable and barn	2	2.07
459		P35	Stable and barn	4	2.07
461		B182	Farmhouse	4	4.86
463		V1	Stable and barn	3	3.78
467		B120	Stable and barn	3	1.08
468		B185	Stable and barn	3	1.08
3223		G5	Stable and barn	6	2.16

Table 22 - 19th century map. The total amount of the urban block's surface is 30 pertiche (196.4 sq. m).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (tavole)
875	1	Cura di S. Agata Tremenico	Part of farmhouse	3 ³ / ₄
	2	Eredità giacente del qd. Giacomo Lauri	Other part of the owner house	³ / ₄

Table 23 - 18th century map. The total amount of the urban block's surface is 4.5 tavole (122.7 sq. m).

Cadastral map #	Subaltern #	Owner's name	Use typology	Surface measure (pertiche)	Income (Austrian liras)
443		B130	Stable and barn	4	3.24
444		B68	Stable and barn	3	2.16
447		P80	Stable and barn	4	3.24

Table 24 - 19th century map. The total amount of the urban block's surface is 11 pertiche (72 sq. m).

The presented data come from the list of the owners of the 18th century property register and refers to the maps 01 ASCO_DORIO_001 c.Teresiano fg. 1, 05 ASCO_DORIO_005 c.Teresiano fg. 5, and 08 ASCO_DORIO_008 c.Teresiano fg. 8 ("Sommarione del Catasto teresiano di prima stazione in riferimento alle mappe"). The header of the drawings is: "Ducato di Milano, Riviera di Lecco Pieve di Dervio, stima del Valor Capitale, rivista dal Collegio de' Periti, come da Loro Relazione del di 22 Gennaio 1732".

Final remarks of the analysis

The economic evaluation of the land rent in Dorio area (at January 22th, 1722)

The data of cadastral maps 28-41¹/₂ represent the urban blocks of Dorio and Mondonico, and the fields nearby between the two creeks. The agricultural fields closer to the villages have cultivations that requires everyday cares: mostly vineyards, than cereals fields, small herbal gardens and a small grazing lands.

The wood is mostly alongside the northern creek and

the lake side.

The meadows are very small and they are located mostly on the slope upstream Mondonico and along the lake side, in the area of Torchiedo hamlet.

The vineyards and agricultural fields have the highest land rent, especially in the southern areas in between the villages. On the contrary, the lowest rent are related to the agricultural fields on the upper part of the slope. Woods, forests and bush are located on the north eastern part of municipality lands, beyond the northern river, far from the villages.

The analysis of the cadastral maps

The cadastral maps of the land of Dorio Community on the lake shore (maps #01-05-08) have one or more owners (up to 85 owners of the map #67); the use of the land is differentiated in the cadastrale maps.

The cadastral maps of "prima stazione" (18th century) show graphically the main use of the land, and not all the uses on smaller pieces of the maps.

Therefore, the meaning of the map could be not easily understandable without the consultation of the correlated documents summary.

The size of the maps

The map of "Prima stazione 01" have wider surfaces than the maps of cadastral maps "05" e "08".

The widest parcel of Dorio Municipality is the #15 in the map "01 ASCO_DORIO_001 c.Teresiano fg. 1", and it lays on the lake shore, the surface is 1,377 tavole, the owner is the the Community of Corenno, the uses are wood and moorland, and the income is 688 scudi e 3 liras. In the map "05 ASCO_DORIO_005 c.Teresiano fg. 5", the widest parcel is #35, its surface is 25.86 tavole: on 12.05 tavole the use is grapevine, and it has thirty owners. In the map 03, the wider parcel is #67: surface of 357.59 tavole, 85 owners; the uses of 267.10 tavole are wood and moorland.

The description of the typology of the cultivation

Wood and moorland are the most common use. They cover 1,770.87 tavole, especially close to the upper meadows, on the mountain (parcels #15 and 67).

Fields without cultivation, on a surface of 183.77 tavole, are mainly distributed on the parcels #5 and 67. Wood cover 104.81 tavole, mainly on the parcels #60 and #68.

Grapevine cultivation cover 71.78 tavole: 24.96 tavole on the parcel #59 (belonging to 53 owners), 12.05 on the parcel #35 (belonging to 30 owners), 11.63 tavole on the parcel #39 (belonging to 60 owners).

The owners

The number of the owners is directly proportional to the surface of the parcels. The cadastral parcels of the map "08" have mainly one owner, despite of the maps in "01 ASCO_DORIO_001 c.Teresiano fg.1"

The parcels in "05 ASCO_DORIO_005 c.Teresiano fg. 5" are the largest, therefore the number of owners is higher than in map "08". The map "05" includes the urban fabric of Dorio and its surroundings.



01 ASCO_DORIO_001 c.Teresiano fg. 1



05 ASCO_DORIO_001 c.Teresiano fg. 5



08 ASCO_DORIO_001 c.Teresiano fg. 8

The assessment and documentation of the material characteristics of the Mondonico village

Laura Elisabetta Malighetti

The present chapter briefly summarizes the chapters of assessment and documentation of the village, preliminary to the project. The paper describes the methods of assessment of the village but it does not refer to the details of the buildings on a small scale: the analysis on the villages includes the assessment of its shape by photographic and geometric survey, surface mapping of materials and damage; and description of the building techniques and the causes of damage¹. The technical survey's stages follow many analyses proposed by other authors in this text- like those described in the chapter "Reading the landscape. The experience of Mondonico" by Raffaella Laviscio.

The village: its shape and landscape

The settlement of Mondonico seems to be similar to the scattered villages on the side of Lecco lake, which date back to the early middle age. Its location half way up the slope of the mountain fits the need of defence from enemies coming from the lake and the plain, as occurred in the northern part of the Lake sin-

ce the early Middle ages up to the 17-18th centuries. The village is at the elevation of 328 m. on the sea level and consists of thirteen buildings settled along the narrow land between the Wayfarer trail and a parallel path, at a higher elevation.

The houses have an entrance from both the trails: they have two-three storeys towards the lake and one storey towards the mountain upper slope. The connections transversal to the main paths have stone steps and large stairs.

The photographic survey

The survey documents the village at three levels:

- Views from outside the village (from the opposite side of the lake, from the same side, to perceive the real dimension and the full extension);
- The panoramic views from the village around (looking towards North and South it is possible to admire exceptional views of the mountains around the lake, and to enjoy an unhindered view down to the lake side);

Fig. 1 [left] - Existing Site plan. (source: Corbella, 2014)



Fig. 2 [right] - Sections of the settlement of Mondonico. (source: Corbella, 2014)



Fig. 3 - Panoramic views (source: Corbella, 2014)



- The paths inside the village and the buildings (the pictures of buildings along the main street, the interiors and details were very useful to the surface mapping and further analysis of the buildings).

Shape analysis

After the collection of the existing survey, the direct survey on site is carried out to define the real shape and dimension of all buildings and to produce the plans, elevations, sections at scale 1:100 and 1:50. The direct observation on site and the photographic survey supported the surface mapping.

The three dimensional graphic representation allowed for analysis of the relationships between the buildings and their facades. All the buildings have irregular stone masonry, with retaining walls at the ground level (eastern side, towards the mountain) with small rooms (7-14 sq.m. of floor area and 2.2-2,5 m. of internal height) as the rural warehouses are in cold storage sites. The barns have an exceptionally high (a double height of 5-5.5 m.). Additional smaller barns are located in the attic of the residences, and have large openings for the ventilation of the hay.

The stone stairs are located outside, along the facade, and in some cases are the only connection between different rooms of the same house. The openings are very small, to prevent heat loss.

At present, the use of the buildings is strongly connected to livestock (stables, barns) and in some cases to temporary residence.

The building materials

Generally speaking, the traditional materials are stone (granite, serpentine, soapstone). Timber (fir, larch, chestnut coming from the woods near the village) and

iron.

The reduced range of the materials and their manufacturing lends uniformity to the traditional architecture of the village and it is a witness of the need to use the local resources available on the site. In fact, the main characteristic of Mondonico is the value of "material culture" due to the conservation of the local materials and building techniques, maintaining a standard uniformity along the Wayfarer trail. On the contrary, many buildings under uncontrolled transformation, have lost their local identity.

The new buildings and their reinforcement use traditional materials and other elements whose historical suitability is proven by the surface mapping.

The irregular stones of the masonry are dry assembled or with lime mortars, in many cases have recently been substituted with cement mortar. Larger stones are at the bottom of the structures.

The stairs have the same building techniques, and the step treads are thin slabs of local sedimentary rocks or cut from blocks of rocks. Usually, timber balustrades protect the open side of the stairs.

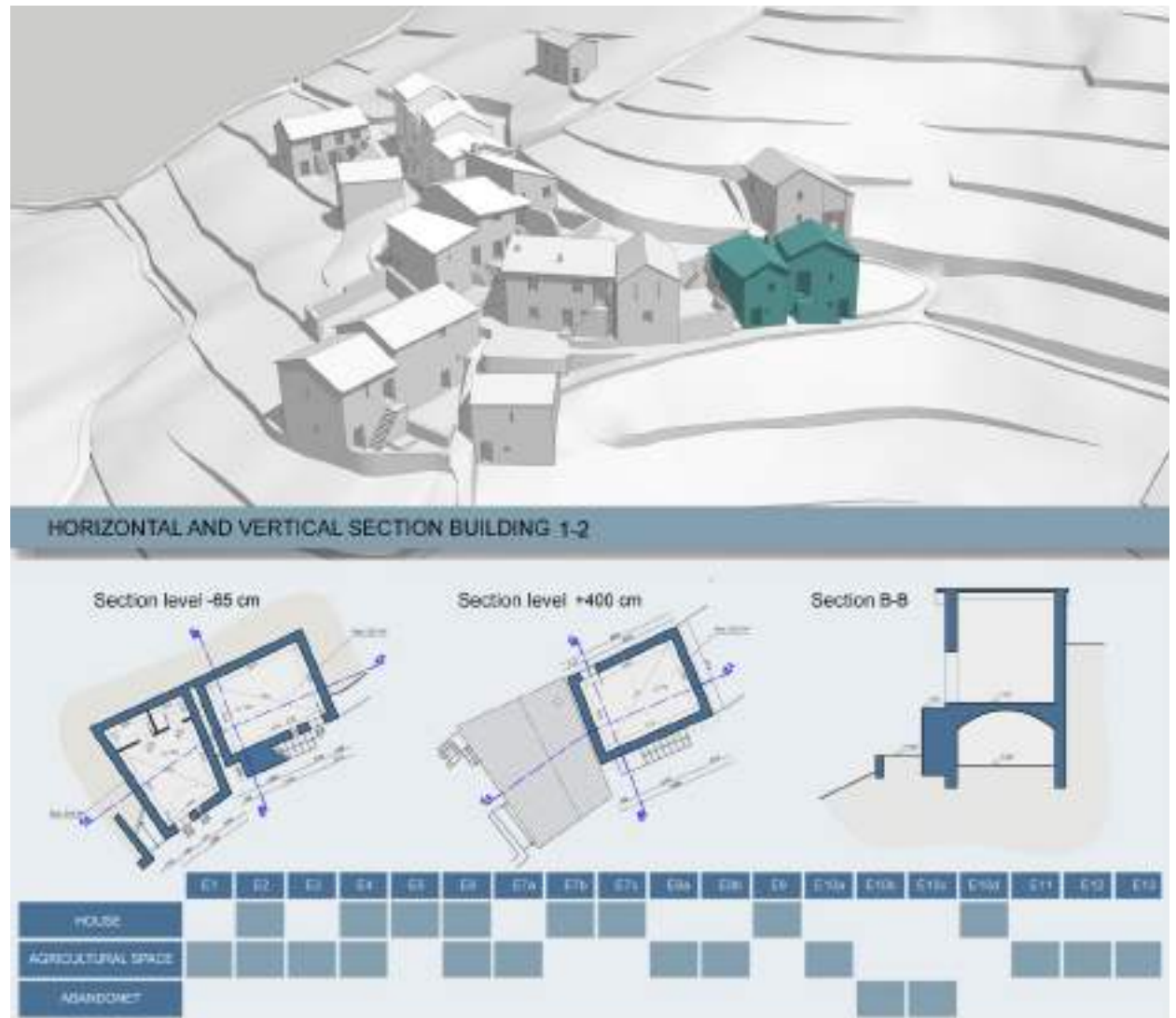
Opening frames are composite of blocks of rocks (roughly squared and suitable for their function). Most ancient windows are smaller with monolith shoulders and lintels. Usually doors have timber panels. In later centuries as dimensions increase, shutters and grilles appear. In some cases, more recent larch and chestnut lintels have substituted the stone. Recent transformation of the facades are very apparent: infilling of openings and the insertion of modern elements like metallic window frames and new doors.

The traditional timber structure of the roof usually had a slate coating (the traditional name is "piode") set along three overlapped layers. Recent work is very apparent on the roof, because of the introduction of tiles (also Marseilaise tiles). Moreover, the roof struc-

Fig. 4 - The paths inside the village. (source: Corbella, 2014)



Fig. 5 - Plans and sections of two buildings. (source: Corbella, 2014)



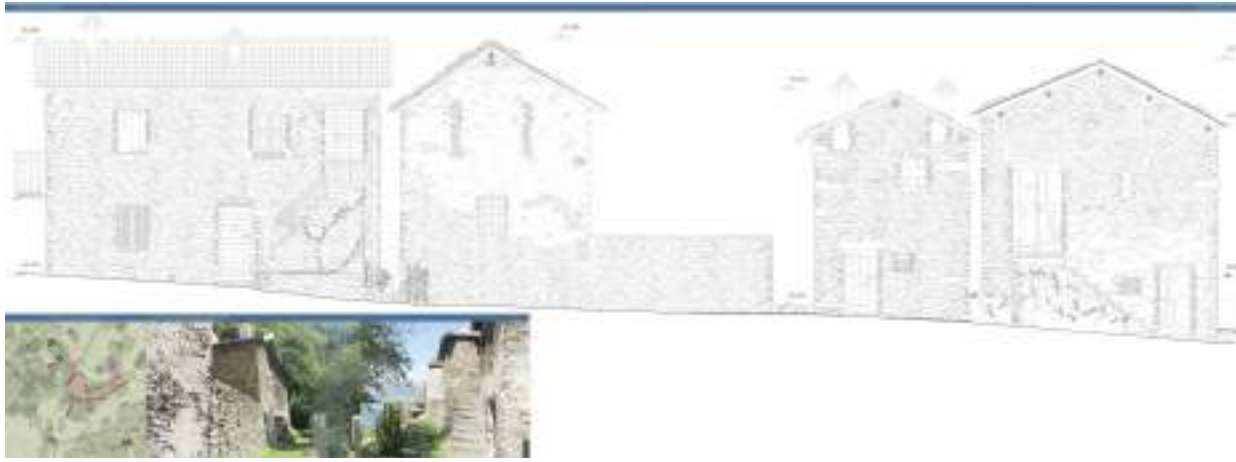


Fig. 6 - Elevations of two buildings. (source: Corbella, 2014)



Fig. 7 [left] - Stone stair. (source: Corbella, 2014)



Fig. 8 [right] - Sloped roof made by "piode" (slates) and roof tiles. (source: Corbella, 2014)

tures are new in the residential buildings, where the roofing materials are tiles and metallic flashing (and there is also one case of photovoltaic panels).

Analysis of the surrounding landscape and the pathways

The first step of the analysis was to catalogue the vegetation and pathways in the Mondonico area. Inside the area, there are decoration and benches of many different species of trees. Cherry and beech tre-

es along the tracks and a nut tree in the central small square: it shadows the benches.

Other vegetation includes: chrysanthemum along the building elevations, lichens and micro-vegetation on the stone masonry resulting from the neglect of the site. A wood surrounds the village: mixed species of vegetation are on the southern side, towards Dorio. A huge meadow is toward the north, used as grazing land. At the northern edge, there is a wild wood.

The trees (mostly chestnuts, cherry and nut trees, oaks, basswood, maples) and other vegetation here are not

Fig. 9 - Mapping of materials. (source: Corbella, 2014)



very tall. A fewer number of taller firs and larches are present as well.

Pebbles and earth compose the pavement of the streets inside the village. The pavement of the two paths entering Mondonico is clay court (and extended vegetation grows on it) apart from the area behind the first two buildings, where the flooring is cement, due to a recent, non-authorized intervention. The parts of the mule track have stone steps and sidewalls where the slope is steeper. The flooring does not include any

water drainage to collect the rain coming from the recently added downspouts either.

Analysis of the building techniques

The most common building techniques are thick solid masonry, the stones being layered rocks. Static steadiness depends on the thickness of the masonry (0.4-0.7m). Mortar joints are present in some houses, as well as in exterior plaster. The barrel vaults and front

Fig. 10 - Building techniques. (source: Corbella, 2014)



arches have a stone or brick structure and mortar. The highest span is 3/4 m.

The rooves are double pitches, the timber of the structure usually is cherry tree, oak, or chestnut. The trunks are set without cork, and do not have a regular geometric section. The supporting structure has a pattern "alla piemontese"- Piedmont style, and the stone coa-

ting covers a wooden lath which has grapples to fix the slate onto the timber structure.

The damage assessment

After being assessed, the damage on all building facades is shown through surface mapping. Any da-

Fig. 11 - Damage assessment - buildings catalogue.
(source: Corbella, 2014)

Component	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Roof	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Roof structure	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Roof tiles	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Walls	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Windows	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Doors	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Interior walls	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Interior floors	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Interior ceilings	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Staircases	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Structural elements	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Plaster	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Paintwork	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Iron and steelwork	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Other metalwork	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Other non-metallic	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Other	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Other	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Damage has an associated code that also refers to the damaged material.

Natural and artificial stones

The exterior surfaces suffered erosion due to weathering, including the thaw/defrost cycles. The main damage today is:

- Superficial degradation: discoloration , stains, encrustations, patina, efflorescences, crusts;
- Disgregation: stratification (esfoliation or detachment) and loss of cohesion (erosion, peeling, splintering ,crumbling,pitting, loss of components, missing parts);
- Deformation, detachment, bumps, fractures or cracks;
- Biological colonization: plants, roots inside the

stones or in existing fractures, biological patina.

Metals

The damage on the metallic elements inside the masonry (tie rods and bolts) and outside (gates, grating, etc.) is assessed.

The corrosion of the metal elements causes the reduction of their section and increases the volume; therefore, causing the loss of mechanical function decreasing the supporting function of the slabs and the connected structures.

Brickworks

The damage of roof tiles is mainly due to weathering: particularly apparent is the incrustation of biological patina and other damage to natural stones.

Timber

Rot and spoiled timber are the most widespread damage to the wood exposed to weathering. Fungi, insects and parasites cause discoloration and cracks, in addition to the worst damage such as excavated holes and micro tunnels.

Deformation and cracks are due to the small section size and underestimation of load bearing requirements.

Glass

Major damage is due to human activities and vandalism, which are scattered across many buildings.

Endnotes

(1) The text reports a summary of the analyses in Corbella's Master Degree Thesis concerning the current status of the settlement of Mondonico - Corbella, S. (2014), *Ripensare Mondonico. Modello di recupero di un piccolo agglomerato diffuso* (graduation thesis, Politecnico di Milano, School of Architecture and Building Engineering Italy. Supervisor Prof. L.E. Malighetti). The Thesis was developed within the Buildings Renovation and Conservation's teaching and laboratory activities held by the author as part of the University Degree course in Architecture and Building Engineering at Politecnico di Milano.



Saint George church in Mondonico

Alessia Silveti, Roberto Pozzi

In Mondonico village, at the southern edge of the urban blocks, a small white church and its bell tower rise on the top of a small hill, close to the Mills valley. It was the first church built in the Mondonico Community, it is dedicated to the warrior martyr Saint George, a dedication that is very popular in the area¹. The inhabitants set the church in a sacred area separate from the other buildings, instead of building the church in the middle of the other housing and farming constructions. Near the church, in the past, up to the 19th century, there was the cemetery.

The church entrance has its orientation towards west, according to the tradition. The churchyard lies on an artificial terrace, at an upper level from the natural slope of the hill, supported by a constraining stone dry wall.

The courtyard has a double function: to create a respectful area in front of the church and build the base of the façade, together with the stairs on the side.

In the past, up to recent times, terraces for the cultivation of vines were alongside the stairs and all the paths connecting the lake to the village, as an amazing vertical stepped garden during the grape season.

At present, a wild bush, with native and imported trees, covers the entire area.

The first documentation of the church dates back to 1412; the description mentions a porch in front of the church for public meeting before the religious function². Nearby the church there were no cultivated or agricultural fields, below the church there were a vineyard and six olive trees "...era una di terra brugina et campina [...] soto la chiesa, vidata con piante n. 6 di olivi"³.

The church is not mentioned in the *Liber notitiae Sanctorum Mediolani*, the famous list of the churches of Milan parishes at the end of the 18th century, nevertheless a more ancient origin cannot be excluded.

In fact, the *Liber* lists only eight churches in the Dervio parish, and it is specified that ten sacred buildings were under Dervio's administration: "*Prepositus de dervio sine exemplis habet in ecclesiis X altaria XIII*". Unfortunately, also in the reports of the 16th cent. visits of Feliciano Ninguarda, Bishop of Como, the description of Dorio is a spread out village of 40 families and a parish, "*villa sparsa de foghi 40, dove è una parochia dedicata a...*", without the name of the saint to whom the church is dedicated.

In the report of the visit on July 1455, the bishop Gabriele Sforza refers that the priest Paolo di Marnio (one of the five canons of Saint Peter's parish in Der-

Fig. 1 - Dorio's view from the lake. In the red square Saint George in Mondonico (the and smaller church on the slope above Dorio) and Saint George in Dorio (the largest church) (source: Alfonso Piva)



Fig. 2 - St. George's facade in Mondonico (photo: Andrea L'Erario)



Fig. 3 - Connection between St. George church in Mondonico and Saint George church in Dorio (source: www.facebook.com/comunedorio)



vio) officiates the Mass "*in ecclesia sancti Georgij de Dorio, que est ecclesia subdita ecclesie prepositure et distat miliaria duo*" (which is two miles from Dervio church, and is the head of the parish).

At the end of 15th century the report of the bishop's visit refers that a priest officiated at the Mass in Dervio church, with the community's economic support⁴.

In 1506, the church of Saint George in Mondonico became an autonomous parish, because of the fervent request of the Dorio and Mondonico population that could not reach Dervio church during the winter. Saint George remained a parish until 1677, when the title passed to the new church of Holy Virgin Mary in Dorio, where most of the inhabitants had relocated in the meantime⁵.

From 1557 to 1600 Petrus de Gogis Baptista was the priest of Dorio parish. His signature is on many documents: parish registers and letters, reports to Milan. From the numerous documents, he can be seen to be an active and enterprising man who was, perhaps, a little weak with the collaborators of the brotherhoods. In 1568, he received the visit of Saint Carlo Borromeo and in the report of the visit, there are no reprimands about the management of the church, and at that time, this was exceptional. The priest was prompt to send his detailed reports to the Clergy, describing both the parish management and the life of the community. He listed the furniture and sacred endowments of the Saint George church: "*In questo libretto⁶ si fa menzione et descrizione di tutti i beni mobili de la chiesa di Sto. Georgio constructa in el Comune di Doro, membro de la canonica di Derfo, diocessi di Milano; quella chiesa è recta e gubernata da mi prette (prete) Petro Gogia curato di essa chiesa*".

In the following he describes the church: Church with two sacred altars, one dedicated to Saint George and the other to the Holy Mary, the latter without any eco-

nostic legacy, and a bell tower with two bells: “Chiesa una con doi altari consacrati, uno di Sto. Georgio et l’altro di la madona, quello de la madona non à d’entrata cosa alcuna. Campanile uno con doi [due] campane”.

The second altar, no longer existing, probably was below the frescoes of Saint Mary and the Saint patrons. According to Gogis’ description, the altar did not benefit from any bequest, and the mention of the two bells does not refer to the small present one, too small to support more than one bell. Perhaps the present tower bell is not the same as Gogis’ description. In his report, the priest describes the church goods: “Croce una de latono [ottone] sopra adorata [dorata], calice uno con la copa de argento sopra adorato, la patena sopra adorata, pisida [pisside] una di argento sopra adorata da tener il Santissimo Sacramento, para doi [due] di candeleri di latono, para doi di pelle per accendere quando se lascia il nostro Signor Iddio (when the Eucharist remains in its case: n.o.t.) [...]”.

Gogis also describes his small home beside the church: “La casa dove sta il prete la quale è canepata et solerata, [possiede una cantina e un solaio] con la sua cugina [cucina] [...]. Questa casa corencie [confina] da una banda con la chiesa, da le altre il sagrato. Portico uno dinnanzi a la chiesa, una camera di sopra ad uso del prete”.

The house is small, although it has all the necessary rooms for a family: a cellar, a kitchen, a bedroom on the first floor and the attic.

In September 1570 the bishop’s delegates visited the parish church of Saint George in Dorio once again, without mentioning any details of the church: “parrocchiale chiesa di Sto. Georgio del luogo di Dorio plebe di Dervio, diocesi di Milano, dal suddetto prete Pietro Maria Sfera preposito di Dervio et vicario foraneo et in questo delegato dal molto reverendo Gio. Battista

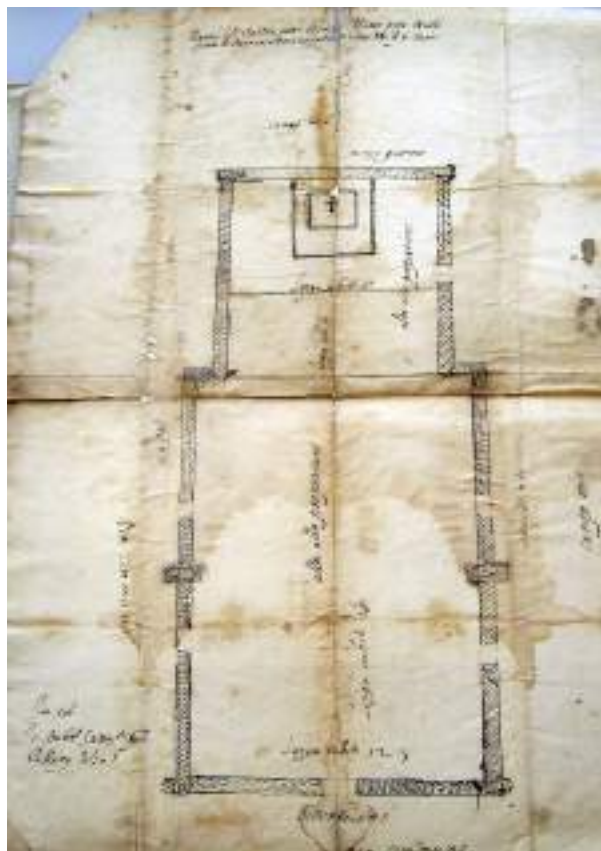


Fig. 4 – Plan of the church of the Holy Virgin Mary, in Dorio. (Parish Archive of Dorio)



Fig. 5 – Dorio’s view from the lake, at present (photo: Andrea L’Erario)

Fig. 6 - Saint George church in Dorio, main façade, at present (photo Alessia Silvetti)



vicario generale alla presenza del curato et homini del ditto luogo sono fatte le seguenti ordinationi" (see the Document #3 in the third part of this book).

In a further document of another pastoral visit (year 1582, see the Document #2 in the third part of this book), the description includes the chapel close to the main altar, entirely painted with "*vetusta*" (ancient) and partially "*colapsa*" (ruined) frescoes representing the evangelists and their symbols. The description also includes the frescoes on the northern wall, equally "*vetusti*" (ancient). In the following, the orders of the archbishop of Milan, 1582, stated the necessity of repainting the frescoes of the evangelists, adding more details to the images of the animals (the evangelists' symbols)⁷.

At present, no fresco remains on the presbytery walls. Maybe, the priest commanded their covering with whitewash instead of painting them again, as was the habit of the time to whitewash paintings instead of repairing them, with the aim of refreshing the plaster (especially after the plague) or to spare money⁸.

In the report of Federico Borromeo's visit, dated 1612, the bishop ordered the building of another parish house close to the new church of the Holy Virgin in Dorio, because the exiting house was ruined.

In the report of the further visit (1649, see the Document #4 in the third part of this book) the church of Dorio is mentioned not yet as the parish church, nevertheless the new church is the site of the baptisms as well as Saint George in Mondonico.

The further reports of the 18th and 19th centuries do not include descriptions of the buildings (Saint George and the present parish church of Dorio).

The report after the pastoral visit of cardinal Ferrari, 1905, refers that the ancient and small church of Mondonico was enlarged in the 16th century, the

Fig. 7 - Saint George Church, north-eastern elevation. On this side, another small volume is visible, probably the a chapel. (source: Alfonso Piva)



original date is unknown and at present is not used: "San Giorgio è l'antichissima chiesa parrocchiale. È immemorabile e sconosciuta la sua origine. Fu ampliata nel 1500, è grande poco. Presentemente è in stato di disuso. Ma vi manca la campana che si deve porre dal Comune, il quale non ci sente"⁹.

Quoting Andreani's description¹⁰, the building underwent numerous modifications over the time. The present structure mainly dates back to the 16th century and partially to the second half of 17th century. Furthermore, in 1804 other variations of the façade occurred. In fact, the small windows (with iron grids and stone frames) were opened during the counterreformation time to allow the population to pray looking at the Eucharist although the church was closed, whilst the doorframe dates to the beginning of the 17th century.

The small nave is 5 m. wide and 12.5 m. long, it has a flat ceiling, whilst a barrel vault covers the presbytery. The apse is a half round, and this is the most ancient remains of the previous church: the masonry does not fit with the dimensions and axis of the nave (a bit larger) as it was "pasted" on a new construction.

In the past, frescoes should have decorated the interior plasters; at present the only remains is the painting 352x297 cm. large on the northern side, dating back to the 15th century. It has six framed pictures; the fame represents leaves, branches and small rounded decoration. The date of the painting is on the bottom: 1492 and 1497.

Endnotes

(1) For example, Varenna, Mandello, Colico piano.

(2) National Archive of Milan, Fondo Notarile, cart. 5621.

(3) From a report of the priest Pietro Goggia, 1575, in Diocese Archive, Milano, Pievi Lacuali. See the Document #1 in the third part of this book

(4) Diocese Historical Archive of Milan (ADM), Visite, Pievi Lacuali, Vol. 2.

(5) See the document quoted by C. Andreani in "La Pieve di Dervio".

(6) In ADM, Pievi Lacuali.

(7) "ad congruenter formam reducantur". Diocese Archive of Milano, Visite, Pievi Lacuali, Vol. 2.

(8) ACAM, Visite pastorali, Dervio, 1/3 (1592); 1 /19-20 1582

(9) ACAM, Visite Pastorali.

(10) Andreani Carlo (1898). *La Pieve di Dervio*. Lecco: Tipografia Editrice Fratelli Grassi, pp. 56,57.



Degradation analysis and conservation work on Saint George church in Mondonico

Mattia Alberganti, Francesca Andrulli, Chiara Bonaiti, Simone Freni

The chapter shows the results of the assessment and surface mapping on Saint George church, as an example of the analysis of materials and damage that the authors¹ performed on the village, during the practice of the Conservation and Refurbishment classes and the Thesis. Therefore, the assessment went under a process of subsequent refinement, to achieve the most suitable and detailed project of conservation. The direct survey of the materials and their damages has the aim of refining the ability of watching, observing the ancient materials and features, reflecting on the causes of degradation and the effects of previous maintenance/repairs. The assessment serves also as verification of transformation/permanence of the historic materials of the buildings, and completes the evaluation regarding their integrity and authenticity supported by the historic documentation.

It is mandatory to achieve the documentation supporting the conservation project and the choice of the intervention. Together with the diagnostic tests, the assessment of the damages is crucial to define the causes of degradation and the project the most effective intervention.

The detailed knowledge of the state of conservation of the building and its surroundings is also an important indication of the influence of the environment on the art craft and the risk factors existing in the site, those should be object of mitigation by means of the further conservation plan.

In the case of Saint George church, the structural cracking resulted as the worst damage, probably due to the location (on a steep slope) and the soil. At present, without a rigorous monitoring of the cracks, is not possible to design an appropriate intervention, therefore is strongly recommended to start a prolonged structural monitoring as soon as possible, with the aim to obtain the necessary data at least for the application of provisional strengthening that could prevent further damages.

Secondarily, after the observation, assessment, survey and surface mapping, the most spread damage on the surfaces resulted the superficial deposit, discoloration, biological patina: generally speaking,

the church mainly suffers of lack of maintenance or inadequate maintenance intervention (as grouting and patching the plaster/stucco with not compatible mortars). Despite of the almost neglect of the village, the church and its surrounding are yet respected and no vandalism and graffiti resulted. Spontaneous intervention from volunteers have been the only repair provided in the last decades, after the last restoration of the interior elevation. Although these interventions have the pros to prevent worst damages (for example: the yearly maintenance of the roof, the periodic inspection, ventilation, cleaning, cutting the meadow around the church, etc.) a handbook for maintenance practice will improve the effectiveness and preserve in the best way the materials and building systems. More in general, a preservation plan including the management and user guidelines guarantees the physical persistence of the building features and materials, as well as it allows the owner and users to optimize the resources to support the preservation activities. The gathered surveys and documentation, and displayed in the present volume can be a first annotated collection of data, to update in the future, and it can constitute the first level of a conservation plan.

Results of the material and damages assessment

The authors followed the best practice for assessing the materials based on the visual analysis and the use of simple optical tools, as portable microscopes. The definition of materials, alteration and damages were according to ICOMOS glossary (ICOMOS-ISCS, 2008). The authors associated a code to all the detected materials and degradation, with the aim to propose a specific intervention (or cycle of intervention) for any damage, to locate univocally on the maps and

technical drawings.

Most of the degradation concerns the lime-based materials, stones, bricks, wood, metallic materials and cement mortar.

The code has two letters identifying the material and two digits identifying the damage. Every code refers to a specific and detailed description of the intervention annexed to the project report.

Materials	Degradation	Intervention
Lime-based materials	Chromatic alteration	CM.01
Lime-based materials	Craquelure (microcracking)	CM.02
Lime-based materials	Vandalic graffiti	CM.03
Lime-based materials	Superficial deposit	CM.04
Lime-based materials	Washout	CM.05
Lime-based materials	Disaggregation	CM.06
Lime-based materials	Detachment	CM.07
Lime-based materials	Salt efflorescence	CM.08
Lime-based materials	Erosion	CM.09
Lime-based materials	Exfoliation	CM.10
Lime-based materials	Cracking	CM.11
Lime-based materials	Humidity stain	CM.12
Lime-based materials	Lack	CM.13
Lime-based materials	Mold/Algae	CM.14
Lime-based materials	Biological patina	CM.15
Lime-based materials	Vegetation (mosses)	CM.16
Lime-based materials	Patchy cement mortar	CM.17
Stone materials	Surficial deposit	LP.01
Stone materials	Disaggregation	LP.02
Stone materials	Biological patina	LP.03
Stone materials	Vegetation (mosses)	LP.04

Stone materials	Craquelure (microcracking)	LP.05
Stone materials	Stain	LP.06
Stone materials	Lack	LP.07
Stone materials	Oxidation	LP.08
Stone materials	Crumbling	LP.09
Stone materials	Disconnection of stones	LP.10
Stone materials	Patchy cement mortar	LP.11
Stone materials	Cracking	LP.12
Stone materials	Humidity stain	LP.13
Stone materials	Chromatic alteration	LP.14
Wood materials	Natural ageing	LE.01
Metallic materials	Oxidation	ME.01
Cement mortar	Cracking	CE.01
Bricks materials	Superficial deposit	LA.01
Bricks materials	Biological patina	LA.02
Bricks materials	Mold/Algae	LA.03
Bricks materials	Cracking	LA.04
Bricks materials	Stain	LA.05
Bricks materials	Humidity stain	LA.06
Bricks materials	Disaggregation	LA.07

Table 1 - Elevations: list of the materials, damage and associated codes.

Many forms of degradation have mainly affected the lime-based materials, particularly the external stucco and internal plasters, due to ageing and the aggressive climatic factors.

For further analysis, the parts of the church underwent consideration: roof, external facades, internal facades (including altar and ceiling) and internal flooring. The following histograms represent an approximated quantification of the types of degradation for every part of the building: a unit corresponds to the surface

of about 8 square cm and about 1,5 cm length of microcracking and cracks (at 1:50 scale). Pie charts, instead, show, as a percentage, the entity of every intervention compared to the total process.

The roof

Degradation on the roof mostly concerns stones and bricks.

Degradation	Number
Superficial deposit	187
Disaggregation	0
Biological patina	94
Vegetation (mosses)	0
Craquelure (microcracking)	0
Stain	0
Lack	0
Oxidation	0
Disaggregation	0
Disconnected stones	0
Patchy cement mortar	28
Cracking	0
Humidity stain	0
Chromatic alteration	0
Mold/Algae	6

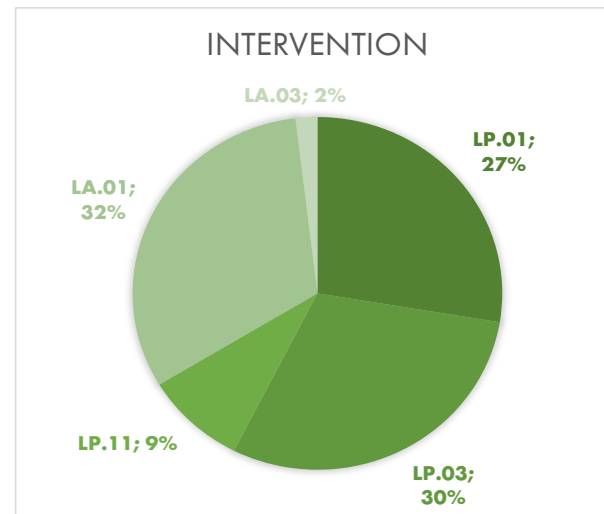
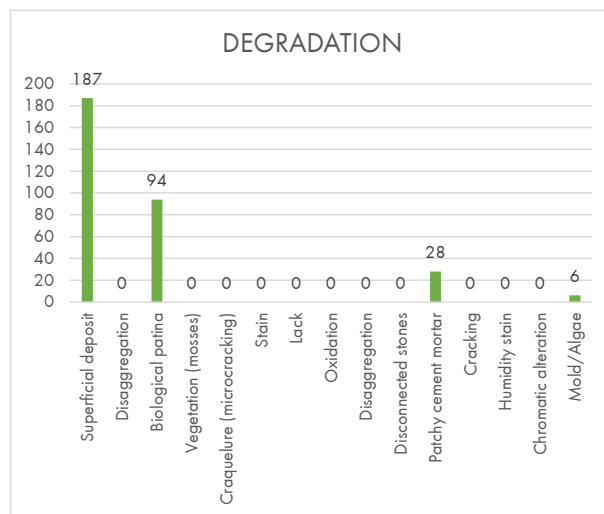
Table 2 - Roof: list of the materials, damage and associated codes.

The most frequent form of degradation is that of superficial deposit and biological patina.

The first one is widespread over the whole roof exterior coating evenly and affects both marseillaise tiles and the stones placed over them. This deposit mainly consists of dirt and dust, transported by wind and bird droppings. Biological patina is localized only on the stones in the south-western roof pitch. Indeed this side

Graph. 1 [left] - Graphic of the damages spreading (roof, Table 2).

Graph. 2 [right] - Pie chart of the percentage frequencies of each type of intervention on the roof (Table 3).



does not receive sun irradiation for the main part of the day due to the presence of many tall trees; therefore, the surfaces of this side are cooler and wetter, leading to the formation of degradation. The following table and pie chart show the percentage frequencies of each repair intervention.

Intervention	Number
LP.01	87
LP.03	94
LP.11	28
LA.01	100
LA.03	6

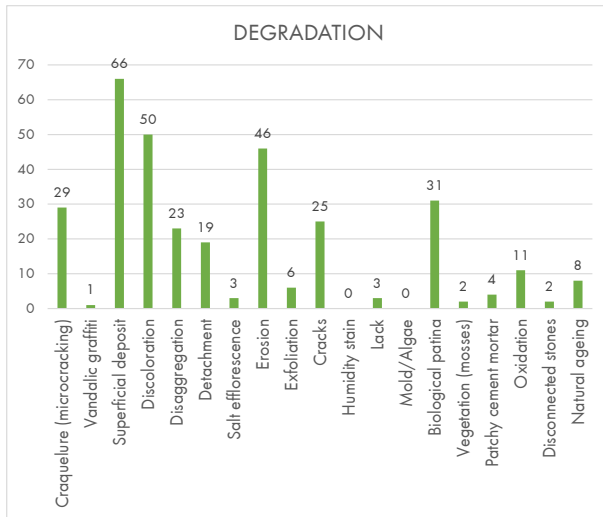
Table 3 - List and number of the intervention on the roof.

The most significant interventions are LA.01 (removal of superficial deposit on bricks) and LP.03 (removal of biological patina on stones).

The external façades

The main degradation on external façades concerns lime-based materials, stones, metallic materials and wood.

Degradation	Number
Craquelure (microcracking)	29
Vandalic graffiti	1
Superficial deposit	66
Discoloration	50
Disaggregation	23
Detachment	19
Salt efflorescence	3
Erosion	46
Exfoliation	6
Cracks	25
Humidity stain	0
Lack	3
Mold/Algae	0
Biological patina	31



Vegetation (mosses)	2
Patchy cement mortar	4
Oxidation	11
Disconnected stones	2
Natural ageing	8

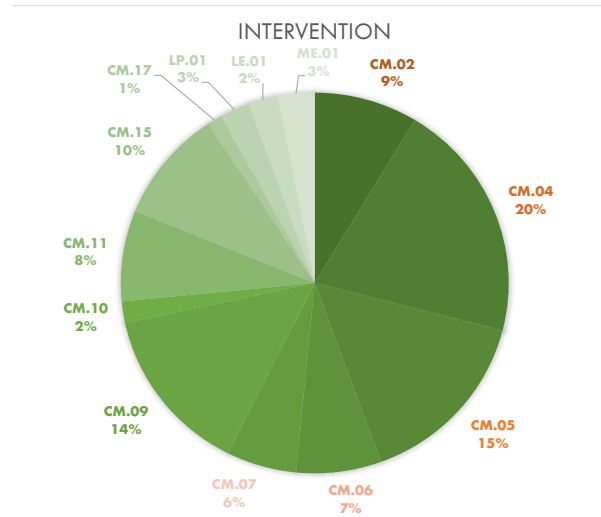
Table 4 - List and number damages on the façades.

The most frequent degradation is in superficial deposits, discoloration, erosion and biological patina; the first one concerns also the stones of the façades, whilst the others affect only the exterior stucco.

Superficial deposit consists of dust, topsoil and dirt transported by wind. Bird droppings are present to.

Discoloration is due to the action of water running down the external facades during rainy periods. The most affected area is the south-eastern façade and in the central and lower parts, near the sloping ground.

Erosion, due to the loss of the plaster binder from the surface, is due to weathering. Biological patina is localized on the north-eastern and south-western facades, due to the orientation (north) and the presence



of tall trees, that shadow the façade for the main part of the day.

Intervention	Number
CM.02	28
CM.04	66
CM.05	50
CM.06	23
CM.07	19
CM.09	46
CM.10	6
CM.11	25
CM.15	31
CM.17	4
LP.01	8
LE.01	8
ME.01	10

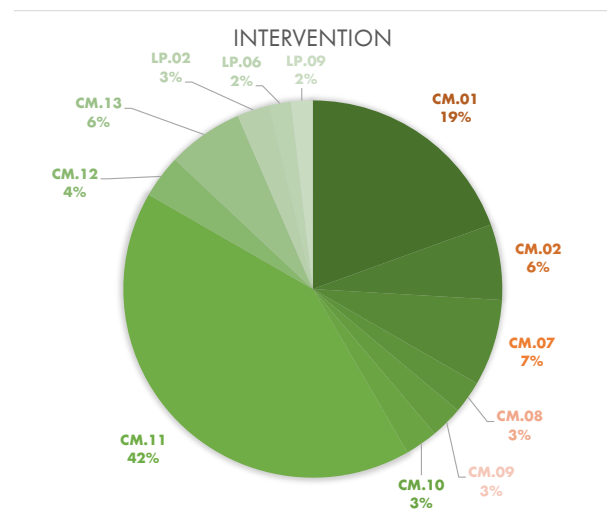
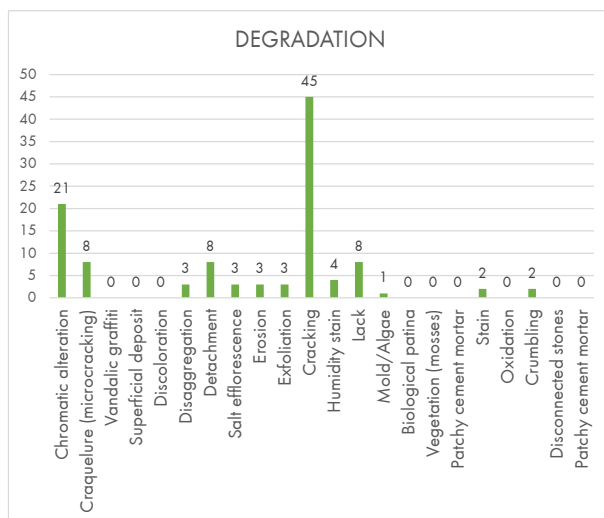
Table 5 - List and number of the intervention of repair on the façades.

Graph. 3 [left] - Graphic of the damages spreading (external façades, Table 4).

Graph. 4 [right] - Pie chart of the percentage frequencies of each type of intervention on the external façades (all materials, Table 5).

Graph. 5 [left] - The graphic shows the percentage frequencies of each form of intervention (internal elevations, Table 6).

Graph. 6 [right] - Pie chart of the percentage frequencies of each type of intervention on the interior elevations (Table 7).



The most frequent interventions are CM.04 (removal of superficial deposit from exterior stucco) and CM.05 (removal of discoloration from the stucco).

The internal elevations, altar, ceiling

Inside the church (internal façades, altar, ceiling) degradation mostly concerns the lime-based materials and stones.

Degradation	Number
Chromatic alteration	21
Craquelure (microcracking)	8
Vandalic graffiti	0
Superficial deposit	0
Discoloration	0
Disaggregation	3
Detachment	8
Salt efflorescence	3
Erosion	3
Exfoliation	3

Cracking	45
Humidity stain	4
Lack	8
Mold/Algae	1
Biological patina	0
Vegetation (mosses)	0
Patchy cement mortar	0
Stain	2
Oxidation	0
Crumbling	2
Disconnected stones	0
Patchy cement mortar	0

Table 6 - List and number damages on the interior elevations.

The most frequent degradation is in cracks and chromatic alteration. Cracks affect only the layer of plaster and they are mainly localized on the low facades and ceiling. The thermographic analysis allowed the authors to highlight the difference between surface

cracks and cracks crossing the masonry, and therefore to recognize the cause and assign the correct solution. Cracks are due to structural adjustment and subsidences. The diagnostics confirmed the hypothesis that the church foundations are lowering and the masonry is gradually leaning to yield towards south-west.

The chromatic alteration affects only the plaster, both of ceiling and walls. There are many possible causes related to this degradation. Near the windows, the degradation could result from the action of sunlight whilst near the candlesticks it could be due to candle smoke; in other limited zones, different coloration is due to maintenance operations that have been careless regarding the aesthetics of the surface. Finally, alterations are due to the fast change of the microclimate inside the church, for example because of crowding in short time.

Intervention	Number
CM.01	21
CM.02	7
CM.07	8
CM.08	3
CM.09	3
CM.10	3
CM.11	45
CM.12	4
CM.13	7
LP.02	3
LP.06	2
LP.09	2

Table 7 - List and number of the intervention of repair on the interior elevations.

The most frequent interventions are CM.11 (sealing cracks) and CM.01 (fixing chromatic alteration).

The former consists of grouting the crossing cracks and sealing the superficial ones. The intervention on chromatic alteration is done after cleaning the discoloration and chromatic alteration, this includes white-washing the surfaces to obtain the desired uniformity.

The floor

Degradation to the floor concern stones, "Lombard cotto" and cement mortar.

Degradation	Number
Superficial deposit	7
Disaggregation	1,5
Biological patina	0
Vegetation (mosses)	0
Craquelure (microcracking)	0
Stain	5
Lack	0
Oxidation	0
Crumbling	0
Disconnected stones	0
Patchy cement mortar	3
Cracks	5
Humidity stain	5
Chromatic alteration	4
Mold/Algae	1

Table 8 - List and number of the damage types on the floor

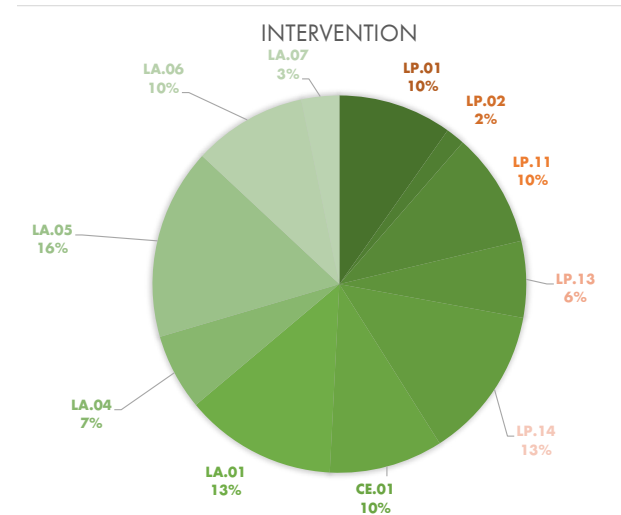
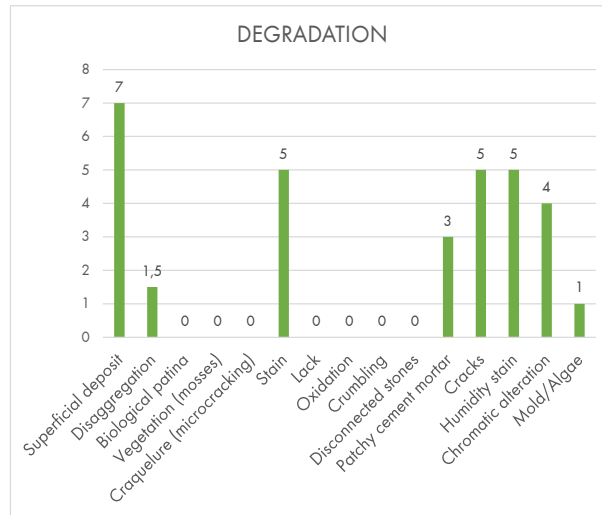
The most frequent degradation is superficial deposit on the stone in the nave and Lombard cotto in the apse, due to dust and topsoil near the walls.

In addition, the apse floor also shows humidity stains, wax and oil stains due to the residues of maintenance products.

Stains on Lombard cotto are located in the apse in the north-western area; this is an unfavorable orien-

Graph. 7 [left] - The graphic shows the percentage frequencies of the damage types (roof, Table 8).

Graph. 8 [right] - The pie chart shows the percentage frequencies of each form of intervention (roof, Table 9).



tation because the temperature is lower and this side the church is directly in contact with the slope ground. The thermography and psychrometry diagnostics confirmed this hypothesis, the micro-climate is the main cause of the humidity stains.

Although this is not the most frequent form of degradation, cracks on all materials are a serious issue for the conservation of materials and structures. As already ascertained during the diagnostic application, the phenomenon highlights a foundational subsidence to south-west, also confirmed by the presence of many cement mortar patches indicating the presence of cracks in the past that have been sealed several times. A huge central crack extends longitudinally along the nave and a lot of other, more minor cracks, are present on the south-western side.

Intervention	Number
LP.01	3
LP.02	0,5
LP.11	3

LP.13	2
LP.14	4
CE.01	3
LA.01	4
LA.04	2
LA.05	5
LA.06	3
LA.07	1

Table 9 - List and number of the intervention of repair on the floor.

The most frequent forms of intervention are LA.05 (removal of stains on Lombard cotto), LA.01 (removal of superficial deposit on Lombard cotto) and LP.14 (removal of chromatic alteration from the stones).

The first intervention consists of cleaning with appropriate solvents, depending on the stain to remove. The intervention on the superficial deposit and chromatic alteration is a cleaning process that follows specific procedures according to the materials and their state of conservation. As an example, at the end of this

chapter, the authors show a technical specification of one of the procedures.

Endnotes

(1) The authors with Letizia Bernasconi, Micol Borsa, Davide Cucchi, Martino D'Alberto, Hao Gu and Valentina Iobizzi.

Bibliographic sources

- ICOMOS-ISCS (2008). *Illustrated glossary on stone deterioration patterns*. Paris: ICOMOS



Fig. 1 - Metric, material and degradation survey: plan and ceiling.

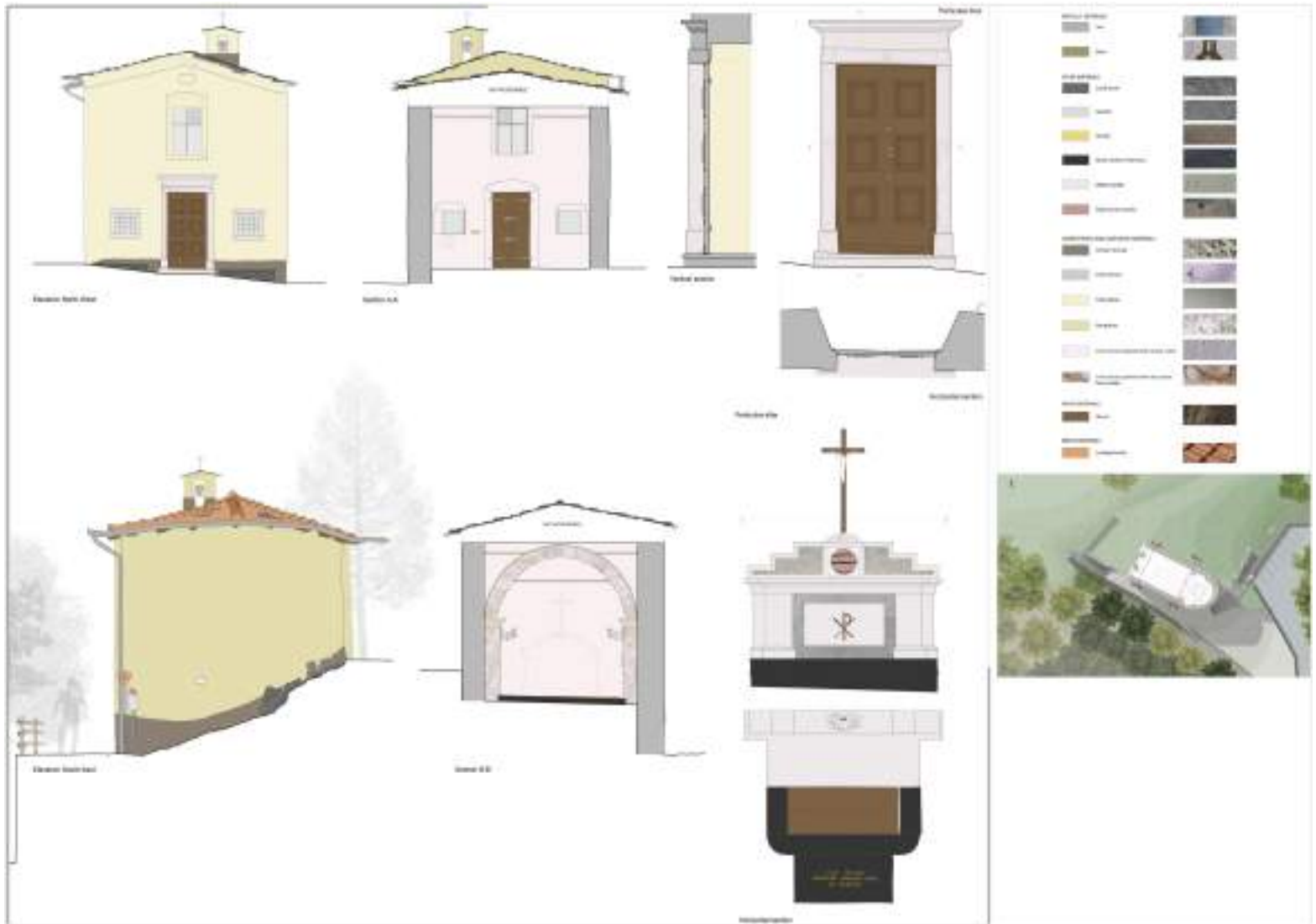


Fig. 2 - Material survey: elevations North-West (façade) and South-East (apse).

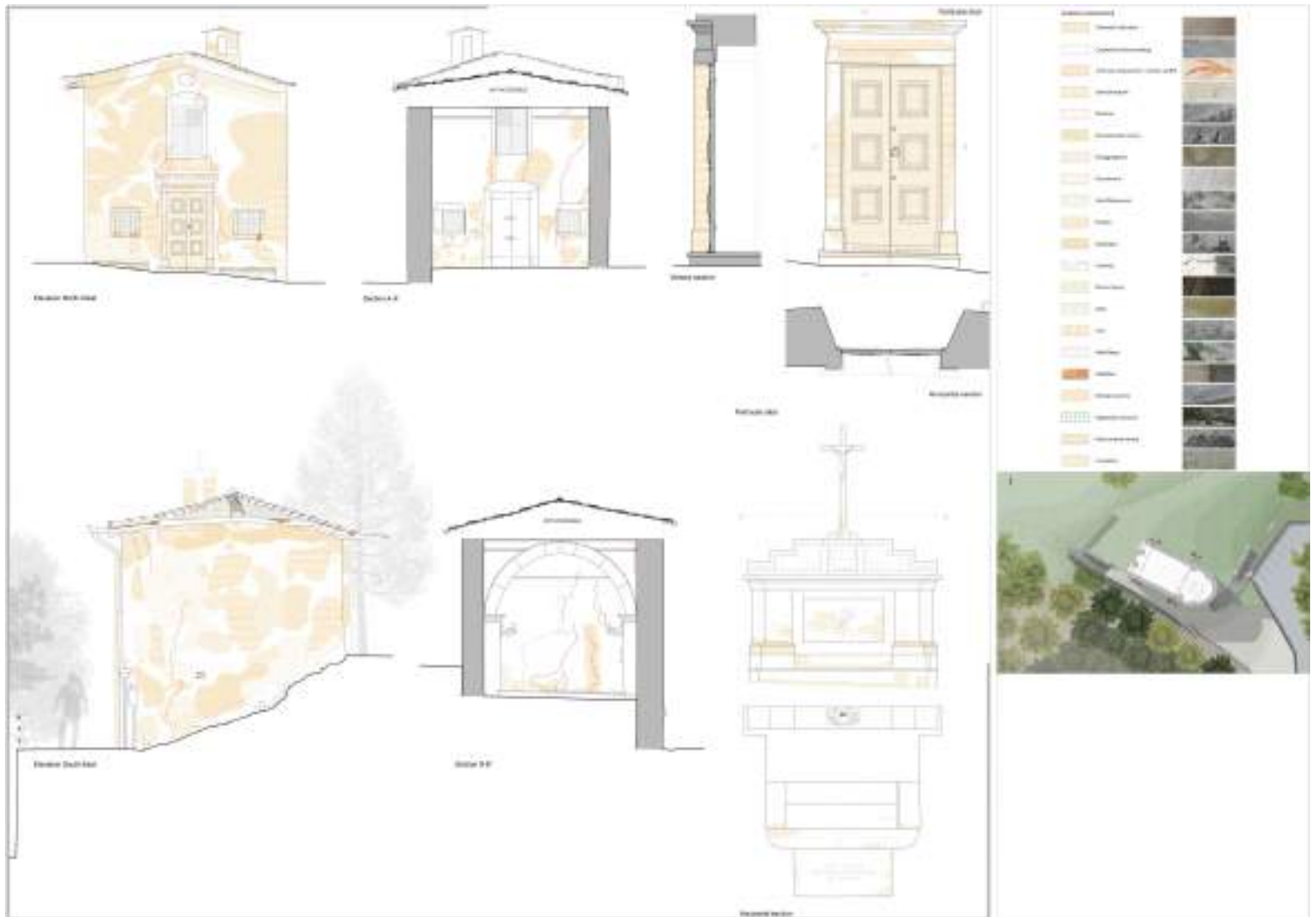


Fig. 3 - Degradation survey: elevations North-West (façade) and South-East (apse).



Fig. 4 - Degradation survey: elevations North-East and South-West.

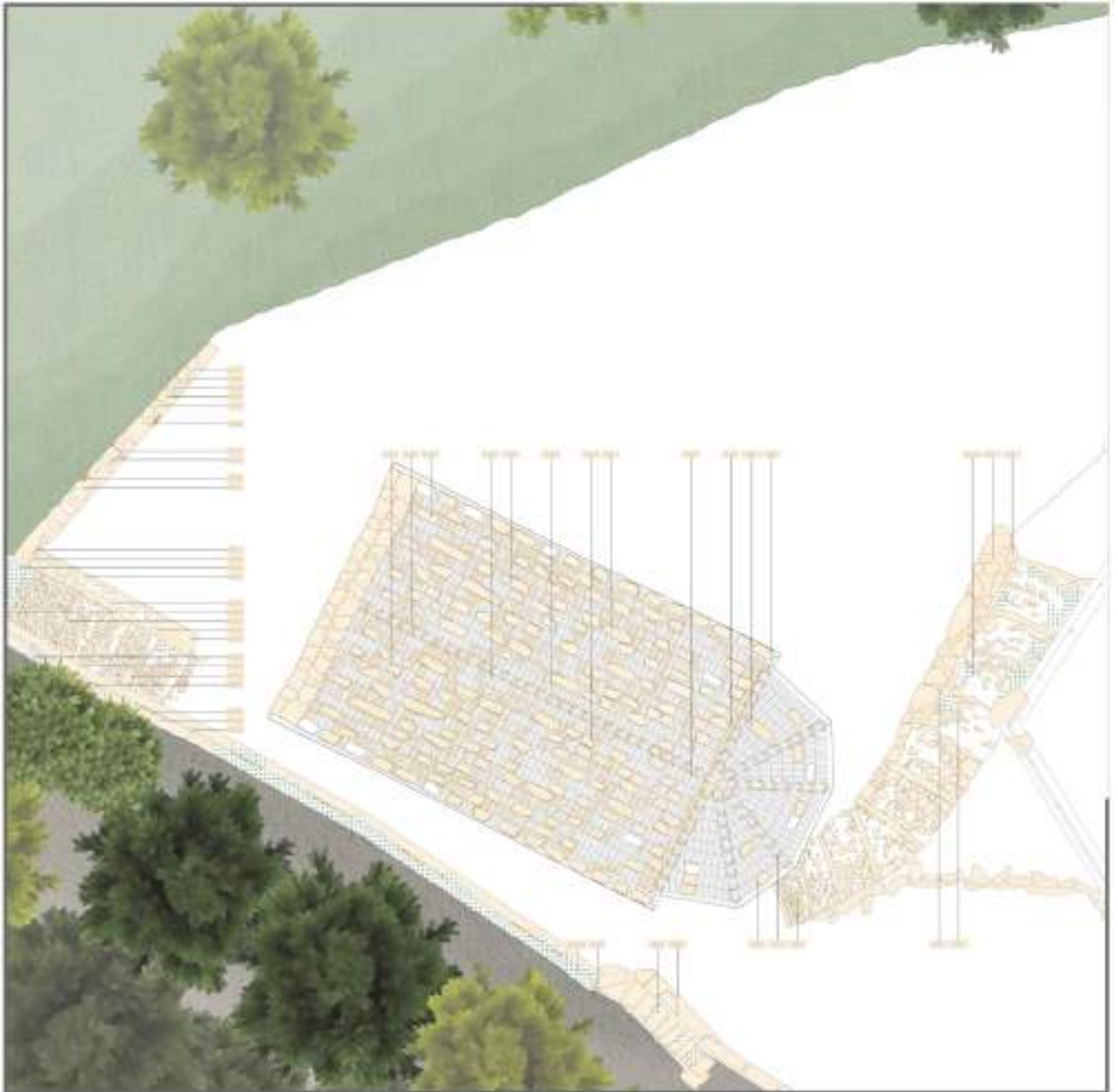
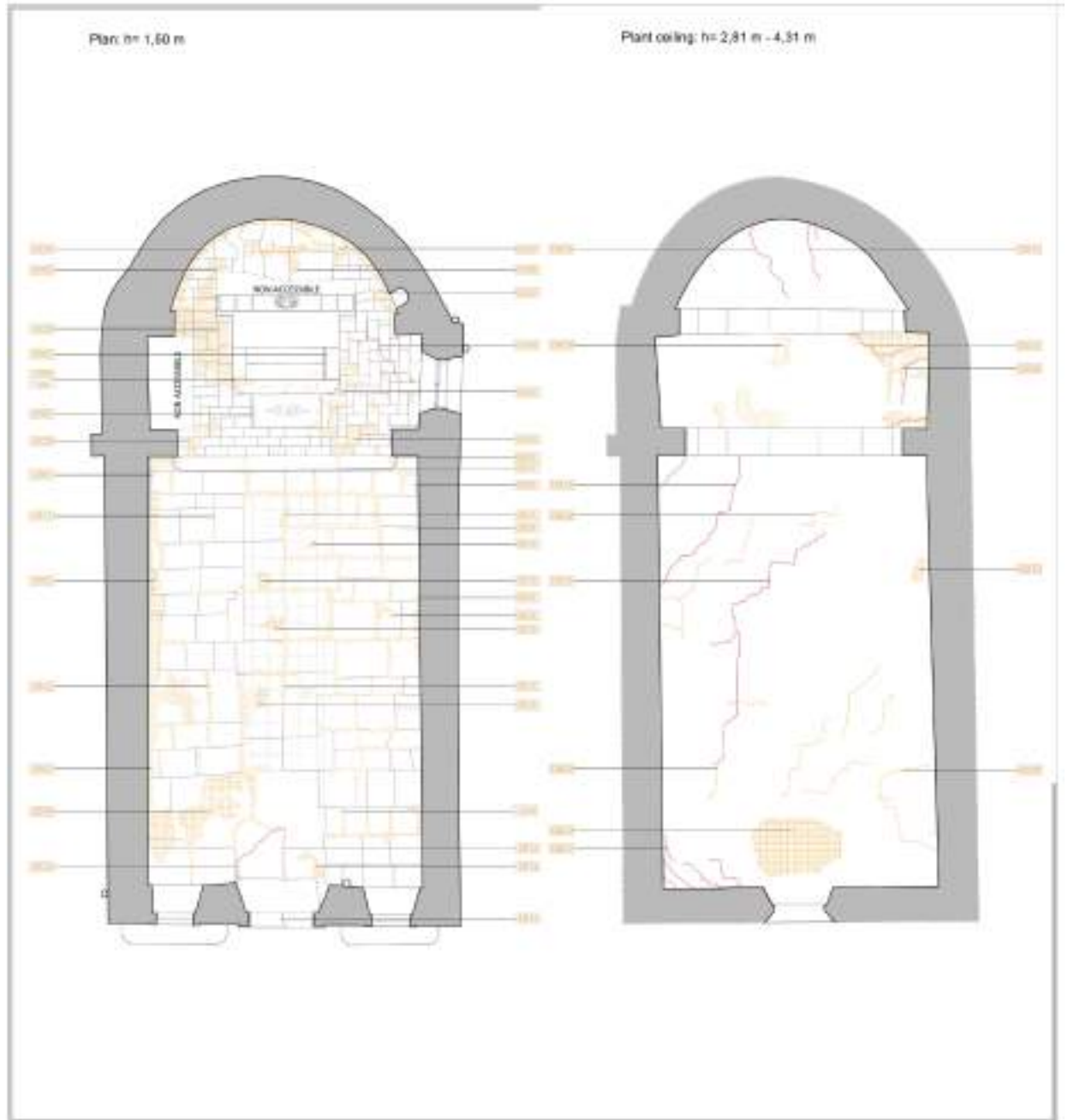


Fig. 5 - Conservation interventions: roof plan, context.



Plan: n° 1,60 m

Plant ceiling: h= 2,81 m - 4,31 m



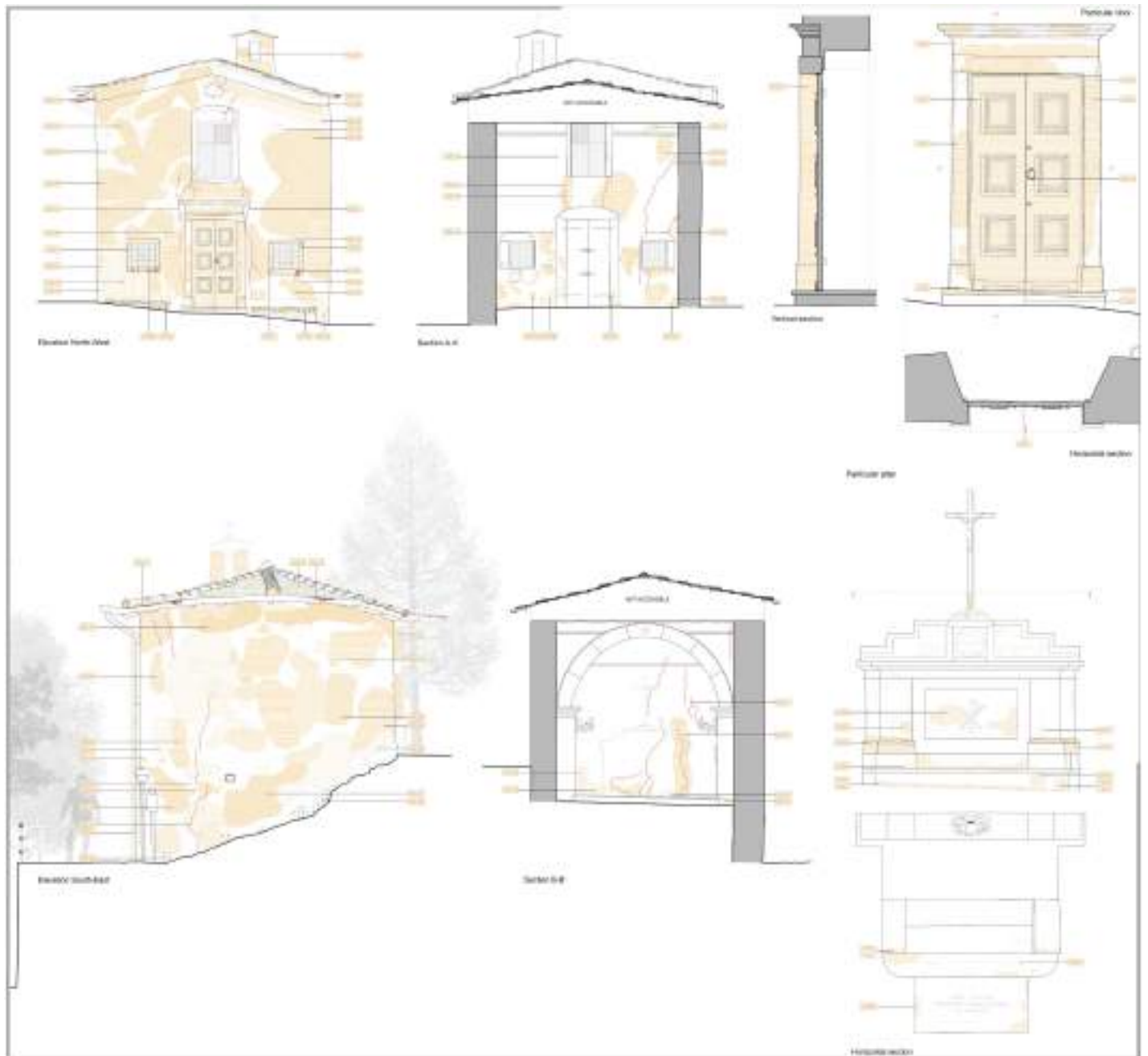




Fig. 7 - Conservation interventions: elevations North-West (façade) and South-East (apse).



Fig. 8 - Conservation interventions: elevations North-East and South-West.





CONSERVATION AND ENHANCEMENT OF THE VILLAGE AND THE LANDSCAPE

THE LANDSCAPE



Landscape quality objectives: from analyses to design

Tiziana Bardi, Andrea L'Erario

After the analysis and before the design phase, it is important to have an intermediate *check phase* to make a synthesis of all the former analyses.

The aim of this paper is to describe the methodology to highlight and sum up the strengths and weaknesses of Mondonico village and its landscape and to define the *landscape quality objectives* for the conservation, requalification and enhancement of Mondonico and its landscape in the future.

This chapter shows the SWOT analysis results that are useful to identify the *key concepts* for the following definition of 'landscape quality objectives'.

SWOT analysis: brief description of the method

The SWOT analysis is a method for organizing all the information resulting from previous analyses and to categorize them according to a rational and logical scheme (Frisio, 2004; Team FME, 2013). Albert Humphrey¹ developed this analytical tool to evaluate strategic business plans, while working on a research

project at the Stanford University Research Institute between the 60s and 70s. From the 80s, the SWOT analysis became a support tool for public strategic plans to analyze several territorial development scenarios (Storti, 2009).

The SWOT analysis is useful for integration between disciplines: it achieves a result, which answers several questions, related to a multi-criteria approach. The SWOT analysis is used to design strategies in order to achieve all objectives more easily and quickly. In relation to the Mondonico case study, the SWOT analysis is fundamental to define the strategies to design the best proposal for the conservation and the enhancement of Mondonico and the landscape.

The acronym 'SWOT' comes from the first letters of four words, which are the interpretation categories of a phenomenon or a place: Strengths, Weaknesses, Opportunities and Threats.

Strengths and weaknesses relates to the current state of the landscape analyzed; they are internal factors. Opportunities and threats are external factors and come from outside of the analyzed context. They are

not modifiable. They refer to «*an examination of the evolutionary trends and their possible impacts on the current landscape organization, with a consequent focus on [landscape] enhancement opportunities and landscape damaging threats/risks*» (Regione Lombardia, 2007: 23). It is necessary to keep them under control and take advantage of them (or to avoid the issues related to them).

The SWOT grid (see Table 1) categorizes all the information collected during the SWOT analysis.

It is important to refer to all design scales (from the territorial to the settlement/building scale) when conducting the SWOT analysis. «*A landscape is not an indefinite part of the world, observed from any place at any scale*» (Pinchemel et al., 1992). It is perceived according to the different scales, at ground level, from the top, with a perception of horizontal and diagonal (Lévy, Lussault, 2003).

The four SWOT analysis interpretation categories refer to:

- *Strengths*: positives aspects of the landscape; landscape components (tangible or intangible) at different scales, which represent an advantage for the landscape itself and are already present in the area. For example landscape historical features, visual and sensory aspects (beautiful views, good sounds or smells, etc.), presence of historical settlements or buildings with a high cultural value, etc;
- *Weaknesses*: elements that represent a disadvantage or an issue for the landscape or for the objectives of the research. For example lack of maintenance of the landscape, lack of territorial or local accessibility, lack of facilities for local people, building decay, etc;
- *Opportunities*: interventions already planned that could have positive consequences for the conser-

vation and the enhancement of the landscape. For example actions planned by Municipalities or Regions according to local or regional urban plans, the reinforcement of regional public transport, financial funds for the recovery of historic buildings or for multifunctional agriculture, etc;

- *Threats*: actions that could destabilize the current situation of the landscape with negative consequences for the landscape. For example: presence near the analyzed area of potential pollution sources for the environment, construction of new infrastructure that could compromise the landscape's historical features, etc.

Key concepts for the designation of the 'landscape quality objectives'

After the SWOT analysis, the methodological second step is to outline key concepts for the designation of the 'landscape quality objectives'.

The European Landscape Convention (Council of Europe, 2000) defines the 'landscape quality objectives' as «*the formulation by the competent public authorities of the aspirations of the public with regard to the landscape features of their surroundings*» (art. 1., Definitions, lett. c).

Moreover, the Guidelines for the implementation of the European Landscape Convention (Council of Europe, 2008) refer: «*The definition of quality objectives should be based on knowledge of the specific characteristics and qualities of the places concerned, and identification of their dynamics and of potential as well as of how landscape is perceived by the public. Certain landscape questions or aspects may receive special attention. Landscape quality objectives represent the result of the process of devising landscape operations, which implies knowledge production, public*

consultation, policy formulation and action and monitoring strategies.

The objectives should constitute the *preliminary guidelines* for drawing up the measures to be taken to protect, manage and plan landscapes and manage them over time». (11.2.2, Definition of landscape quality objectives).

The 'landscape quality objectives' are the main purpose of the design strategy. The 'landscape quality objectives' for Mondonico concern the conservation and enhancement of the village and its landscape.

The 'landscape quality objectives' definition is fundamental to guarantee the best landscape planning and management, therefore to find the best design ideas to reinforce potentialities, to eliminate weaknesses, to take opportunities and to avoid threats. The compilation of the SWOT grid helps in their definition.

The designation of Mondonico's 'landscape quality objectives' refers to specific *key concepts*, which link to Cultural Heritage conservation as well as economic local context development. *Key concepts* strictly relate to the former analyses.

The method for the key concepts definition, and therefore for Mondonico 'landscape quality objectives', is based on the answers to the following basic questions: *Why in Mondonico? What in Mondonico? How in Mondonico?* (Neuray, 1982). The answers to the previous questions minimize the impacts of the ideas on landscape in the *ex ante* step of the proposal, by organizing the existing realities and by putting them into a good synergy and global 'landscape strategy'. The village and the land around it constitute a *landscape unit*: it would be incorrect to work on them separately. This consideration was the base for Mondonico's 'landscape quality objectives' designation, for the following design strategies definition phase and therefore for a unitary *landscape project*.

SWOT analysis application

As described in the previous chapters of this book², the main aim of the analyses was the comprehension at different scales of all Mondonico's positive elements and negative issues, related to the state of abandonment of historical buildings and agricultural terraces. The SWOT analysis helped in organizing all the results of the former analyses in a logical way. Mondonico's SWOT grid (Table 1) describes the results of the SWOT analysis.

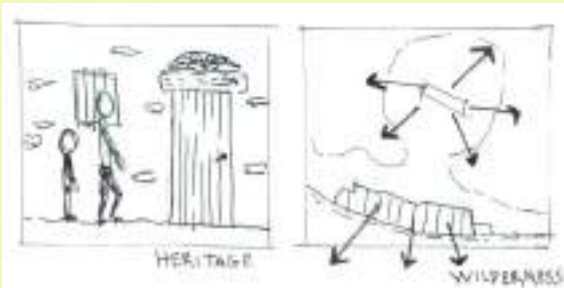
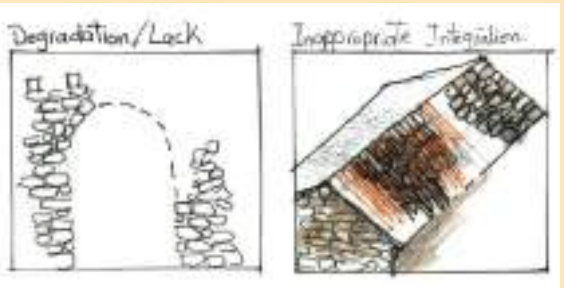
Key concepts and 'landscape quality objectives' for Mondonico and its landscape: conservation and enhancement

The key concepts definition is the result of a discussion on Mondonico's SWOT grid (Table 1) and on the answers to three questions (*Why in Mondonico? What in Mondonico? How in Mondonico?*).

They refer to Mondonico's main strengths or issues to work on. Therefore, they are the focus areas to work on for the 'landscape quality objectives' designation and then for the following step of identification of the design strategies. The discussion defined four key concepts to work on: heritage, sensorial perception, physical integration, accessibility. The 'landscape quality objectives' were designated for each key concept.

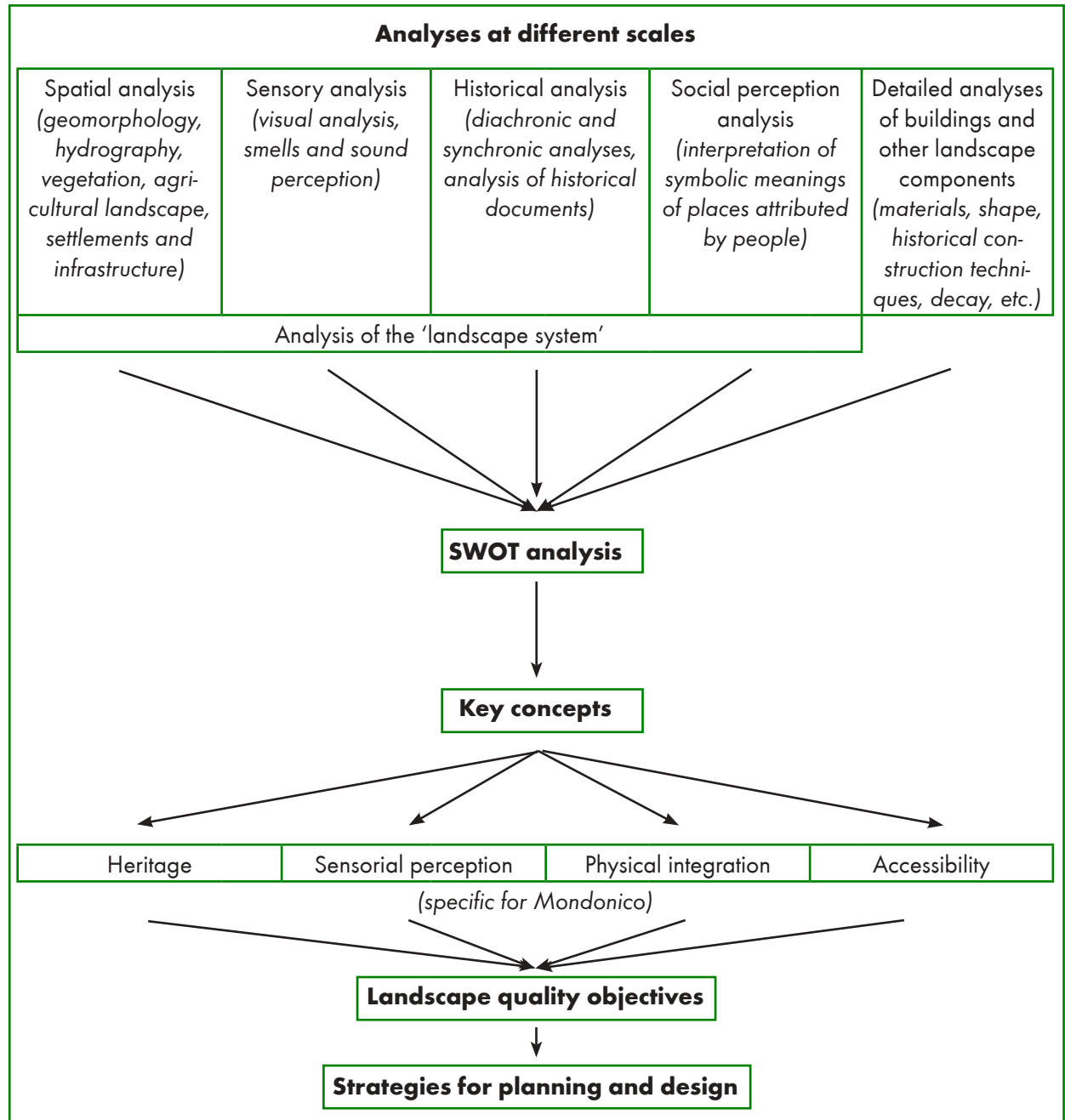
The SWOT analysis, the *key concepts* definition and the 'landscape quality objectives' designation, are fundamental for the definition of conservation and enhancement proposals of Mondonico and its landscape (Fig. 1). The proposals, and therefore the design strategies, are described in the second part of this book.

Table 1 - Mondonico's SWOT grid

		Helpful to achieving the objectives	Harmful to achieving the objectives
Internal origin	STRENGTHS	<p><i>Territorial scale</i></p> <ul style="list-style-type: none"> • Mondonico's horizontal circulation on the mountainside runs parallel to Dorio's circulation along the lake (Wayfarer path); • Presence of close by Dorio railway station; <p><i>Landscape scale</i></p> <ul style="list-style-type: none"> • Exceptional natural and historical landscape around the village; • Different landscape views, open or close, along the pathways; <p><i>Settlement and building scale</i></p> <ul style="list-style-type: none"> • Mondonico's historical buildings still maintain their historical features (materials, external structure, small openings, etc.); • Mondonico's open space characteristics: public-social (large ones) and private (small ones). 	
			<p><i>Territorial scale</i></p> <ul style="list-style-type: none"> • Soft transport infrastructures absence; • Lack of integration among all transport kinds already present (pedestrian and cycling paths, roads and railway); <p><i>Landscape scale</i></p> <ul style="list-style-type: none"> • Fragmented territory (land properties system since the 19th century, as documented in the historical analysis). Not enough connections existing between terraces; • The abandonment of the village and the land caused lack of maintenance of the landscape: the consequence is the 'spreading' degradation of the landscape components (terraces, buildings, open spaces between them, physical connections, etc.); • Use of contemporary materials to repair the landscape components, which are incompatible to the landscape's historical characteristics; • Non-accessibility of the three main vertical pathways leading up to Mondonico for the elderly or people with disabilities; <p><i>Settlement and building scale</i></p> <ul style="list-style-type: none"> • All buildings are in decayed condition and not possible to live in; • Lack of utilities and commodities in Mondonico, both for local people and tourists.
			

External origin	<p style="text-align: center;">OPPORTUNITIES</p> <p><i>Territorial scale</i></p> <ul style="list-style-type: none"> • Possibility to improve the connection between Dorio/Mondonico, with the city of Milan, by train or car, and with Switzerland, by car; <p><i>Landscape scale</i></p> <ul style="list-style-type: none"> • Possibility to increase sustainable tourism, due to cultural and natural resources; • Local tradition revival (i.e. traditional techniques of construction of terraces and dry-stone walls) with an educational aim; • Possibility to enhance the social-cultural values of the landscape; <p><i>Settlement and building scale</i></p> <ul style="list-style-type: none"> • Possibility to requalify all buildings for social uses. 	<p style="text-align: center;">THREATS</p> <p><i>Territorial scale</i></p> <ul style="list-style-type: none"> • Decrease of population of Lake Como area: the youth is moving away from Dorio to the main urban centers like Lecco or Milan; <p><i>Landscape scale</i></p> <ul style="list-style-type: none"> • Decrease of people will lead to further landscape degradation and to the historical-cultural value loss; • Intangible heritage loss, such as traditions or historic construction techniques for terraces and dry-stone walls maintenance; • Mass tourism could spoil the delicate balance between conservation and enhancement of the landscape; <p><i>Settlement and building scale</i></p> <ul style="list-style-type: none"> • Loss of the historical-cultural value of the village caused by new functions which are not suitable and coherent with the exterior and interior structures of the buildings; • Use of improper new materials for building conservation not coherent with historical materials.

Fig. 1 – The steps from the analyses to the strategies



Endnotes

(1) Albert Humphrey, 1926-2005

(2) See the chapters by Raffaella Laviscio, Andrea L'Ercario, Elisabetta Rosina & Alessia Silveti, Laura Elisabetta Malighetti and Mattia Alberganti & al.

Bibliographic sources

- Carta, M. (2011). *La rappresentazione nel progetto di territorio: un libro illustrato*. Firenze: Firenze University Press
- Chiappero, M., (2003). *Le dessin d'urbanisme, de la carte au schéma-concept*. Lyon: Editions du Certu
- Council of Europe (2000). *European Landscape Convention*. Available from: <https://rm.coe.int/1680080621> [Jan 10th, 2018]
- Council of Europe (2008). *Guidelines for the implementation of the European Landscape Convention*. Recommendation CM/Rec(2008)3 of the Committee of Ministers to member states. Available from: <https://rm.coe.int/16802f80c9> [Jan 10th, 2018]
- Frisio, D.G. (2004). I punti di forza e di debolezza, le minacce e le opportunità. In Casati, D. (cur.). *Riforma della PAC e impatto sul sistema agricolo lombardo*, pp. 213-224. Milano: Regione Lombardia
- Lévy, J., Lussault, M. (2003). *Dictionnaire de la géographie et de l'espace des sociétés*. Paris: Éditions Belin
- Neuray, G. (1982). *Des paysages. Pour qui? Pourquoi? Comment?*. Gembloux, Belgique: Les Presses agronomiques de Gembloux
- Pinchemel, P., Pinchemel, G. (1992). *La face de la terre: éléments de géographie*. Paris: Armand Colin
- Regione Lombardia (2006). *La gestione paesistica delle trasformazioni territoriali: linee guida e casi pilota*. L.O.T.O. Project, Landscape Opportunities for Territorial Organization. Milano: Regione Lombardia
- Roger, A. (1997). *Court traité du paysage*. Coll. «Bibliothèque des Sciences Humaines». Paris: Gallimard
- Storti, D. (2009). *L'analisi SWOT*. Lesson at Reggio Calabria Mediterranean University, Italy. Available from: www.unirc.it/documentazione/materiale_didattico/598_2009_170_5598.pdf [Jan 10th, 2018]

- Team FME (2013). *SWOT Analysis. Strategic Skills*. Available from: www.free-management-ebooks.com/dldebk-pdf/fme-swot-analysis.pdf [Jan 10th, 2018]

Mondonico's landscape quality objectives

Tiziana Bardi, Andrea L'Erario

Heritage

The concept is based on the awareness of intervening in Mondonico's historical built environment. The buildings, the rural landscape and their relationships have a high historical and architectural value. The historical data provide the time of permanence of the buildings and their patterns, documented since 18th century. The land around Saint George church, towards the village, is historically terraced and the pathways from Dorio to Mondonico have remained pedestrian up to now. Historic materials (wood, stones, etc.), open or built spaces, terraces and dry-stone walls, shapes and old functions of historical buildings, are witness of the complex interactions between the main features of the settlement and the landscape around it.

Landscape quality objectives (heritage)

1. Preserve the historical characteristics of tangible Cultural Heritage: the terraced landscape, the settlement and the buildings;
2. Protect and enhance intangible Cultural Heritage: religious traditions, historical construction techniques for the maintenance of terraces, dry-stone walls and buildings.
3. Create a strong dialogue and relationship between the historical heritage and new elements for landscape enhancement.

Sensorial perception

The concept refers to the feelings and emotions experienced at the site. The concept is essential for the comprehension of the 'landscape architecture' and

the importance of integrating different points of view to look at Mondonico's landscape: the visual and aesthetic perception of space, the emotional part of inhabitants and/or visitors, etc.

Landscape quality objectives (sensorial perception)

1. Keep and enhance the visual relationship between Mondonico, the terraces, Dorio and the lake;
2. Enhance the other positive aspects related to sensorial perception (good smells or sounds) and reduce the negative ones (for example traffic noise).

Physical integration

The concept relates to several issues to solve (see SWOT grid).

Landscape quality objectives (physical integration)

1. Integration of functional and visual connections to create a unique sense of place;
2. Integration between natural and historical features of Mondonico's 'landscape architecture';
3. Integration between public and private open or built spaces;
4. Integration between vertical and horizontal physical connections (railway, roads and pathways) at different levels;
5. Integration between old and new landscape elements/materials.

Accessibility

This concept strictly relates to the previous one (integration) and helps to focus on some issues to solve. Not all open public spaces are accessible to people because of their abandonment and the consequent degradation of tangible components of the landscape

(collapse of parts of buildings in Mondonico, abandonment of terraces, degradation of several dry-stone walls and pathways, etc.). The fragmentation of land properties (public or private) does not allow physical connections and integration between all open spaces, both between buildings and terraces. Moreover, Mondonico is accessible only by bicycle or on foot.

Landscape quality objectives (accessibility)

1. Think up a new way to allow all people (even the elderly and people with disabilities) to reach the village easily and visit the landscape;
2. Think up an innovative strategy for landscape maintenance to increase accessibility;
3. Allow local stakeholders meeting all together to work and participate in the decision-making process for the definition of a landscape dynamic conservation and management project. This, in spite of the fragmentation of land properties, also aims to increase local accessibility.



Guidelines for preservation of a landscape system. A handbook for the historic village of Mondonico

Paola Branduini

Introduction

As illustrated in the Lavisio text, the first condition before starting any intervention of recovery is taking care of the landscape characteristics, concerning both buildings and open spaces. The previously explained landscape reading is the right way to determine sensitivity to change.

The landscape of Mondonico is fragile: its fascination is due to a combination of natural and human factors that have built a unique landscape over time that today captures our gaze for its harmonious colours, materials, forms and connections. The availability of natural elements combined with the people culture produces similar but different landscapes from others even in very close by territories: this allows us to give some suggestions for preserving them but it reminds us to adapt these suggestions to the specific characteristics of each place.

Methodology

The suggestions for preserving landscape comes from the long standing and accurate work undertaken by English heritage in defining sensitivity to change and specific characters of rural heritage (English Heritage, 2006 and 2011); it was also carried out by the applied research undertaken by Lionella Scazzosi and the author for the Italian Ministry of Culture concerning the suggestions for designing and evaluating the landscape compatibility of transformations (Scazzosi, Branduini, 2014).

Who can benefit from these guidelines?

They can be addressed to technicians (architects, engineers and agronomists) in charge of designing a landscape project and of drawing up a landscape report, of evaluators of the same landscape reports; but it can be useful also for farmers and owners of

rural buildings and agricultural land who want to plan changes to their property; it could be helpful for administrators and citizens' associations engaged in the preservation of rural heritage and landscape quality. (Everybody can have an active role in recognizing and transmitting rural heritage / CEMAT).

General principles

Because we are working on a common heritage, it is important to have a great respect of the historical subject and some general principles, usually applied to the buildings, can guide operations on the landscape too:

A_ It's better to maintain than to repair. Repair is work to put right significant decay or damage that has already occurred whereas maintenance is the continuous protective care of the building. Maintenance can be carried out either on an 'as needs' basis or as part of a proactive cyclical plan (Historic England). Annual care of the dry stone walls avoids the collapse of entire parts of the terraces; a periodical cleaning of the drainage canals avoids risk of flood.

B_ It's better to recover than build new construction. The reuse of the existing building or of the existing landscape structure like the terraces is always preferable to the construction of the new: this is a general principle to avoid land consumption and the alteration of morphology.

C_ It's better to adopt reversible solutions than irreversible ones. Light additions with contemporary materials have to be preferred to stable/fixed solutions with traditional materials and mimesis of forms. New cultivations on the terraces can be helped by contem-

porary lightweight materials; where they can prosper without modifying the form and the connection of the terraces; new vegetation can integrate the existing with native or naturalized species.

Any new addition should be in dialogue with the existing landscape and not in contrast: the project is not written on a white page, but on a text composed and re-elaborated time after time. Any new addition should be appropriate for the context and not be taken from other project and simply bolted on: any solution should come from the attentive reading and comprehension of the specific characteristics of the site.

In order to accomplish that you should avoid any form on mimesis of solutions concerning forms, materials and techniques of the past: you should be inspired by the process of research of the past but use contemporary materials in order to declare the authenticity of the present intervention.

The main criteria for preserving landscape are shown below and they are suitable to the Mondonico landscape: they can be applied in any rural context, in the mountain and on the plain. The correct application depends on a deep and accurate landscape reading (as explained in Laviscio chapter).

How to preserve a rural settlement

1_ Respect the existent relationship between open spaces and construction, understanding character, significance and context.

This advice should guide the adaptation of any farmstead in the landscape. It involves understanding the essential features of the settlement, its relationship to the wider landscape setting and its sensitivity to change. Only then should a designer start to address the issues associated with adapting the buildings for a new use.

A characteristic of Mondonico is the clear division in the agricultural use of landscape: the mixed cultivations below the settlement, shown on terraces, the vineyard above and the grazing land in the upper part. The permanence of this historic division should be kept as distinctive spatial character: in a renovation plan the agricultural function should be preferred in order to help maintaining it.

The meeting places of the Mondonico settlement are spaces left free from construction: there are no private spaces in an alpine village, the passages between houses becomes small squares and places to stop and talk. They should keep the continuity of movement in the village and not be separated from the other spaces. Old but still productive vegetation act as shelter, meeting points and symbols of ancient uses. Retaining walls of ancient vegetable gardens become seats for meeting point.

2_ Respect uniqueness, specificity of each landscape construction, acquired over time and in relation with its context.

A thorough understanding is needed of how the landscape system works: terraces, irrigation, vegetation,... At the same time a thorough understanding of the building techniques, materials and their conditions is needed.

For example, when a dry stone wall meets a spring, it should let it pass to avoid a risk of infiltration in the wall and rupture in the winter time: so the spring becomes a small canal and in the wall a window is opened to let it pass. This is a specificity detail in Mondonico walls. Closing this open canal or redirecting it cause the loss of the knowledge of this simple technique.

Vegetable gardens in the alpine villages can be besides the houses or frequently on a part of the terraces: they are protected from the winds by walls or they can



Fig. 1 - The open space is still a productive space because it is well maintained: fields and terraces for agricultural and livestock production; forest for fruit and wood production. The new use of the space should maintain the relationship between the open space and the settlement. (photo: Andrea L'Erario)



Fig. 2 - Open spaces left free from construction were used for rest and talk between inhabitants: today they are suitable space for sociable occasions. (photo: Andrea L'Erario)

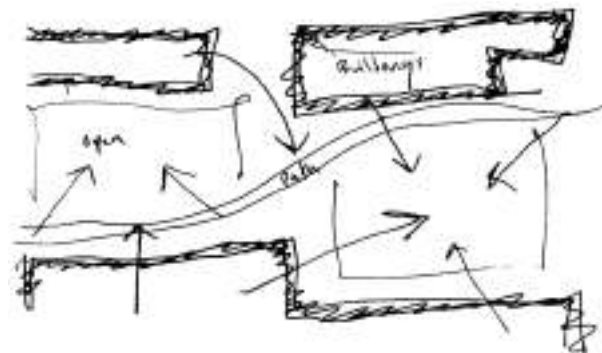


Fig. 3 - A scheme of open spaces of the settlement.

Fig. 4 - Ancient canalisation help the draining system of the drystone wall. (photo: Andrea L'Erario)



Fig. 5 - The enclosures around the settlement are for the vegetable garden: this is a specificity of alpine villages. (photo: Andrea L'Erario)



Fig. 6 - The Viandante pathway in the south part from Mondonico to Dervio does not conserve historical characteristics: dimensions have been changed for being vehicle accessible and historical elements now include concrete reinforcements. The new wood railing is too smooth and its forms belongs to wood industry not handcrafted production. (photo: Andrea L'Erario)



be under the ground level. This specificity should be kept with uses that maintain the isolated and precious character of this artefact.

3_ Respect formal characteristics of the landscape in order to maintain formal unity, even if concerning only a part of the whole.

You should minimise changes. Altering features that give the landscape its historic or architectural importance should be avoided. If significant features have already been lost, the case for reinstatement can be only if providing that there is good evidence for their former existence (Historic England).

As explained in the analysis (Lavisio chapter), formal unity is due to the horizontality of terraces that link Mondonico to the villages along the mezzacosta path, the Viandante path: this character is readable from the lake view. The Mondonico village is hidden behind trees: its colours are completely integrated in the natural colours of stones, grazing pasture and vegetation. Dorio houses are painted with light colours and are evident from the view lake. Only the Mondonico church is visible from the road and the lake as are most of the churches on the Como Lake in an old system of communication. Painting even only one of the Mondonico houses with colours should change this relationship and its significance.

4_ Keep the functions the construction was built for readable and comprehensible.

Even where a building needs a change of usage, the character of site, architecture, materials and details should be kept in order to allow future generations to understand the reasons why this building was conceived and its role within the territory.



Fig. 7 [left, top] - The wide angle vertical landscape unit: lake, Dorio settlement, terraces, Mondonico settlement, forest. (photo: Andrea L'Erario)



Fig. 8 [right, top] - The close landscape unit: Mondonico settlement and its terraces. (photo: Andrea L'Erario)



Fig. 9 [left, bottom] - View from Mondonico: the lake as part of the landscape unit. (photo: Silvia Erba)



Fig. 10 [right, bottom]- The first nucleus of this building is the stable and hay barn and the following additions are nevertheless recognisable in becoming a woodshed. (photo: Andrea L'Erario)

5_ Respect sobriety and pure essentiality of rural buildings.

Any enrichment or decoration not belonging to the history of places and of local building types should be avoided. Rural architecture is essential and is far from excess and decoration. The scarce availability of protection material like mortar left the facades bare, but it is the regular display of stones to form a wall or stairs that can be considered decorative: it does not need any addition. Decoration belonging to other

architectural languages should be avoided.

6_ Prefer maintenance and regular integration to complete substitution of parts or total landscape artefacts or building.

Minimising loss of and intervention in significant historic fabric: usually the fabric of the building will embody its character and interest (Historic England). It is better to retain as much original material as possible. The replacement of historic components and features

Fig. 11 [left] - Sophisticated additional elements not belonging to the sobriety of the rural settlement.
(photo: Andrea L'Erario)

Fig. 12 [right] - The quality of this building lies in the uniform material display in a unique texture with the old technique.
(photo: Silvia Erba)



can undermine the historic value and authenticity of a building. Contractors who have the right building skills can usually repair decayed or failed components rather than having to replace them (Historic England). New materials should be used only to replace existing materials where necessary and should be close matches for those being repaired or replaced. Where the cost of using matching materials could jeopardise the viability of a repair project it may be appropriate for the planning authority/grant giving body to consider alternative materials.

One of the alteration risks in a rural village like Mondonico is the change of rooftop materials. Rooves as

well as walls are fundamental elements of the construction to be monitored in order to avoid risk of collapse: they are also evident identity elements visible from high positions. Changing the flat stones covering the wood structure of the roof is a significant modification of the village character: if it is repeated, it can start an irreversible chain of alteration of the whole village. In these cases it is important to use new materials with a similar colour to the existent to guarantee landscape integration on a large scale. On a small scale, texture and form should assure good compatibility.



Fig. 13 [left] - The substitution of part of the railing is a necessary integration: a better solution should be the substitution of only some of the horizontal or vertical boards and with non shiny treatment of the surface. (photo: Andrea L'Erario)

Fig. 14 [right, top] - It is better to avoid complete substitution of materials. (photo: Andrea L'Erario)

Fig. 15 [right, bottom] - The maintenance of as much as possible existent material contributes to preserving the historic subject and the readability of techniques. (photo: Andrea L'Erario)

7_ *Only use a modern material if it helps to retain original features.*

Modern materials, such as stainless steel ties, can be the best solution if they allow significant historic fabric to be retained and avoid the need to dismantle parts of the building. This approach can answer to the need of a reversible solution. Resin repairs to timbers can sometimes help retain more material than traditional methods and so aid future interpretation of the building's history.

It is important to achieve high standards of design and craftsmanship: matching the new use to the building, assessing the impact of changes and carrying

out sensitive and appropriate repairs require the skill and knowledge of those qualified and experienced in conserving historic buildings. You may take professional advice before carrying out major repairs. The conservation and repair of traditional buildings often requires specialist skills if mistakes and unnecessary damage are to be avoided. You have to use appropriate methods and materials. A key feature of traditional farm buildings is the use of 'breathable' materials in their construction. Permeable materials coupled with the good ventilation inherent in most traditional farm buildings allows moisture to escape without causing damage to the building fabric. Serious damage

Fig. 16 - Reinforcement of a beam with a new material.
(photo: Andrea L'Erario)



can result from the use of incompatible materials that restrict this ability of the building fabric to 'breathe'.

How to add new constructions

New buildings often entail a substantial change of landscape. They should be designed with the aim to not decrease the quality of the place, but, as far as possible, improve it, without sacrificing the technical and architectural performance required by innovations. Interventions must therefore be implemented which are appropriate to the character of the landscape in which they are located. A range of choices should be studied and verified at different scales (large, intermediate, approximate), taking into account the specific, historical or contemporary, characteristics of sites.

The integration of new buildings is not the imitation of traditional models: the goal is to get a functional and modern design suitable to the characteristics of built local history. It can be seen that an intervention searching for mitigation fails from the beginning to seek innovative and appropriate solutions for his insertion in the landscape.

It is worth remarking that in the case of the draft of a new agricultural building, it is essential to verify the congruence with the rules of the agricultural sector, to know the legal frameworks of EU, state and regional legislation in agriculture (CAP), planning (local urban plan), environment and human and animal health (Reg.CE 1804/99).

1_ Tune the new construction to the large landscape system.

The fundamental principle to insert a new building in the large and intermediate context is to situate it in relation with the existing "landscape systems" and avoid the effects of "intrusion, division, fragmentation,

Fig. 17 - Is the door in ondu-line necessary or could it be made of wood?
(photo: Silvia Erba)



Fig. 18 - Same technique to form a railing to contain stones, but with a new material.
(photo: Andrea L'Erario)



reduction, elimination of visual relationships, cultural historical, symbolic" (DPCM 12/12/2005, Technical Annex, Note 8). The new volumes should have dimensional ratios such as to respect the rules of already existing settlement aggregation and the functional, historical, visual, symbolic relationships existing between them.

The check of the correct position of a new building in Mondonico on a large and intermediate context have to be verified from the lake. No high building in the middle of the settlement should be proposed, otherwise it symbolically competes with the church. Due to the compact character of Mondonico, a new building should be adherent to the existing settlement, so to avoid sprawl: it should be placed following main alignments that structure morphology of the agricultural landscape, along the contour lines. It should be placed in the mezzacosta location so to allow integration with the colours of the background and be less visible from above or below. It should be integrated in the vegetation, that means not completely hidden by the trees but partially visible.

2_ Adapt new construction to orography.

When you look at the close up context, the new building should be in relation with the formal and material characters of the entire settlement. It should therefore be adapted to the orography, avoid carry-over of land and earthworks and comply with the dominant directions of the settlement.

3_ Keep the rhythm between full and empty spaces.

Consider the relationship between full and empty spaces and propose the same rhythm/alternation. The check should be made from the lake, from the Dorio settlement and from the pathways driving from Dorio to Mondonico. As every alpine village, Mondonico



Fig. 19 - The meaning of the open space dividing Dorio from Mondonico returns to the formation of the two settlements and to the transhumance of cattle from the lake to the *maggengo* (May pastures) until the Alpine pastures. It is a spatial division belonging to an agricultural and cultural use. These open spaces should be kept. (photo: Andrea L'Erario; graphic elaboration Paola Branduini)



Fig. 20 - The consolidated open space should be kept free of construction and dedicated to open-air activities. (photo and graphic elaboration Paola Branduini)



Fig. 21 - New constructions should be placed along horizontal lines (terraces): red ovals are spaces full of wood and not empty spaces to be built up with constructions. (photo: Andrea L'Erario; graphic elaboration Paola Branduini)

is located in a terraced clearing, with crops below and grazing above: no building should be realized in these two open spaces that divide and define Mondonico village from Dorio (down) and from wood (up). The upper part is partly covered by vegetation: it should be cleared so to redefine the proper space historically belonging to the village.

4_ Accord the formal characters of new construction to the existing landscape.

In the conception of a new building the simple functional response to the agricultural needs often generates the juxtaposition of new volumes to existing ones, without an overall architectural design and badly placed in the landscape: the size, orientation, position of the new building should be continuously checked at different scales so as to verify the correct insertion in the existing settlement.

The main dimensions (height, length, width, slope of the roof) have a significant impact on the perception of the building and its relationship with the other buildings. Simple solutions, with buildings not too wide and varied in correspondence to different functions, enable us to understand their functions and fit most appropriately in the settlement and in the context. Conversely, buildings which are very long or wide often recall the models of industrial or commercial spaces.

So you can follow simple but wise rules:

Avoid alteration of the coverage geometry: slopes of rooves, fitting between the rooves of adjacent buildings, continuity of the shell. The slope of the roof depends on the regional climate characteristics and by internal needs of ventilation and external descent of rain or snow;

Keep the proportion/relationship existing between the dimensions of the existing volumes in the new construction;

Respect the alignments of buildings with local roads and the vertical and horizontal movements of people and related connections.

5_ Use contemporary materials without mimesis.

The choice of materials for new buildings is predominantly based on technical criteria (support, lightness, resistance to fire, frost, fragility, sound insulation, thermal insulation, ease of implementation, etc.), duration (maintenance, aging) and economy (production costs and maintenance costs), which may vary from place to place. Materials should be contemporary and answer to present-day necessities but in texture and colour should suit existing materials.

6_ Tune the colours with the existing landscape with sobriety.

The matching of colours help shape the perception of the building in the landscape, make it possible to reduce the visual impact, so as to integrate it.

Many factors affect the colour of new constructions nowadays and in the past: the construction materials and their surface treatment, the surface quality and its ability to reflect light, the colour tone of the surfaces, its stability and its sensitivity to acquire a patina of aging, etc.

The colour can be used to prioritize the formal character of a building, for example making clear the entrance or attenuating the difference between the openings. A plain colour make the building homogeneous, while the distinction between the roof and walls accentuates the volume; a dark roof on light walls has a visual effect of making the construction lower. A wrinkled surface absorbs most light of a smooth and it appears darker; while a smooth or shiny surface is very clear, both near and far.

The roof is the part that, in general, is more visible

from a distance; a dark and opaque roof attracts the eye less, while a shiny one attracts it. When using new materials, such as metal, it is suitable to use neutral colours and dark rather than bright.

In the tradition of building techniques, there is a large variety of materials in the face of architectural solutions that are similar in several Italian sites, successful adaptation of the buildings to the specific local availability of materials, technical skills, etc ...

Mondonico has a uniformity in colour and texture due to the only two main materials it is made of: stone and wood. New construction should use contemporary material but select a colour and a texture according to the brown nuances present in the settlement. New buildings should have their own personality and be the fruit of the contemporary age, but should not be emerging from or in contrast with the existent. The quality of design lies in these details.

7_ Link the construction to the landscape with local vegetation.

Vegetation helps to organize the space and the architectural composition of a farming settlement and define its role in the landscape at all scales. From the point of view of landscape, vegetation has an equally important role to that of construction in characterizing the landscape, sometimes even more important.

It signals function (a tree that marks an access or a cross), a reference point, an ornament (a hedgerow or an alignment tree following an entrance pathway, etc.) and often also has a productive function or environment (for example, slope stabilization through the tree root).

In the case of expansion or addition of new buildings, the existing plants should integrate organically with the new volumes in the context (a trees group near large buildings mitigate volume more effectively than low



Fig. 22 [left] - Respect the vertical and horizontal movements of people and related connections.
(photo: Andrea L'Erario;
graphic elaboration Paola Branduini)



Fig. 23 - Dominant colours are nuances of green and brown: the accord between them is cultural (because the material belongs to the local nature) and visual because they are opaque.
(photo: Andrea L'Erario)



Fig. 24 - Isolated fruit trees create shadow near the houses and provide fruit; spatially, they balance the weight/dimension of the building in the open space.
(photo: Andrea L'Erario)

Fig. 25 - Enclosures were historically used for animals or vegetable gardens. (photo: Andrea L'Erario)



and long hedges): the vegetation should not mask or cover the artefact, but be an integral part of the project. Native or naturalized species have, in general, to be preferred to formal elements and botanical species in urban areas: for example, low hedges, cut in the regular form, generally used for gardens of small residences, create foreign characteristics in the rural landscape.

Fences should be limited to animal paddocks and vegetable gardens or orchards: these should have a light shape and be made with simple and uniform materials.

8_ Define circulation spaces without enclosure.

It is important to take care of the indoor and outdoor

spaces of the villages, especially the areas of movement, storage and parking: they should be defined, organized, and, over time, kept in order. It is preferable to use permeable paving (clay, gravel, etc.) limiting as much as possible the impervious surfaces (concrete, asphalt etc.). It also preferable not to divide the areas of circulation with hard enclosures so as to keep the permeability of the agricultural space.

9_ Hiding the storage building with vegetation.

Storage buildings are preferably accompanied with vegetation, painted with neutral colours (dark and opaque allows them not to emerge visually in a predominant way), without covering in plastic material.

References

- English Heritage (2006). *The conversion of traditional farm building: a guide to good practice*.
- <https://content.historicengland.org.uk/images-books/publications/conversion-of-traditional-farm-buildings/traditional-farm.pdf>
- English Heritage (2011). *The maintenance and repair of traditional farm buildings: a guide to good practice*. <https://content.historicengland.org.uk/images-books/publications/maintenance-repair-trad-farm-buildings/acc-maintenance-repair-traditional-farm-buildings.pdf>
- ICOMOS-ISCS (2015). *Illustrated glossary on stone deterioration patterns*.
- http://www.icomos.org/publications/monuments_and_sites/15/pdf/Monuments_and_Sites_15_ISCS_Glossary_Stone.pdf
- Scazzosi, L., Branduini, P. (2014). *Paesaggio e fabbricati rurali. Suggestimenti per la progettazione e la valutazione paesaggistica*. Ministero dei Beni e delle Attività Culturali e del Turismo. Santarcangelo di Romagna: Maggioli Editore

The degradation of a dry-stone wall and repairing steps

Paola Branduini

The degradation of a dry-stone wall

The forms of alteration of the walls can be divided into:

- Instability: alteration of the balance of the static structural construction model;
- Degradation: deterioration due to chemical, physical and biological causes with destructive effects on materials.

This instability principally gives rise to the following events:

- Bulging;
- Crumbling;
- Collapse.

The causes are endogenous, due to construction defects, or exogenous, due to external causes of anthropogenic and/or animal overload, or to pressures generated from natural components (excess of water). These are usually a combination of various forces simultaneously applied to the wall that cause the collapse of one or more points.

The most frequently exogenous causes encountered are:

- Physical: ice formation resulting from stagnation of water inside the masonry increases in volume and generates driving forces between the stones;
- Mechanical: excessive strain on the above floor caused by animals or mechanical loads cause the movement of stones.

Goats, while not being heavy, are particularly harmful, because they stand on the edge of the wall to eat, moving stones crowning the wall itself. The roots of forest trees, although the younger roots can help to hold the stones, at maturity can generate thrusts threatening

the stability of the wall and cause the collapse. Many trees grow in fact close to walls and, without a regular maintenance, cause disruption. The uprooting of a large tree, e.g. due to wind, causes the collapse of the wall. Landslides triggered by a defective circulation of water, occur during heavy or abundant rainfall. Together with this instability, the phenomena of stone ware and consequently formation of gaps in the masonry can occur: crack (Individual fissure, clearly visible to the naked eye, resulting from separation of one part from another), detachment (partial or total separation of stone layers), features induced by material loss (erosion or mechanical damage) (ICOMOS, 2015).

The stages of deterioration and the interventions to be made

Different stages of deterioration of a dry stonewall have been identified due to the combination of structural disruption and texture degradation: damage is followed by different forms of recovery.

A_ Localized degradation of crowning elements.

This is the loss of stability in a precise point of upper stones, which can fall to the base of the wall. It is usually accompanied by an excess of vegetation that grows between the interstices of the wall itself.

In such a case, the solution is just a cleaning of the vegetation on the upper part of the terminal wall and repositioning the last layer of stones as far as the area affected by the landslide (possibly re-shaping the water gutters if existing or re-building it if the wall is of more than 2 meters high). The action to be performed is routine maintenance.

B_ Widespread degradation on the top of the wall.

This is the loss of stability of the upper wall which can

lead to small collapses.

In this case, it is necessary to disassemble the upper part of the wall until the layer of loose stones and rebuild the wall, juxtaposing the layers of stones and then filling with drainage material. The dismantling of the wall involves only the unstable or collapsed part and does not involve the entire vertical section of the wall. The action to be performed is partial reconstruction of the wall.

C_ Bulging of the wall.

It is the swelling of the wall, which tends to detach from the rear draining layer. It may concern only the half top of the wall, or affect the whole vertical section.

In the presence of this instability it is necessary to disassemble the entire portion of the wall affected from bulging and rebuild it according to the traditional technique. The action to be performed is dismantling and reconstruction of the structure in respect of shape and layout, if possible by improving the drainage conditions of water flows.

D_ Collapse of part of the wall.

The collapse affects the entire vertical section of the wall.

In this case, the reconstruction of the entire collapsed portion, according to the traditional technique, is always required. It is important to pay attention to the lateral junctions of the wall to rebuild: it is preferable, to dismantling the wall, to maintain a "stair" profile to allow a more stable engagement of the new masonry. The action to be performed is the total reconstruction of the portion of the wall.

How to repair a dry-stone wall

The recovery technique of the wall has been brought

together from interviews with some builders and farmers. The recovery includes the following steps:

- Removal of the damaged wall and preparation of foundations;
- Selection and fixing of the stones in the wall;
- Completion of the wall.

1. Partial or total dismantling of the damaged/collapsed wall and preparation of foundations

The reconstruction of a wall starts from the removal, accumulation and selection of the stones of a collapsed or unsafe wall. Before starting the construction, it is useful to select stones in size, thickness or length. They can be placed in small piles in order to facilitate the selection of individual stones: thereby it will be easier to choose the right stone at different times and to understand how much original material is possible to recover or whether you need more stones.

Foundation. In most cases, foundations already exist or should be clean. If they have to be built up it is better to draw the area to dig, with pegs and ropes, on the ground. The trench should be around 20/40 cm deep and slightly leaning towards the mountain with a width of about 1/3 of the height of the wall. It is helpful to accumulate on the ground the dug up soil: it will subsequently be useful for planting.

At the base of the wall, the more resistant and heavier larger stones have to be placed first both for the difficulty of displacement, and to create a solid base for the wall. Foundations do not need a flat surface but it is good that the stones are firmly inserted into their housing. In restoring the soil for the foundation, it is necessary to remove the vegetation and especially stumps to avoid unstable foundations.

Consolidation technique. To consolidate the soil behind the wall, it is useful to stick one or more poles transversely to the wall, to increase the resistance of the wall itself to the push of the soil. During installation, short stones are alternated with long stones to give stability at the wall: the long ones should be fixed in the ground behind, placed slightly inclined upstream to oppose bulging and roll over pressures. The longer the stones positioned perpendicular the wall, the greater gripping between the masonry and the ground behind is and thus lower the risk of collapse and bulging.

Filling. In the empty spaces it is important to use crusher sand or gravel avoiding river sand or gravel with rounded corners: this last material does not build a solid structure, while friction is lower. In the case of a junction with an existing wall, the stones should be removed and set out as a stair, as already mentioned, to obtain a greater junction surface. If there is a large boulder, the joint should be prepared by slotting the stone to form as flat a junction as possible for the wall; moreover it can be useful to anchor the wall using iron "clips" fixed in the rock. The wall must be removed not just at the point where it collapsed, but at least for 0.5-1 m from both sides.

Space upstream should be progressively and carefully filled in, as the wall grows, with pieces of stone and soil to facilitate the flow of rainwater, as well as the growth of the vegetation and the future residence of insects and small animals.

The filling is essential to have good drainage through the wall and avoid excessive thrust of soil that would undermine the stability of the wall: small stones for the drainage should be placed perpendicularly the wall to facilitate the proper water runoff.

Stone set up. To help the alignment, lay two tables or rods at the ends of the wall and then stretch a cord between the two supports at the upper edge.



Fig. 26 - The background of the wall. (photo: Andrea L'Erario)



Fig. 27 - Look at the structure to help follow the alignment and the arrangement of stones at the foundation of the wall. (photo Alessia Silveti)

2. The choice and the laying of the stones

The correct stone to be used is the local one, which you can recover in the proximity: this prevents the presence of irregular patches and keeps the characteristics of the existing wall. In case the material is difficult to recover or insufficient, you should try to obtain stones of the same rock. The suitable stones for the wall are with large and flat faces: they are easier to lay and offer a constant support to the entire wall. The stones less suited can be used as filler material. It is good to have plenty of material to allow an easy option at the time of installation. The choice and the laying of each stone should avoid shear forces, especially if the wall is characterized by veins that would impair resistance. Furthermore, the visible side of the stone should be the smoother, well squared and presenting pleasing veining to the eye, in order to maintain the surface of the wall as regular as possible. The aim is to obtain not only a resistant product but also a pleasant artefact. Successive horizontal layers form the wall: they are posed on fine gravel and bedded with a hammer or a rubber mallet to the rear. No joint should appear either vertically or horizontally; it is essential to offset the vertical joints so as to better distribute loads. They must be arranged as carefully as possible and immediately reach maximum stability, so to avoid the slightest movement, if charged. To accomplish that it would be necessary to smooth out the shape of certain stones with a chisel and a mallet. To avoid accidents when handling the chipped stones, you should wear gloves and appropriate footwear with steel toe cap resistant to falling rocks.

The stones have to be placed horizontally in even constancy to the upper profile: the height of each row is determined by the bigger stone, used as a stone-guide. Each layer must be carried out with stones that



Fig. 28 - Section of a wall under construction: here the horizontal lay out of stones are clearly visible, the vertical alignment helped by a wood post, the difference between the big stones in the front and the small stones for the drainage at the back. (photo: Andrea L'Erario)



Fig. 29 - In the foreground, the junction of a previous wall to a new part. (photo: Andrea L'Erario)



Fig. 30 - Two level junctions in the wall are visible in the red circle. (photo: Andrea L'Erario)



Fig. 31 - Accomplishing the repair of a wall provides great satisfaction! It is proud work! (photo Andrea L'Erario)

have similar height and levelled with shaved stones, before moving to the next layer.

The inclination of the facade is usually about 10% upstream. The thickness of the wall should progressively decrease: from a base of 60-70 cm to a head of 20-30 cm (for high walls about 1 m above the ground - for higher walls greater thicknesses are needed). To achieve this, just move back the thread of the front progressively and tilt stones upstream. That allows a greater resistance to tipping and avoids the slippage of the stones outwards when pushed by the soil behind. In the case of a curved wall, to maintain a correctly curved profile a set of guides constituted by vertical axes at regular intervals and fixed upstream and downstream should be prepared.

3. *The completion of the wall*

It is appropriate to terminate the cap of the wall with flat stones and add the grass, separated at the early stage. In the case of division walls or in the construction of a building, you should proceed to the realization of double head or double-sided walls, with internal filling of waste stones (small stones or splinters) and junctions carried out by large and long flat stones passing from one side to the other.

Work times

The time necessary for construction of a wall varies depending on stone availability, although it is averagely considered to be about 2 m² (1 m³) per day, having locally stones selected already available, ordered and ready to use. It is, in effect, a very demanding activity in terms of manpower. Should you need more stones, times will increase. The optimization of operations and fatigue is when you can reuse all the stones of the existing wall.

Imagining the Mondonico of Tomorrow: proposal of a 'Community Diffused Museum' for landscape conservation and enhancement

Tiziana Bardi, Andrea L'Erario

Re-thinking identity for Mondonico's enhancement in re-connecting the village to the landscape

The aim of this paper is to describe the proposal of a 'Community Diffused Museum' (CDM) for the dynamic conservation (Puzzo, 2016), the enhancement and the sustainable management of Mondonico and its landscape.

The main goal: a new system of relationships between the village and the landscape

«A landscape identity [...] is not eternal. If people who had recognized it disappear without 'passing on the memory', it can disappear too. A new landscape identity can be created [...] finding an individual or collective landscape identity will remain a constant element for human beings.»¹

In the past, Mondonico and the terraced land around

it constituted the low sector of the 'landscape system'² which is described in the chapter "*The 'landscape system of Dorio/Mondonico short transhumance'*".

At present, the historical system of relationships is broken: the buildings of the village are abandoned, there is no agriculture on the terraces, historical paths between Dorio and Mondonico are not well maintained, etc. The lack of a strong system of relationships, tangible or intangible, between the landscape components is one of the causes of the gradual loss of landscape cultural values. If people do not maintain tangible historical landscape components, they will be gradually lost. Therefore, the historical landscape of Mondonico, as well as the historical techniques for its construction, as intangible heritage, will be lost.

For this reason, the main goal of the proposal for the conservation of Mondonico and the landscape is the creation of a new relationship system (therefore a new 'landscape identity') to prevent further loss of cultural values and to enhance the existing Cultural Heritage (CH).

The traditional 'diffused museum' as opportunity for landscape conservation and enhancement

A conservation project for Mondonico and its landscape would not be complete without a strong idea for the enhancement of CH. The enhancement project tries to answer to several questions. How to manage and maintain Mondonico's heritage in the future? How to pass down Mondonico's CH, considered as a resource, to the new generations? How to enhance the terraced landscape uniqueness as CH (tangible and intangible), by reinforcing its strengths and avoiding incorrect design approaches that will deprive the landscape of its own identity?

The projects for landscape conservation and enhancement should closely relate with the peculiarities of the area being worked on. Rural landscapes are unique and different, one from the other, for their history, territorial morphology, etc.

The proposal of the creation of a 'diffused museum' for Mondonico³ focuses on the enhancement of the existing CH.

Why a proposal of a 'diffused museum'? A 'diffused museum' «excludes the possibility of eradicating [...] objects made by men and deserving of protection, conservation, knowledge, from the original place. [Indeed] as soon as you eradicate something from its original context, it loses in significance»⁴ (Drugman, 2010: 93). Italian scholars like Fredi Drugman and Luca Basso Peressut analyzed the relationships between the words museum and territory/landscape. They defined conceptual criteria for the 'diffused museum':

1. «Diffused museum as network of places, spread across the territory;
2. Diffused museum as route through open-air places in the landscape (buildings, natural and artificial elements, etc.);

3. Diffused museum collection made up of the landscape elements, located in the original places;
4. Immaterial culture (for example historical construction techniques) as essential element of the diffused museum». (Basso Peressut, 2005: 65)

Moreover, 'diffused museums' are a way for the sustainable management of landscape⁵, not to freeze historical landscapes but to drive their future transformations and to communicate the landscape values and CH.

A 'Community Diffused Museum' for Mondonico's new landscape identity

According to its landscape features (tangible or intangible, historical or current), the Mondonico case study is a good way to give more force to the principles of the traditional 'diffused museum' listed in the previous paragraph. This stresses the need of involving local people in all phases of the process for the dynamic conservation and management of the landscape, and in taking care of their own landscape heritage.

Mondonico landscape features should drive the 'Community Diffused Museum' (CDM) proposal, also to meet the needs of local people and to create a new landscape identity. The CDM should represent the 'glue' between the local people, Mondonico village and the landscape.

The CDM proposal has two main aims:

1. The creation of a *people network* by Dorio Municipality or a local Association, as a new organization for the sustainable management of the landscape and touristic promotion;
2. The creation of a *tangible network* for the physical connections between the attractive places in the landscape.

The *people network* objectives are to bring to a new life Mondonico's 'landscape system' from a contem-

porary point of view and to re-connect Mondonico to Dorio and to the terraced landscape. The participation of the local *community* is fundamental for the CDM creation: people are not only viewers, but also one of the most important engines of change.

The people network can be a new local association autonomous from Dorio Municipality or an organization related with its offices.

The people network – made up by the local people, the local economic activities, Dorio Municipality, local farmers and landowners – could be a good way to achieve the financial resources necessary for Mondonico dynamic conservation, management and enhancement.

Thanks to the conservation of the physical components of landscape and the revitalization of Mondonico abandoned buildings, the creation of the *tangible network* allows the realization of a cultural route for visitors.

The CDM wants to preserve and enhance both the tangible and the intangible landscape components: it is an opportunity to tell the ‘landscape stories’ to the people, and so to share and pass down the ‘landscape memory’ (for example in relation to the site history, or to people and craft stories, or to the local traditional knowledge). Local people are involved in passing down their own heritage. The CDM involves visitors in cultural activities.

The CDM idea recalls the ‘ecomuseum’ concept. Quoting the ecomuseum definition by George-Henri Rivière (Rivière, 1985⁶): «An ecomuseum is an instrument conceived, fashioned and operated jointly by a public authority and a local population [...]. It is a mirror in which the local population views itself to discover its own image. [...] It is an expression of man and nature [...]. It is an expression of time [...]. It is an interpretation of space [...]».

However, the CDM creation approach wants to be top-down (more traditional for diffused museums), and not bottom-up, as it is for ecomuseums.

The CDM proposal wants to make the landscape live and dynamic for the local community, a fundamental component of the local economy, and an attractive place for visitors. This, thanks to the joint work of local institutions, the local community and associations.

In the next paragraphs, the detailed description of the CDM proposal for Mondonico will follow.

Proposal of a ‘Community Diffused Museum’

Dealing with the scale: from the territorial to the building scale

The main design criterion of the CDM proposal for Mondonico is not to ‘crystallize’ the current landscape state, as would be the case in an archaeological site. The criterion is to drive in a dynamical and appropriate way the landscape transformations.

The analyses of Mondonico’s landscape features and the characteristics of the historical buildings⁷ of the village drove the definition of the CDM proposal.

The CDM proposal concerns actions and interventions at different scales, from the territorial scale to the one concerning buildings:

- *Territorial scale*: reinforcement of the Wayfarer path role, to connect Mondonico with other places along Lake Como;
- *Landscape scale*: new identities and cultural-educational role for the pathways through the terraces between Mondonico and Dorio, to improve their maintenance level and so local accessibility. New sustainable agricultural use of terraces;
- *Building scale*: sustainable and coherent reuse of Mondonico abandoned buildings, for their re-

birth toward a new life and the improvement of the local economy.

The proposal wants to help to solve several issues of the local context, such as the lack of maintenance of the landscape components (terraces, dry-stone walls, etc.), the lack of accessibility to Mondonico and the absence of touristic promotion.

The proposals at the different scales are interconnected. In the following paragraphs, there is the description of all proposals more in detail. The purpose of the description is also to show the relationships of one action to the other.

Territorial masterplan: proposal of creation of an intermodal system of transportation to increase tourism

Firstly, the CDM proposal for Mondonico enhancement depends on increased links between the attractive points along Lake Como. According to this, the reinforcement of the Wayfarer path touristic role is necessary (Fig. 1a).

The Wayfarer path enhancement could reinforce the role of the horizontal connections along the shoreline of the lake. At present, the railway from Valtellina to Milan and the old National Road N. 36 "del Lago di Como e dello Spluga"⁸ ensure the horizontal connection of the towns located along Lake Como shoreline. The Wayfarer path could be the third horizontal connection to allow bikers and trekkers to reach Mondonico and the nearest towns by bicycle or on foot.

Moreover, the reinforcement of the role of existing vertical paths located in the area between the lake and the Wayfarer path (or the construction of new ones) will improve the connections between the Wayfarer path itself, the National Road and the railway. This would allow the creation of an intermodal transportation system (Fig. 1b) along the lake shoreline (train-

car/bicycle-foot). The sustainable tourism of the area would increase, and so the possibility for tourists to reach Mondonico and visit the site, get to know the history of place, and enjoy the beauty of terraced landscape.

Landscape enhancement: reinforcement of the vertical links and new agriculture for dynamic conservation of terraces

The reinforcement of the Wayfarer path relates to the reinforcement of vertical connections from the lake to the top of the mountains and the alpine pastures. Mondonico is one of the intersection points between the Wayfarer path and the vertical connections: therefore, the village is one of the most important elements for landscape enhancement.

The aims of the reinforcement of vertical links are:

1. to solve the issue concerning the lack of pedestrian accessibility to Mondonico from Dorio and the lake;
2. to give new identities to the three historical pathways through the terraced landscape, and for their preservation and enhancement.

The new thematic identities of the vertical pathways relate with the landscape features along them, which differ from one path to another. This gives them a stronger role in the CDM proposal. Visual and historical analyses described in the first part of this book helped in choosing the new identities of the three paths (Table 1 and Fig. 2a-2b). Moreover, brief rules for their maintenance in the future aim to preserve both their current and historical features (Fig. 3).

According to their new identities, the proposal of the enhancement of the vertical paths also concerns the creation of an educational route (Fig. 4). The educational route represents the thread, which will connect the main landscape elements: the vertical pathways,

the agricultural terraces, the churches, the Wayfarer path and Mondonico village, its buildings and open spaces. The choice of these attractive points along the route resonates with their landscape values (historical, cultural and visual).

Informative tours that could concern specific topics (i.e. handmade production of local food, local traditions, immaterial culture, etc.), may enhance the identified attractive points with educational activities for tourists or students. Moreover, the educational route proposal correlates with the expected increase of sustainable tourism and to the new functions suggested for Mondonico buildings (see the next paragraph).

The second proposal for landscape enhancement is the reuse of terraces for a 'new sustainable agriculture' (Fig. 5). Nowadays most of the agricultural terraces are abandoned. Quoting Donadieu and Luginbühl: «abandoned spaces by 'traditional' agriculture try to find new uses: ecological or touristic ones as places for trips» (Donadieu, Luginbühl, 2008: 164)⁹. Without the creation of a new agriculture, which is economically sustainable, nobody will take care of this fragile landscape in the future.

For this reason, it is important to think about a proposal for a 'new agriculture' that looks towards both the past and the future, and to the educational aim of the CDM.



Fig. 1a – Suggestions for the reinforcement of the Wayfarer path role to increase tourism

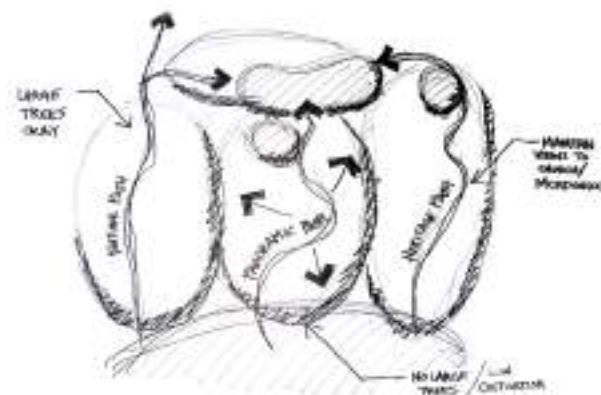
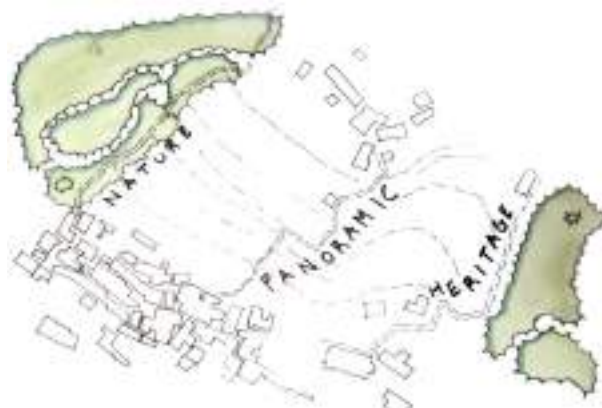


Fig 1b – Concept of the intermodal transportation system

Table 1 – The new identities of vertical links from Dorio to Mondonico and rules for their feature preservation

Paths	Rules for the paths features preservation
<p><i>Natural path</i> Focusing on the local vegetal natural heritage</p>	<ul style="list-style-type: none"> • Preserve vegetal biodiversity that spontaneously grew because of the lack of agriculture on the side of terraces along the path. • Maintain the open view along the panoramic path to keep the visual relationships from Mondonico village to Dorio and the lake; • Avoid cultivation of high trees or plant species on the terraces along the path, also to keep the 'landscape architecture' of terraces around the village from the point of view of Lake Como visible.
<p><i>Panoramic path</i> Focusing on the visual aspects of the landscape of the side of the mountain in front of the lake.</p>	<ul style="list-style-type: none"> • Maintain the open view along the panoramic path to keep the visual relationships from Mondonico village to Dorio and the lake; • Avoid cultivation of high trees or plant species on the terraces along the path, also to keep the 'landscape architecture' of terraces around the village from the point of view of Lake Como visible.
<p><i>Heritage path</i> Linking the two churches of Dorio and Mondonico, both dedicated to St. George.</p>	<ul style="list-style-type: none"> • Maintain the open view between the two churches to keep the visual relationship between the historical buildings; • Avoid cultivation of trees or high plant species on the terraces along the heritage path. Low crops are preferable; • Preserve the historic paving and materials of the path (stones and pebbles).

Fig. 2a [left] and 2b [right] – New identities for the paths between Mondonico and Dorio, according to their historical and current features



The 'new agriculture' objectives are:

1. cultural: agriculture can have an important educational role, in particular for young generations;
2. scientific: the terraced landscape could be a good place for recovery experiments of ancient botanical species, which were typical of Lake

Como area;

3. naturalistic: to increase local natural biodiversity.
- The idea of the 'new agriculture' closely relates:
1. to young generations: to local school students and to undergraduate students. The CDM proposal is compatible with the agro-forestry campus propo-

sal described in the next chapter of this book¹⁰. The integration of the two proposals would allow an easier land management and avoid the neglect of the terraces, preserving/enhancing the quality of the historical landscape;

2. to *local people*: few aged people are custodians of the traditional techniques of construction of terraces and dry-stone walls. These ancient techniques represent an important immaterial CH, to hand down to the young generations. Therefore, aged local people could teach ancient techniques to young students to avoid losing this fragile tangible (dry-stone walls and terraces) and intangible heritage (traditional techniques).

New functions for the buildings connected to landscape enhancement

The educational route and the 'new sustainable agriculture' proposals strictly relate with the functions suggested for the new use of abandoned buildings in Mondonico (Fig. 6). The objective of the new functions is the revitalization of the historical buildings and the open spaces (Fig. 7), also thanks to new social and cultural facilities, aimed at improving the local economy and to encourage handicrafts activities. Open spaces are very important for the creation of meeting and communication areas for local people, tourists and students.

The purpose of Mondonico village revitalization is to provide visitors with a new experience related to the knowledge of the past for visitors and inhabitants, to link the village to the present, and for improving the communication of local culture. For these reasons, Mondonico village is the heart of the CDM proposal. Some of the possible functions are listed as examples for a new sustainable new use of Mondonico:

- Public social spaces inside the buildings, like a li-



Fig. 3 – The historical paving, made by stones and pebbles, still characterizes the *Heritage path*. It is important to maintain this kind of pavement to keep the path identity (photo: Andrea L'Erario, 2014)



Fig. 4 – The educational route. Black circles are the attractive points

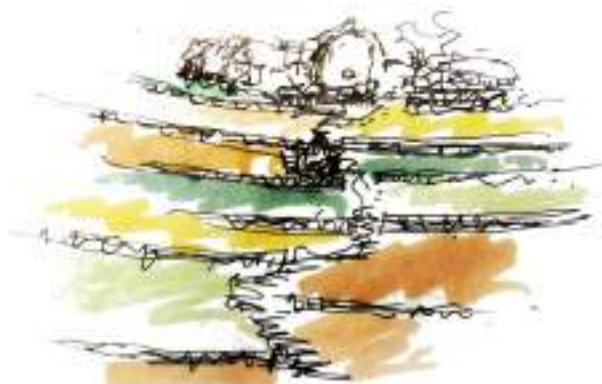
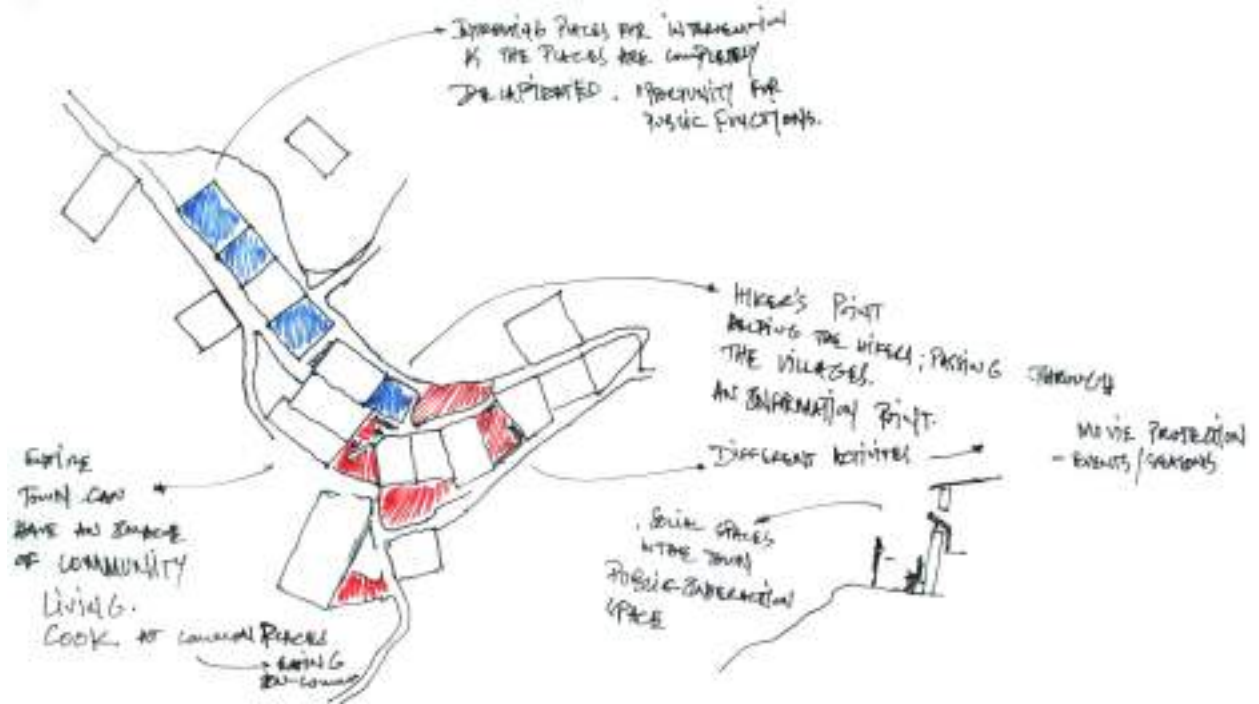


Fig. 5 – New agriculture for Mondonico terraces: new colours for the landscape, according to perceptive and historical analyses

Fig. 6 – New functions for Mondonico buildings



- library or small rooms for meetings;
- Few rooms to rent for tourists;
- External open spaces used with suitable diffused functions, like an open-air cinema;
- Facilities for tourists such as workshops for repairing/renting hiking and cycling equipment ('ciclofficina');
- Info point;
- Exhibition area;
- Multifunctional spaces;
- Small shops to sell local food or crafts, few rental rooms for visitors.

The new functions and designed facilities are coherent and suitable with the current and historical characteristics of the existing buildings heritage and the open spaces: they respect the original morphology of

the settlement, both the exterior and interior structures of the buildings, according to *compatibility* and *reversibility* criteria¹¹. The suggested new uses do not require changing volumes or openings of the existing buildings¹².

The suggested uses link to the new functions recommended for St. George church. The church enhancement is essential to give the old religious building a new, contemporary and important role according to its historical significance, in particular for the local community. According to its religious function (the building is still consecrated), it could become a community hall for social and cultural meetings, presentations and exhibitions, in addition to religious ceremonies. The area around the church could host cultural events.



Conclusions

The multidisciplinary approach and the contamination between different disciplines resulted in the most effective criterion for designing an adequate proposal for the new use of Mondonico (buildings and open spaces), and therefore its new 'landscape identity'.

At present, Mondonico's landscape is a system under transformation. It is possible to consider it a living organism. This stimulated the consideration of the importance of landscape dynamic conservation, management and enhancement, from the territorial scale to the buildings scale.

The proposal of a CDM aims to find a balance between the needs of:

1. respecting the existing CH (historical materials, buildings structures, settlement morphology, landscape architecture);
2. finding a new and strong role for the village and its landscape system in the Lake Como area, with sustainable and coherent new uses of buildings and open spaces.

The analysis and documentation were crucial to design the CDM proposal, the new land use of terraces and the new functions for buildings and open spaces.

The choice of the new uses of the historical buildings of Mondonico, the educational-cultural role for the landscape and the reinvention of the agricultural use of terraces are compatible with the integrity of the existing CH and its dynamic conservation for the future generations.

The proposal confirms Mondonico's traditional multi-functional characteristics and wants to solve the emerging needs of cultural sustainability.

The CDM is also a way of achieving the goal of sustainable tourism, which is aware of the cultural value of the place. Attracting such tourism, Mondonico's reputation will be enhanced. The modest availability of rooms will prevent mass tourism that could spoil the delicate balance between conservation and enhancement of CH. Indeed, the rational limitation of the number of visitors is a way to preserve Mondonico's landscape in good condition, which is an extremely fragile built environment.

The success of the proposal will also depend on an integrated approach applied to transform a rural area into a CDM by combining interconnected goals: the consolidation of rural symbiosis, the promotion of sustainable accessibility and the development of multifunctionalities¹³.

Moreover, the contribution of other design proposals by several stakeholders (who live in the territory of Dorio Municipality or coming from outside) could integrate and complete the idea of the CDM for a new cultural experience in Mondonico.

From this point of view, the other two proposals of reuse of Mondonico village which are described in the next chapters, as *scattered hotel* and *agro-forestry campus*, are in part compatible with the CDM proposal. The possibility of finding a balance between the three different proposals will be necessary in order to increase the chances of getting financial funds (and

Fig. 7 – Example of public spaces new use such as open-air cinema

so to increase the financial sustainability of the proposals) for the dynamic conservation and enhancement of Mondonico and its landscape system, of which the village is a fundamental component.

Endnotes

(1) Donadieu, Luginbühl, 2008: 12-14. Translation by the authors. Italian text: «Un'identità paesaggistica [...] non è eterna. Può scomparire, se coloro che la riconoscevano scompaiono senza 'passare il testimone'. Un'identità paesaggistica, infine, può essere creata. [...] La ricerca di un'identità paesaggistica individuale e collettiva resterà una costante tendenza degli uomini. [I paesaggi] sono punti di riferimento importanti nei periodi di crisi sociale o personale».

(2) See Scazzosi's chapter in this book.

(3) 'Museo diffuso' means «a museum-workshop network, as system of services aimed at rehabilitation, conservation, protection [of Cultural Heritage and landscape], connected to sources, research institutes [...], and to handicraft and industrial production sites, local communities, educational institutes [...]» (Drugman, 2010:85).

(4) Translation by Andrea L'Erario. Italian text: «Museo diffuso esclude, in linea di principio, qualunque pratica di estirpazione dal luogo di origine di oggetti [...] prodotti dall'uomo e meritevoli di tutela, conservazione e conoscenza. [...] Appena estrai una cosa dal suo contesto, questa perde [di significato]».

(5) European Landscape Convention, Art. 1., Definitions, lett. e): "‘Landscape management’ means action, from a perspective of sustainable development, to ensure the regular upkeep of a landscape, so as to guide and harmonise changes which are brought about by social, economic and environmental processes”.

(6) George-Henri Rivière wrote this 'ecomuseum' definition in 1980. French original text: «Un écomusée est un instrument qu'un pouvoir et une population conçoivent, fabriquent et exploitent ensemble [...] Un miroir où cette population se regarde, pour s'y reconnaître [...]. Une expression de l'homme et de la nature [...]. Une expression du temps [...]. Une interprétation de l'espace [...]».

(7) See the chapter "Landscape quality objectives: from analyses to design" in this book, by Tiziana Bardi and Andrea L'Erario.

(8) The old National Road N. 36 connects Dorio to Lecco on the Southern side, and Dorio to Valtellina and then to Switzerland on the Northern side.

(9) Translation by Andrea L'Erario. Italian text: «Gli spazi abbandonati dell'agricoltura 'classica' tentano dunque di ritrovare nuove funzionalità: funzionalità ecologiche o turistiche come luoghi per escursioni».

(10) See the chapter "Project of an agro-forestry campus for the revival of the village and the territory" in this book, by Mattia Alberganti & al.

(11) See the chapter "Towards new uses of Mondonico" by Elisabetta Rosina.

(12) If needed, new additions to the existing buildings or the construction of new buildings should follow several criteria, as clearly described by Paola Branduini in her chapter in this book.

(13) The same approach brought to the conversion project success of the industrial park of Salaise-Sablons, France, into an eco-industrial park (Ribeiro et al., 2017). Thanks to an interdependent approach, rural and territorial ecosystems were jointly planned, seeking a more sustainable level of development that considers agriculture activity, the transportation of people and goods and the spatial articulation with the neighbouring environment and urban areas. It is possible to adopt this approach in similar cases.

Bibliographic sources

- Bardi, T., Bonfanti, J., Vieux, J., (2009). *La vallée du Rhône dans 10 ans - Six sites rhodaniens imaginés par de futurs architectes, urbanistes et ingénieurs: projets, explorations et paysages*. Lyon: La Maison d'à coté
- Basso Peressut, L. (ed.) (1985). *I luoghi del museo*. Roma: Editori Riuniti
- Basso Peressut, L. (2005). *Le forme di museo diffuso: esperienze progettuali e di ricerca in area lombarda*. Minucciani, V. (ed.). *Il museo fuori dal museo. Il territorio e la comunicazione museale*. Milano: Edizioni Lybra Immagine

- Council of Europe (2006). *Landscape and sustainable development: challenges of the European Landscape Convention*. Strasbourg: Council of Europe Publishing
- Council of Europe (2012). *Landscape facets. Reflections and proposals for the implementation of the European Landscape Convention*. Strasbourg: Council of Europe Publishing
- Donadieu, P., Luginbühl, Y. (2008). L'evoluzione della nozione di paesaggio in epoca moderna. Donadieu, P., Küster, H., Milani, R. (cur.), *La cultura del paesaggio in Europa tra storia, arte e natura*, pp. 1-22. Firenze: Olschki
- Donadieu, P., Luginbühl, Y. (2008). Il divenire dei paesaggi rurali e periurbani. Donadieu, P., Küster, H., Milani, R. (cur.), *La cultura del paesaggio in Europa tra storia, arte e natura*, pp. 157-178. Firenze: Olschki
- Drugman, F., Brenna, M. (cur.) (2010). *Lo specchio dei desideri: antologia sul museo*. Bologna: Clueb
- Dubois, C. (2009). Le paysage, enjeu et instrument de l'aménagement du territoire. In *Biotechnol. Agron. Soc. Environ.*, vol. 13(2), pp. 309-316
- Gustavsson, R., Peterson, A. (2003). Authenticity in landscape conservation and management: the importance of the local context. In Palang, H., Fry, G. (eds.). *Landscapes interfaces: cultural heritage in changing landscapes*, pp. 319-356 Dordrecht, The Netherlands: Kluwer Academic Publishers
- Magnaghi, A. (2007). *Scenari strategici. Visioni identitarie per il progetto di territorio*. Firenze: Alinea Editrice
- Puzzo, C.M. (2016). *Dynamic Conservation of Globally Important Agricultural Heritage Systems (GIAHS)*. Presentation. Available from: www.slideshare.net/FAO-oftheUN/dynamic-conservation-of-globally-important-agricultural-systems
- Ribeiro, P., Fonseca, F., Neiva, C., Bardi, T., Lourenco, J. (2017). An integrated approach towards transforming an industrial park into an eco-industrial park: the case of Salaise-Sablons. In *Journal of Environmental Planning and Management*. vol. April/2017, pp. 1-19. Abingdon-on-Thames, UK: Routledge. DOI: 10.1080/09640568.2017.1300576.
- Rivière G.H. (1985). The ecomuseums - an evolutive definition. In UNESCO. *Museum*, vol. n. 148/XXXVII, n. 4/1985, pp. 182-183
- Scazzosi, L. (2011). Museo, museo diffuso, paesaggio. In Gennaro, E. (ed.). *Musei e paesaggio. Da un tema di ricerca a prospettiva d'impegno*, pp. 65-73. Ravenna: Provincia di Ravenna
- *L'écomusée: rêve ou réalité. Publics et Musées*, vol. 17-18/2000 (direction: André Desvallées). Lyon: Presses universitaires de Lyon

THE SETTLEMENT



Towards new uses of Mondonico

Elisabetta Rosina

Why to use again Cultural Heritage

The enlargement of the concept of Cultural Heritage (CH) as *"the entire corpus of material signs – either artistic or symbolic – handed on by the past to each culture and, therefore, to the whole of humankind"*¹ (Jokiletho, 1999) has reached a common acceptance. A critical issue remains that the definitions of cultural patrimony still root in selective criteria of a historical background and aesthetic value. In the present Italian legal framework² the definition of the classes of CH under protection are wide and general, nevertheless the classes do not include the totality of the CH per the initial definition quoted above.

Despite of the partial inclusion, the recent awareness of Cultural Heritage is spreading out the value of the existing built landscape, especially the historic fabric of urban and rural zones.

In fact, despite the ambiguity of definition existing at present, an important result is to consider the cultural patrimony as an economic patrimony, that requires to be evaluated for its conceptual nature and not only for the financial income due to its use. Since the statements of Amsterdam Charter, the development of economy for CH underlines that historic buildings must

meet new uses, compatible with the existing features (Della Torre, 2010) and bringing income and social advantages. The misleading opinion that protection of historic building constrains the new use, is a burden for the owners and public administration, a sclerotic and rigid embalment, comes to terms with the opportunities that conservation offers for supporting a more conscious and sustainable development of the society and economy in the country. On the contrary, the historic patrimony constitutes firstly a resource that contains a huge potential of sustainability, with various declination and articulation of what sustainability implies in this case: the economic sustainability (CH firstly employs local resources), social (it belongs to the local community that generated it), cultural (as expression of civilization of the local community).

In addition, other potential of CH reveals other aspects of sustainability. Resilience is one. The features of historic buildings substantially meet some criteria of resilience as recently stated³, supporting the idea that resilience means the capacities for adapting to the future changes although the recognition of these features is not obvious. Despite the update scientific literature on the rural building typologies in specific Alpine regions (Aliverti, 2014), the connection between

the potential of historic settlement in term of resilience does not have diffusion yet.

Scope of the chapter is to evaluate which are the advantages to use again an historic settlement as Mondonico is. Therefore, the text will explore the updated perspectives of the CH values under the transformation of the rural/urban context, with respect to the social aspects that can lead to positive changes, as resilience is. The chapter will explain a possible hypothesis on the value of resilience that historic buildings have, together with the value of use that keep for their possibility of meeting the present and future needs of inhabitants.

The intervention on historic buildings requires following specific criteria of the architecture design that permit to graphing new parts in the existing palimpsest. The criteria of reversibility, compatibility, distinction and least intervention constitute viable paths to improve the resilience of the historic buildings, because preserving their integrity, features and identity in the present use means to preserve possible exploitations and adaptive new uses in the future.

Do historic buildings deal with Resilience?

Resilience has a wide-span, multidisciplinary definition: generally, it is the characteristic of organisms to respond and overcome to unexpected threats by reorganizing of the resources at any levels. At urban level, the features of resilience include redundancies of functions and connections, the management of slow variables and feedbacks, the promotion of adaptive systems, especially by encouraging learning, broadening participation, and polycentric governance systems (Biggs et al., 2015).

In particular, Kishali (Kishali et al., 2018) already proposed a comparison with the historic urban fabric of

Fener Balat (Istanbul) and the condition revealing the potential in resilience. The urban context of Kishali's comparison is favourable to resilience in urban district, because of the scale, the extension of the neighbourhood, the presence of the metropolitan middle-eastern city, the pressure of top down changes due to the plans of development, the multicultural group of inhabitants. In a small rural village as Mondonico is, such features are not present. Nevertheless, some common criteria for conservation meet the resilience distinctive tracts. One is to *"anticipate changes, and shape it for sustainability in a manner that does not lead to loss of future options. It involves enhancing the capacity for self-organization"* (Folke et al., 2003), that exactly is one of the conservation cornerstones. The conservation choices have the characteristic to be reversible, with the aim to leave the possibility to remove them in the future for better options (in this chapter in the further). In fact, the recent development of the conservation aims to the best management of the existing resources, including historic buildings, focusing on prevention/mitigation of the environment effects on them and planning maintenance at short-medium term for maximizing their durable material permanence (Della Torre, 2010). The transformation of the building, the steps of the process and especially what is possible to change without looting its values, based on the methodologies of analysis proper of Conservation. The definition of adaptability and its application comes from the body of knowledge on the historic buildings the analysis produces, according to the methodology shown in the previous chapters. The following chapters will show some of the possible new uses for of Mondonico village, that meet the increasing need for sharing knowledge of the village and its landscape, economic sustainability of intervention and the costs of maintenances, the affordability at social/cul-

tural levels (joining students/tourists/new comers and local inhabitants).

Moreover, the spatial organization of a historic building usually is compatible with the criterion of redundancy because of the presence of rooms that can serve the same function at different levels: the choice of duplicate the same functions at different levels is key basilar to obtain a resilient structure. For instance, the vertical connections (staircases) are usually more than one, often resulting from many modifications occurred in time due to fraction of properties, the change of use, the differentiation of paths within buildings due to new needs. The adaptability of the spaces, especially the vertical connections, is a plus for sharing the buildings and its functions towards a design for all.

None of the connections are exactly a repetition, generally are partial connection between some of the levels, nevertheless they constitute an interesting "node" for improving the connection and accessibility throughout the structure. Redundancy results also in not differentiated spaces, small rooms, porch, corridors and "camerini" that helped in the past for working and living. The availability of spaces to locate new uses is one of the major attractiveness of the historic buildings. Moreover, the building of the past, built for less complex and specialized residential needs, conserve their potential of different uses and adaptation to them, keeping their value of use in time (Vivio, 2007). In Mondonico, the uses for residential and agricultural purposes of the buildings created some redundant spaces typical of the storage and conservation of food that can serve as junction, articulation, technical spaces between the wider houses/stables.

The stratification of different uses and modification in historic buildings is an example of overcoming the transition and change; it a witness of past positive experiences of ruling transformation the building confir-

ming its usefulness in the next step of its life. Opening windows and doors, changing the entrances, adding plants etc. are examples of enhancements of the building, a confirmation of its values despite the changes and that were necessary, so much to receive the financial investment. Moreover, these modifications were the fuel for the owners and inhabitants to accomplish their project of life changes, or the way to meet the needs consequent to the changes. Many examples pave the history of architecture of the western countries.

The CH have embedded values that require only to be unravelled and displayed to reinforce the trust on changes, by means of the memory of past changes interwoven in the historic fabric of a settlement. In fact, the usual historic stratification of structures and decoration prove that the traditional building techniques and use of local construction materials positively overcame the challenge of new uses. The criterion of adaptation to swing conditions, through cyclical, partial changes, is well represented in the history of the building, although the time of the cycles can be longer than the human lifespan. An example comes from the historic analysis of Mondonico area (see the chapters "*Recognizing the cultural value of Mondonico: a historical analysis for the reading of the landscape*", by Andrea L'Erario, and the chapters about the property registers analysis by Elisabetta Rosina and Alessia Silveti in the first part of this book).

The cadastral maps of Dorio show many differences occurred in the ownerships between the end of the 18th and 19th centuries that determined many small (although significant) changes in buildings. Graphic documents of these modifications are not available; nevertheless, their description in the register of the cadastral maps is almost precise to guess the necessary change, for example to supply autonomous entrances

to become different properties.

The history of buildings instils tremendous awareness of history as a process, and to reinforces the confidence to be successful in modification. The display and comprehension of historic building, and its potential, is also a resource for reinforcing the sense of the local community because the building shows the common values that founded the community in different ages of the past. The presentation and dissemination of the cultural values of the building is an invitation to the old and new residents to discover the roots of the recently common present and share the foundation of the community memory. With Angela Colucci “[...] the local dimension is strategically relevant to improve the total resilience of complex systems and the upper hierarchic levels” (Colucci, 2012: 36).

A European perspective of the value of CH at present

The European community has been supporting the program to protect CH since the beginning because considered the historic buildings and urban fabric as a capital of irreplaceable cultural, social, environmental and economic value.

The protection of the roots of the cultural identity of any nation is a strategic target to ensure the durable respect also of the economic transition within the European countries and abroad. Quoting the final document of the project CH counts for Europe (CHCFE): *“The interest for the protection of CH in Europe comes also from the increasing awareness of the value and multiple benefits of cultural heritage for the economy, society, culture, and environment. The conceptual and policy developments at present affirm the importance of cultural heritage as a strategic resource for a sustainable and peaceful Europe. They also demonstrate*

the determination of the EU institutions to develop and implement an integrated policy approach to cultural heritage. As a perspective for the next future, the EU Council’s Conclusions on a Work Plan for Culture 2015-2018 identified cultural heritage as one of its four priorities and indicated the need for the EU to invest in cultural statistics as a prerequisite for evidence-based policy”.

The project started on 2013 with the support of the European Commission. *“This project comprised collecting, analyzing and consolidating evidence-based research and case studies from different EU Member States on the impact of cultural heritage on the economy, society, culture and environment with three aims: demonstrate the value and potential of cultural heritage as a strategic resource for a sustainable Europe; raise public awareness of this resource; give strategic recommendations to European decision-makers”.* Raising public awareness is one of the goals of the plan of conservation and restoration for historic building that coincides with one of the fundamental strategy for improving resilience (Colucci, 2012: 37). To create fluxes of information and mechanism of feedback is the basis of resilience. The most advanced researches in the field of planned conservation experimented forms of community participation to the knowledge produced during restoration of historic fabric (Della Torre, 2014), as well as developing branches of “experiential” knowledge together with the diffusion of scientific knowledge (Foppoli et al., 2014).

Many results came from the mentioned project CHCFE, for examples the definition of indicators for assessing the values of specific advantages coming from the protection of CH, for the recognition of the multiple and valuable benefits that cultural heritage brings to society.

Mainly, the economic evaluation focus on the resto-

red building and not on the process of intervention, as well as most of the present discussions of scholars and professionals deals with questions that are related to “how to do”: which are the traces/stratification of modification of the building to keep, and display after the restoration? Has the restorer the duty to transmit the traces of the past to the future, or to “recreate” “a” past? Which is the limit in between the two actions? The following paragraph and chapters deal with the methodology of the project of conservation, showing the criteria of the intervention and their application on the village. In fact, although is possible to describe the methodology of intervention as a corpus of criteria leading the choices, it is only the application case be case that permits to answer the questions listed above.

The conservation project meets the new uses

The project of conservation is a project on architecture

The previous chapters show the analysis of the buildings and the site as a mandatory for the intervention on them. The analysis is the mandatory step to obtain a project meeting the conservation aims. The gathered knowledge along the different paths of analysis is both the starting point for any compatible, proper, sustainable, effective new use and the project itself for the conservation of materials, structures and features of the building. Both are projects, because they deal with the “corpus” of the architecture and site (Bellini, 2001), that is the building and landscape, and because both use of the creative tools of design and the scientific tools of preservation. In fact, the project of conservation is much more than a quantification of technologies of technical rehabilitation, or structure strengthening. The designer must evaluate the analysis

of all the strategies and techniques of intervention, especially considering the effects on the specific building, forecasting also the effects in a short-long term. The project of conservation is the result of a highly scientific and technical activity of design, based on the knowledge of the specific building (Feiffer, 2005). Different solutions and techniques could be used to obtain the same results, also in terms of compatibility and reversibility, nevertheless the personal creativity and level of expertise of the designer can substantially vary the advanced techniques and traditional procedures.

The aim of the conservation project is to pass on the entire material heritage to the community for the new use; the design of the new configuration/addition has the aim to insert itself among the written lines of historic matter.

As stated in late decades of 20th century, restoration is a project of conservation of the existing buildings and built landscape with the addition of the value of new part (Bellini A. et al., 2005). Any intervention has the aim to improve the physical permanence of the inherited heritage, keeping an active use of its components by new designed parts, for the integral passing to the next generations. After few decades, the principle of conservation is real as never has been in the past. According to Campanella (Campanella, *Il rilievo degli edifici*, 2017: 261-273, 275-288), within the aim to give new functionality to the building, “[...] any choice of the design is as successful as it will consider all the possible function that the building can host” without losing its materials and features. The project of conservation and of the new use deal with the unity of the single building that is the leading spring to realize a real project on the architecture and its environment. The specificity of the building, its character, materials, morphology, suggests intervention that the

same building can generate, founded on its volumes, space distributions that we can perceive and survey in the whole complex. From the best assessment, the second phase of the project will have the target to take the existing building back by empowering the potential of functionality and increasing the value of use, thanks to the addition of new structures and materials and design.

The new function is a graft on the historic palimpsest

The developed and advanced knowledge requires to get high level, specific, tailored solutions, that can be a sort of “graft”, as Caterina Giannattasio explains (Cocco, Giannattasio, 2017: 65-70): “[...] in other words, grafting is an act of metamorphosis carried out on the old structure, which remains unchanged by modernity and lives in the values of the pre-existing structure. [...] grafting is therefore inevitable in terms of distinctness and modern expression. It gives the architect the role of a listener with regard to the pre-existing structure, on any scale, in order to mediate between the appropriate functions and meanings, and between necessity and possibility [...]”.

The project of intervention (both conservation and new use) is far from any imitation/model, because a model has a generic and unchanging nature that may lead to a distortion of the place (Cocco, Giannattasio, 2017: 87).

Within this scenario, the institution for the education of the designers have a prominent role to propose the proper approach of the project for new uses of historic buildings. The historic education to restoration and conservation, substantially the education “to listen” the building (COTAC, Understanding Conservation, UK), comes together with the assumption of the criteria of compatibility, reversibility, least intervention and

recognition (Mileto, Vegas, 2011) for any intervention on the existing, both provisional or for a prolonged permanence.

Moreover, there is an increasing consciousness of the challenges deriving from the need of accessibility, energy efficiency and safety. Therefore, also the current approach of invasively adapting the historic buildings to the standards for contemporary buildings has been changing towards the improvement of the residual performances. Examples come from the present Italian Ministry guidelines to improve the stability of the historic buildings (MiBACT, 2008) and the energy efficiency (Verpoest et al., 2006), very recently adopted by the EU (Bernardi et al., 2017).

The schools of architecture, architectural conservation, architectural engineering are the natural cradles to diffuse how to study the best solution for improving any specific structure instead of applying a “ready-made” project that matches current fashion and tastes. It is the deepest knowledge of the features and materials of the building, together with the better cure for the damages that create the conditions for a conscious design of the new use and necessary improvement. The project of conservation is a project of architecture, dealing with the architecture in all its aspects and not only a good practice of maintenance and technical repair of the damages.

The conservation of architecture is an activity of planning, aimed to scientifically synthesize the knowledge data (historic, on materials, architecture language and technology, on possible uses) with the objective of conservation of features and materials, considering the historic site a unique document as it comes from the past. This cultural planning is contemporaneously a historic-critic judgment and a scientific knowledge, therefore requires the multi-level collaboration of many disciplines.

The step of the intervention, dealing with the enhancement of the existing buildings, consists in reaching the best balance between the proposal of new addition and transformation for meeting the needs of the new use and the strictest conservation both of materials and building techniques.

It is possible to reach this balance along with a methodology of progressive subtraction of the unnecessary items and images that usually fill our imaginary thinking to a functional use of the building. As worshippers of images (Dezzi Bardeschi, 1995), the icons of contemporary architectures pop up in the mind as a reference, also before that a complete exam of requirements, needs, and opportunity is done. As a difference from the project of a new building, the proposal of new use of a historic building is not a pencil sign on a blank paper. It requires writing among lines, to conceive shapes, colors, materials that dialogue with the existing one, without prevail on them or, even worst, use them as an excuse to display, enhance astonishing new construction that have the commonly accepted marks of genius.

The standard is a challenge for the current use of protected building: four keywords as guideline of the intervention

Mainly, the new uses require meeting the standard for safeness, fire protection, accessibility, energy efficiency, especially if the new function is a public use. Concerning the reinforcement, since 2008 the Italian standard for historic buildings require improving the stability and the prevention of seismic damage instead of applying the general reinforcement of the contemporary structures (MiBACT, 2015. *"Guidelines for improving energy performance of Cultural Heritage. Architecture, historical and urban centers"*). The recent EU standard for the energy efficiency follows the same

line: once again, the suggestion of the "improvement" does not quantify and specify the intervention, although the most recent regulation designs the process of decision making for choosing if and how to intervene. The requirement of improvement, together with the following criteria, are suitable for leading both the technical intervention for repairing and the project of enhancing the building (Musso, 2012).

The first criterion is *compatibility*: as technical intervention, the new materials should not damage the existing ones, both physically and esthetically, therefore the new materials should have the same chemical-physical-mechanical properties of the existing ones. As enhancing intervention, the new use should not require damaging the existing building with a massive intervention that sacrifices materials and structure, considering also the reinforcement or demolition required in the phase of the restoration itself. The intervention or the addition should match with the existing without risk to damage it, as it happened using cement mortar to seal frescoes. At present, compatibility is necessary; the new materials should behave as the old ones or show lower performances because, in the case of damage, the new materials will be damaged firstly. The description of the technical conservation project on Saint George church (see the chapter *"Saint George church in Mondonico"*, by Alessia Silvetti and Roberto Pozzi) is an example: the choice of the materials for fixing the damage of the finishing, as well as the reinforcement of the structure, totally respect the criterion. It is also an application, of the second criterion: *reversibility*-retractability.

The suggested proposals for new uses meet these two criteria, basing on the idea of "box in the box". The technical solutions proposed in the final chapters are respectful of the existing materials and building techniques as well as the guideline (see the chapter

Fig. 1 [left] and 2 [right, top] - The new stairs inside Bernabò Visconti Tower (Trezzo sull'Adda Castle, Italy, project: Lorenzo Jurina and collaborators) is a good example of reversibility and integration between old and new structures (photo: Andrea L'Erario, 2014)



Fig. 3 [right, bottom] - Detail of the wood beam reinforcement of the roof of one tower of Pavia Castle, Italy. The new addition is completely reversible. Project: Lorenzo Jurina (photo: Andrea L'Erario, 2014)

"Guidelines for preservation of a landscape system. A handbook for the historic village of Mondonico" by Paola Branduini) for the location, design, volumes, and materials of the new buildings to rise.

In fact, in a technical interpretation of the word, reversibility means that all the intervention should be removable without damaging the existing building, because of possible, future, better intervention or because of the durability of the employed materials. The concept is also declining as re-tractability, that means the possibility to intervene with new materials/solution on a restored part, without taking off the previous material (Arkos Conference, 2002). With Campanella, (Campanella, Geores, 2017: 669-672), a reversible

improvement of the building performances opens new options for using light technologies, preferable dry, biocompatible and sustainable, that can support all the needs of the structure without permanent impacts. The third criterion that basis the intervention states that the best intervention is the least (*less is more*). This criterion serves to prevent any "oversize" addition, transformation, mutation. It has application both on the technical and functional side: for example, the strengthening intervention should be "collaborative" with the existing structure, exploiting its residual performances instead superimposing materials and construction techniques that behave in a very different way from the original one. An example of the concept



Fig. 4 and 5 [left, top]- The insertion of new horizontal structures on old timber beams. The historical beams are reinforced by the addition of new beams (Ex caserma Calchi, Pavia, Italy). (photo: Andrea L'Erario, 2014)

Fig. 6 [left, bottom] - Saliceto Castle, Italy. Restoration project by Armellino&Poggio Architetti Associati, 2011. The new tower, made with a steel and timber cladding self-supporting structure, is well noticeable from the historic castle.

Fig. 7 and 8 [right] - The conservation of the rose window of Aula Magna of University of Pavia, project: Lorenzo Jurina (photo: Andrea L'Erario, 2014)

of least intervention, on the functional side, is to use the existing vertical connection for inserting plants and pipes instead of locating services rooms, bathrooms, kitchen despite of the sacrifice of original materials). The criterion of the least intervention is very important to limit the loss of the integrity of the building and guarantee the respect of all the information regarding the history of the buildings. The traces of the past bring the values, information, a witness of past knowledge and artistic artisanship that express the uniqueness of our Cultural Heritage. Therefore, the best attitude to project the adaptation to the new use is to study the most and to intervene the least, based on the most accurate analysis and evaluation. The examples of the final chapters show how is possible to add new functions (the diffused hotel, the new site for university and especially the diffuse museum) and improve buildings performances, without superimposing images of bog-standard solutions. All the interventions are "tailored" on the spot, meeting needs and design in a balanced dialogue among the old and new. The additions reveal their contemporaneity, without misleading camouflage, although achieving the harmony with the existing parts. Proportions, dimensions, colors, volume articulation, connections, materials of the hotel, the university classrooms and facilities are partially underground, and they exploit the levels curves to hide most of the volume. The natural slope of the hill permits to have natural ventilation and solar irradiation on the western facades, improving also the energy efficiency of the new buildings. The proposed accessibility improvements of the site follow the guidelines and results in the same mainstream of the buildings design: for example, the proposals include the use of local stone or metals for improving stairs and parapets, as well as the addition of simple stone steps for decreasing sharp slopes of the country roads and paths.

In addition, the rehabilitation of small open spaces as belvedere and community/touristic events, gains existing places to the public use and it is a very practical way to reinforce the sense of community, both of residents and tourists, thanks to the possibility to share the wonderful landscape and views. The open-air furniture, signs, lighting system denounce their contemporary design, although they merge in the existing built landscape.

In fact, they respect the forth criterion relies on the *visibility of the new addition*. This criterion has been under discussion since the birth of an early awareness regarding the implication of restoration. At present, the common perspective regarding the recognition focus on the necessity to distinguish the new addition from the existing parts, without disturbing the total view and perception of the whole work of art, building, object. The interpretation of this criterion relies on the sensitivity and culture of the designer, perhaps more than the application of the previous keywords, and many examples could match with it although the final aesthetic result could be different.

The above-mentioned criteria are more than technical guidelines for accomplish a proper addition, or integrate the existing building. They are a path that helps to reach a balanced design; they constitute an accepted frame to facilitate the development of the project. Nevertheless, the creativity and innovative spring of design continuously flow along the complex and ever developing roadmap to accomplish the recognition and enhancement of the building itself and all its historic/material values. The historic buildings, whenever their life started, firstly are a continuous source of inspiration for the population to whom belongs. The only condition is to make them survive, preserving their integrity by preventing the occurring damages and with a management aware of the risks for their conserva-

tion, as well as a studied rehabilitation encompassing all the aspects and levels that the building represents. The recognition of resilient features and strategy in the conservation process of Mondonico reinforces the sustainability of the intervention for reshaping the future of the ancient settlement, as well as many other historic rural villages in the area.

Endnotes

(1) As the deep reflection on the legacy of Ruskin, Riegl, Dvorak, the studies of archaeology methods, the development of the concept of material culture brought to overcome the reduction of history to the great happenings, to emergencies, to (the uniqueness of figurative production (Bellini, 2001). The definition of the Cultural Heritage as the witness of past civilization comes back to the Sixties, in Italy. The Government Committee (Commissione Franceschini, 1967) for the protection of Cultural Heritage stated this definition showing a wide perspective that was too in advance with respect to the legal framework at that time. Nevertheless, the definition is presently considered the widest and more complete, accepted by the updated scientific literature.

(2) Legislative Decree n. 42 of 22 January 2004, Code of the Cultural and Landscape Heritage.

(3) The assessment of building resilience and sustainable systems in social environment bases on several principles: maintaining diversity and redundancy (with the aim to keep them for possible future activation of secondary circuit of functions in substitution of the primary), managing connectivity (to improve it at any level, sharing information and feedback), managing slow variables and feedbacks (providing the slow and controlled change of the necessary factors for survival, that could become dangerous over a threshold), fostering complex adaptive systems thinking, encouraging learning at any level and time (sharing the awareness of learning as a necessity), broadening participation (especially raising the awareness about threats and improving conservation plans), and promoting polycentric governance systems (Biggs et al., 2015).

References

- AA.VV. (2002). *Reversibilità? Concezione e interpretazioni nel restauro*, Proceedings of the Conference, 12th-13th April 2002, Turin. Turin, Italy: UTET Periodici
- Aliverti, L. (ed.) (2014). *Guida al riconoscimento, alla manutenzione e al recupero dell'edilizia rurale di Ardenno/Masino*. Sondrio, Italy: Bonazzi grafica
- Bellini, A. (2001), Postfazione con appendice. In F. Ventura, *Beni culturali. Giustificazione della tutela*, pp. 145-165. Turin, Italy: Città Studi
- Bellini, A. (2005), *Cosa è il Restauro? Nove studiosi a confronto*. Venice, Italy: Marsilio
- Bernardi, A., D'Ambrosio, F., Rosina, E. (2017). La norma per migliorare l'efficienza energetica negli edifici storici, In *AiCARR Journal*, 43/2017, pp. 25-27
- Biggs, R., Schlüter, M. & Schoon, M.L. (2015). *Principles for building resilience: Sustaining ecosystem services in social-ecological systems*. Cambridge, UK: Cambridge University Press
- Campanella C. (2017). *Il rilievo degli edifici: metodologie e tecniche per il progetto di intervento*. Palermo: Dario Flaccovio Editore
- Campanella C., (2017). Design and "restoration": the roots of Architecture project for the built. In *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Vol. XLIII-5/W1/2017. Geores - Geomatics & Restoration. Conservation of Cultural Heritage in the Digital Era, 22th-24th May 2017, Florence, Italy. DOI: 10.5194/isprs-archives-XLIII-5-W1-669-2017
- Cocco, G.B., Giannattasio, C. (2017). *Misurare innestare comporre*. Pisa, Italy: Pisa University Press
- Colucci, A. (2012). *Le città resilienti: approcci e strategie*. Pavia, Italy: Jean Monnet Interregional Centre of Excellence, University of Pavia
- Della Torre, S. (2010). Conservazione programmata: i risvolti economici di un cambio di paradigma. In *Il capitale culturale. Studies on the Value of Cultural Heritage*. *Journal of the Department of cultural Heritage*, vol. 1/2010, pp. 47-55. Macerata, Italy: EUM Edizioni Università di Macerata

- Della Torre, S. (2014). Oltre il restauro, oltre la manutenzione. In Della Torre, S. (ed.) *Proceedings of the international Conference Preventive and Planned Conservation*. Vol. 1, pp. 1-10. Florence, Italy: Nardini Editore
- Dezzi Bardeschi, M. (1995). Adoratori d'immagini, In *Ananke*, vol. 12/1995, pp. 2-3. Florence, Italy: Alinea Editore
- Feiffer, C. (2005). *Il progetto di conservazione*. Milan, Italy: Franco Angeli Editore
- Folke, C., Colding, J., Berkes, F. (2003). *Navigating social-ecological systems: Building resilience for complexity and change*. Cambridge, UK: Cambridge University Press; DOI: 10.5751/ES-00601-090101
- Foppoli, D., Menghini, G., Zanolari E. (2014). Preventive conservation: an opportunity of cooperation in the heart of the Alps. In Della Torre, S. (ed.) *Proceedings of the international Conference Preventive and Planned Conservation*. Vol. 1, pp. 85-96. Florence, Italy: Nardini Editore
- Jokilehto, J. (1999). *A history of architectural conservation*. Oxford, UK: Butterworth Heinemann
- Kealy, L. (2008). Teaching/Thinking/Learning/Doing. Conservation and creativity in architectural education. In Musso, S.F., De Marco, L. (eds.). *Teaching Conservation/Restoration of the Architectural Heritage. Goals, Contents and Methods*. EAAE Transactions on Architectural Education, n. 38, pp. 41-48. Hasselt, Belgium: EAAE European Association for Architectural Education
- Kishali, E., Rosina, E. (2018). Conservation issues in Fener-Balat region in the context of resilience. In *Techne* (in press). Florence, Italy: Firenze University Press
- MiBACT (2008). *Linee guida per la valutazione e la riduzione del rischio sismico del patrimonio culturale con riferimento alle Norme tecniche per le costruzioni di cui al decreto del Ministero delle Infrastrutture e dei trasporti del 14 gennaio 2008*. Available from: www.protezionecivile.gov.it/resources/cms/documents/LineeGuida_BBCC_2010_11_26_1.pdf [March 14th, 2017]
- MiBACT (2015). *Linee di indirizzo per il miglioramento dell'efficienza energetica nel patrimonio culturale. Architettura, centri e nuclei storici urbani*. Available from: www.beap.beniculturali.it/opencms/multimedia/BASAE/documents/2015/10/27/1445954374955_Linee_indirizzo_miglioramento_efficienza_energetica_nel_patrimonio_culturale.pdf [February 15th, 2018]
- Mileto, C., Vegas, F. (2011). Teaching architectural restoration through reflection on intervention criteria. In Kealy, L., Musso, S.F. (eds.). *Conservation/Transformation, EAAE Transactions on Architectural Education*, n. 52, pp. 363-368. Leuven, Belgium: EAAE European Association for Architectural Education
- Musso, S. (2012). Conservation/Regeneration: of what and for what? In Crişan, R., Franco, G., Kealy, L., Musso, S.F. (eds.). *Conservation/Regeneration: The Modernist Neighbourhood*, EAAE Transactions on Architectural Education, n. 58, pp. 785-799. Leuven, Belgium: EAAE European Association for Architectural Education
- Musso, S. (2013). L'avvicinamento al progetto di Restauro architettonico: dalla individuazione del "problema" alla ricerca delle sue "possibili soluzioni". In Musso, S.F. (ed.). *Tecniche di Restauro*, pp. 351-357. Turin, Italy: UTET scienze giuridiche
- Verpoest, L., Stulens, A. (2006). MonumentenWacht. A monitoring and maintenance system for the cultural (built) heritage in the Flemish Region (Belgium). In Patricio, T., Van Belen, K., De Konge, K. (eds.). *Conservation in changing societies. Heritage and development*. Proceedings of the International Conference, Leuven, 22-25 May 2006, pp. 191-198. Leuven, Belgium: Raymond Lemaire International Centre for Conservation
- Vivio, B. (2007). Restauro come progettazione dell'esistente. In Ferlenga, A., Vassallo, E., Schellino, F. (eds.). *Antico e Nuovo. Architetture e architettura*, vol. II, pp. 563-580. Venice, Italy: IUAV University, Il Poligrafo
- Reference from the Internet: Conservation of Cultural Heritage - Guidelines for improving energy performance of historic buildings (draft, 2015). www.beap.beniculturali.it/opencms/multimedia/BASAE/documents/2015/10/27/1445954374955_Linee_indirizzo_miglioramento_efficienza_energetica_nel_patrimonio_culturale.pdf

cibse.org/getmedia/bad5b290-969c-4961-8d0c-cb71f2dcd875/Draft-BS-EN-16883-Conservation-of-Cultural-Heritage-Guidelines-for-improving-energy-performance-of-historic-buildings.pdf [March 14th, 2017]

- Reference from the Internet: ENCATC, European network on cultural management and policy. blogs.en-catc.org/culturalheritagecountsforeurope/outcomes [March 14th, 2017]
- Reference from the Internet: COTAC, Understanding Conservation, UK. www.understandingconservation.org/content/304-investigation-and-survey [May 1st, 2017]



Strategies and methodologies for the regeneration of small historical town centres: the Mondonico case study

Laura Elisabetta Malighetti

A network of small settlements covers our landscape, still present today and perfectly integrated in a panorama with a high level of natural and cultural values. The richness of this heritage deals with the value of the totality of the landscape, the harmonious fusing of each element in a unique whole, instead of an exceptional excellence of one building above all others. Many of these settlements went into neglect and disrepair and at present, their rehabilitation requires high costs to improve their performance to present day housing standards.

Therefore, the local community that owns the settlement often refers to the ancient heritage as a critical issue, an uncomfortable presence. Furthermore there is to be taken into account the difficulty in managing an extremely fragmented property heritage as illustrated by Elisabetta Rosina and Alessia Silveti in their chapters in the first part of this book.

However, ancient buildings have great potential, if properly preserved and kept in a good state of repair.

They improve the attractiveness of a fragile area: they act for the safeguard of an otherwise uncontrolled part of the territory, for example in terms of geological risk (avalanche, landslide, etc.)

For the regeneration of small, abandoned or underused historic town centres, it is firstly necessary to identify the new intended use that can justify the enormous investment required for the regeneration, as well as a strategy that can link physical regeneration with the objective of adding value to the territory and the local community.

The functions that create new attractiveness of land and jobs for the population are successful (Fig. 1).

They are much more successful again when they involve all the stakeholders of the transformation process, firstly, the local ones like the municipality and the Valley Communities.

In recent years, the researchers of *Polo di Lecco* (Politecnico di Milano) have been studying specific methodologies of intervention on and small ancient villag-

es for their valorization and refurbishment, by means of didactic activities, as in the graduation thesis.

The initial phase is the detailed assessment and documentation of the object (Fig. 2-3), together with the assessment on the territory and its population, and the stakeholder's views and requirements (owners, Municipality, etc.).

Many of these researches are well described by other authors in this text, as for example the steps of the analysis and the different scales of study shown in the paragraph *"Reading Mondonico: method and tools"* in the chapter *"Reading the landscape. The experience of Mondonico"* by Raffaella Lavisio.

The information-gathering phase concludes with critical analysis of the data collected, using the SWOT method (Strengths, Weaknesses, Opportunities and Threats) which provides the input for the next phase of the project.

The analysis of the main features of the village and its landscape consists in the recognition and homogeneous categorization of building/site features (for example landscape/location, accessibility, economy, building Heritage, Cultural Heritage, population). The results of the analysis are fundamental in devising the new functions.

Among the criteria of choice for rehabilitation, is economic feasibility (assessed by Project Management tools).

The most feasible results are in tourism, integrated with agriculture and the traditional local activities, continuing to survive (see the proposal of a 'diffused museum' in the chapter by Andrea L'Erario and Tiziana Bardi in this book). In fact, this is a possibility for the rural territory to keep and valorize its nature of landscape (Fig. 4).

The identification of function for a nature-oriented tourism is an alternative to the one of mass tourism, and

they offer the integration of the local resources (landscape, artistic heritage, local production) with the education function (knowledge and valorization of the features of the territorial identity).

The process of new use of historic centers requires a careful preparation and overview, to avoid transforming this unique landscape into a uniform and compliant piece of the territory. At present, the protection is extended to the whole of the built up landscape, including the private and collective open space, instead of being limited to the exceptional historic buildings (the monuments) only.

Particularly useful from this point of view are the guidelines for preservation of a landscape system illustrated in the Branduni's chapter (in particular see the advice 1 - *"Respect the existent relationship between open spaces and construction, understanding character, significance and context"*).

The intervention to improve the performance of ancient buildings, through new use, has to preserve as much as possible of the existing: the designed solution has to be compatible and respectful of the typology and the building concept of the existing building. The design of new additions should speak the architectural language of our time; at the same time, it should prevent any excessive intervention as illustrated in the paragraph *"How to add new constructions"* in Branduni's chapter.

The assessment of the village included also the comprehension of the typology, spatial distribution and building techniques used in the houses.

The systemic survey of the buildings led to the drawing up of an inventory of the most frequently recurring solutions for the heritage being studied.

In the project, the choice of the solution focuses on the ones that fit in with other similar villages and locations. The concept of "the box into the box" is particularly

suitable for any building to be integrally preserved and in the meantime that hosts new functions that require a high level of improvement of even the most basic performance stipulation (Fig. 5).

The insertion of new modern volumes into an existing building is particularly effective for preserving the original envelope (in this case, the solid stone masonry). The envelope constitutes the exterior finishing of an interior box that accomplishes all the supporting and functional tasks, achieving the required comfort standard.

The criterion of sustainability leads to the choice of the materials and building techniques, the plant and energy efficiency.

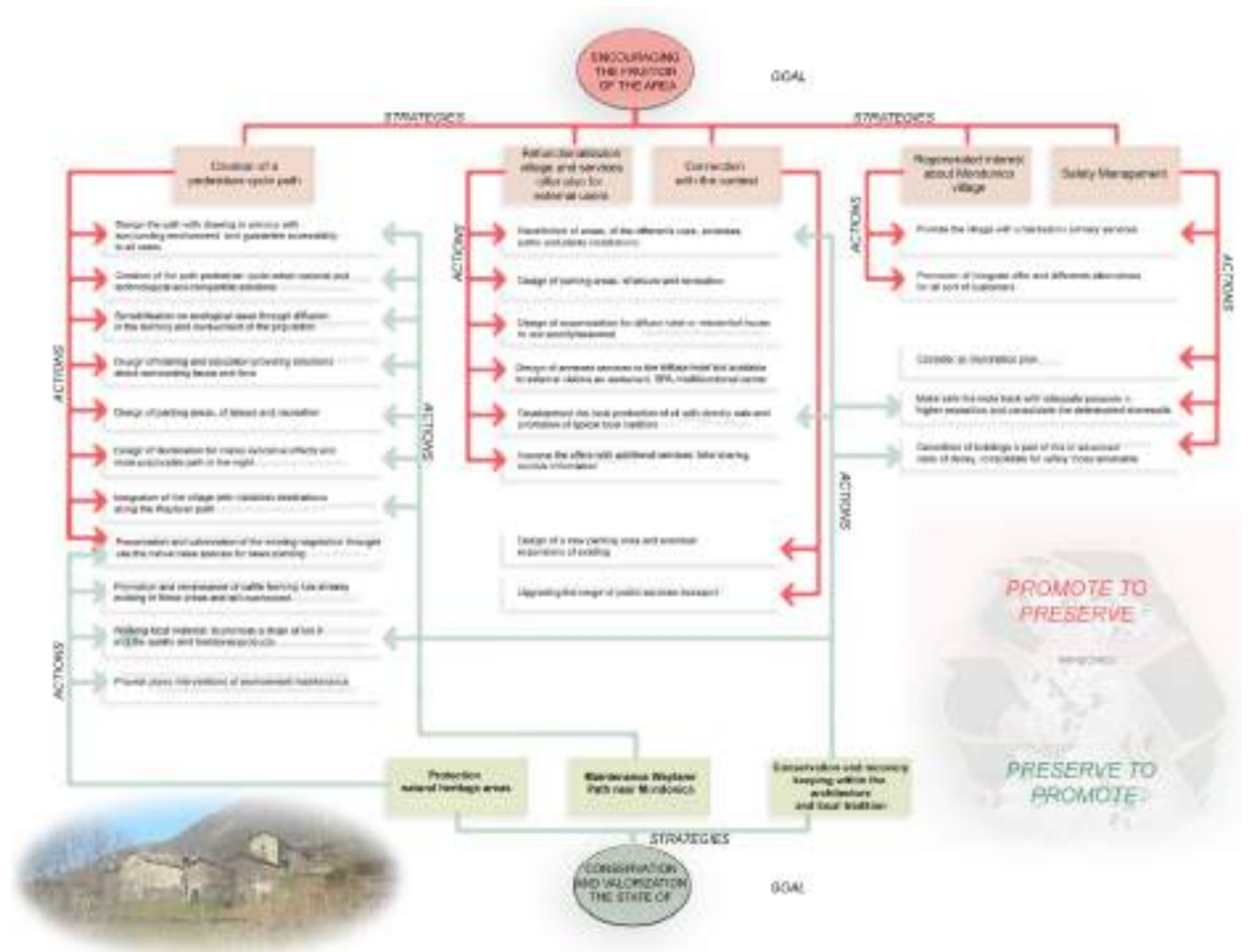
Especially for a small neglected village, with scarce infrastructure, energy self-sufficiency is mandatory, and it is possible to realize this goal by the best exploitation of the local available resources (Fig. 6). In the following the author describes a good example of the afore-mentioned approach.

References

- Corbella, S. (2014), *Ripensare Mondonico. Modello di recupero di un piccolo agglomerato diffuso* (Graduation Thesis, Politecnico di Milano, Scuola di Ingegneria Edile-Architettura, Milan, Italy. Tutor prof. L. E. Malighetti)
- Dematteis, L., Doglio, G., & Maurino, R. (2003). *Recupero edilizio e qualità del progetto*. Cuneo: Primalpe
- Giebeler, G., Fisch, R., Krause, H., Musso, F., Petzinka, K. H., & Rudolphi, A. (2009). *Refurbishment Manual*. Basel: Birkhäuser
- Grecchi, M., & Malighetti, L. E. (2008). *Ripensare il costruito. Il progetto di recupero e rifunionalizzazione degli edifici*. Santarcangelo di Romagna: Maggioli Editore.
- Malighetti, L. E. (2011). *Quattro strategie di recupero per ripensate il costruito. Four renovation strategies for reconsidering buildings*. *Materia*, 71, 152-161
- Malighetti, L. E. (2011). *Recupero Edilizio. Strategie per il riuso e tecnologie costruttive*. Milano: Il Sole 24 Ore
- Malighetti, L. E., & Colucci, A. (2015). *Il Recupero dei nuclei storici minori. Il caso di Premana /Regeneration of small town centres. The Premana casa study*, Santarcangelo di Romagna: Maggioli Editore
- Pedrazzini, L. (cur.). (2005). *Survey on alpine heritage*. Culturalalp, Sesto S. Giovanni: GSC arti grafiche
- Malighetti, L. E. (2016). *Metodi e strategie per il recupero nuclei storici minori. Architettura tra tradizione e innovazione: il caso Svizzero di Wespi de Mueron Romeo Architetti. Methodologies and strategies for small town centres regeneration. Architecture between tradition and innovation: the Swiss architects case study of Wespi de Mueron Romeo Architetti*, *Techne. Journal of Technology for Architecture and Environment*. 12, 112-121. DOI: 10.13128/Techne-19342
- Pizzi, E., Guida, A., De Tommasi, G., Morganti, R., & Salemi, A. (2013). *Large scale refurbishment strategies in Italy: a proposal of Geocluster characterization*. *Proceedings of the 39th World Congress on Housing Science - Changing Needs, Adaptive Buildings, Smart Cities*, Milano (I), 17-20 september 2013, (Vol.1, pp. 993-1000). Milano: PoliScript
- Richarz, C., & Schulz C. (2013). *Energy efficiency refurbishments*. Munich: Institut für internationale Architektur Dokumentation
- Turchini, G. (2013). *Abandoned Historic Settlements*. *Il Sole 24 ORE Arketipo*, 77, 72-75
- Zordan, L. (2002), *Tipo, Tecnica e progetto nella conservazione dei tessuti storici*, in AA.VV., *Le tradizioni del costruire in pietra: materiali, tecniche, modelli e sperimentazioni*. L'Aquila: Gruppo Tipografico Editoriale

Fig. 1 - Project objectives.

For the regeneration of small, abandoned underused historic town centres, a strategy that can link physical regeneration with the objective of adding value to the territory and the local community is necessary. (source: Corbella, 2014)



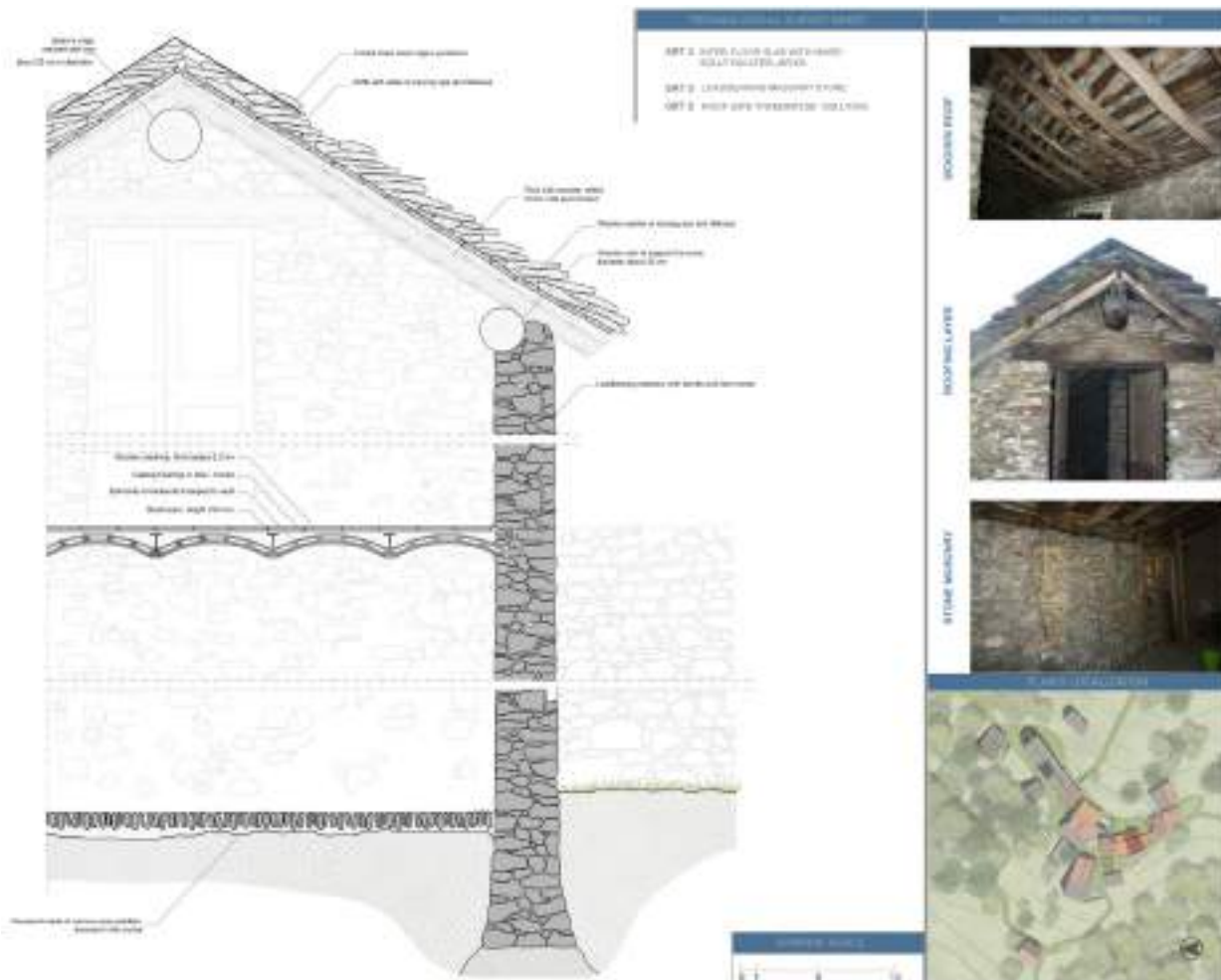


Fig. 2 - Technical site survey report. This combines the data available from the site survey with references to handbooks. (source: Corbella, 2014)

Fig. 3 - Mapping of degradation. (source: Corbella, 2014)



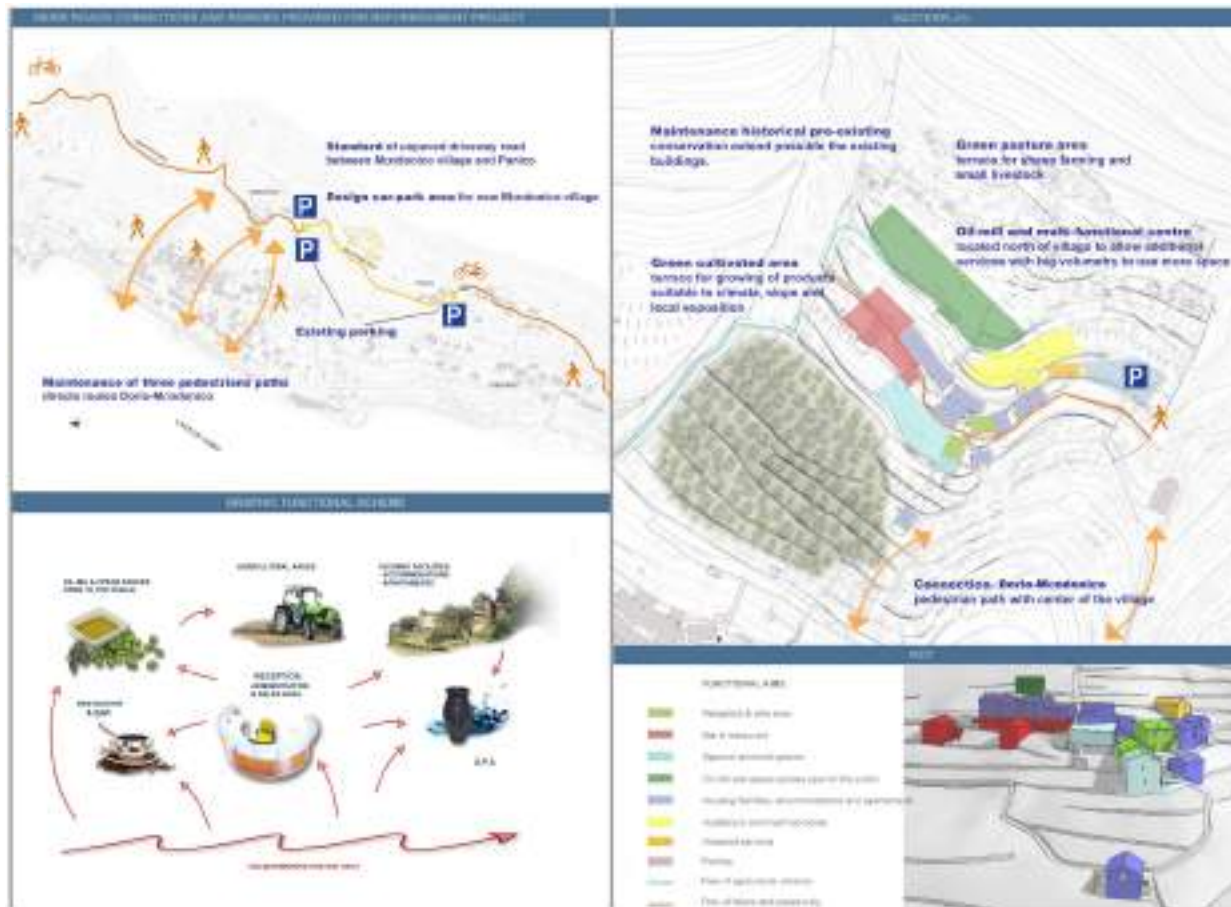


Fig. 4 - Masterplan and functional diagram of the activities established in the town. Selecting these activities requires a range of different skills, including those involving marketing of the local area and in turn, cross-referenced analyses of strengths and weaknesses. (source: Corbella, 2014)

Fig. 5 - Detailed section of the solution for technological regeneration using the "box in the box" strategy: the structure of the internal box is wood panels and wood fibre insulation. (source: Corbella, 2014)

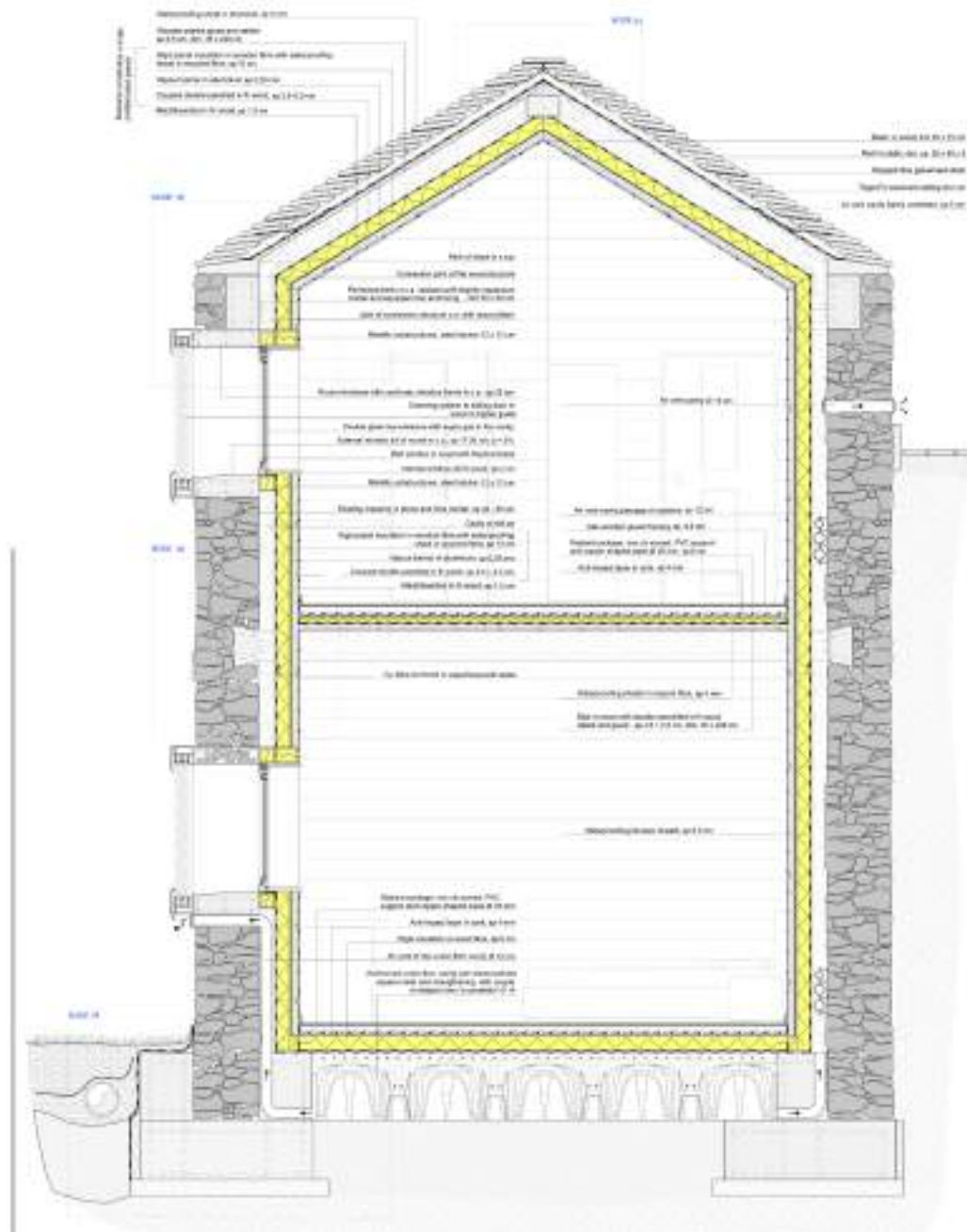




Fig. 6 - The revitalization plan for an abandoned settlement has to strive for energy self-sufficiency and it has to take advantage of all the available resources. In the case of Mondonico, this objective is achieved by the choice of a co-generation biomass plant that allows for the disposal of waste materials from olive oil production. (source: Corbella, 2014)



Proposal of the new use in Mondonico village as scattered hotel

Laura Elisabetta Malighetti

Over recent decades, the Mondonico area has been neglected, both the village and the pathways, cut off from contemporary development of infrastructure and facilities, and the scarce maintenance and refurbishment have not followed any guideline or masterplan. In the following, the author presents the project proposals of the thesis *“Re-thinking Mondonico, model of refurbishment of a small ancient village”*¹ and explains an intervention method for adding new functions, respectful of the existing buildings, the tradition, the culture of the site while also applying sustainable criteria.

This chapter is a description and general analysis of the meta-project methods, particularly in terms of the development of the architecture, structures and planning.

The first step of the refurbishment project involves an evaluation of the feasibility of the new uses, and the second step is the development of the project and design of the project components: the architecture, the technological aspects, the strengthening of existing structures, and the improvement of energy efficiency.

Evaluation of the new proposals

The first step is the evaluation of the approach to the meta-projects, the choice of the contents and thresholds due to the huge value of the landscape and urban fabric. The knowledge of the place and village and their characteristics led to an understanding of the potential for a renewal and to bring new life to the existing buildings.

The SWOT analysis has been mostly significant for the identification of the potential and threats of the village and site.

The village has a high historic and cultural value, both the buildings (especially the church of Saint George) and the pathways and trails. The location is perfect for an increase in tourist flows coming from lake Como, thanks to the potential to develop agriculture and livestock.

Moreover, Mondonico is a peaceful and quite place, with wonderful views and could be easily reachable. Nevertheless, the current isolation of Mondonico means also a lack of water, energy, and maintenance

Fig. 1 - Perspective view of the village, project rendering. (source: Corbella, 2014)



Fig. 2 [left] - SWOT analysis, Strengths. (source: Corbella, 2014)



Fig. 3 [right] - SWOT analysis, Weaknesses. (source: Corbella, 2014)



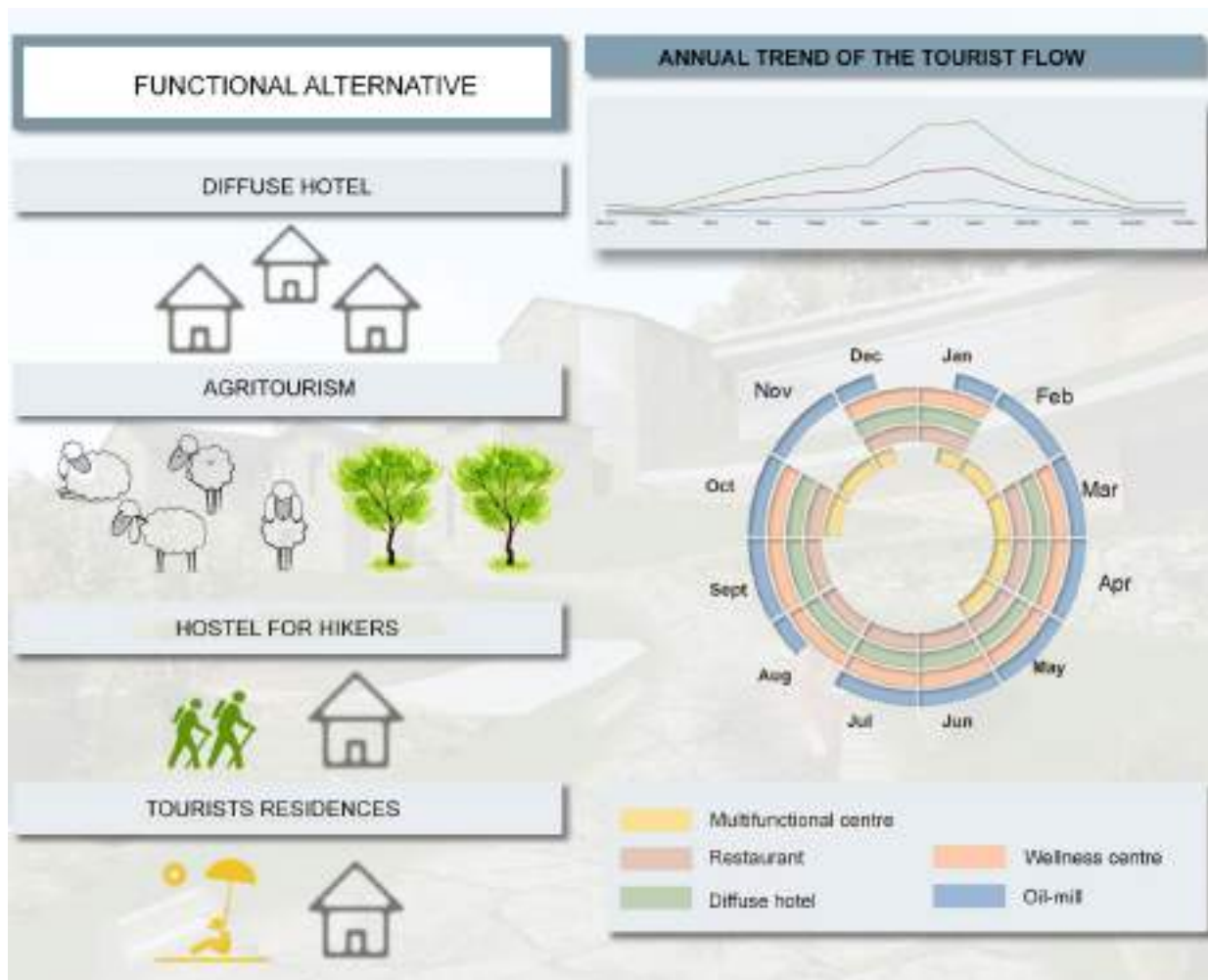


Fig. 4 - Possible new functions from SWOT analysis. (source: Corbella, 2014)

both of the buildings and the connections with the main roads, alongside the lake. Since the inhabitants left the village, productivity has also decreased. In addition, a further threat is the lack of a harbour in Dorio for the connection with other touristic villages on the lakeside and the presence of more commercially competitive villages close to Mondonico (Colico, Varenna, Menaggio, Bellano ecc).

The effective choice of future uses depends on the needs of the present population and the plan of development of the Municipality. A pro-active approach in the territory could strongly affect the inhabitants' life. Therefore a further step of the project has been to interview the Public Administrators and population regarding the present condition of Mondonico, the requirements for future developments and the potential

for bringing new opportunities.

The answers constituted the starting points for the projects, ensuring that they fit the population's expectations.

This step focuses on the local demand and supply, getting the local population on board and the objective of possible functions fitting real needs.

The projects has two objectives: promoting public use and the conservation and valorisation of the existing area.

The proposal of the new uses takes into account the tradition and the culture of the site that also strongly communicates village values throughout its materials and physical appearance.

The possible uses are several: scattered hotels, working farms with hospitality, hostels for climbers and trekkers, tourist residences.

The assessment of the site and village, the connection with the natural and built up landscape, the damage to and volume of the existing buildings leads to the choosing of the scattered hotel within a wide range of possible housing solutions, for several categories of tourists.

From the analysis of the touristic flow and the local demand, the indication for the site management is to open the hotels from March to October, and during the Christmas vacation.

The integration of the hospitality function with others required the addition of new buildings and it allowed the location of a restaurant (for the guests of the hotel and for other tourists), a wellness centre, a multi-purpose centre, an olive mill for the local production of olive oil. These new functions are located in Mondonico and along the main path connecting Mondonico to the other small villages at mid-slope height. Many buildings in Mondonico will be part of the scattered hotel.

Together with the hospitality and recreational activities, the masterplan includes a bike sharing service that improves the offer for the cycling focused hotels in the area of Lecco Lake.

The choice to set up an olive mill comes from the careful analysis of the cultivation of olive trees in the area of lake Como: the north-eastern side of the lake has the best climate for this cultivation, nevertheless there is a lack of mills for producing oil.

In fact, in 1997, the EU awarded the production of oil from lake Como with the brand DOP (protected original provenience), and Dorio is one of the locations of the protected area.

Therefore, the project has the goal to improve the cultivation of olive trees up and down the hill where the village is, along the slope and on the existing terraces. The masterplan sets out a meadow for raising livestock, which is close to the buildings.

The evaluation of the economic feasibility of the project is positive for all the hypothesized functions.

The economic evaluation took into account the costs of the intervention and the cash flow, gains, etc. due to the new functions. The result should be that all the proposals have a positive pay back, within an acceptable timeframe.

The architectural project

The project also intends to improve the identity of the location, in addition to the valorization of the landscape, and to insert Mondonico in the Trekking of Wayfarers, as a new and special milestone along the path.

Whilst the project of the scattered hotel includes the interior strengthening of the buildings to respect the exterior facades, the projects of the restaurant, wellness centre and multifunction centre are an integration



Fig. 5 - General view, scattered hotel. (source: Corbella, 2014)



Fig. 6 - Plans and sections of one of the refurbished buildings, scattered hotel. (source: Corbella, 2014)

Fig. 7 - Rendering of the town after regeneration.
(source: Corbella, 2014)



Fig. 8 - Project Site plan.
(source: Corbella, 2014)



of new and existing buildings, The new buildings are located underground and their volumes are similar to the over-land terraces existing on the slope of the hill where Mondonico is.

The hotel facilities are underground, with wide glass facades towards the lake. A reticular timber board cladding shadows the glass: from inside it is possible to have the breathtaking view of the lake and mountains and from outside, the complex knitting of the boards lights the continuous façades.

The strengthening of eight buildings (total coverage of 510 sqm) improves their structural performance, to host 35 people in hotel rooms and 20 people in small apartments.

The design of the elevation includes the timber cladding of the infilled opening, keeping a similar pattern

to the new facades. The project includes the substitution of some of the existing stairs connecting the ground level of the street and first level of the houses. In addition, new benches will be set along the road. Each building has unique dimensions and characteristics; therefore, the architectural project is specific for each one.

The language of the new additions is contemporary, and it regards the plans of the scattered hotel: it uses curves to follow the contour lines of the land, merging into the terraces and the ancient buildings.

The aim of the project is to design buildings coming from and going back to nature by means of open spaces, garden roofs and the use of local, traditional, materials and building techniques.

The balance to reach is between nature and architecture: one tool used to reach this balance is the orientation of the volumes that allow the residents to keep a visual contact with the landscape and to prolong the natural view of the surrounding terraces.

The restaurant offers a locally sourced menu. The dining room has 115 seats, on 504 sqm and includes a bar and a tasting zone.

The wellness centre is open to the hotel guests and the other tourists in the village. It includes swimming pools, different kinds of tubes, relaxation areas (also outside), and a beauty farm.

The multifunction center will be the headquarters of the Municipality and includes an auditorium (125 seats on 190 sqm); it is also available to the inhabitants of the small village near Mondonico.

The olive mill is available to the local farmers, the ones coming from the nearby village on the northern side of the lake. Inside the mill, there is also an exhibition area for public use, both schools and touristic visitors.

The sustainable design

A careful analysis of the existing buildings and its landscape is necessary to display, promote and transmit the signs that Mondonico village wishes to communicate to the visitors.

The project technicalities enhance the existing building as a precious resource, with specific characteristics, interlocked to the materials, building techniques and their transformation over time.

The sustainable project refers to:

- Budget: low costs at highest possible quality
- Environment: low consumption of resources and controlled emissions
- Social: to pay attention to the new uses, producing a high quality project of the construction

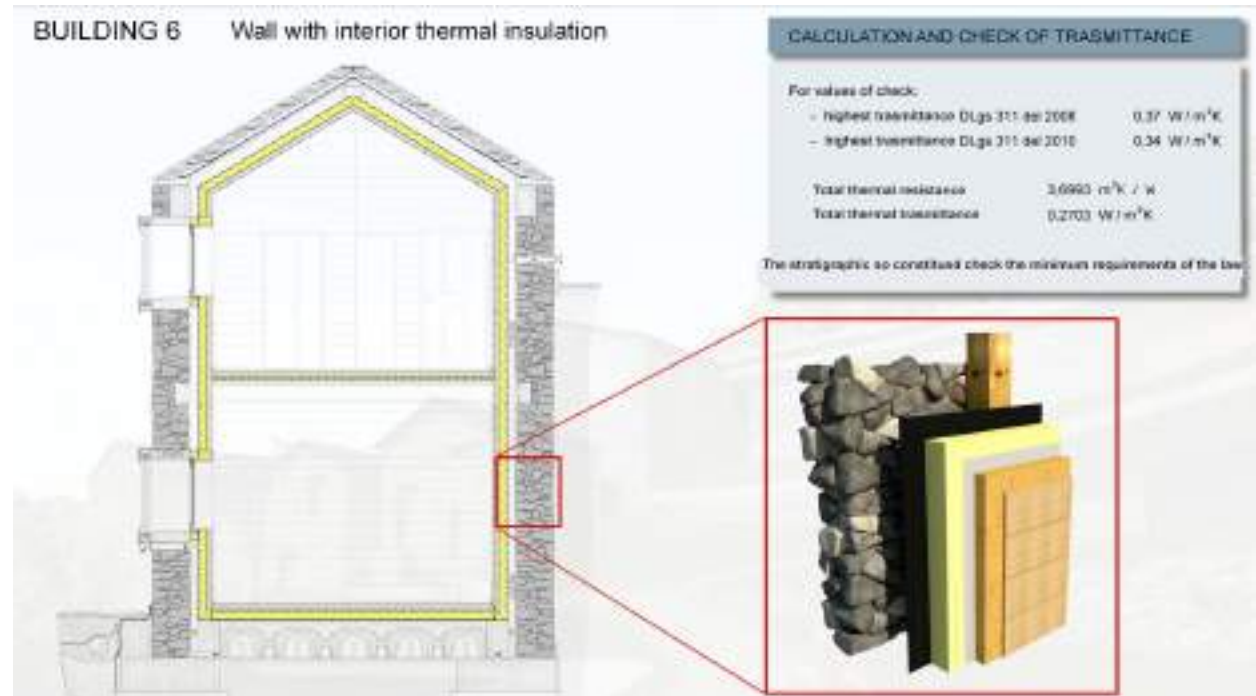
These three criteria led the choice of the materials and the combination of them. Their assembly into technological systems meant the new elements could be inserted into, put beside, or overlap the existing buildings.

The strengthening and insulation systems have been very respectful of the existing structure because the intervention does not interfere with the exterior side of the building. The criterion of the intervention is to insert a box inside the existing box, with the aim of improving structural performance and insulation.

The author paid particular attention and care to the details, especially in the conjunction of the new (by dry techniques) and the existing, ensuring the reversibility of the interior addition.

Nevertheless, the respect of the historical features does not mean the site is being converted into a museum: the objective of the project is to preserve and to enhance the exterior of the stone-masonry buildings, adding the improvement of energetic and structural performance.

Fig. 9 - Exploded axonometric diagram of a solution for technological regeneration using the “box within a box” strategy. (source: Corbella, 2014)



The results of the LCA led to the choice of methods and materials having the least environmental impact together with the best fitting with the requirements of the project.

Timber fibre was considered the best insulation for walls and floors; cork gave the best acoustic insulation material for the first floors and glass wool the best thermal insulation of the new walls.

The new walls are made of aerated concrete, a sustainable product. Most of the interior finishing and structures are timber clad.

The strengthening project

The strengthening project for each typology of work to be carried out was customized: the strengthening

of the existing buildings to host the new guest rooms and apartments of the scattered hotel, and the joining of new and existing structures in the common spaces and facilities. The project evaluated all the possible strategies to improve the performances of the walls and horizontal structures. The best choices were:

- Strengthening of the masonry by binding and grouting the wider cracks;
- Insertion of tie rods in the first floor flooring, to prevent kinematics of the masonry under seismic stress and improve the resistance to deflection. The project included the sizing and tensioning of the bolts and rods to prevent the rotation of the supporting structures;
- Insertion of trenches and ventilated dead spaces in the case of retaining walls to drain the rising

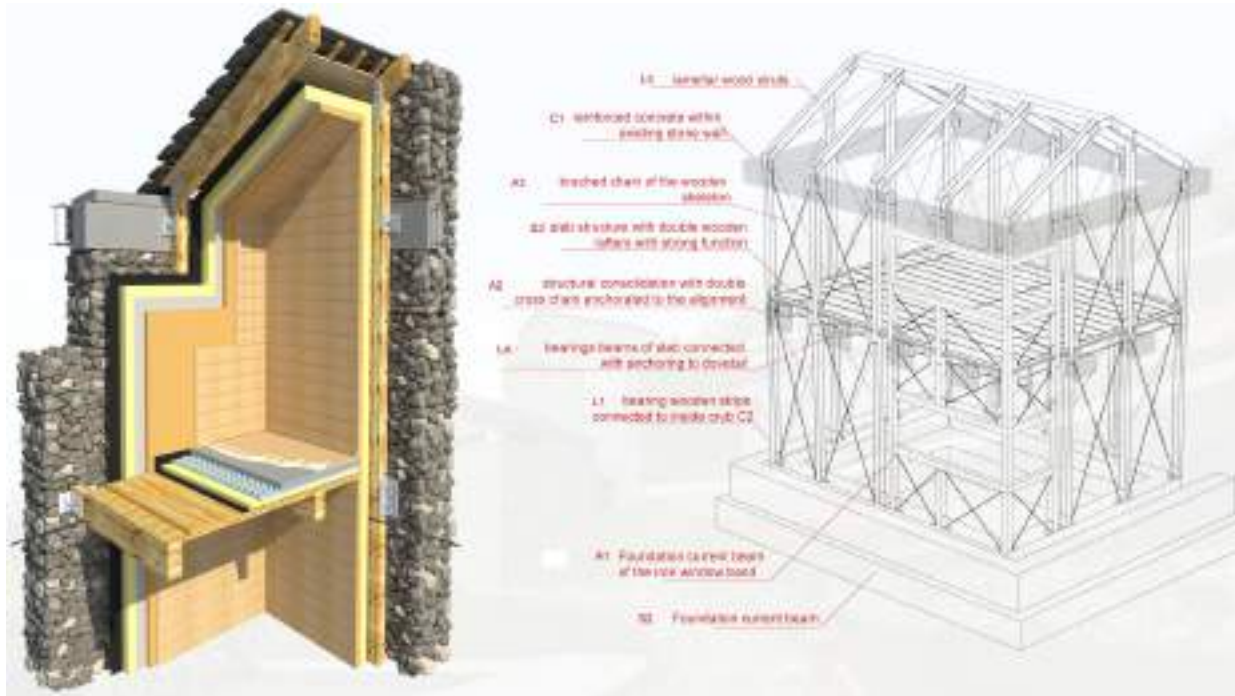


Fig. 10 - Assonometric diagram showing the structural strategies for refurbishment. (source: Corbella, 2014)

damp at the bottom of the masonry;

- Insertion of curbs on the top of the masonry to stiffen the structure;
- Strengthening of the restaurant vaults by treated steel bars connecting the vaults to the upper slab;
- Calculation of the masonry stiffness before and after opening new windows/doors, in case of insufficient rigidity, the project includes the insertion of a concrete frame in the new opening.

The strengthening of the foundation includes:

Insertion of a double cement curb at the bottom of the existing walls, on both the masonry sides;

- Insertion of sinkhole remediation underneath the existing buildings where the new additions are at underground level. The new foundations transfer

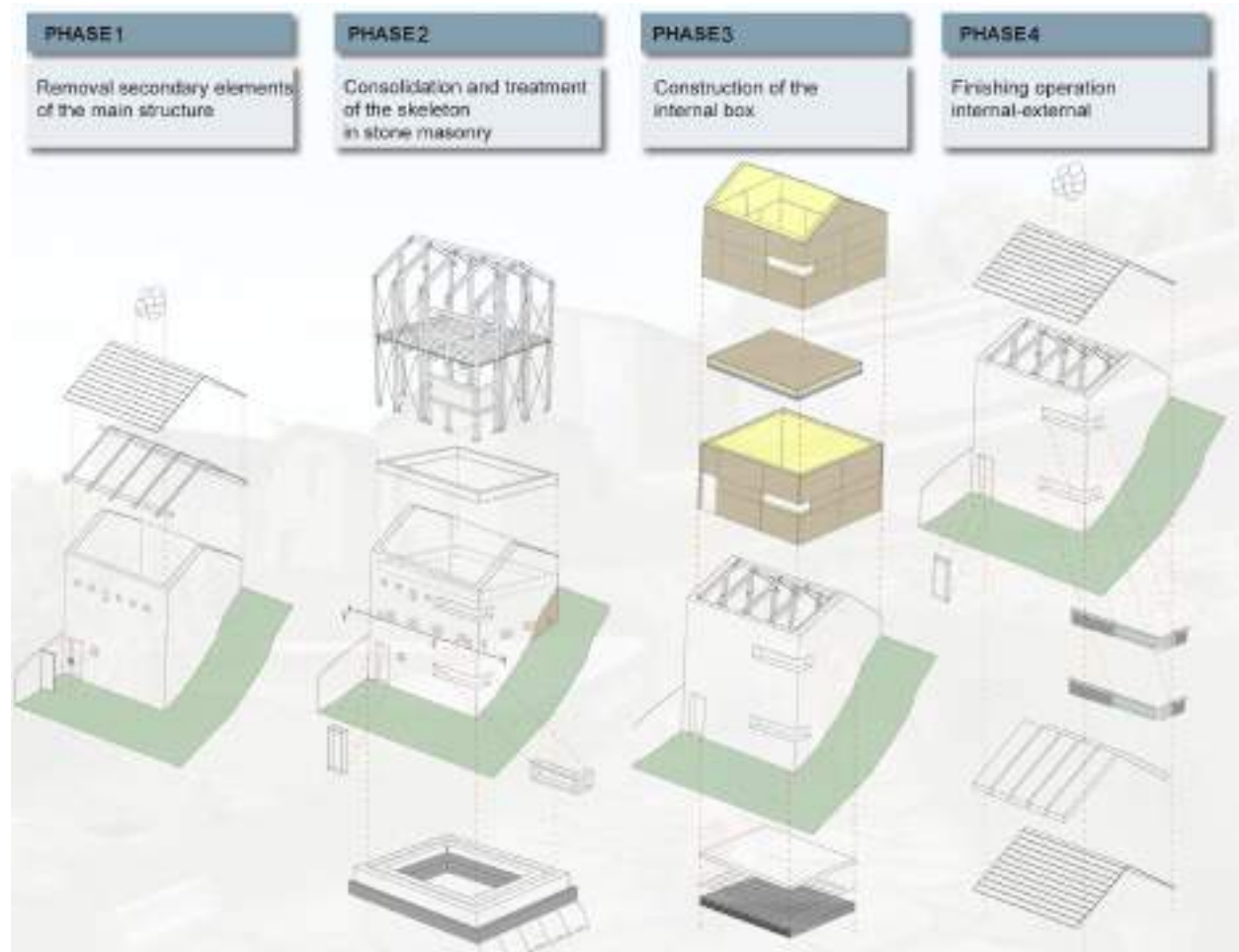
the loads to a deeper level, have a larger horizontal section to reduce the compression on the foundation plan and have pre-tensioned tie rods.

- The strengthening of the horizontal structures includes:
- Insertion of a ventilated space underneath the ground floor to prevent rising damp;
- Fitting the vaults with reinforced concrete, evaluated by modelling (Arco software);
- Substitution of the timber structures in case of excessive inflection (after evaluation by calculation).

Energy improvement

The thermal dispersion across the vertical and horizontal structures both of the new buildings and the

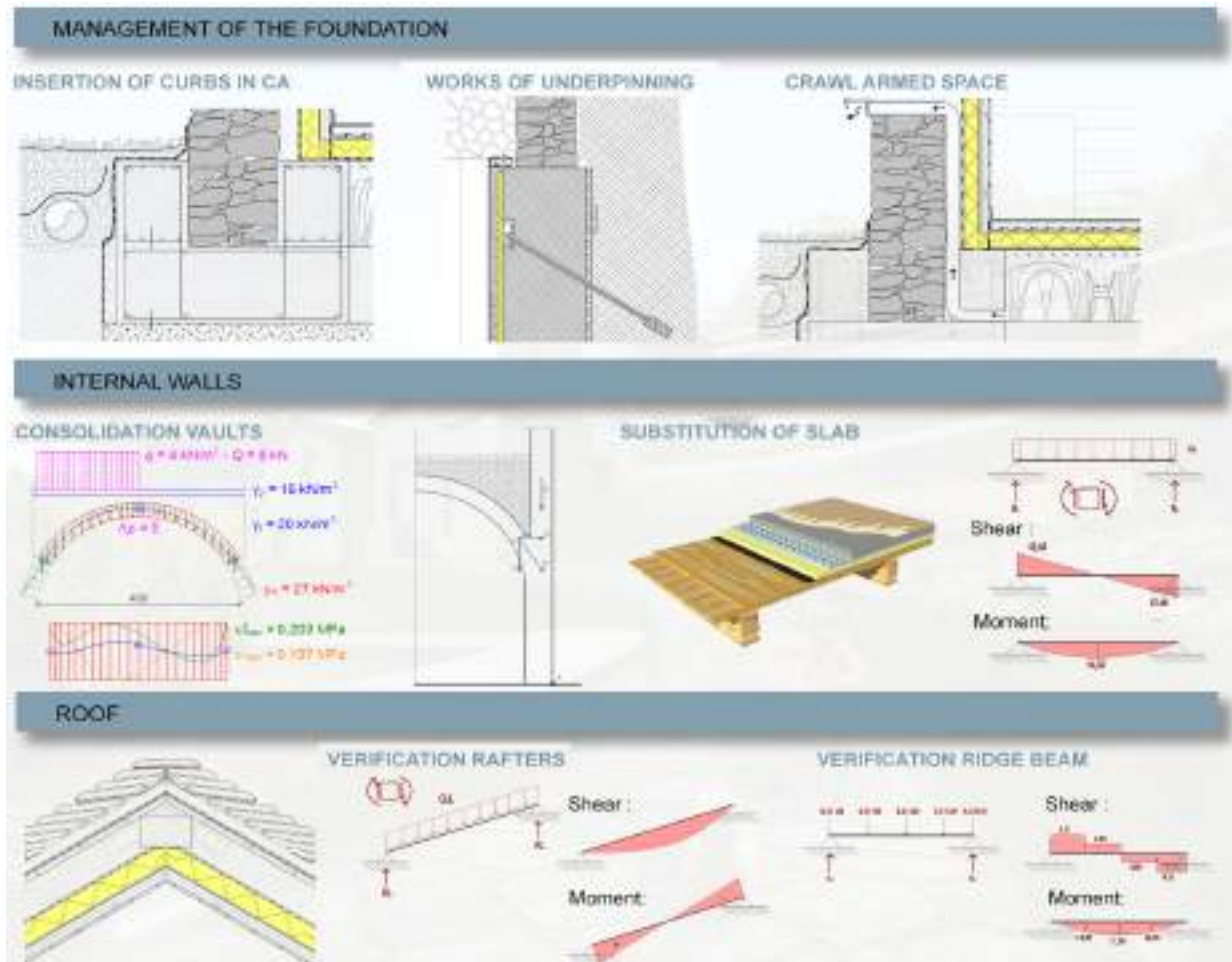
Fig. 11 - Phases of the strengthening of one existing building. (source: Corbella, 2014)



existing ones was thus verified: according the present legal framework, the transmittance values of the cross section of the masonries are not acceptable and required further improvement. The quantification of the thermal, electric and hot water needs were necessary to design the new plant. Due to the isolation of the village, energy self-sufficiency is mandatory. Therefore, the fuel for the new plant derives from waste coming from oil production. Pruning olive trees, leaves etc

produces optimal biomass fuel that supplies a small size co-generator and the remote controlled heating system. The project foresees four small stations inside the village, connected to the main co-generated heating station. The heating system of the buildings has radial elements. The new buildings have large interior volumes, therefore require a different and more complex HVAC plant. Vacuum collectors on the roof of the oil mill will meet the requirement for hot water.

Fig. 12 - Main structural work. (source: Corbella, 2014)



Conclusions

The approach of the Mondonico refurbishment as shown in the described project can be applied to similar case studies, by using sustainable technologies that are respectful of the uniqueness of the existing structure.

The project returns the identity and life to these places so rich in history and tradition, at present vastly under-

estimated, and enhances their future importance.

Endnotes

(1) Corbella, S. (2014). *Ripensare Mandonico. Modello di recupero di un piccolo agglomerato diffuso*. Master Degree Thesis in Architecture and Building Engineering, Politecnico di Milano, School of Architecture and Construction Engineering, Italy. Supervisor prof. L. E. Malighetti).

Fig. 13 - Section showing the interface between new and old buildings. (source: Corbella, 2014)

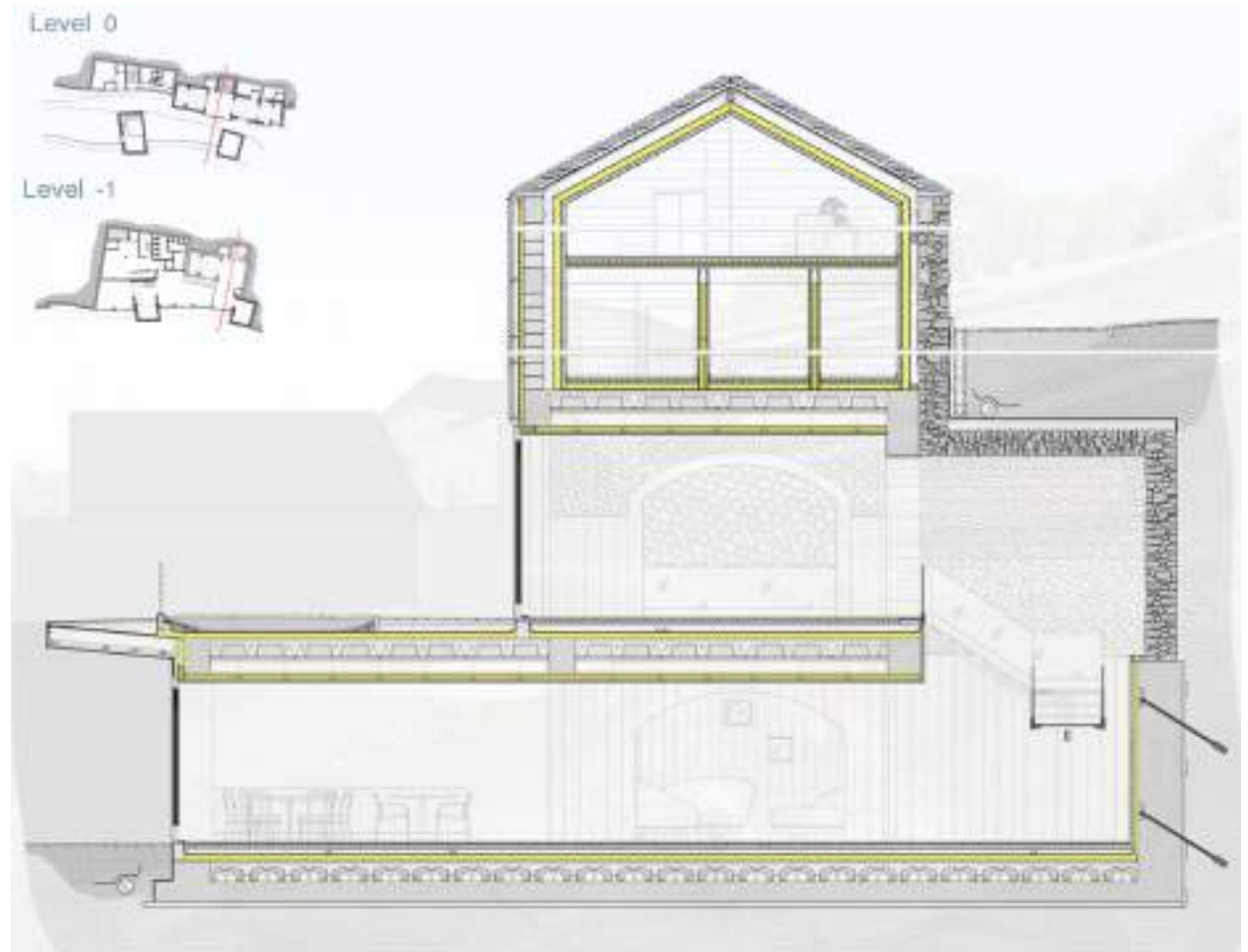


Fig. 14 - Scheme of the energy consumption strategy. (source: Corbella, 2014)





Project of an agroforestry campus for the revival of the village and the territory

Mattia Alberganti, Francesca Andrulli, Chiara Bonaiti, Simone Freni

A new function

The choice of the new use of the village buildings and its land took into account the rural vocation of the territory and the necessity to revitalize both the village and the surrounding countryside. An essentially *touristic function* could cause a large amount of people to come only during the warmer season. Such a quantity of people in a few months could be economically and ecologically unsustainable, because of the consumption of the natural resources and the risk of destroying the perfect balance between nature and built up environment. The choice to install a widely spread hotel (a hotel having its functions distributed in different buildings) could be risky if the dimensions, technologies of the buildings, number of guests and workers, meeting of standard requirements should not suit the conservation issues. Also, the function of a well spread museum (like a spread out hotel, it would be housed in different buildings) runs the risk of abandonment due to the low level of income not being enough to sustain the cost of the project and the maintenance of

the buildings after the intervention.

A third proposal was to set an *agroforestry campus* in the village. The proposal has the advantage of preserving and passing down the techniques (agricultural and constructive) common in the village and in the territory. Moreover, there is not a similar school in the area, up to the Valtellina valley. The driving idea was that the students could attend their courses and studies living in the natural environment, practicing the theoretical lessons on site. The intervention could revitalize the Dorio area too, because the larger village should host different services that could encourage the local economy; for example, the students could rent the abandoned buildings in Dorio historic center, after their refurbishment.

The project aims to maintain the “general environmental value”, looking for the right balance between the necessity to transform and adapt the existing building to the current regulations and the need to protect the existing formal features and materials, the integrity of the place. The masterplan shows the buildings to restore, converting them from stables and warehouses

to classrooms, laboratories, offices, cafeteria, canteen and a number of dorm rooms.

The masterplan

The first threat to face is the accessibility to the village; at present Mondonico has three pedestrian paths connecting to Dorio and "Wayfarer Path" connecting with other villages half way up the surrounding hills. In addition, a recent vehicle accessible road connects Dorio to a small area nearby St. George church; this road continues with a path connecting the area on the back of the church to the village. With the aim of improving the connection between Dorio and the village, the project converted this path into a vehicle accessible road to enter the village, continuing the existing vehicle road.

In addition to the existing pedestrian connection from Dorio, the masterplan includes new paths and ramps with an almost flat slope (<4%); this path is placed along the existing dry-stone walls and follows the existing contour line.

The primary objective of the new path is the enhancement of the natural environment that characterizes the village. All ramps comply with the standards and follow the guidelines for the conservation and enhancement of the site (according with the guidelines, Paola Branduini, in this book).

Moreover, the new path also provides a secondary route through steps that allow a faster access to the village. The ramps connect the area to all the buildings in Mondonico. To ensure a safe and comfortable walkway, the pavement consists of flat stones simply embedded into the existing soil. This technique would keep the local materials and ensure accessibility to all buildings thanks to the flatness of the stones and the proper slope. Along the paths Corten steel para-

pets were set, near to each other to comply with safety standards. The rustic look and color of this material blends into the natural surroundings, reducing the visual impact of these necessary additions, that are recognizable in the meantime (see Paola Branduini's chapter in this book). The vertical surfaces of the parapets have scattered and irregular holes, to ensure a better view towards the landscape. The paths are equipped with an artificial lighting system, which consists in spotlights in the ground, to guarantee a safe access to Mondonico through the night. Along the paths some small relaxation areas under the shadow of the existing trees are set, equipped with tables and benches; a dining area is set at the edge of the village and an amphitheater is set beside the Church, to be used as a concert area and meeting place.

Due to the limited volume of the existing buildings, other classrooms and a library are set in a new underground building, located in a small, unused area inside the village.

Project references

The system "the box into the box" consists of building a new construction inside an empty one. The building inside is completely independent from the existing one, it has also the function of protecting the ancient walls (by a prominent double pitched roof) and to strengthen the existing structure (Fig. 2-3-4).

The same strategy as the first reference is suggested in the second case study (Fig 5-6-7): in this case the existing building was a ruin and the new construction is a corten box, this material creates a nice contrast with the existing bricks although keeping the harmony of the landscape colors (see Paola Branduini's chapter).

Fig. 2, 3 and 4 - Rheinland-Pfalz, Germany, a 2004 project by FNP Architekten. (source: www.fnp-architekten.de)

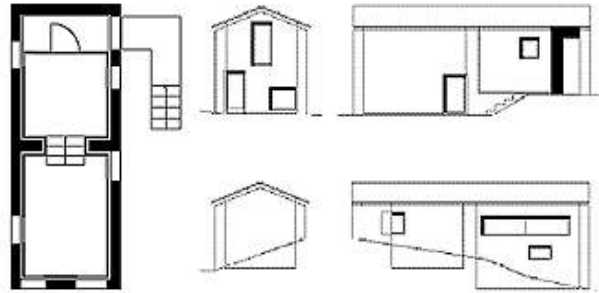




Fig. 5, 6 and 7 - Dovecote Studio by Haworth Thompkins, Suffolk, England, 2009 (source: www.archdaily.com)



The new buildings

The project of the addition includes three new buildings with wider rooms than the existing ones; the new buildings host two classrooms and a library. The rooms are underground, remaining visible only on the western side. The access is from the western side, and the whole surface is glass.

The volume of the building looks like the terraces steps, because the bottom (ground level) is larger than the first level, following the natural slope of the hillside. This volume composition has the aim of keeping the skyline of the village unchanged because the buildings are hidden within the hill slope. The library is at the ground level, the larger level of the building. It is accessible by the stone stairs from the outside, and also with a ramp inside.

The building at upper level is only partially underground. It has a green roof that holds the turf of the hill; there are also skylights on the roof to provide a diffuse natural lighting throughout the building at this floor.

Executive details

The executive details have been thought out to improve the thermal and acoustic insulation, and waterproofing performances of the existing buildings; the design of the details is respectful of the traditional techniques and materials of the existing buildings and they are also reversible and compatible.

Against rising damp, the project plans to drain rain, collected and channeled by pipelines at the bottom of the masonry, instead of the application of waterproof membranes of grouting injection.

At the ground level, the existing floors (earth) are replaced with ventilated crawl spaces laid on a layer of

lean concrete. In the case of insertion of the new structures (the “box into the box”), insulation is guaranteed by the prefabricated plywood panels X-LAM.

The connection of the new windows to the existing walls requires particular attention to avoid any disruption of the materials. New sills, fixed on the existing walls, support the new windows; the system sill/window is totally removable. New reinforced concrete lintels strengthen the masonry over the opening (dimensions of the lintels are calculated considering a weight of 115 kN/m). The windows are double-glazed timber frame, which harmonizes well with the interior flooring and paneling strips on the walls.

The X-LAM panels are placed inside the existing building at a short distance from the existing wall; pipelines of the hydric, electrical, thermal system are located in this dead space. Iron tie rods strengthen the external walls improving the resistance to seismic risk. Horizontal X-LAM panels make up the floors, 30 cm thick; with small openings across the slab thickness to let the light flow from the upper level (where there are new and larger windows) to the ground level. The heating system is under the finishing, it consists of earthenware panels crossed by plastic pipes. The roof structure consists of wooden beams on sight. The beams continue out of the building to support the overhanging eaves, preventing the rain from washing the external surface of the wall. To improve the natural lighting, the project added skylights on the roof and wider windows replacing the existing ones. At ground level, the amount of light is too small.

*Il protetto Modello contiene
 la porzione finita da Colico d'
 aggregata a questo Con. di Dorio*

1	2	3	4	10	11	12	
5	6	7		13	14	15	
8	9			16	17	18	19
				20	21	22	

Modello



HISTORICAL DOCUMENTATION



Dorio Sieve di Deruio

Cher

Vezze

The archival research, selection, transcription and collection of the historic documents

Alessia Silveti

The following section consists on the selection, transcription and cathalogation of the historic documents on Mondonico. The documents are kept at:

- the Parish Archive of Dorio;
- National Historical Archive of Como;
- Historical archive of the Diocese of Milan.

The presented documents are quoted in the chapters of the first part of this book and support the historical analysis. The documents are not published yet.

The documents were copied and framed in the template that elucidate their provenience, location and all the data about the documents that are useful to their consultancy in the site.

Historic documentation and publication is an important step for the collaboration of scholars dealing with historic buildings, at any level and institution. It is an important form also of preservation of deperable historic materials, that can be under the critical issue of their conservation.

- Historic documents summary
- Historic maps and drawings summary
- *Document 1.* Description by Pietro Goggia, 1574-1575
- *Document 2.* Pastoral visit report, 1582, Card. Carlo Borromeo (summary)
- *Document 3.* Visit report by Pietro Herra, 1570 (summary)
- *Document 4.* Pastoral visit report, 1649, Card. Cesare Monti (summary)
- *Document 5.* Pastoral visit report, 1746, Card. Giuseppe Pozzobonelli (summary)
- *Document 6.* Document related to the construction of Dorio new church, 1860
- *Document 7.* Main land-taxpayers list, 1893
- *Document 8.* Pastoral visit report, 1911, Card. Andrea Ferrari (summary)
- *Document 9.* Document related to Dervio, Dorio and Corenno Municipalities union, 1927
- *Document 10.* Document related to Dorio separation request from Dervio Municipality, 1945
- *Document 11.* Document related to Dorio separation request from Dervio Municipality, 1947

Dorio Pieve di Dervio Riviera di Lecco



Table of the land division from property registers of Theresian Cadastre (*prima stazione*)

Alessia Silveti

The following table synthesizes and displays the data content in the analyzed land registers and list of the owners. The placement of the cultivation typologies and their extension have been useful to have a clear overview of the production and agricultural activities of the end of 18th century, as well as the relationships between the cultivated part and the woods, mostly used for hunting, collecting selvatic fruits/herbs and firewood.

These last uses are mostly on the properties "*di niun possessore*" (none owner) that indicates the common uses of large extension of woods and field of the community.

In the table, the numbers coloured in green (from 28 to 41 ½) indicate the land lots between the two rivers, close to Mondonico and Dorio centers. The others indicate the properties in the Municipality of Dorio, far from the center.

Cadastral map n.	OWNERS code	Typology of cultivation												Tot. TAVOLE				
		Coltivo (cereals)	Coltivo con ulive una (cereals and one olive tree)	Vitato (grapevine)	Avvitato (grapevine)	Vitato con ulive una (grapevine with one olive tree)	Coltivo vitato (cereals and grapevine)	Coltivo vitato con ulive una (cereals, grapevine and one olive tree)	Coltivo avvitato (cereals and grapevine)	Orto (herbal garden)	Prato (meadow)	Vigna (vineyards)	Pascolo (grazing land)		Pascolo con ulive una (grazing land and olive tree)	Zerbo (not cultivated land)	Brughera boscata (moorland and woods)	Selva (wood)
1	22											1.38			0.15		14.93	
	1 di niun poss. (none owner)																	0.01
2	21													15.58	3.29			
3	4																0.42	
4	18													11.46	13.49			
	1 di niun poss. (none owner)																	0.02
5	1 Corenno Parish														24.13			
6	5													10.90	5.72			
	1 di niun poss. (none owner)																	0.13
7	16													11.44	2.36			
	1 di niun poss. (none owner)																	0.20
8	1 Corenno Parish																3.60	
9	1 Corenno Parish											2.20						
10	3													1.22	5.10			
	1 di niun poss. (none owner)																	0.08

11	1 Corenno Parish																	2.19		2.19	
12	1 Corenno Parish																		3.50		3.50
13	13										0.22		4.79	17.34							22.52
	1 di niun poss. (none owner)																			0.17	
14	7												6.88	1.77							8.76
	1 di niun poss. (none owner)																				
15	1 Corenno community													1,377							1,377.00
16	16										1.10									14.87	15.97
17	31										1.63		4.93	11.89	7.16						29.21
	1 di niun poss. (none owner)																				
17 ½	1						2.15														2.15
18	3																			2.06	2.06
19	21	2.14		2.82	1.54				0.45		0.06										8.17
	1 di niun poss. (none owner)																				
20	20												0.08	9.00	4.76						15.34
	1 di niun poss. (none owner)																				
21	35	1.54		2.01	1.40		1.12				1.23										7.42
	1 di niun poss. (none owner)																				
22	14													9.72	0.24						10.00
	1 di niun poss. (none owner)																				

23	16																6.83		6.83
24	14												0.02	4.48	7.06				11.56
25	20	7.53				0.18											0.81		8.52
26	10																8.89		9.05
	1 di niun poss. (none owner)																	0.16	
27	6																4.07		4.07
28	19													1.12			1.92		3.12
	1 di niun poss. (none owner)																	0.08	
29	14													0.03	4.28	1.51			5.91
	1 di niun poss. (none owner)																	0.09	
30	N.5																3.20		3.20
31	N.31	4.20		4.97			2.92			0.02	0.10		0.24						12.45
32	N.3													0.07			1.06		1.13
33	N.5												1.30						1.30
34	N.28												0.12		0.50		5.40	0.16	12.36
	N.1 di niun poss. (none owner)																	6.18	
35	N.30	0.21		12.05			11.00												2.60
	N.1 di niun poss. (none owner)																		
36	N.33	0.29		4.30		0.09	0.05	0.08		0.05			0.50	0.16					5.52
37	N.13												0.24				0.24	0.02	0.50
	N.1 di niun pos. (none owner)																		
38	N.33												0.37		0.56		3.14		4.09
	N.1 di niun poss. (none owner)																	0.02	

60	N.70												7.67		3.22	16.88	20.99			48.76
61	N.1														1.18					1.18
62	N.13														6.77	2.71				10.62
	N.1 di niun poss. (none owner)																		1.14	
63	N.10															10.22	9.60			19.86
	N.1 di niun poss. (none owner)																		0.04	
64	N.2												0.36							0.36
65	N.2																	4.29		4.29
66	N.3												0.19		0.11					0.30
67	N.85														77.27	267.10				357.59
	N.1 di niun poss. (none owner)																		13.22	
68	N.33												0.11		0.82	8.22	16.50			25.65
69	N.1																	2.18		2.18
70	N.1						3.15													3.15
71	N.1	0.06																		0.06
72	N.1						1.15													1.15
73	N.1							0.05 con ulive 2												0.05
74	N.1						0.19													0.19
75	N.1										0.13									0.13
77	N.1																1.60			1.60
78	N.1												1.12							1.12
79	N.1																	3.19		3.19
TOTALE		22.77	2.28	71.78	2.94	1.47	33.84	10.27	0.45	0.07	0.87	0.06	26.53	0.16	183.77	1770.9	104.81	62.94	34.33	2,330.21

Table 1 - Table of the land division from property registers of Theresian Cadastre (*prima stazione*)

Catalogued documents

Edited by Alessia Silveti

Historic documents summary

N. doc	ANNO	CONTENUTO	DESCRIZIONE	FONTE
1	1455	Visita Pastorale Arcivescovo Gabriele Sforza	Sintesi Il 13 Luglio 1455 il prevosto Gasparino de Curte e il sacerdote Martino dei Capitanei di Dervio si recarono a Bellano per rispondere, di fronte all'Arcivescovo Gabriele Sforza, ad un questionario che permetteva di conoscere la situazione di ogni parrocchia dopo le varie guerre, soprattutto dopo gli attacchi dei Veneziani. La loro relazione rappresenta la prima fonte di informazione sicura sull'organizzazione della Chiesa di Dervio e la sua pieve. Dopo aver parlato della chiesa prepositurale di Dervio e dei tre suoi canonici descrive le chiese tra cui quella di Dorio. La duplice dedicazione della chiesa prepositurale ai Santi Pietro e Paolo appare a partire dal XV secolo. Nel 1564 il collegio canonico risultava composto dalla prepositura e da cinque canonicati. La pieve in quel periodo comprendeva, oltre alla chiesa prepositurale, le rettorie di San Tomaso di Corenno, San Martino di Mont'Introzio; Sant'Agata di Tremenico e la cappella di San Nicolò e San Giorgio di Dorio. Traduzione <i>"[...] Chiesa di san Giorgio di Dorio, distante due miglia e con rendita di cinque fiorini. A quella chiesa provvedeva il presbitero Paolo di Marnio, canonico regolare, mentre tre delle altre chiese le teneva il Prevosto. Ogni settimana nelle chiesa prepositurale erano dette quattro messe basse e ogni tre domeniche si dicevano due messe: una nella chiesa prepositurale e l'altra nella chiesa di san Giorgio, che era sottoposta alla prepositurale e distava due miglia. Nei giorni di festa si cantava messa e vespri."</i>	Archivio Diocesano di Milano, Pievi lacuali
2	1568		Sintesi Il parroco Pietro Goggia descrive la chiesa, i suoi altari ed i beni della Chiesa di S.Giorgio. La Chiesa conserva ancora il portico ed è affiancata dalla casa del prete. In seguito allo spostamento della parrocchia nell'attuale chiesa dedicata anch'essa a San Giorgio, l'oratorio viene utilizzato come meta delle rogazioni e di processioni devozionali. Trascrizione <i>"Inventario della chiesa di Santo Georgio in Doro plebe di Derfo et de doi capelle</i>	Archivio Diocesano di Milano, Pievi lacuali

			<p>quali sono in el monte de Introzzo cura di San Martino fatto adì ultimo di luglio 1568”.</p> <p>Scripture loci Doriy.</p> <p>In questo libretto si fa mentione et inventario di tutti li beni mobbili et stabili de la chiesa di Sto Georgio constructa in el comune di Doro diocesse di Milano de la canonicha di Derfo, diocesse di Milano, quale chiesa è recta et governata da mi prette Petro Gogia curato di essa chiesa.</p> <p>Chiesa una con doi altari consecrati uno di Sto Geogio el l’altro di la Madona, quello de la Madona non ha d’entrata cosa alcuna. Campanille uno con doi campane: croce una di latono sopra adorata, calice uno con la copa di argento sopra adorato e la patena sopra adorata, pisida una di argento sopra adorata da tenere il Santissimo Sacramento, para doi di candeleri di latono, para doi di pelle per accender quando si leva il nostro santo Idio.</p> <p>Campanile (campanello ndr) uno per suonar quando si porta il nostro Santissimo ali infermi: planette n. 3, una di color damascho rosso con la croce di color di orro. Le altre due sono di pano rosso con le croci bianche; cordoni n. doi, camisi doi, amitti 3, stolle 3, manipoli 3; corporali n. 4 panetti (purificatoi) da mettere sopra il calice; misale uno, sacramentario uno, libro uno per le litanie, sedelino uno per portare l’acqua santa; tovalie n. 5, fondali palii (paliotti) n. 4: uno rosso con la croce verde, uno bianco con la croce rossa, uno turchino con la croce rossa uno di tela a figure. Altro non è al uso di chiesa per al presente per esser il comune povero pur a me con bono animo di far bene.</p> <p>La casa dove sta il prete la quale è canepata e solerata, (cantina e solaio) con la sua cugina (cucina) [...] che coerencie da una banda la chiesa e da le altre il sagrato.</p> <p>Portico uno dinnanzi ala chiesa, una camera di sopra a uso del prete.</p> <p>Horto uno con una bruga apresso che coerencie da una banda il sagrato, da laltra gli eredi di Gio Antonio Peloto, da laltra strada, da l’altra messer Battista dal Guesto da Derfo.”</p>	
3	1569	Visita Pastorale San Carlo Borromeo	<p>Sintesi Descrizione della Chiesa S. Giorgio di Mondonico.</p> <p>Traduzione "Dorio 1569 23 mese di agosto Fu visitata parrocchia eretta sotto il titolo di San Giorgio, nella località di Dorio, pieve di Dervio, ducato di Milano, consacrata. Di lunghezza passi 21, larghezza passi 8. Si ascende con tre gradini di pietra. Pavimentata, coperta con piote ... (seguono due parole illeggibili). Con tre finestre coperte con tela cerata - stamegne di tela. La porta maggiore nel mezzo (seguono due parole illeggibili). A destra della porta c’è un’altra porta.</p>	Archivio Diocesano di Milano, Pievi lacuali

			<p><i>Fuori della chiesa affisso al muro c'è l'acquasantiera a forma di nave con acqua benedetta.</i></p> <p><i>C'è il battistero marmoreo nella chiesa, ma manca di ciborio e di confessionale ... (tre parole illeggibili).</i></p> <p><i>Vi è il campanile con due campane."</i></p>	
4	1582	Visita pastorale	<p>Sintesi</p> <p>La relazione della visita è in lingua latina, poco leggibile. Nel documento non c'è il nome del visitatore ed il nome del paese non è corretto. Nella visita vengono descritti gli arredi mobili della Chiesa di s.Giorgio in Mondonico, la Chiesa e la casa del prete Goggia prevosto dal 1572.</p> <p>Traduzione</p> <p><i>"Ho visitato la chiesa di San Giorgio, della località di Hoxij (sic) della pieve di Dervio. È consacrata e il giorno della sua consacrazione è il 22 marzo.</i></p> <p><i>Il Sacramento è conservato in una coppa mediocre di argento dorata, sufficiente però per il popolo che si comunica. Per il resto nulla da dire, neanche per il baldacchino. Il tabernacolo è costruito secondo il modello ed è congruente. Il tabernacolo è piccolo ma si può tollerare per la miseria (inopia) del popolo, ed è rivestito di un panno di seta. Il conopeo è rosso aperto secondo il modello. Nient'altro da osservare.</i></p> <p><i>La lampada davanti al Santissimo Sacramento viene accesa in forma intermittente per tre mesi all'anno a causa della miseria della popolazione.</i></p> <p><i>C'è la confraternita (Scola) del Santissimo Sacramento, ma per la povertà vi partecipano poche persone.</i></p> <p><i>Il battistero non ha la copertura con sette lati e il posto per gli olii è piccolo (traduzione incerta). La vaschetta (vas) è piccola e anche stretto è il posto per battezzare i bambini e si apre nel mezzo.</i></p> <p><i>I vasetti dei sacri olii sono conformi.</i></p> <p><i>C'è un solo altare secondo le normative, non è consacrato è in esso si conserva una misera pietra sacra. Senza tavolati e telai.</i></p> <p><i>All'altare si sale con due gradini di legno. Le chiusure delle finestre sono a norma (traduzione incerta).</i></p> <p><i>Le porte per accedere alla sacristia e al campanile (frase incomprensibile).</i></p> <p><i>Le pareti sono in parte dipinte e in parte imbiancate (dealbata) e le aperture delle finestre con due 'staminis sed sine cathris' (forse vuol dire che sono coperte con carta-vello animale trasparente ma senza telaio).</i></p> <p><i>Il confessionale non è secondo le norme.</i></p> <p><i>La vaschetta (labrum) per l'acqua benedetta è ma ciò è tollerabile.</i></p> <p><i>Al cimitero si entra con una porta che è sempre aperta.</i></p> <p><i>La sacrestia appare abbastanza capace, e in essa vi è un armadio non secondo le norme.</i></p> <p><i>La casa parrocchiale è annessa con una stanza (cassina) una a piano terra e una</i></p>	Archivio Diocesano di Milano, Pievi lacuali

			<p>sopra e una stanza per dormire sopra il portico. Questa casa è abitata dal prete Pietro Gogia oriundo da queste parti, della località di Vestreno dall'anno 1572 quando ottenne la cappellania sotto il titolo di san Giacomo di Vestreno."</p>	
5	1612	Visita Pastorale Cardinal Federico Borromeo	<p>Sintesi Ordinazione da parte del Cardinal Federico Borromeo di costruire una nuova casa Parrocchiale in Dorio.</p> <p>Trascrizione <i>"Vedendo la casa parrocchiale essere angusta e minacciante rovina, ordinava se ne erigesse un'altra." Comandava che questa casa nuova si fabbricasse vicino alla chiesuola di Santa Maria di Loreto, in un luogo donato da Nicolò Petazzi dimostrandosi così questo uomo benemerito della Chiesa, del parroco, e più di tutti ottemperante agli ordini dell'Arcivescovo."</i></p>	Archivio Parrocchiale
6	1643	Visita Prevosto di Bellano	<p>Sintesi In questa visita del prevosto di Bellano in riferimento a Dorio parla di due chiese San Georgio e l'oratorio della beata Vergine Maria. Novembre del 1643 e la chiesa parrocchiale è ancora a Mondonico.</p> <p>Trascrizione <i>"Decreti pieve di Dervio adi 17 novembre 1643 Ordinazioni da fare nelle chiese parrocchiali et oratori nella pieve di Dervio da me Francesco Alippi prevosto di Bellano Vicario Foraneo. È nella chiesa parrocchiale di S. Georgio del luogo di Dorio e dell'oratorio della Beata Vergine Maria di Dorio inferiore. La coperta del tabernacolo facciasi di colore rosso, almeno attesa la povertà di questo popolo. La chiavetta del tabernacolo sia indorata. Si provedi di navicella per l'incenso Del dietro del confessionale il telono sopra la finestra d'essa chiesa sia fatto con la sua inferrata. Si provedi di un velo di colo roso alla pisside. È nell'Oratorio della beata Vergine Maria di Dorio inferiore. Sia levato il tabernacolo che è sopra l'altare et posto il Crocifisso sopra l'architrave. Si proveda di un messale nuovo, ovvero della formula del canone. La borsa da portarsi al collo, quando s'hanno da comunicare gli infermi, sia di colore rosso di seta. Si faccia abbassare la pietra sacrata al piano della mensa, che ... in modo si possa conoscere solamente. Si procurino avere quattro bussole di ottone per li candelieri."</i></p>	Archivio Diocesano di Milano, Pievi lacuali

7	1649	Visita della Pieve di Dervio	<p>Sintesi</p> <p>In questa visita effettuata solo sei anni dopo quella precedente si menzionano ancora entrambe le chiese. In essa si informa che il curato e la gente avevano l'intenzione di utilizzare come parrocchia la chiesetta dedicata alla Beata Vergine Maria e già avevano spostato la fonte battesimale dalla chiesa di San Giorgio all'oratorio e ivi sistemato in forma poco idonea. Questo sicuramente per evitare di portare i neonati per il battesimo fino alla chiesa di S. Giorgio a Mondonico. Il visitatore ordina di costruire nella chiesa di Dorio inferiore un degno luogo per mettere la pila battesimale oppure riportarlo nella chiesa di San Giorgio altrimenti minaccia l'interdetto.</p> <p>Trascrizione</p> <p><i>"Si rinnovi in ogni modo la consuetudine tralasciata da molti anni in qua di fare la processione del Santissimo Sacramento ogni terza domenica del mese. Perciò gli uomini della cura facciano subito accomodare la strada, per la quale si va al cimitero, che ora è diruppata, acciò si possa comodamente, et senza pericolo passare con il Santissimo Sacramento, et per la processione avverta il signor curato, che sia accompagnata con quella quantità di lumi maggiore, che sia possibile, et in avvenire procurino li huomini di mantenere continuamente l'olio della lampada affinché si possa nel tabernacolo custodire permanentemente il Santissimo Sacramento, qual in ora non si conserva se non in certi tempi dell'anno per il mancamento dell'olio. La chiave del tabernacolo si faccia quanto prima indorare. Il signor curato avvisi subito dall'altare li huomini della cura che riportino senza replica alcuna nella sacristia il credenzone, che già levarono per riporlo nell'Oratorio della Madonna (c'è un punto interrogativo nell'originale) acciò ivi si possano conservare li paramenti, che ora si sono lasciati sopra una tavola con molta indecenza et avverti di huomini renitenti, ne dia subito parte al vicario foraneo acciò si possano astrengere con rigore. Alla finestra della medesima sacristia si faccia quanto prima il telaro et impannata di tela. Cosa troppo irriverente che li cadaveri si portino alla sepoltura senza il panno nero, pertanto il curato avvisi subito il popolo, che lo provvedino con ogni diligenza alla forma delli ordini a spese di detti huomini.</i></p> <p><u>Della chiesa</u></p> <p><i>Alla porta della chiesa che da molto tempo in qua abbia inteso restare aperta tanto di notte come di giorno per non esservi la chiave con la quale si possa serrare; non solo si provveda subito di detta chiave, ma si faccia fare un'altra porta di nuovo di noce lavorata da perito maestro in forma quadrata nella parte superiore alla forma dei nostri ordini, e non altrimenti ornata come ora si trova.</i></p> <p>[un paragrafo sul cimitero non trascritto]</p>	Archivio Diocesano di Milano, Pievi lacuali
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			<p><u>Dell'Oratorio della Madonna</u></p> <p><i>Fu già dalla parrocchiale levato il battistero e riportato in questo Oratorio col pretesto che anche la cura medesima si dovesse trasferire in detto oratorio, ma perché la povertà dei parrocchiani non si sono mai proviste le cose ordinate per la traslazione di essa cura e restando ivi il battistero senza sacrario alcuno, il signor curato avvisò il suo popolo che o riportino detto battistero nella chiesa parrocchiale nel loco dove prima si ritrovava ovvero facciano fare in detto Oratorio il sacrario nel loco assegnatoli, altrimenti si procederà all'interdetto del medesimo battistero alla forma delli ordini."</i></p>	
8	1722	Visita a Dorio Cardinale Benedetto Odescalchi	<p>Sintesi</p> <p>Il testo in latino è poco leggibile a causa di un inchiostro che penetra nel foglio e appare anche sul retro. Parla della visita della chiesa parrocchiale sub invocatione S. Marie Lauretane. Nelle prime righe introduttive parla della faticosa salita alla chiesa e che si tralascia nella descrizione di parlare dei preliminari. Il visitatore comanda (iniussit) di conservare l'Eucaristia rinchiusa in una pisside. Il parroco Giovanni Francesco Bonazzola promette di comprare un ciborio da mettere in un tabernacolo di legno e di coprirlo con un conopeo rosso.</p> <p>Viene descritto l'altare (hac ara) il quale è staccato dalla parete di un cubito e rialzato con due gradini di pietra con candelabri. In seguito si accenna ad un crocifisso, ma non si comprende se questo pende dall'architrave o se deve essere appeso allo stesso architrave perché si trova affisso alla parete. Menziona pure il luogo dove esporre il Santissimo che deve essere elevato di tre gradini sull'altare.</p> <p>Traduzione</p> <p><i>"La sacristia è collocata nel lato del vangelo (a sinistra) e dietro l'altare. ('ad latus Euangelii et ad terga altaris patet ostium - porta - della sacristia') ottenuta in una rientranza (fornicario opere).</i></p> <p><i>Il visitatore poi constatò che vi è una sufficiente quantità di paramenti, di vasi sacri e di altri suppellettili e tre l'altro, due campanelli." [...]</i></p> <p><i>"Si visitò quindi il sacro fonte battesimale a sinistra della porta collocato dentro una piccola cella - cellulam - di cui la sacra fonte è contenuta in un piccolo ciborio di legno (modico ciborio ligneo)." [...]</i></p> <p><i>"C'è una cappella alla sinistra dell'altare (Cappella adest ad sinistram altaris) recentemente costruita con volta (reciens fornicata atque aedificata) con una grandissima icona (cum ingenti icona) della Beata Vergine Maria Lauretana, dipinta su una tela (in tela picta), non ancora benedetta per divino dono." [...]</i></p> <p><i>"Nel pavimento della chiesa, che è formato da una di cemento (quod cementiera congerie compositum est) non vi sono tombe, c'è un piccolo confessionale e un'acquasantiera (vas aque lustralis)." [...]</i></p> <p><i>Pertanto la chiesa ovvero oratorio, di una sola aula "ha una lunghezza compreso il coro è di sedici braccia (cuia longitudo una cum choro ad sexdecim brachiae pertingit)</i></p>	Archivio Diocesano di Milano Pieve lacuali

			<p>e la larghezza è undici braccia (et latitudine ad undecin) e all'esterno c'è il cimitero.” “Si asserisce che qui è stata istituita la confraternita del Santissimo Sacramento, anche se non appare traccia di una dichiarazione canonica.” Poi si parla di un certo Giovanni Batista Petaci che è debitore verso la chiesa. Il seguito si parla in lingua italiana di “Un sito annesso alla piazza della chiesa e il suo cimitero, con una pergola al quale da mezzodi è confinante Gio Battista Dell’Era, da ponente la strada. Esente da gravezze, ossia taglio. Continua con la descrizione degli altri possedimenti della parrocchia.</p>	
9	1746	<p>Atti, decreti e documenti annessi della visita del Card. G. Pozzobonelli alle pievi di Perledo, Bellano, Dervio, Varenna</p>	<p>Sintesi Descrizione dell’oratorio di San Giorgio e della nuova Chiesa dedicata alla Beata Vergine Maria.</p> <p>Traduzione “Della Chiesa parrocchiale dedicata alla Beata Vergine Maria e a San Giorgio martire. Il sedici luglio, di buon mattino, l’eminentissimo signor Cardinale Arcivescovo, proseguendo la visita pastorale dal paese di Dervio, venne tragettato lungo la sponda del Lario su una dignitosa imbarcazione e di lì, percorrendo una piacevole salita ma anche faticosa a causa dell’erto pendio, raggiunse la chiesa parrocchiale di Dorio, situata sull’estremo confine della nostra diocesi, e recentemente dedicata alla Beata Vergine dalla casa di Loreto, prima però la parrocchia era dedicata a San Giorgio martire. <u>Battistero, sacrestia e oli</u> A sinistra di chi entra nella chiesa si apre la nicchia del sacro fonte, protetta da un armadio di legno con il sacrario costruito secondo il rito e chiuso saldamente. <u>Decreti sugli Altari</u> I fori visibili da una parte e dall’altra nello stipite dell’altare siano subito otturati. La mensa di cemento dell’altare minore non sia priva ai lati della tela. <u>Altre notizie sulla chiesa e le prerogative della medesima parrocchia</u> L’istituzione di questa parrocchia dall’anno 1506 o la separazione dalla prepositurale di Dervio, perché da lì troppo distante, come si ricava dal documento della nostra curia, per cui l’esercizio della cura delle anime pertanto sotto alcune condizioni, come di molti come si dice, già obsoleti, venne trasferito a favore degli abitanti del posto all’oratorio pubblico chiamato di San Giorgio nell’anno successivamente 1677 quando quel sacro tempio umile si era dimostrato non in grado di contenere la popolazione, e già anche più grande ...e più vicino agli abitanti, consacrata sotto il titolo della Beata Vergine Maria Lauretana, e anche venne unito il domicilio del rettore e qui da lì si trasferirono il ministero parrocchiale e la residenza. La nuova chiesa con un’unica navata si estende in lunghezza sedici braccia, compreso il coro, ed è larga undici. Ha soltanto due altari, quello maggiore è stato già descritto all’inizio, dalla parte estrema della parete, separato da un piccolo</p>	Archivio Parrocchiale

			<p>spazio {testudine aquarie - o assuarie depicta obtectum} è coperto da una volta (nicchia) dipinta ad acqua, e circondato anteriormente da cancelli a due battenti di marmo sopra i quali, alla sommità dell'arco, per la mancanza di architrave, è appeso il simulacro del Signore crocifisso, come di abitudine velato da un drappo si seta rosso. Si vede un'altra cappella a sinistra non come la prima staccata sul cui altare (mensa dell'altare) sovrasta un grandissimo quadro che riporta l'immagine della Vergine Madre di Dio ... che si venera nel più profondo santuario del tempio lauretano.</p> <p>Il pavimento è formato da una ghiaia ben compatta e livellata, in nessuna parte si vedono sepolcri, data la vigente antica consuetudine del posto di inumare i defunti sotterranei all'esterno, ... in un cimitero cintato da un muro.</p> <p>Le altre cose riguardanti la chiesa furono riscontrate abbastanza adeguate, come anche le altre cose più relative al culto, certamente le sacre suppellettili per numero e pulizia, ma non certo lodevoli per la preziosità, tutte queste cose sono conservate in un vecchio armadio di noce che si trova nella sacrestia nella parte posteriore del coro."</p>	
10	1787	Lettera della Pretura di Bellano	<p>Sintesi</p> <p>Il bosco comunitario di Valiscione, conteso dalle comunità confinanti è una delle maggiori risorse economiche in quanto forniva legna da ardere per riscaldare le case e per cucinare gli alimenti e soprattutto le castagne, un alimento molto importante per l'economia familiare di quel periodo. Dall'analisi del Sommarione del Catasto Teresiano della metà del 1700, si deduce che la maggior parte degli abitanti di Dorio possedeva sulle le falde del monte Legnoncino porzioni di bosco e di pascoli. L'antichissima controversia tra le comunità confinanti il bosco Valliscione per il suo possesso venne risolta nell'anno 1755. Da quella data il bosco è riconosciuto come appartenente in ugual misura alle comunità di Dorio e dei tre paesi della Valvarrone, Vestreno, Sueglio e Introzzo. Però le comunità di Sueglio e Introzzo, in quanto non possono condurvi gli animali al pascolo chiedono nel seguente documento datato 1787 l'autorizzazione per affittare la loro porzione.</p> <p>Trascrizione</p> <p>"Dopo che fu transatta l'antica controversia fra le comunità di Colico contado di Como, e le quattro comunità di Vestreno, Sueglio, Introzzo e Doro (sic) Ducato di Milano circa la pertinenza del Monte detto Valliscione e con pubblico instrumento dell'anno 1755, si convenne che il Dominio di detto Monte spettar dovesse alle quattro comunità di questo Ducato, le quali però pagassero una certa somma a quella di Colico. Vennero in seguito fra le quattro comunità ad un successivo Istrumento, in cui stabilirono che il detto Monte spettar dovesse fra di loro in Comune, e per indiviso in egual porzione, cioè per una quarta parte a ciascheduna.</p> <p>Convennero inoltre, che qualora le due Comunità di Sueglio ed Introzzo non abbisognassero di pascolo nel detto Monte, premessa la formale dichiarazione,</p>	Archivio Comunale di Dorio

		<p><i>fosse in rimessa di persona della comune confidenza, in quanto avessero a contribuire le altre due di Doro, e Vestreno pure per l'assegnazione alle suddette di Sueglio ed Introzzo un uguale tanta parte di pascolo, che a loro comodo dovesse affittarsi. E finalmente si stabilì che la suddetta convenzione dovesse aver luogo anche nel caso che nelle mappe del nuovo Censimento da pubblicarsi, venisse aggregato, o in tutto o in parte il suddetto Monte più al territorio dell'una che dell'altra Comunità, lo che tutto risulta da dal'Istrumento del 12 agosto 1756 Rogato dal Dottore, e C.C. Carlo Negri.</i></p> <p><i>In seguito a tali convenzioni, e dopo la pubblicazione delle nuove mappe, nelle quali fu aggregato il detto Monte alla Comunità di Doro, si vide che la Comunità di Sueglio ed Introzzo soffrono che il peso dei carichi per la rispettiva quota di detto Monte senza potere goderne il frutto, attesa la situazione in cui quelle sono di una lunghissima distanza dal Monte, e delle strade impraticabili per cui non puonno inoltrare le bestie al pascolo, e così quello resta ad intiero comodo delle Comunità di Doro e di Vestreno; ed intanto soggiacciono le dette Comunità di Sueglio ed Introzzo al grave carico di lire Cento Cinquanta per la rispettiva quota di detto Monte, e siccome formano esse una puochissima somma di scudi d'Estimo, vengono a dover pagare su e più soldi per ogni scudo.</i></p> <p><i>Potrebbero dunque queste, in forza delle cose convenienti, chiedere che si separasse la rispettiva loro parte per quella poi affittare, ma si prevede assai difficile, anzi impossibile l'esecuzione del patto si nel far seguire la separazione, che nel potere in seguito affittare la parte separata per le gravi questioni nascerebbero tra le rispettive parti interessate.</i></p> <p><i>Altro spediente adunque non trovano i Deputati dell'Estimo di dette Comunità di Sueglio ed Introzzo, servidori delle SS.LL. illustrissime se non che siegua un affitto dell'intero Monte, col ripartire in seguito per quarto la pensione che riuscirà di ricavare.</i></p> <p><i>Che credono li supposti possano ostare a questo loro desiderio le supreme clementissime disposizioni di S.M. di fresco manifestate coll'editto del 29 novembre 1763 ove restano vietati li affitti dei beni comunali qualora non sieno rinnovazioni di quelli che facevansi in passato, mentre ben vedono le SS LL Illustrissimi, che non trattasi qui di fondi d'antico possesso delle Comunità né di godimento a li Comunisti, ma di fundi di fresco acquistati dalle comunità stesse in vigore della riferita transazione, cosicché al tempo stesso in cui ne divennero padroni, convennero altresì per il caso di affitto, e però li supposti alle SS. LL. Illustrissime ricorrono perché si degnino dare gli ordini opportuni affinché siegua nelle forme l'affitto di detto Monte Valiscione lo che ... [interrotto l'originale]"</i></p>	
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11	1857, 25 Maggio	Lettera dei Comuni di Vestreno, Sueglio ed Introzzo al Commissario di Bellano	<p>Sintesi Richiesta dei Comuni di Vestreno, Sueglio e Introzzo di sospendere il progetto di costruire la nuova chiesa a causa della povertà delle comunità in quanto dovranno contribuire alle spese perché comproprietari del bosco Valliscione e le cui imposte sono pagate in quote uguali.</p> <p>Trascrizione "All'illustrissimo Regio Sig. Commissario di Bellano. Nello stato attuale in cui trovasi la massima parte di questi infelici abitanti di vedergli ogni giorno porgere la mano colle lacrime agli occhi dai propri pargoletti chiedendo il necessario sostentamento senza che possano col loro medesimo cordoglio assecondare si giuste e sacre domande, vi dovrebbe subentrare almeno l'idea nelle rappresentanze comunali di non permettergli di proporre opere pubbliche non reclamate da un assoluto bisogno, onde sollevare così in parte i poveri censiti dalle imposte che aggravano i loro tenui poteri per far fronte alle quali si vedono ad ogni istante spogliati non solo di quel poco peculio guadagnato con grande sudore e che dovrebbe servire per uno scarso mantenimento delle languenti loro famiglie, ma ben anco del bestiame e dei mobili necessari per l'esistenza e perfino delle loro tenue proprietà riducendoli così nella più squallida miseria. Ma tutto al contrario invece si verifica in giornata e senza riflesso a tante vicissitudini si vanno proponendo opere di lusso o che potrebbero essere dilazionate perché non necessarie all'istante, costringendo così nello stato di vera disperazione che deve sostenere il relativo dispendio; e qui non valga il dire che coll'esecuzione di esse si dà lavoro ai poveri, giacché le opere stesse vengono appaltate e con esse si occupano dieci o quindici persone di chi abita in quel comune ed il rimanente dei censiti devono sostenere il disagio di una spaventevole posizione. E se ciò sia vero basti il riflettere: Che sgraziatamente i Comuni di Introzzo, Sueglio e Vestreno posseggono in società col Comune di Dorio un bosco appellato Valliscione posto in Dorio stesso portante l'estimazione di £. 6073,23 le cui imposte devono essere pagate in quote uguali dai comuni cointeressati. L'estimo in corpo del detto Comune di Dorio ascende a £. 13.609,40. Da questi devesi dedurre il ¼ sopra gli £ 6073,23 spettante a Dorio sul quale non può essere caricata la sovrimposta e quindi £ 1518,2 ¾ più l'estimo parziale del detto Comune 3437 si somma a 155257. Si residua quindi l'estimo per cui devono essere caricate le spese comunali a 12.057 4/48 nei quali ne spettano ai menzionati comuni d'Introzzo, Sueglio e Vestreno per i loro ¾ del Valliscione. [...] Con questo vantaggio di far sostenere ai non abitanti in Comune quasi due terzi delle spese comunali quel consiglio a mano salire (?) delibera l'esecuzione di grandiose opere senza che siano reclamate dal bisogno e senza che si possono in parte ritenere tuttavia a carico comunale e ne sia il vero.</p>	Archivio Comunale di Dorio
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		<p>Nel 1854 venne fatto riattare la casa parrocchiale che in origine non è di ragione comunale quando si voglia ispezionare gli atti precorsi sotto il già parroco Magni sostenendo l'ingente spesa di £. 4000.</p> <p>Nel 1842 venne costruito l'orologio Comunale £. 1130.</p> <p>Esisteva in quel comune una torre campanaria solida solidissima per concerto di due o tre campane esuberanti il bisogno di quella popolazione di circa 350 anime ed invece nel 1851 si distrusse la torre costruendone un'altra per £. 2690.</p> <p>Non soddisfatta quella rappresentanza comunale delle due campane esistenti decretò l'acquisto di un concerto di quattro pel prezzo addizionale di £. 3570.</p> <p>Non sapendo come scialacquare il denaro nel 1847 col pretesto di dare lavoro ai poveri fece costruire una strada carrozzabile che dalla militare, conduce all'abitato la quale è assolutamente inservibile, giacchè nell'abitato stesso non vi si può accessione né con carrozze, ne carri, contando le contrade interne di quel Comune la larghezza di un metro o poco più e si sostenne la spesa di £. 1550.</p> <p>Nell'adunanza consigliare 22 ottobre 1856 venne proposto l'ampiamiento della Chiesa parrocchiale che è già sufficiente capace per questa popolazione, appigliandosi al pretesto di dedicarla alla fausta avvenuta in Lombardia delle LL. MM. II. RR. AA onde ottenere così l'adesione superiore di altre £.20.000.</p> <p>Non è nemmeno da supporre che il cuore magnanimo paterno delle LL. II. AA. Voglia accettare di buon grado una tale dedica quando conoscesse che per ciò eseguire fa d'uopo aumentare i disagi delle più desolate famiglie come sono quelle dei Comuni d'Introzzo, Sueglio e Vestreno che devono sostenere un'eccessiva ed insopportabile sovrimposta appunto per le opere pubbliche che ad ogni tratto si vorranno eseguendo nel Comune di Dorio.</p> <p>In vista di ciò le servienti deputazioni supplicano calorosamente la bontà dell'illustre regio Signor Commissario perché si degni interessarsi presso l'autorità superiore onde non sia approvata la proposta ed inutile amplificazione della Chiesa parrocchiale di Dorio medesimo nell'attuale affliggente carestia de generi di prima necessità, e mancanza di denaro a sollievo di tantissime famiglie che languiscono nella più squallida miseria e costrette a sostenere eccessivi sovraccarichi sull'estimo dei loro tenui possessi. Dalla lusinga di essere dalla bontà e giustizia superiore ascoltati ed esauditi, per non essere obbligati a portare più oltre i propri reclami si rassegnano col massimo rispetto.</p> <p>Dalle deputazioni comunali d'Introzzo, Sueglio e Vestreno 11 23 maggio 1857.</p> <p>Deputati di Vestreno: Goggia e Bazzi</p> <p>Deputati di Sueglio: Pandiani, Bonazola, Tocco</p> <p>Deputati d'Introzzo: Buzzella (sostituto), Camminada.</p> <p>La supplica è comunicata anche a</p> <p>Alle deputazione Comunale di Dorio, per rapporto con incarico anche di riferire</p>	
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			col ritorno della presente, in quale stato trovasi la perizia a dell'Era. 25 maggio 1857 Firma illeggibile."	
12	1858, 7 Settembre, Milano	Approvazione della Curia del progetto della nuova chiesa a Dorio	Sintesi La curia arcivescovile di Milano approva il progetto della costruzione della chiesa in Dorio. Trascrizione <i>"Lo scrivente, encomiato come troppo è giusto lo spirito di religione e la generosità del Consiglio comunale di Dorio che deliberava l'ampliamento a sue spese di quella troppo vetusta chiesa parrocchiale, l'approva in quanto le spetta la determinazione. Trova poi regolare in linea liturgica e per conseguenza munisce del proprio voto il disegno steso dal signor ingegnere e architetto Dell'Era del progettato ampliamento a condizione che l'Altare Maggiore non venga lasciato nell'identica posizione in cui oggi si trova, ma sia messo a fianco dalla corrente d'aria formata dalle due porte laterali. Tanto a debita evasione della pregiata nota delegatizia del 14 agosto."</i>	
13	1858, 2 Ottobre	Avviso di appalto: strutturazione della chiesa parrocchiale	Sintesi Autorizzazione all'appalto e descrizione dei lavori. Trascrizione <i>"Procedere all'appalto per l'ampliamento della chiesa parrocchiale esistente in Comune, in base al progetto del signor Antonio Dell'Era stante la spesa di 18.611.03. Calcolo del nuovo importo di spesa eseguito dall'appaltatore Todeschini Pietro per la demolizione e ricostruzione della chiesa parrocchiale di Dorio in base al contratto d'appalto 21 ottobre 1858, istituitosi dietro le risultanze del progetto. Qualità delle opere:</i> <ul style="list-style-type: none"> • <i>muro di sostegno in a secco con rientranza in calce come ampliamento della piazza.</i> • <i>demolizione del tetto, della rimanente porzione di chiesa vecchia.</i> • <i>svellimento dei pavimenti, demolizione della volta demolizione dei muri,escavazioni."</i> 	Parrocchia San Giorgio, Dorio, Archivio Parrocchiale
14	1860, 20 Settembre, Bellano	Collaudo delle opere eseguite nella ristrutturazione della Chiesa parrocchiale	Sintesi Importo delle opere eseguite dall'appaltatore Todeschini Pietro per la demolizione e ricostruzione della Chiesa Parrocchiale di Dorio in base al contratto d'appalto 21 ottobre 1858, istituitosi dietro le rispettanze del Processo Verbale di collaudo in data 17 settembre 1860 ed antecedenti. See Annex 10.	Archivio Comunale di Dorio

15	1869, 26 Febbraio, Como	Ingiunzione del sindaco Bettega per il pagamento della tassa sul macinato	<p>Sintesi Descrizione mulini. Si notifica all'ufficio la descrizione dei mulini presenti sul territorio esistente: mulini n 3 di 5 coppie di macine. Ingiunzione del sindaco Bettega per il pagamento della tassa sul macinato.</p> <p>Trascrizione "22 Luglio 1869 Avviso: col giorno 29 andante Luglio si deve versare immancabilmente nelle mani dell'esattore comunale la tassa sul macinato per il primo semestre 1869. Sono quindi diffidati tutti i contribuenti risultanti dall'elenco pure qui affisso a versare la relativa quota nelle mani del sindaco onde essere per il detto giorno 29 definitivamente pagata alla cassa comunale. Il Sindaco Bettega.</p> <p><u>Comunicazione dell'agente delle imposte dirette</u> Como, 26 Febbraio 1869. Per di lei norma e per la comunicazione ai mugnai e all'esattore comunale, le si partecipa che il real ministero delle finanze con nota 21 corrente n° 218 ha dichiarato quanto segue: L'esercente che ha ritirata la licenza d'esercizio predisposta per l'intera annata 1869, sebbene cessi dall'esercizio nel corso dell'anno, rimane nonostante obbligato all'intero canone, a meno che non riesca a comprovare che la inattività dell'esercizio è derivata da forza maggiore. L'agente delle imposte dirette.</p> <p>Il 4 marzo 1869 viene richiesto al sindaco un nuovo elenco dei mulini che macinano per esportazione e commercio di farina, e l'elenco dei mulini che non riscuotono tassa. Il Sig Garolini Raffaele fu Ignazio, esercente in Dorio, comunica alla Commissione Consorziale che nel 1869 ha macinato granoturco e segale quintali 70, altri cereali quintali 10, frumento niente. Garolini Severo fu Ignazio ha macinato granoturco e segale quintali 80, altri cereali quintali 20."</p>	Archivio Comunale di Dorio
16	1862, 2 Dicembre	Progetto per l'ampliamento del cimitero e costruzione della camera mortuaria	<p>Sintesi Avviso di messa a disposizione del progetto del cimitero per presa visione dei proprietari dei terreni interessati da espropriare.</p> <p>Trascrizione "In considerazione che nell'ultimo decennio (1880) gli abitanti erano 464 e la mortalità negli adulti fu di 48 e in quelli inferiori agli anni sette 38, il consiglio comunale riconosce la necessità di ampliare l'attuale cimitero, che misura mq 138 e cioè 122 in meno di quanto è disposto dal regolamento di polizia mortuaria.</p>	Archivio Comunale di Dorio

			<i>Il consiglio superiore di sanità in un primo tempo non accolse la domanda di ampliamento perché non distava dall'abitato m 200 voluti dal regolamento, ma in seguito agli schiarimenti forniti dall'amministrazione, sebbene in via eccezionale concedeva l'autorizzazione per l'ampliamento."</i>	
17	1890, 21 Marzo, Dorio	Manifesto di avviso del Sindaco di Dorio Cargasacchi	<p>Sintesi Comunicazione della messa a disposizione del piano parcellare dei terreni da occupare per l'ampliamento del cimitero.</p> <p>Trascrizione "In conformità e per effetti degli articoli 17, 18 e 24 della legge 25 giugno 1865 sulle espropriazioni per causa di utilità pubblica. Fa noto: che presso l'ufficio Comunale, e per 15 giorni dalla data di oggi, trovasi depositati e visibili il PIANO PARCELLARE dai terreni da occuparsi nel territorio del Comune e l'ELENCO delle rispettive ditte proprietarie, soggette ad espropriazione per la costruzione della linea LECCO - COLICO, da eseguirsi dalla Società Italiana per le Strade Ferrate Meridionali, giusta la Convenzione 20 giugno 1888, approvata con legge 20 luglio detto anno, N. 5550, serie 3. Chiunque possa avervi interesse è invitato a prenderne conoscenza e presentare le sue osservazioni in merito presso questa Segreteria Comunale, nel termine sopra menzionato."</p>	Archivio Comunale di Dorio
18	1893, 9 aprile, Dorio	Aspetti sanitari a fine Ottocento	<p>Sintesi Informazioni geologiche sul suolo del comune e censimento della popolazione.</p> <p>Trascrizione "Nella relazione annuale di Sanità del 1892 compilata dall'ufficiale sanitario Comunale dott. Candido Manzoni si riportano le seguenti notizie topografiche:</p> <ul style="list-style-type: none"> • profondità della falda d'acqua 5 metri. • strati del suolo ghiaiosi e argillosi, pertiche metriche 9120.35. • prodotti principali: uva, granoturco, e castagne. • temperatura massima 24/25 gradi, minima 3 sotto 0. <p>Dal censimento del 1891 risultano 424 abitanti [...]</p> <p>Mortalità nel 1892:</p> <ul style="list-style-type: none"> • da 0 - 5 anni: 7 • da 5 - 20: 1 • da 20 - 50: 1 • da 50 e più: 5 <p>Totale 14 morti di cui 6 maschi e 8 femmine. La popolazione dal 1871 al 1891 è aumentata. L'aumento della popolazione è attribuito alla poca emigrazione annuale. È considerevole però la emigrazione temporanea di muratori che in primavera d'ogni anno si recano nella Svizzera e nella Germania. Principale occupazione della popolazione è agricola. Prosperità mediocre. Alimentazione si basa principalmente</p>	Archivio Comunale di Dorio



			<p><i>sul pane di frumento, polenta di granoturco, latticini e prodotti agricoli; la carne solo nei giorni festivi. Esistono tre frazioni: Signorello, Panico e Torchiedo. Nel capoluogo abitanti 348, nelle frazioni 76.</i></p> <p><i>Lo stato delle abitazioni è deficiente, la pavimentazione e pulizia strade mediocre anche la fognatura è mediocre. Il deflusso dell'acqua per terreno ripido è facile. La condizione dei locali scolastici è ottima essendo di recente costruzione (1892). Le condizioni igieniche dell'unico stabilimento serico sono buone. In esso si osservano le prescrizioni di legge sul lavoro dei fanciulli. Acque potabili da fonti sono poste superiormente all'abitato e si considerano buone le condizioni dei pozzi e dei bacini di presa. Per i lavatoi ci si serve dell'acqua del lago. Il cimitero è distante m. 60 di una casa di recente costruzione di Dell'Era Mansueto. L'estensione dell'area di 90 mq. Terreno atto alla decomposizione entro il decennio, con profondità sufficiente delle acque per impedire inquinamento. La vigilanza su bevande e alimenti è affidata all'ufficiale sanitario.</i></p> <p><i>Assistenza medico-chirurgica: si è formato un consorzio con il comune di Corenno, la cui attività si estende a tutta la popolazione e non solo ai poveri.</i></p> <p><i>Esiste un'opera pia Andreani che concorre con £ 153.60 a favore degli ammalati. L'assistenza ostetrica è seguita da una levatrice patentata.</i></p> <p><i>Si annota che è in atto un processo a carico del signor Dell'Era Mansueto per lo scavo delle fondamenta vicine al cimitero in contravvenzione per l'art. 57 della legge."</i></p>	
19	1893	Elenco maggiori contribuenti all'imposta fondiaria per l'anno 1893	See Annex 10.	Archivio Comunale di Dorio
20	1903, 5 Dicembre, Dorio	Denuncia d'esercizio Filanda di Giuseppe Nava	<p>Trascrizione</p> <p><i>"Denuncia d'esercizio</i></p> <p><i>Nome della ditta: Giuseppe Nava fu Carlo.</i></p> <p><i>Industria esercitata: filaggio bozzoli, torcitura seta per conto terzi.</i></p> <p><i>Ubicazione: filatoio (o torcitoio) Strada Nazionale.</i></p> <p><i>Filanda in riva al lago.</i></p> <p><i>Anno inizio azienda: 1895.</i></p> <p><i>Dispone di due motori idraulici di cav. Vapore 5."</i></p>	Archivio Comunale di Dorio
21	1906, 9-10 Maggio	Visita pastorale del Card. Andrea Ferrari	<p>Sintesi</p> <p>Prescrizione di esecuzione di opere di restauro degli arredi della chiesa di San Giorgio di Mondonico.</p>	Archivio Diocesano di Milano, Pievi lacuali





			<p>Trascrizione</p> <p><i>"Ci rallegriamo della bella fioritura di opere di pietà cristiana e specialmente dell'iniziato oratorio festivo.</i></p> <p><i>Si faccia levigare ed inverniciare la mensa dell'altare maggiore. Si faccia inverniciare il tabernacoleto portatile pel S. Viatico. Dall'altare del Crocifisso si tolga l'effigie del S. Volto di Gesù, e vi si metta una croce di conveniente dimensione. La reliquia della S. Croce sia custodita secondo le istruzioni date dal Sinodo Diocesano.</i></p> <p><i>Chiese e oratori. Parrocchiale dedicata a San Giorgio Martire, antica e primitiva parrocchiale dedicata a San Giorgio. Si apre al popolo qualche volta all'anno: nelle rogazioni e il giorno dei morti. È priva di campanile.</i></p> <p><i>San Rocco dove si celebra più volte per devozione privata.</i></p> <p><i>Numero abituale parrocchiani 551 Panico 20, Torchiedo 30, Mandonico 15."</i></p>	
22	1911, 9-10 Maggio	Visita pastorale del Card. Andrea Ferrari	<p>Sintesi</p> <p>Usi e costumi della popolazione di Dorio; elenco delle confraternite della parrocchiale.</p> <p>See Annex 12.</p>	Archivio Diocesano di Milano, Pievi lacuali
23	1927, 17 Marzo	Documento dell'unione dei Comuni di Dervio, Dorio e Corenno	<p>Sintesi</p> <p>Unione di comuni di Dervio, Dorio e Corenno in comune di Dervio, sede del capoluogo.</p> <p>See Annex 13.</p>	Archivio Comunale di Dorio
24	1936, 17 Ottobre	Elenco operaie alla filanda Barili	<p>Sintesi</p> <p>Elenco delle operaie, trasmesso al Comune di Dervio, alle dipendenze della filanda di Dorio di proprietà di Giovanni Barili.</p> <p>Trascrizione</p> <p><i>"Giovanni Barili scrive al Comune di Dervio.</i></p> <p><i>Per maggior vostra comodità nel compilare il "Libretto di lavoro" faccio seguire elenco delle operaie alle mie dipendenza.</i></p> <p><i>Bettega Rosalia fu Natale, Balbiani Oriele fu Francesco, Bettega Maria fu Gabriele, Bettega Maria fu Giuseppe, Bettega Santina fu Giuseppe, Cristina Angelina di Antonio, Garolini Giuseppa fu Lazzaro, Frigerio Gilda di Francesco, Bettega Innocente fu Ambrogio, Bettega Maria di Luigi, Frigerio Palmira fu Antonio, Vitali Giuditta fu Giuseppe, Colzada Fortunata di Francesco, Bettega Rosalia fu Battista, Panatti Domenica di Tomaso, Zucchi Santina fu Giuseppe, Ferrandi Ebe di Carlo, Rizzi Maria Assunta di Agrippino, Bettega Maria fu Giovanni, Bettega Giuseppina</i></p>	Archivio Comunale di Dervio



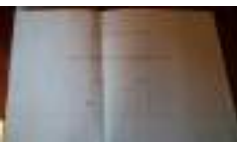

			<i>di Cesare, Bettega Rita di Giuseppe, Garolina Lena di Severo, Vitali Maria fu Battista, Ferrandi Maria di Carlo, Ferrandi Ines di Carlo, Torri Luigia di Natale, Bettega Rosa di Battista, Angela Garolini di Luigi, Sacchi Ernesta di Senne, Bettega Maria fu Francesco, Piva Teresita di Giuseppe, Arici Angelina fu Mauro, Todeschini Battistina fu Pietro, Balbiani Ernesta fu Francesco, Bettega Angelo fu Pietro, Todeschini Camillo fu Pietro. In totale 36 operai."</i>	
25	1945, 23 Dicembre	Richiesta per la separazione del Comune di Dorio da quello di Dervio	Sintesi: Ragioni per ottenere l'autonomia del comune di Dorio da quello di Dervio. See Annex 14.	Archivio Comunale di Dorio
26	1945-1947	Richiesta di Autonomia del Comune di Dorio	Sintesi Ragioni per ottenere l'autonomia del comune di Dorio da quello di Dervio. See Annex 15.	Archivio Comunale di Dorio
27	1983	Relazione storico-artistica dell'affresco sito nella chiesa dedicata a S. Giorgio martire, sita in Dorio (Prov. di Como) da dattiloscritto di R. Bernasconi restauratrice dell'affresco	Sintesi Descrizione della chiesa di S. Giorgio a Mondonico e del suo apparato decorativo. Trascrizione <i>"Dall'attuale chiesa parrocchiale, per una ripida mulattiera, si sale in breve alla località, panoramicamente splendida, denominata Mandonico, su un poggio isolato sorge la chiesetta, composta da una navatella terminante con un abside orientata, che rappresenta l'antico edificio parrocchiale di Dorio. Non molto distanti, rimangono i vetusti agglomerati abitativi, stretti tra di loro in un complesso che palesa ancora chiare reminiscenze difensive. Gli edifici svolgono al più delle funzioni di baita pedemontana momentaneamente, avendo quasi ultimato il piano di recupero da parte del Comune di Dorio, che ha destinato la zona residenziale-turistica nel vigente PRG. La chiesetta, recentemente restaurata, non palesa dettagli costruttivi significativi, essendo stata fortemente ritoccata, interventi effettuati per bonificare le imponenti infiltrazioni di umidità, che hanno in parte compromesso le pitture. L'edificio comunque non presenta all'interno ed allo stato attuale, dei caratteri ogivali, ipoteticamente da considerarsi più o meno coevi alla datazione quattrocentesca, reperita alla base delle pitture affrescate. In particolare, l'abside, dalla pianta semicircolare, ha una volta con una calotta a quarto di sfera, più tipiche delle chiese d'epoca romanica, che non di quelle immediatamente successive (anche se presenta un eccessivo sviluppo volumetrico); per obiettività va comunque rilevato che non è neppure da escludersi un possibile intervento di rifacimento, anche radicale, in qualche epoca successiva, che potrebbe</i>	Parrocchia San Giorgio, Dorio, Archivio Parrocchiale



		<p><i>avere largamente trasformato, particolarmente negli alzati, l'originaria situazione dell'antica parrocchiale.</i></p> <p><i>Anche l'interno del tempietto presenta tracce di evidenti e radicali rimaneggiamenti, che hanno fra l'altro pareggiato le pareti, prima a superficie disuguali, livellandole e ricoprendo il tutto con uno spesso strato di intonaco. L'unica porzione di muratura risparmiata e quella relativa al grandioso riquadro affrescato.</i></p> <p><i>Questa antica chiesa dedicata a S. Giorgio (ora appartato oratorio), non è citata nell'elencazione attribuita, verso la fine del XIII secolo, a Goffredo da Bussero (Liber Notitiae Sanctorum Mediolani) ma è tuttavia noto come, nello stilare il repertorio, gli edifici dedicati a San Giorgio non siano stati a suo tempo di proposito inseriti nella registrazione, per un deliberato intento, di cui oggi ci sfuggono le complesse motivazioni. Va ancora segnalato che, nel citato Liber Notitiae, in una nota riassuntiva, le chiese soggette alla canonica di Dervio risultano essere dieci, ma nel testo ne sono riportate solo otto: una delle due non nominate doveva indubbiamente essere quella del S. Giorgio di Dorio. L'unica porzione di muratura risparmiata è quella relativa al grandioso affrescato."</i></p>	
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Historic maps and drawings summary

N. doc	Year	Shelf-mark	DESCRIPTION and TECHNICAL DETAILS	Source
<p>1</p> 			<p>Description Plan of Holy Virgin Mary in Dorio. Last will of Nicolò Petazzi, Parish Priest of Margno. The drawing represents the plan: it has one nave, the entrance door is on the northern side and the altar is on the southern side. Church dimensions are in "cubiti": the nave is 12 cubiti large and 18 cubiti long, the altar is cubiti 8 large and 8 cubiti long. The masonry has different patterns, and there are two openings along each side, the altar has an opening on the western side. Two painted pillars are between the lateral openings along the sides. The edges of the church estate are: on the northern and western sides the Commune street; on the southern and eastern sides.</p> <p>Technical details Black ink drawing on paper. The paper has scattered stains, and the folding lines have some braking point. On the rear, an added label has the title: Saint George Parish in Dorio (Como), Diocese of Milan.</p>	Parish Archive of Dorio
<p>2</p> 			<p>Description Latin cross plan of a church, with the entrance door on the western side. The interior is 7.5 m large and 12 m. The paper does not have any date and dedication of the church.</p> <p>Technical details Black ink drawing on paper, red ink hatch inside the wall section. The paper has scattered stains due to humidity.</p>	Parish Archive of Dorio

<p style="text-align: center;">3</p> 	<p>18th cent.</p>	<p>Fondo U.T.E. Catasto Teresiano, serie mappe, Dorio, cart. n. 336, foglio Insieme (172.-1760)</p>	<p>Description Map of Dorio municipality land. The map represents all the land belonging to Dorio municipality, under the title "Dorio Pieve di Dervio Riviera di Lecco". The large Dorio land has its northern border towards Olgiasca; towards Northeast Colico, Coreno, Vestreno, Sueglio, Introzzo municipalities; towards south Tremenico land. The mountainous shape and geology of the municipality area has many steps of different high, and it is mainly natural rather than urbanized (the green color is highly spread on the map). The urban fabric (red color) and agricultural lands (pink color) is mainly settled on the southwestern zone, along the lakeside. Scale of Trabucchi 1:300.</p> <p>Technical details Ink drawing on paper. The building plan has a red contour; the roads have an ochre contour, the agricultural land a pink contour, rivers and the lake have a blue contour.</p>	<p>National Archive of Como</p>
<p style="text-align: center;">4</p> 	<p>18th cent.</p>	<p>Fondo U.T.E. Catasto Teresiano, serie mappe, Dorio, cart. n. 336, foglio rettangolo n. 1 (a. 172.)</p>	<p>Description "Mappa di I stazione, catasto Teresiano Comune di Dorio". The title block is in the middle of the map, in the title block there is the list of the topographers of the map of "Dorio Pieve di Dervio in occasione della misura generale dello Stato". In the map there is only one building (Vesgallo house) and the road that leads to north, towards Olgiasca municipality (in the same place of the present one). The map graphically represents the different cultivations of Dorio land. Map at scale 1:150.</p> <p>Technical details Ink drawing on paper. The building plan has a red contour, the roads have a ochre contour, rivers and the lake have a green contour.</p>	<p>National Archive of Como</p>
<p style="text-align: center;">5</p> 	<p>18th cent.</p>	<p>Fondo U.T.E. Catasto Teresiano, serie mappe, Dorio, cart. n. 336, foglio rettangolo n. 5 (a. 172.)</p>	<p>Description "Mappa di I stazione catasto Teresiano Comune di Dorio". A scheme of Dorio land is in the middle of the map, subdivided in nine parts. The logo indicating the north direction is below the central nine maps. Dorio and Mondonico villages and both the churches of Saint George have red contours. The map graphically represents the different cultivations of Dorio land.</p> <p>Technical details Ink drawing on paper. The building plan has a red contour, the roads have a ochre contour, rivers and the lake have a green contour.</p>	<p>National Archive of Como</p>
<p style="text-align: center;">6</p> 	<p>18th cent.</p>	<p>Fondo U.T.E. Catasto Teresiano, serie mappe, Dorio, cart. n. 336, foglio rettangolo n. 8 (a. 172.)</p>	<p>Description "Mappa di I stazione catasto Teresiano Comune di Dorio". Dorio and Mondonico villages have red contours. In Mondonico, only a small building is settled apart from the village blocks, on the eastern side of the hill slope, a few far from the village. The largest block has a connection to Dorio (map n. 5). Another block is settled apart from the village, towards south, and beyond the river Valle dei Mulini. A road connect this block to Corenno Plinio. The map graphically represents the different cultivations of Dorio land.</p> <p>Technical details Ink drawing on paper. The building plan has a red contour, the roads have a ochre contour, rivers and the lake have a green contour.</p>	<p>National Archive of Como</p>

<p>7</p> 	<p>18th cent.</p>	<p>Fondo U.T.E. Catasto Teresiano, serie mappe, Dorio, cart. n. 336, foglio dei Beni di Il Stazione (172.-1760)</p>	<p>Description “Mappa di Il stazione catasto Teresiano Comune di Dorio”. The graphic representation is less precise than the one in the previous map: it includes the urban blocks (ad all the hamlets of Dorio municipality and larger area too, Verzè e Cher), the connections, the rivers, and the lake. The map indicates the numbers of the cadastral maps, nevertheless the use of the land and buildings are not listed.</p> <p>Technical details Ink drawing on paper. The building plan has a red contour, the connections are a dotted line, rivers and the lake have a green contour.</p>	<p>National Archive of Como</p>
<p>8</p> 			<p>Description Octagonal central plan and exterior elevation (with colonnade). The drawing does not have any date or title. It is assumed to be a sketch of a possible project of the enlargement of Saint George church in Dorio.</p> <p>Technical details Pencil on paper.</p>	<p>Parish Archive of Dorio</p>
<p>9</p> 			<p>Description Drawing of the church with a colonnade. The facade is symmetric and it has three doors. The central door has a rectangular shape; the two lateral doors are arched. A half-round painting is frescoed on the central door. The drawing does not have any date; probably it is a preliminary sketch of the enlargement of Saint George church in Dorio.</p> <p>Technical details Red pencil on paper.</p>	<p>Parish Archive of Dorio</p>
<p>10</p> 			<p>Description Project of the front elevation of the main altar in Dorio church. The drawing consists on the plan and an elevation. The elevation is watercolored, and the colors are meaningful of the different materials to be used. In the central part there is a cross, and the dimensions are written with black ink: the front is 1,81.5 m width. The plan has only a black contour (ink) and it matches two levels: on the left it is the base of the altar, on the right it is the top. On the back, there are other two pencil drawings,</p>	<p>Parish Archive of Dorio</p>

			probably the details of the decoration. In addition, also two sentences are on the back: one was erased and now is not readable; the second is "via G. Maurilio Radaelli". On the right side of the back, some written digits are not readable. Technical details Elevation, pencil and watercolor. Plan, black ink on paper. A burning stain is on the left side of the paper.	
11 	1860-1903	Fondo U.T.E., Catasto Cessato o Lombardo Veneto, serie mappe, Dorio, cart. n. 155, foglio rettangolo n. 20 (a. 1860)	Description "Mappa catasto Lombardo Veneto Comune di Dorio". The map has much more details and it is more precise than the earlier maps. Here, in the blocks the buildings are distinguishable, every building and field have a code or a number, any number of the map refers only to one owner. The drawings with red ink and pencil indicate the variation of some cadastral map decided and realized between 1860 and 1903. Technical details Ink on paper. The buildings plans have a red contour, the roads have a beige contour, rivers and the lake have a blue contour and hatch. Red ink and pencil indicates the variation in the cadastral maps.	National Archive of Como
12 			Description Plan of the zone along the lake in Dorio municipality area between the "Valle dei Molini di Dorio" on the southern side and the stair connection the Nazionale dello Stelvio road and the northern side of the area. The drawing is rich of details: the building of "Molino Sormanni", "Capanna Sormanni" "Filanda e Filatoio Bettega". are settled along the southern side of the lake, at a lower level of the road's one. Towards north, there are four buildings: the "Filanda dell'Era", "casa Cargasacchi" and "Maglio Cargasacchi", and another building without any name, with an irregular shape. The railway path is dotted and along it towards south, there is the drawing of a building named F.V.: the building has one exterior and one interior stair connecting the National road (on the right). A sidewalk 80 m long is on the left of the building. The project is probably a sketch of the new station (built between 1894 and 1898). The municipality hall is located on the other side of the Nazionale dello Stelvio road, where the Station is set. Also other few buildings are set on the other side of the Nazionale dello stelvio road, in front of "Filanda dell'Era" ("Casa Garolini") and towards north. The map include also the elevation heights. Technical details White ink on black paper.	Municipali- ty Archive of Dorio

<p>13</p> 	<p>1898 Fondo U.T.E. Catasto Cessato-Aggiornamenti, serie mappe, Dorio, cart. n. 155, foglio rettangolo n. 20 (a. 1898)</p>	<p>Description “Mappa degli aggiornamenti al catasto Lombardo Veneto del Comune di Dorio”. The new map is an update including the variations drawn with a pencil and red ink in the previous map. Close to the new station and “Filatoio Bettega” there are some unreadable notes.</p> <p>Technical details Ink on paper. The buildings plans have a fuchsia contour, the roads have a beige contour, rivers and the lake have a blue contour and hatch. Notes and variations of the cadastral maps are drawn with a pencil.</p>	<p>National Archive of Como</p>
<p>14</p> 		<p>Description Detailed section of three naves it is a pencil drawing with the dimension of the elements. The central arch is higher 40 cm than the lateral ones. A decorative molding is over the arches. The total height is 9.20 m, the width inside the arches is 2.65 m. The drawing does not have any date, name of the building and notes.</p> <p>Technical details Pencil and blue ink on paper.</p>	<p>Parish Archive of Dorio</p>

Document 1. Description by Pietro Goggia, 1574-1575

[51] 1575

Io prete Pietro Goggia curato di Santo Georgio de Doro Pieve di Derfo, facio fede cuome un giorno de domenica che fu alli 25 luio alla mia messa dove era la maggior parte del mio popolo, pubblicai la bolla in Cena Domini del n. s. papa Gregorio decimo tercio, et alla publicatione d'essa Bolla mi erano presenti per testimoni Pietro Maiinino da Lera, Ambrosio dito Bogacha de Betegi da Solmogno et Sfirio de Betegi da Torgedo, et subito publicata che lebe la fece metter alla porta della Chiesa, et in fede di ciò ho fatto la presente et sottoscritta de mie propria mane, data in Doro 7 agosto de l'ano seguente.

Prette Pietro Gogia curato de Doro.

Bolla promulgata da Gregorio XIII nel 1583 e successivamente confermata da altri papi: comminava la scomunica per i delitti di eresia (protestanti), di appello dalla sentenza del papa al futuro concilio o all'autorità civile, di pirateria, di rapina a danno di naufraghi, di falsificazione di lettere apostoliche, di commercio di armi verso gli infedeli, di assassinio e rapina a danno di pellegrini diretti a Roma.

[52] La biblioteca del prete Pietro Goggia parroco di Dorio (1557 – 1600)

Il sacerdote Pietro Goggia che rimase parroco per 43 anni a Dorio ci ha lasciato l'elenco dei libri della sua biblioteca.

Primo il Concilio di Trento

Il Concilio Provinciale primo

Il Concilio Provinciale secondo

Il decreto Provinciale secundo

Il decreto Provinciale tercio

Il decreto fato in lo sinodo diocesano del anno 1572

La Suma Angelica

Il catachismo vulgare

Il pastorale di san Gregorio

Jacopo da Voragine

Suma sacramentorum
Manipulus curatorum
Homiliario de Ludovico Pictorio
Suma Antonina
Bio berfon
Il Sanodardi
Metodo de Confessione
Testamento Novo
La infracione generale
Confessionario raccolto tra i dottori cattolici
Breviario doi

Il calendario

Tra i libri del curato, in primo luogo ci sono i decreti del Concilio di Trento e quelli dei concili provinciali celebrati a Milano. Tra questi c'è il catechismo volgare scritto dopo il Concilio. La Regula pastoralis di San Gregorio Magno padre della Chiesa (590-604) e il Manipulus curator (il manuale del curato) dello spagnolo Guido de Monte Rochen un sacerdote e giurista che era attivo intorno al 1331, gli saranno serviti per essere un buon sacerdote. Gli altri testi sono "manuali del mestiere" servono per predicare e per amministrare i sacramenti. Per la predicazione sarà stato di grande utilità la Legenda Aurea di Jacobo di Voragine, l'omiliario di Lodovico Pittorio e il Catechismo volgare. Gli altri libri meno il Nuovo Testamento e il breviario, sono manuali di diritto e di teologia morale applicata all'amministrazione dei sacramenti, in modo particolare della confessione. Queste Summe sono come ricettari lunghissimi in cui si presentano gli innumerevoli casi in cui una persona si può trovare nella sua vita. Normalmente sono ordinate secondo i dieci comandamenti. Infinita è la casistica rispetto al sesto comandamento. Da notare che il curato non possiede una Bibbia ma solo il Nuovo Testamento. Si deve aspettare il concilio Vaticano II per valorizzare la Bibbia. Il principale strumento a disposizione della Chiesa per il controllo della condotta dei suoi fedeli era la confessione, regolamentata dalla Controriforma dopo il Concilio di Trento, e uno dei paladini in questo progetto di controllo era stato appunto san Carlo nella diocesi di Milano, a cui appartiene la parrocchia di Dorio. Per questa operazione erano stati suddivisi i peccati che poteva assolvere un normale sacerdote e quelli riservati a confessori speciali e altri ancora riservati al vescovo. Sappiamo, per esempio, da un documento che in quegli anni della Controriforma il curato Giovanni Giacomo Adamolo di Pagnona chiese ed ottenne la facoltà di assolvere un incestuoso della sua parrocchia. Tra le disposizioni del Concilio di Trento vi era l'obbligo di confessarsi almeno una volta all'anno; chi non si confessava era considerato "inconfesso" e quindi soggetto a pene ecclesiastiche. Il rituale ambrosiano suggeriva, infatti, ai confessori le seguenti penitenze: astenersi per qualche giorno di vestire abiti di seta, di portare monili d'oro, di partecipare a festini, di andare a caccia (come divertimento) o di fare equitazione. Tali penitenze difficilmente potevano essere imposte ai fedeli di Dorio negli anni Trenta.

Nel testo però sono elencate anche penitenze che impegnavano a dar da mangiare agli affamati, a portare pane e vino ai bisognosi, a lavare i piedi ai poveri, a ospitare in casa propria dei pellegrini, a visitare i carcerati e portar loro dei cibi. Altre penitenze invece consistevano in sacrifici personali, come non bere vino o non mangiare carne per un certo tempo. Le donne potevano confessarsi soltanto finché c'era luce solare e solo in chiesa. Agli uomini era richiesto un vestito semplice e aver depresso le armi, mentre le donne dovevano presentarsi con un velo che le coprisse fino alle sopracciglia. I fedeli si confessavano, in modo particolare per Pasqua, per adempiere uno dei cinque precetti della Chiesa: "Confessarsi almeno una volta all'anno e comunicarsi almeno a Pasqua". I confessori erano i sacerdoti del paese, ma per le grandi festività come Natale, Pasqua, la Madonna venivano sacerdoti esterni, soprattutto i padri missionari di Rho o i frati di Piona.

1574

[45] Il prete Pietro Gogia stende l'elenco dei beni della chiesa di San Giorgio

In questo libreto si fa mencione et [...] di tutti i beni mobbili de la chiesa di Sto. Georgio constructa in el Comune di Doro, membro de la canonica di Derfo, diocessi di Milano; quella chiesa è recta e governata da mi prete Petro Gogia curato di essa chiesa.

Chiesa una con doi altari consacrati, uno di Sto. Georgio et l'altro di la madona, quello de la madona non à d'entrata cosa alcuna.

Campanile uno con doi campane: croce una de latono (latta) sopra adorata (dorata), calice uno con la copa de argento sopra adorato, la patena sopra adorata, pisida (pisside) una di argento sopra adorata da tener il Santissimo Sacramento, para doi di candeleri di latono, para doi di pelle per accendere quando se lascia il nostro signor Iddio.

Campanile (campanello) uno per sonar quando se porta il Nostro Signore ali infermi. Planette (pianete) n. 3, una de damasco rosso con la croce di color di orro: le altre due sono di panno rosso con le croce bianche; cordoni numero doi, camisi (camici) doi, amitti tre, stolle 3, manipoli 3 corporali n. 4 con panetti 2 da metter sopra il calice. Misale uno, sacramentario uno, libro uno per far le litanie, sedelino (secchiello) uno per portar l'acqua santa. Tovaglie n. 5, fondalis palii (paliotto) per meter ali altari n. 4; uno rosso con la croce verde, uno verde con la croce rossa, uno turchino con la croce rossa, uno di tela afigurato.

Altro non è all'uso di chiesa perché al presente per essere il comune povero, pur anno bono animo di far bene.

La casa dove sta il prete la quale è canepata et solerata (ha cantina e solaio) con la sua cugina (cucina) tritam senia. Che corencie (confina) da una banda la chiesa da le altre il sagrato. Portico uno dinnanzi a la chiesa, una camera di sopra ad uso del prete.

Horto uno con una brugia (terreno incolto in pendio) appresso che corencie (confina) da una banda il sagrato, dall'altra gli heredi di Jo Antonio Pelot, da l'altra strata (strada), da l'altra Messer Jo Battista dal Guasto de Derfo.

Peza una di terra brugina (incolta) et campina (coltivata a campo) dove si dice soto la chiesa, vidata (coltivata a vite) con piante n. 6 di olive che corencie da una banda strata, da l'altra Messer Batista del Guasto, da l'altra Georgio e fratello da Lera, da l'altra Dominico da Lera.

Peza una de terra campina et vidata donde fu ditto in morada che corencie da una banda gli heredi di Dominico Da Lera, da l'altra gli heredi Lorenzo dal Panigo, da l'altra strada, da l'altra il suddetto Lorenzo.

Peza una di terra campina et vidata donde fu ditto in monada che corencie da una banda la strada, dall'altra Battista Petazo, dall'altra messer Battista del Guasto, dall'altra gli heredi di messer Dominico Silveto da Tremenico.

Peza una di terra brugina con piante 6 di arbori quali sono dinepati dal vento, donde fu ditto in Salvadonica che corencie da una banda gli heredi di Jacopo Taponno, da l'altra in parte Messer Battista del Guasto et in parte gli heredi di messer Dominico Silveto, da l'altre due dagli heredi di Jacopo Taponno.

Peza una di terra vidata donde fu dito sopra gli horti di Mandonico che corencie da una banda Tonio Garola, da l'altra gli heredi di Gio Antonio Pelot, dalle altre doi Pietro Mainino.

Peza una di terra pratina con piante 6 di salege (salice) selvatici che corencie da una banda Bartolomeo de Petazi, dall'altra gli heredi Gio. Antonio Pelot, dalle altre doi bande gli heredi di Jacopo Taponno.

Peza una di terra campigna con doi piante di vitte sopra donde fu ditto al campello del laco (lago) che corencie da una banda Petro Mainino da Lera, dall'altra Jo. Chito da Lera, da le altre doi bande gli heredi di Jacopo Taponno.

Peza una de terra buschiva e sassina donde fu dito ala terra Rossa che corencie da una banda Dominico da Lera, da l'altra gli heredi di Gio Antonio Pelot, dall'altra gli heredi di Jacobo Taponno, da l'altra Marcho Gogia di Vestreno.

Peza una di terra buschiva et cerbina (o zerbina terreno sassoso e incolto) donde fu ditto a la Moya che corencie da una banda Lorezo Garola da Lera et dall'altra strata (strada) et dall'altra Petro Mainino da Lera, e dall'altra gli heredi di Jacobo Taponno.

Peza una di terra buschiva et cerbina (zerbina) donde fu ditto in el baroso (o Larosa) che corencie da una banda la val, da l'altra gli heredi di Lorenzo del Panigo, da l'altra Tonio Garola da Lera, da l'altra sentero, li quali beni li fa lavorare il prete e se ne ricava Lire 15.

Casa una canepata, solerata (con cantina e solaio) con la corte dinnanzi posta in Doro dove se dice al Panigo che corencie da una banda la strada, da l'altra Messe Jo Andrea Andriano da Coreno, da l'altra Georgio da Lera, questa casa non se ne ricava cosa alcuna.

Li mobili che sono in la casa de la chiesa sono questi: primo vasello uno di tre con sitella (secchio, sedela) una di tenuta bochali 9, patella [oppure. Bochali con patella] uno di ferro uno lanezo di tenuta bocali 6, catena una de foco, casse tre, descho uno (tavolino) et taula (tavola) una, banca una, bisacha da dormir e sopra uno borazo (borascel) per coperta, uno caldarino (paiolo) piccolo, uno raminero de rame.

Gli heredi di Donato de Lera che paga ogni anno una brenta di mosto ovvero 35 ipr sopra una peza di terra brugia et vidata, donde fu ditto sopra le case da Salmonio (Solmogno) que corencie da una banda strada, da l'altra gli heredi di Jacopo Taponio, da l'altra Battista detto Malarba da Lera, dall'altra il medesimo et questi heredi hanno la grazia da es ora da reschodersi (riscuotersi).

Gli heredi di Jacopo Taponio pagano lire 4 ipr (?) sopra una pezza di terra pratina donde fu detto alla Changirga da monte che corencie da una banda la strada, dall'altra gli heredi di Gabriello di Bazi da Vestreno, dall'altra messer Baldassare Campazio da Coreno, dall'altra Battista Petazzo.

Document 2. Pastoral visit report, 1582, Card. Carlo Borromeo (summary)

Visita pastorale 24 luglio 1582

Ho visitato la chiesa di San Giorgio, della località di Hoxij (sic) della pieve di Dervio. È consacrata e il giorno della sua consacrazione è il 22 marzo.

Il Sacramento è conservato in una coppa mediocre di argento dorata, sufficiente però per il popolo che si comunica. Per il resto nulla da dire, neanche per il baldacchino.

Il tabernacolo è costruito secondo il modello ed è congruente. Il tabernacolo è piccolo ma si può tollerare per la miseria (inopia) del popolo, ed è rivestito di un panno di seta. Il conopeo è rosso aperto secondo il modello. Nient'altro da osservare.

La lampada davanti al Santissimo Sacramento viene accesa in forma intermittente per tre mesi all'anno a causa della miseria della popolazione.

C'è la confraternita (Scola) del Santissimo Sacramento, ma per la povertà vi partecipano poche persone. Il battistero non ha la copertura con sette lati e il posto per gli olii è piccolo.

La vaschetta (vas) è piccola e anche stretto è il posto per battezzare i bambini e si apre nel mezzo.

I vasetti dei sacri olii sono conformi.

C'è un solo altare secondo le normative, non è consacrato e in esso si conserva una misera pietra sacra. Senza tavolati e telai.

All'altare si sale con due gradini di legno. Le chiusure delle finestre sono a norma

Le porte per accedere alla sacristia e al campanile

Le pareti sono in parte dipinte e in parte imbiancate (dealbata) e le aperture delle finestre con due "staminis sed sine cathris"

Il confessionale non è secondo le norme.

La vaschetta (labrum) per l'acqua benedetta è ma ciò è tollerabile.

Al cimitero si entra con una porta che è sempre aperta.

La sacrestia appare abbastanza capace, e in essa vi è un armadio non secondo le norme.

[Poi parla di un registro con la nota dei legati]

La casa parrocchiale è annessa con una stanza una a piano terra e una sopra e una stanza per dormire sopra il portico.

Questa casa è abitata dal prete Pietro Gogia oriundo da queste parti, della località di Vestreno dall'anno 1572 quando ottenne la cappellania sotto il titolo di san Giacomo di Vestreno.

Document 3. Visit report by Pietro Herra, 1570 (summary)

Ordine fatto per il Rev.do nostro Illustrissimo et Reverendissimo Carlo Borromeo, archidiocesi di Milano in la parrocchiale chiesa di Sto. Georgio di Doro, membro della prepositurale di Dervio

Primo. Che si faccia fare uno tabernacolo di legno adorato per tenere il SS. Sacramento, questo è fatto.

Secondo. Che si faccia fare un tabernacolo per portare in processione, questo non s'è fatto per la povertà di esso comune.

Terzo. Che si face far una piside per portare il SS. Sacramento ali infermi et per comunicare il popolo. A questa rispondo che l'hanno avuto in dono dall' Illustrissimo et Reverendissimo Cardinale Borromeo patrono nostro.

Quarto. Che al se face far il battisterio con il suo ciborio et che il fin pyramidato. Questo è stato fatto secondo che è stato ordinato et si tiene di continuo chiavato.

Quinto. Circa li paramenti per uso della chiesa rispondo a questo che non posso supplire secondo l'istruzione generale perché sono poveri uomini.

Sesto. Che si istruisce la Scola del Corpus Domini. A questo rispondo che gli è istituita et se non anzi facendo al meglio che Dio mi ispira.

Visita Dorio del 1570

Adi 7 febbraio 1570, visita la parrocchiale chiesa di San Georgio del luogo di Dorio, plebe di Dervio, archidiocesi Milano del Reverendo prete Pietro Herra preposito di Dervio et vicario foraneo et in questo delegato dal molto Revdo. mons. Gio Battista Castelli, vicario generale, alla presenza del curato et homini dil detto luogo sono fate le seconde ordinazioni.

Sia metta da qui a San Michele proximo che viene la Scola del S.S. Sacramento secondo le istruzioni et indulgenze date nelle dette istruzioni generali si come havia ordinato Sua illustrissima et reverendissima nella sua visita. (Card. Carlo Borromeo ndr). Gli uomini di detto luogo habbino a mantenere del suo di continuo la lampada accesa avanti il SS. Sacramento si come hanno promesso al suo Illustrissimo e Reverendissimo.

L'altare maggiore si riduca alla misura con metterli sopra una tavola di legno qualsiasi cavata nel mezzo et si

comodi dentro questa pietra sagrata et sia in piano con detta tavola secondo l'ordine datto nelle istruzioni generali.

Il tabernacolo di legno che ora si è comprato si facci comodare sopra detto altare in modo non possa essere levato dentro al quale di continuo si mantenga il Santissimo Sacramento come di sopra et si faccia fare una coperta sopra di qualche drappo honorevole.

Il curato usi diligenza in far si che gli huomini e donne di detto luogo si faccino scrivere tutti in detta Scola e poi ne diano notizia al Vicario Foraneo.

Si provveda di un baldacchino più onorevole che sia possibile e doi (due) lanternari per far la processione del Corpus Domini alla quale andano tutti con i suoi lumi.

Si elevi il luogo dove si terrà il Santissimo Sacramento et gli si faccia dipingere qualche pittura.

Si levino questi legni dove si ponerà li ceri per far che si possa comodare il tabernacolo.

Si piglino i vasi delli olij santi secondo la forma da qui a Pasqua che viene, altrimenti non si danno gli olij.

Si faccia biancare la chiesa dove non è dipinta.

Sfiro Betaci che qual ora sono statti sindaci habbino da qui a San Martino prossimo da raccogliere tutti li crediti di detta Chiesa sotto pena di pagar del suo.

Tutti i debitori che non avranno pagato in detto termine cascano ne la pena di un quarto di più del debito e i sindaci li faccino chiamare davanti al reverendo Vicario Foraneo che procederà contro di loro alla condenazione.

Si faccia fare una bussola con sopra due chiavi, una de li quali sia appresso al curato, et l'altra appresso de li sindaci, nella quale si mettano tutti denari et non si aprirà senza licenza del reverendo Vicario Foraneo.

Non si faccia spesa alcuna per la chiesa dalli sindaci et altri senza licenza del curato.

Non si contino più per l'avvenire le elemosine della chiesa senza l'intervento del parroco.

Georgio de Lera sotto pena della privazione ad ingresso della chiesa habbia pagato di qui a San Martino tutto il vino che doveva al curato per aver goduto una vigna della chiesa e così detto curato si è contentato di donarlo alla chiesa per il passato e per l'avvenire habbi a pagare ogni anno sin che si passara in contrario, e questo a contare di stare 2 ogni anno; et il curato insieme con gli sindaci faccino diligentemente sapere per quanto tempo non ha pagato detto vino. Si faccia fare un confessionale.

Il vaso d'acqua santa quale è di fuori, si riponga in chiesa a mano destra.

Si provveda d'un tabernacolo per portare il Santissimo Sacramento in processione.

Che si faccia comodare il sagrato a mano destra della chiesa, perché si possa andare facilmente e senza pericolo con il Santissimo Sacramento in processione.

Si elevi da terra la pisina (la vasca del battistero Ndr) et si serra con la sua chiave.

Si faccia il coperto del battistero in modo piramidale.

Il battistero si comodi perché sia levato dal pavimento della chiesa almeno un grado (gradino ndr).

Si faccia attorno al battistero una ferata di ferro (sic) perché niuno non si possa accostare.

Che il curato in termine di due mesi faccia riconoscere per instrumento tutti li fitavoli della chiesa come di altri legati et ne dia copia al reverendo Vicario foraneo.

(In Archivio Spirituale sez. X, Pievi lacuali, Vol. VI)

Document 4. Pastoral visit report, 1649, Card. Cesare Monti (summary)

Visita pastorale della Pieve di Dervio nel 1649

Si rinnovi in ogni modo la consuetudine tralasciata da molti anni in qua di fare la processione del Santissimo Sacramento ogni terza domenica del mese. Perciò gli uomini della cura facciano subito accomodare la strada, per la quale si va al cimitero, che ora è diruppata, acciò si possa comodamente, et senza pericolo passare con il Santissimo Sacramento, et per la processione avverta il signor curato, che sia accompagnata con quella quantità di lumi maggiore, che sia possibile, et in avvenire procurino li huomini di mantenere continuamente l'olio della lampada affinché si possa nel tabernacolo custodire permanentemente il Santissimo Sacramento, qual in ora non si conserva se non in certi tempi dell'anno per il mancamento dell'olio.

La chiavetta del tabernacolo si faccia quanto prima indorare.

Il signor curato avvisi subito dall'altare li huomini della cura che riportino senza replica alcuna nella sacristia il credenzone, che già levarono per riporlo nell'Oratorio della Madonna acciò ivi si possano conservare li paramenti, che ora si sono lasciati sopra una tavola con molta indecenza et avverti di huomini renitenti, ne dia subito parte al vicario foraneo acciò si possano astreggere con rigore.

Alla finestra della medesima sacristia si faccia quanto prima il telaro et impannata di tela.

Cosa troppo irriverente che li cadaveri si portino alla sepoltura senza il panno nero, pertanto il curato avvisi subito il popolo, che lo provvedino con ogni diligenza alla forma delli ordini a spese di detti huomini.

Della chiesa

Alla porta della chiesa che da molto tempo in qua abbia inteso restare aperta tanto di notte come di giorno per non esservi la chiave con la quale si possa serrare; non solo si provveda subito di detta chiave, ma si faccia fare un'altra porta di nuovo di noce lavorata da perito maestro in forma quadrata nella parte superiore alla forma dei nostri ordini, e non altrimenti ornata come ora si trova.

Dell'Oratorio della Madonna

Fu già dalla parrocchiale levato il battistero e riportato in questo Oratorio col pretesto che anche la cura medesima si dovesse trasferire in detto oratorio, ma perché la povertà dei parrocchiani non si sono mai proviste le cose ordinate per la traslazione di essa cura e restando ivi il battistero senza sacrario alcuno, il signor curato avvisò il suo popolo che o riportino detto battistero nella chiesa parrocchiale nel loco dove prima si ritrovava ovvero facciano fare in detto Oratorio il sacrario nel loco assegnatoli, altrimenti si procederà all'interdetto del medesimo battistero alla forma delli ordini.

Document 5. Pastoral visit report, 1746, Card. Giuseppe Pozzobonelli (summary)

Trascrizione del documento: 1746, Atti, decreti e documenti annessi della visita del Card. Giuseppe Pozzobonelli alle pievi di Perledo, Bellano, Dervio, Varenna, volume calligrafico con 906 pagine, con indici

Della chiesa parrocchiale dedicata alla B.M.V. Lauretiane e a San Giorgio.

Narra la separazione da Dervio nel 1506; parla dell'oratorio scto Georgio, Nel 1677 si decide di costruire un'altra chiesa più grande e più vicina alle abitazioni, poi descrive la nuova chiesa (quella poi rifatta nell'800) Descrive la struttura architettonica. Parla delle immagini, e del pavimento sotto il quale non sono visibili le sepolture poi parla delle suppellettili in sacrestia.

Nota dei beni stabili, che si posseggono, e redditi che si esigono di presente dalla fabbricera della Chiesa parrocchiale di Dorio

1. Base di casa con piante di noci e un prato sotto Mandonico: confina coi beni della cura, Andrea Garolino et acquistati per un legato dell'anno 1616, come al libro parrocchiale segnato. Al folio 176, e descritti al catasto del comune alla partita della fabbrica Lib. Sgn. B. fol. 27.
2. Selva sita al Pannico confina da levante col Fisico Andreani, da sera, et mezzodi con gli heredi Andriani - dalla Peschiera. Non trovo come, e quando siasi acquistata, ma è descritta al catasto suddetto, benché si siano da quel tempo in qua mutate le coerenze, nel citato libro Seg. B folio 87 - 1679 -
3. Selva detta - alla Pila -; confina da levante coi predetto heredi Andreani - Lucchesi - da sera col Signor Tommaso Calvi, e da mezzodi con Heredi andreani - della peschiera - Neppure di questa trovo l'acquisto, sebben vedasi menzionata nel predetto Libro B, folio 87, 1679.
4. Selva detta - nella Bruga di Cassina - confina a levante con la strada, da sera con Giovanni Lazzaro, da mezzodi con Domenico Garolino, da settentrione con la valle. Registrata al Catastro come sopra, ed al predetto libro B, folio 87 - 1679 -
5. Selva e Bosco, detti - A Ronco - confina da due colla parrocchiale di Corenno, e da due con quella di

Tremenico, registrata nel suddetto catastro in tutto come sopra.

6. *Selva sita - in Vindonico -, confina da levante Andrea Garolino, da sera li heredi Anganuzzi, da mezzodi Battista Dell'Era, da settentrione questa medesima parrocchiale. Acquistata per legato di Domenmico Dell'Era fatto nell'anno 1672, di cui v'è pateat (evidenza n.d.t.) nell'archivio Seg. N 16.*
7. *Selva nei monti, detta - La Crotta -, confina con la Valle, da sera Antonio Lauro, e da settentrione il suddetto Battista dell'Era. Acquistata l'anno 1693 / insieme con metà di stalla, che in oggi però non si gode / come da instrumento pure in archivio Segn. N. 22.*
8. *Altra selva detta - a Ronco - confina coi beni della parte di Corenno, e di Carlo Garolino - Non trovasi d'essa alcuna antica notizia.*
9. *Bosco dove si dice - Sul Dosso - confina da mattina con Giacomo Lauro, da sera con Giorgio Garolino, e da mezzodi con Niccola pettazzi, e da settentrione con Pietro Bettega.*
10. *Sito con prata, e pergola annesso al cimitero, e piazza dinanzi alla chiesa parrocchiale confinano da sera la strada, e da mezzodi da Battista dell'Era = altre volte fu di magna estensione, sendo Campo d'oliva come al Catastro suddetto, ma ne venne una parte occupata dal cimitero.*
11. *Vigna detta - alla Scaletta, o Baita - confinano da mattino li heredi Andriani della Peschiera, da sera la prepositurale di Dervio, mezzodi Giogio Dell'Era figlio di un certo Pietro, e da settentrione Carlo Garolino. Non trovo antica memoria, ma è registrato nel sovracitato Catastro Libro B. al folio 78.*
12. *Campo et vigna siti dove si dice - a Pràa - confinano da mattina Antonio Dell'Era, e da tre parti il signor fisico Girolamo Andreani; ed è fatto il registro d'essi al suddetto libro B. folio 37, e folio 48, degli anni 1687 e 1701.*
13. *Fitto annuo di Lire quindici Imperiali, che pagasi dalla comunità di Dorio per un capitale di lire trecento, danaro di questa Fabbrica, come se ne fa menzione a Libro A. ultimo folio, e libri Segn. B. folio 85.*
14. *Suole parimenti la stessa comunità pagare ogni anno alla detta fabbrica lire 12 per la provvisone del Cereo Pasquale, come si vede annotato nel predetto libro B. al folio 85.*
15. *Finalmente suole questa comunità pagare alla medesima Fabbrica lire dieci annue per provvederne tanta cera da valersene in fare l'esposizione dell'Augustissimo Sacramento nell'ottava del Corpus Domini, come da succennato Libro segn. B. folio 49. Reddita nobis hujuscemodi administrationis ratione Carolus dell'Era, simul et Andreas pariter dell'Era fabricae syndaci reperti sun creditores libras centum et nonaginta, solido quinque; ac den. sex (190.5.6) et fuerunt in officio confirmati.*

Beni stabili

Posseduti dal reverendo Curato di Dorio, li frutti dei quali non si devono computare per formare la congrua mercede delle £. 365, convenuta, mentre sono sottoposti ad obbligo di Messe, ed altri suffragi per ragione di Legati.

1. *Livello di lire quattro e mezza, che si paga da Giorgio figlio di un certo Maino dell'Era di Doro, sottoposto ad obbligo di Messe, come si ha da libri parrocchiali, benché non se ne trovi la specifica fondazione.*

Vedesi questa partita registrata nel sovra mentovato Libro della fabbrica Segn. A. folio 89.

2. Per il livello di lire nove che altre volte pagavano gli eredi di Martino Donatello , di preferente sono così ripartite, cioè lire tre si pagano da Baldassare Bettega figlio di un certo Gio. di Torchiedo, e lire sei restano fissate sopra una vigna sita in questo territorio, dove si dice - nella Vigna - con una stalla, ed orto annessi, entrovì la cos' detta - Avigera - il tutto di detta fabbrica coperto di piode; e di più sopra detta vigna vi restano fissate altre lire sette e mezza, che altre volte si pagavano dagli eredi del certo Giambatta Petazzo per l'interesse d'un capitale di lire centoventicinque, che dovevano , e che fu in seguito restituito: alla qual vigna fanno coerenza li Beni Parrocchiali di questa Chiesa, mediante il così detto - Valesello - e il presentaneo Reverendo parroco assegnante, gli eredi del signor Gaetano Barelli, e la valle; come apapre dell'istrumento rogato dal Notaro Sig. Francesco Magni di Dervio nel giorno 6 maggio 1738 con altra riserva a favore d'esso Reverendo Signor Curato che si asserisce assegnante, come detto Instrumento ... e di più. Basi con piante di noci sino dove si dice - a Torchiè - sottoposti all'obbligo di tante messe per legato del fu Domenico Dell'Era, detto - Majno - fatto sotto il giorno 21 luglio dell'anno 1598.
3. Vigna in questo territorio sito dove si dice - nella Valle d'Asini -. Campo e vigna in detto territorio, sito dove si dice - nei Ronchi -; vigna sita come sopra, dove si dice - in cima a Ronchi - detta - Ronchetta -; campo et vigna come sopra sito dove si dice - nel Giroldo - , o Maggianica -; selva sita come sopra, dove si dice - nei Pozzalli -. Quali fondi sono tutti sottoposti all'obbligo perpetuo d'una messa in ciascuna settimana, cioè in giorno di Sabato, il pio legato instruito dal fu Reverendo Prete Signor Niccola Pettazzi li 17 febbraio 1625.
4. Prato con piante di noci, e castani, sito dove si dice - in Cassina - territorio suddetto sottoposto all'obbligo / sta scritto così / di tanto Bene a ragione della Cavata, per legato del fu Cristoforo Chittò fatto sotto il giorno 18 Ottobre detto anno 1615.
5. Vigna in questo territorio, dove si dice - a Perlo - sottoposta come sopra all'obbligo di Messe, ed altro bene a ragione della Cavata per legato della fu Elisabetta Bilanzina Dell'Era fatto l'anno 1626.
6. Vigna sita come sopra dove si dice - Sotto le pergole - ove altre volte si aveva l'orto della prima vasa parrocchiale, sottoposta all'obbligo si dice solamente - di tanto bene - a ragione dell'annuale cavata per legato di Antonio Chittò fatto l'anno 1623, sotto il giorno 14 d'aprile.
7. Campo e limida sito limida sito dove si dice - sopra Mandonico - sottoposto parimenti a tanto bene, come sopra, a ragione della cavata, per legato di Pietro Majnino fatto l'anno 1629 il 15 novembre (?).
8. Basi di case con pianta di noce, sito come sopra, dove si dice - in Mandonico -; prato e orto con viti, sito dove si dice - sopra Mandonico -, selva e bosco sito come sopra, dove si dice - in Tralvai -. bosco sito dove si dice - in Paracalà - e Caleggio con pianta di noce sito dove si dice - Nei Monti -. Quali fondi tutti insieme sono per l'intera loro annua Cavata sottoposti a tante Messe, ed altro bene per legato di Donato Bosascha, o sia Bettega, fatto li 27 Novembre dell'anno 1625.
9. Selva sita dove si dice - in Urigada - sottoposta in perpetuo ad una messa annua per legato di Catterina Pettazzi fatto nel giorno 22 novembre dell'anno 1707.

10. *Vigna sita nel luovo, dove si dice - Sotto la Chiesa di San Giorgio - con obbligo di tante messe, o a dire più vero - di tanto bene -, come infatti sta scritto, per legato di Giacomo Binanzino del giorno 24 d'aprile 1623, e d'Antonio Chittò del giorno 24 Aprile del medesimo anno.*
11. *Finalmente v'è l'obbligo di celebrarsi ogni anno Messe dieci per legato del fu Pietro Garolino istituito nel predetto anno 1623, e successivamente imposto sopra la nuova casa parrocchiale. Recognito per nos codici, quo legatori fasis (?) factio recensetur, ita subscripsimus, vidimus et venerabilis Parochus missas in posterum celebranda juxta Decretum generale mox promulgandum adnotabit.*
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I. Nota dei beni, e fitti e livelli, che da libri, e scritture che sono in casa, o nell'archivio plebano che si citeranno, si cava appartenessero alla Venerabile fabbrica di San Giorgio, e della Beata Vergine Maria di Dorio, e che al presente non si posseggono da essa; o si posseggono dal curato

1. *Vigna detta - Nelli Poggioli - territorio di Dervio; come da instrumento d'investita dell'anno 1557, qual è nell'archivio Segn. B. ed altra scrittura Segn. 23, pure nell'archivio, ed altri instrumento del 1571 citato nel vecchio libro Segn. A e nel Segn. C. folio 170. - goduta dal curato.*
2. *Vigna e campo sito dove si dice - Sopra Moada - item paga taglie.*
3. *Vigna et campo sito parmenti dove sopra; item paga taglie.*
4. *Vigna et campo sito pure dove sopra. dove si dice - Sotto la Strada - e paga taglie.*
5. *Altra vigna sita ancora - a Moada - come da instrumento d'investita dell'anno 1597 Segn. N. 31 (?) ed altro di compra del 1614, quali sono nell'archivio goduti dal curato.*
6. *Selva sita, dove si dice - a Cosei - item paga taglie.*
7. *Selva sita dove si dice - a Terra Rossa - come da instrumento di compra dell'anno 1617. Qual è in casa e da instrumenti pure di compra degli anni 1618 e 1629 nell'archivio. Goduta da curati; e paga taglie.*
8. *Prato, Campo e selva e vigna sito - In Cassina - come da instrumenti di compra del 1595, e d'istrumenti del 1597, quali sono in archivio. Goduti da curati; ma non vi è adesso la vigna, che v'era allora. Pagano taglie.*
9. *Selva sita nei Monti dove si dice - al Lazoto - item altra pure nei Monti, come da instrumento di compra del 1595, ed d'istrumento del 1597, quali sono pure in archivio. /Forse sono le due che si godono da Curati, non ne godendo ivi la fabbrica.*
10. *Selva sita dove si dice - Nei Pozzalli - del valore di lire quarantacinque, come da instrumento di compra del 1617, qual è in casa - Forse si gode assieme alle altre in altro sito da curati.*
11. *Selva e bosco sito - a Sottosasso - item.*
12. *Selva e bosco sito - a Varcà - come da instrumento d'investita del 1597, qual è nell'archivio Segn. N. 11. Quello di Sotto Sasso è forse quello, che si godeva da curati, e da medesimi fu cambiato /come dicono/ con parte del liuogo detto - Alla Pila -. Quel di Varcà si gode da curati, se pur è quello.*

13. Campo et vigna sito dove si dice - a Riva - come da instrumento di compra del 1602, ed altro del 1618, quali sono in archivio. Forse è quel Pradello, che ora si gode da curati, dove si dice - Alla Piazza - poichè ivi si dice anche - A Riva -; e li vecchi dicono che altre volte fosse campo - paga taglie.
14. Campo et vigna sita dove si dice - Al Pozzallo - come da Libro A. fol 177. Forse si gode da curati assieme ad altro in altro sito - paga taglie -.
15. Prato e selva nei Monti, dove si dice - a Marché -, come da instrumento di compra del 1620, qual è nell'archivio Segn. N. 7, e N. 11. - Non se ne trova conto.
16. Casa sita dove si dice - in Salmogno -, come da Instrumento di compra del 1629, qual è nell'Archivio Segn. 14. Dicono che di quelle rovine di case contigue in oggi alla casa detta - Dei Cipriani - v'è porzione spettante alla Chiesa.
17. Ronco avidato, detto - il Ronchetto - sopra Salmogno -, come da instrumento di compra del 1602, qual è nell'archivio Segn. N. 20. Non se ne trova conto.
18. Campo detto - in Bontadina di sotto - in Vigna et bruga - in Bontadina di Sopra e campo, prato e vigna detti - in Cassina -, come da Instrumento di compra del 1595, in archivio Segn. N. 16. Non v'è più questa denominazione - di Bontadina - e forse sono quelli di Moadà, sopra descritti dal N. 2 al N. 5, goduti dai curati.
19. Ronchetto detto - del Sole - come da instrumento di compra del 1623, nell'archivio Segn. N. 17 ed al libro della Chiesa Segn B. fol. 37 - Non si trova questo fondo.
20. Campo, vigna et selva detti - La Brugazza -, come da instrumento di compra nell'archivio Segn. N. 17, - in oggi non si gode -.
21. Vigna sita dove si dice - Nei Ronchi - Vigna sita dove sopra dicesi - Al Sole - come da instrumento di compra del 1613, in archivio Segn. N. 9 - Ora non si trovano -.
22. Vigna dove si dice - Alla Piazza del del Barcai - come dal libro dell'estimo alla partita della fabbrica suddetta. Se forse non il bosco sito - a Varcà - già descritto sopra al N. 12; sendo questa pezza infatti bosco, e non vigna, come come per inavvertenza s'è qui scritto. Non sembra però verosimile questo sbaglio; mentre il medesimo bosco a Varca si godeva dal parroco in quel tempo stesso che viveva il Curato Capra, che ha descritto nel libro succinto dell'estimo la presente partita in testa della fabbrica.
23. Metà d'una stalla, cioè quella verso il lago sita nei monti, dove si dice - a perdonasco -; come da instrumento del 1693, e qual è in casa. Era goduto da Antonio Lauro, detto - Morettino - e dicono che avendo Simon Lauro, da cui si acquistò ceduta alla chiesa maggior pezza della selva alla Grotta, li sindaci gli rilasciassero la stalla: ed è verosimile, perché la sola selva vale quel prezzo in circa, che si pagò compresavi la stalla; ma non fanno esibire scritte, e solo parole.
24. Livello, o sia fitto di lire due e mezza da gli eredi di Sfirio Bettiga di Torciè; come da instrumento di compra del 1592, in archivio Segn. N. 5 - goduto dai curati -.
25. Livello o fitto di stara due castagne da eredi di un certo Gio. Giacomo dell'Era del Pannico, sito sopra Selve dette pure - al Pannico - come da instrumento in casa Segn. N. 14, e Libro A. della Chiesa folio 7. Non trovo chi siano questi eredi di Gio Giacomo dal Panico. Se forse non fossero state cedute le me-

desime selve; poiché in questo sito la Chiesa ne possiede, e si accordano in alcune coerenze con le sottoposte al livello. Può anche essere, che sia quel livello di stara due castagne, che si paga al curato dalli Maini, li quali sono d'essa famiglia dell'Era, e nei loro ascendenti per lo più hanno avuto un Giacomo; e possedevano selve, che ora hanno vendute in questo sito con simili coerenze.

26. Livello di uno stajo di castagne fondato sopra un casello sito - in Salmogno, da Bbernardino Carolino quendam Lorenzo; come da instrumento del 1602, in casa Segn. N. 3. - Di questo livello non si trova conto.
27. Livello d'uno stajo di segale fondato da Gio maria Bettega figlio di un certo Ambrogio sopra Campo, e vigna sita dove si dice - Sotto le Case -; come da Instrumento del 1602, in casa Segn. N. 2. Né si possiede il fondo, ne si esigge il suddetto Livello.
28. Molti fitti che sparsim da Libri Segn. A. e B. della Fabbrica si raccoglie che si esiggevano, ed ora non si esigono. Li beni stabili della Giacomina Bettega si lasciarono dalla stessa in eredità della Fabbrica, come da suo testamento del 1671 Segn. N. 17 nell'archivio: ma in un instrumento del 1693 qual è in casa Sign. N. 22, v'è narrativa, che di questi beni - solutis solvendis - pervenisse alla Fabbrica solamente la casa in Mandonico, la quale in seguito rimase abbruciata. Crederci che dei suddetti beni, quelli che ora si godono da curati, e sopra li quali non si pagano taglie, fossero anticamente della chiesa, e però assegnati al Curato nella erezione della cura, ma quelli sopra dei quali si pagano taglie, come nuovi acquisti della chiesa, non possono essere stati assegnati come sopra ai curati.

II. Beni stabili posseduti dal Reverendo Curato di Dorio

Li frutti dei quali devono computarsi per formare la congrua mercede di Lire 365 annue ad esso accordate ... mentre non si ha prova sufficiente, che siano sottoposti ad obbligo di messe o d'altri suffragi per causa di legati.

1. Vigna sita in nel territorio di Dervio, dove si dice - nei Poggioli - alla quale confinano da una parte li beni dell'oratorio di San Leonardo, da un'altra quelli dell'Oratorio di San Gregorio, dall'altra la strada, e li beni del venerando Collegio Gallio di Como. Se ne ricavano il fitto lire dodici.
2. Vigna sita in questo territorio di Corenno, dove si dice - Alla Poggiola - alla quale confinano la strada, ed il signor Conte Girolamo Andreani, all'estimo stimata ...
3. Una pergola sotto la chiesa di San Giorgio, che altre volte era l'orto parrocchiale, alla quale confinano Ambrogio Dell'Era, e gli eredi di Pajno Dell'Era.
4. Selva sita sopra il cimitero a San Giorgio, unitovi un campo, o sia denominata - Nei Pozzalli - e ciò solamente per una porzione; mentre altra porzione è sottoposta al legatodella Messa del Sabato; alla quale confinano il suddetto cimitero, gli eredi di Paino dell'Era, e Niccola Pettazzi.
5. Bosco sito in questo territorio di Doro, detto - della Pizzalla - al quale confinano il Comune di Vestreno, e heredi Andriani detti Lucchesi.
6. Selvetta nel suddetto territorio sito - al Pannico - alla quale confinano li heredi Andriani della Peschiera,

e Gio. Calvi.

7. Vigna nel territorio denominato - Morana - cui confinano li suddetti heredi Andriani Lucchesi, e della Peschiera.
 8. Vigna detta come sopra, alla quale confinano la strada, beni della Cappellania di Santa Maria di Corenno, e gli heredi Andriani.
 9. Bruga nel territorio suddetto dove si dice - Al pozzo di Torchiè. Alla quale confinano Gio. e Cesare Bettega.
 10. Selvetta nel territorio suddetto di Dorio sito sopra le case di Torché- alla quale confinano il sig. Fisico Andreani, e detta capellania di Corenno.
 11. Piazzolo al così detto - chiesolo {gisöö}di Torchiè - alla quale confinano ndetta capellania e la strada.
 12. Prato in questo territorio sito dove si dice - al moletto di Torchiè -, confinano la cappella suddetta, - Fisico Andriano, ed il lago.
 13. Campo, detto come sopra, confinano suddetto Fisico Andriano, il lago et li heredi Andriani della Peschiera - paga taglie -.
 14. Prato et bruga avidata, sita dove si dice - a Prà - confinano la strada e suddetto Fisico Andriano - Pagano taglie.
 15. Prato e vigna sito dove si dice - alla Pila - alla quale pezza di terra confinano il Carl'Antonio Andriano e Pietro Garolino. Se ne gode però dal curato solamente una parte, mentre l'altra parte è della Fabbrica.
 16. Bosco, detto - della Coldirola - al quale confinano la Cura di Corenno, et Andrea Garolino.
 17. Selva con Bosco sito dove si dice - nel Boggio - ai quali confinano Cesare Bettega, Gio Lauro, et la Valle - pagano tasse.
 18. Bosco detto - della Bore - al quale confinano Carlo Garolino, et la Valle- sopra dii cui si pagano taglie.
 19. Ronchetto avidato sito - sopra li Pozzalli - al quale confinano Gio Lauro e Pietro dell'Era.
 20. Vigna sita in - Campo della Valle - confinano il signor Carl'Antonio Andriani, la Scaletta, ed il signor Antonio Dell'Era.
 21. Piazzolo sito - nella valle dei Mulini -; condinano la valle, la cura di Tremenico, e Gio Lauro.
 22. Vigna sita - a Perlo - confinano il lago, la prepositura di Dervio, e Battista dell'Era - paga le taglie.
- Li frutti dei quali suddetti beni, eccettuate però le £. 12, che si cavano di fitto dalla sopranominata Vigna al N. 1. e dedotta, la spesa a lavorarli, e le taglie, che per alcuni d'essi si pagano, come sopra, rendono di netto un anno con l'altro lire novantadue dico £. 92.

La casa, che serve d'abitazione al curato, è bisognosa di riparazioni, e queste devono farsi a spese del popolo,

- primo perché la rendita di questo beneficio è tenuissima, com'è notorio; e
- secondo perché altre volte fu sempre riparata dal popolo, come da foglio, qual'è in casa Segn. N. 31, e lo confessano i medesimi parrochiani,
- terzo perché lo accenna un decreto del eminentissimo Signor Conte Federico,
- quarto, perché il popolo infatti ha compensato al curato l'obbligo delle 10 messe imposto sopra questa

casa per il pio legato di Pietro Garolino, come nella sudescritta Nota dei beni soggetti a legati N. 11 dal che s'argomenta, che il popolo si conosce nell'obbligo di mantenerla.

III. Inventario dei Beni Mobili consegnatemi dal mio antecessore Curato Magni, quali si dicono di questo Beneficio parte

1. Una botte da vino capace di brente 7 circa, con due cerchi di ferro in testa, mentre li altri due cerchi gli ho rilevati dal suddetto signor Curato antecessore, atteso che dice d'averli anch'esso comprati dagli eredi del fu signor Curato Pozzi, al quale è succeduto.
2. Una credenza vecchia in cucina con serratura.
3. Un asse in cucina attaccato al muro.
4. Una catena da fuoco.
5. Due brandenali (alari).
6. Una molletta da fuoco.
7. Una sidella di rame, con manico di ferro.
8. ed un credenzone in camera con serratura.

I Pag. 75 lbi

Ciascun focolare della comunità di Doro paga ripartitamente la somma di lire duecentocinquantanove, et soldi sei all'anno, e questo anno 1722, essendo le famiglie trentadue tocca a ciascuna famiglia Lire otto, soldi due, e centesimi tre: le quali lire 259.6, con altre lire centocinque, e soldi quattordici, che ricavansi dalle soprascritti beni, e livelli soggetti a legati * immo corrigendum - non soggetti a Legati - come dalla dichiarazione dei Reverendi Superiori dell'anno 1715 - * nihil prosequitur; sed calamo retentum intelligi debet constatam ex hisce duabus praedictam annuam summam £. 365 - Congrue nomine Parocho statutam.

II. Pag. 76 lbi

Gli straordinari /dice il parroco/ che sogliono darsi per funerali, Battesimi, e matrimoni, consistono,

1. Per un funerale d'infante sogliono darsi al Curato lire cinque; ed egli è obbligato mettervi la cera gestatoria, cioè la candela per se medesimo e quattro altre al feretro.
2. Per un funerale d'adulto si dà al curato la limosina di lire tre, e gli spetta tutta la cera gestatoria, e quando si fa il settimo si raddoppia l'emolumento e la cera.
3. Per un battesimo danno alcuni al curato un faccioletto, altri quindici soldi ed altri venti.
4. Per un matrimonio danno soldi trenta, ed alcuni anche un faccioletto.
5. Per il Passio raccoglie circa brente tre di vino (226,65 litri ndt), quando non tempesta.
6. Per una stessa cantata con annuale danno soldi trenta.
7. Per un Ufficio da morti, per devozione con quattro sacerdoti sogliono pagare al curato lire quattordici; ed il curato dà poi a quelli la limosna, e mette del suo la cera alla tomba.

Anima a Comunione (numero delle persone che fanno la comunione): 101

Quelli che solo si confessano con i bambini: 53

Totale degli abitanti: 154

De confraternitate SSmi. Sacramenti

Fra decreti fatti da S. Carlo nella sua personale visita l'anno 1568, quali si leggono in certo folio lacero in casa, Segn. N. 1 uno è che detto signor Cardinale ha eretto nella chiesa suddetta /di Doro/ la Scuola del Santissimo Sacramento con le indulgenze e li fratelli di detta scuola sono descritti al libro parrocchiale Segn B. foglio 135.

Altro decreto è, che gli uomini del luogo mantengomno a sue spese del continuo come hanno promesso al Sto. Arcivescovo di fare, la lampada accesa d'avanti al Santissimo Sacramento.

A questo decreto forse si mancava, perché dal signor Vicario Foraneo, fu fatto con simile decreto in un foglio Segn. N. 4

Al presente la lampada si mantiene accesa con li redditi e limosine della Fabbrica; se non che il sagrista, che ne ha cura, è pagato dal popolo.

De festis

Feste, oltre a quelle di precetto universale che il popolo di Dorio ha costume / o come esso dice/ Voto di ossevandi del quale pio costume io non trovo memoria alcuna nelle scritture della chiesa, se non come dirò.

Gennaio

a 2 ad onore, dicono, di S. Defendente,

a 7 e 8 ad honore, dicono, dei Santi Re Magi,

a 17 ad onore di S. Antonio Abate,

a 20 ad onore di San Vincenzo ed il parroco suole cantar messa, per la quale il popolo paga soldi trenta, di che v'è menzione al libro Segn. A della fabbrica folio 90 ed in altra nota dello stato della cura fatto l'anno 1703 folio 7 - si può cercare se la Messa debba applicarsi, del che non vedo chiaro obbligo -

Quesito respondetur, quod alio non documento (?) in Parochi aequae clarum exonus a Missa applicatione, indubie omnino eadem prestanda sit; cum Sanctorum cultus habeatur magis a substantia Sacri, quam praecise a modo, utrumque solemniter, ac tanta ulterius eleemosyna aud quaquamfortassis rependendo ab illam tradentibus, certe insuper consciis, quod nil ultra ipsimet parochi erogatur pro Misa de Requiem oblata in cantu, addito etiam, ut ajunt, Annuali, pro ut supra N. 6 inter conventa nomine functionum ex arbitrio.

Febbraio

A 5 - ad onore di Sta. Agata

Marzo

A 22 - giorno della consacrazione della Chiesa di San Giorgio; di che non trovo memoria, quando e da chi

sia stata consacrata.

Aprile

A 24 ad onore di san Giorgio titolare della cura, nel qual giorno il curato suole invitare a sue spese altri sacerdoti, di che non so, se vi sia certo obbligo.

A 25 per l'obbligo, che ha il curato d'andare processionalmente alla prepositurale di Dervio / per le Rogazioni maggiori/ suole il popolo la mattina fare festa.

Maggio

Nel secondo venerdì suole il popolo far festa ed era solito andare processionalmente alla chiesa di San Miro sopra Sorico, diocesi di Como, lontano dieci miglia, dove il parroco celebrava Messa; per la quale funzione il popolo pagava Lire due al Parroco. Di che si fa menzione nella nota suddetta dell'anno 1703, folio 10, e libro della Fabbrica Segn. A folio 90, dove si dice che il popolo paga soldi trenta. Doppo l'ultimo accordo o nota a Monsignor visitatore, io ho pensato di non essere obbligato, se il popolo non prometteva darmi quello stipendio, che da Reverendissimi Superiori fosse dichiarata; a che non acconsentendo il Popolo, io sono stato alla cura.

Giugno

Adi 11 - ad onore di San Barnaba.

A 13 - ad onore di Sto. Antonio da Padoa.

A 19 - ad onore dei Santi Gervasio e Protasio

Luglio

Adi 2 ad onore della Beatisima Vergine che visita Sta. Maria Elisabetta.

A 5 ad onore di Sta. Margarita.

Agosto

Adi 4. - ad onore San Domenico.

A 6 - ad onore di san Sisto

A 16 - ad onore di San Rocco

A 17 - ad onore, dicono li parochiani, di San Sfirio, ed era solito il popolo andare col parroco, che si diceva obbligato a ciò, all'oratorio di San Siro nella parrocchia di San Martino / di Mont'Introzzo/ lontano sette miglia asprissime; dove il parroco diceva messa, ed il popolo gli pagava la limosina di soldi quaranta; del qual obbligo si fa menzione nella sopra mentovata Nota dell'anno 1703 a folio 7, ed a folio 10.

Dopo del succennato ultimo accordo di cui resta intesa Monsignor Visitatore, io sono rimasto alla cura, per la medesima ragione, detta di sopra nel secondo venerdì di maggio, perché il popolo vuole fare il mercato dell'incomodo, e fatiche del suo pastore, e sembra che non si regoli in ciò colla dovuta equità e discrezione.

Pie consuetudini o voti

1. Dalla festa dell'Invenzione della Santa Croce [3 maggio, ndt] fino all'esaltazione della stessa [14 settembre], nei giorni di domenica prima della messa era solito il curato leggere la storia evangelica della

passione di Cristo Signore Nostro, vulgo - a dir il passio - ed a questo titolo ciascun focolare del luogo dava uno staro di vino [25 litri Ndt] come sita menzione al libro Segn A. della fabbrica totale 89, ed in tre fogli tra le scritture in casa di mano del mio immediato antecessore Segn. N. 32 e come confessano gli stessi parrochiani i quali seppero dire su primi giorni della mia venuta a questa residenza, che volevano dare il detto vino a che fece la Vicecura, perché aveva letto - il passio - aggiungendo che in occasione d'altra vacanza si portò via questo vino il vicecurato, che aveva detto - il Passio -

Ma venendo a Conti in vigore dell'ultimo accordo negavano francamente i Parrochiani, che detto vino si desse a titolo di Passio, e pretendono, che si computi coi frutti dei beni esenti da qualunque obbligo non precisamente parrocchiale, per formare la £. 365 - promesse.

Del quale parlare, e procedere restando io meravigliato, ne sapendo come poter conseguire il vino al titolo antico, ho detto, che quanto a me essi si tengano il suo vino, ed io lascerò di dire il Passio; e così ho fatto, ma che mai darò mano, che si computi nelle £. 365 contro l'accordo, qual è di computarvi solamente ciò, che non è sottoposto ad altro obbligo, non precisamente parrocchiale.

2. Dal di 24 giugno, festa di San Giovanni Battista fino al di 24 di agosto, festa di San Bartolomeo inclusive, era solito il parroco nei giorni di sabbato al doppio pranzo fare col popolo una processione per tutto il territorio: di cui non trovo menzione, se non nella suddetta Nota del 1703, fol. 7 e folio 10, ed in un foglio dei...(?) Segn. N. 32. - prima del predetto accordo i Parrochiani sempre della stessa lingua, dicevano lo stesso al mio immediato antecessore /che io era obbligato a queste processioni: e che per queste pagavano ciascun focolare il latte del bestiame d'un giorno, ed una carica di legna, il valore di questa pretensione ascenderà a £. 16 circa / ha fatto l'accordo, e venendo ai conti, siamo pssati alle medesime parole, che sopra del vino. E però io ho tralasciato di farle ne vedo, come possa io essere obbligato a queste funzioni dopo l'ultimo accordo senza del conveniente emolumento.

Se poi il popolo possa per risparmiare lo stipendio tralasciare e contentarsi, che non si facciano, mi rimetto: siccome la stessa questione può moversi sopra l'andare a S. Miro ed a San Siro.

B. Suole fin dall'anno 1674, come si ha dal libro parrocchiale Segn. B, fol. 172, e successivamente dopo, come da giornali delle stesse del mio immediato antecessore un parrochiano destinato a fare nelle feste ed in chiesa nel tempo della Messa, e fuori nelle case una cerca a fine di far cantare in ogni lunedì, o nel giorno più comodo una messa con annuale, ed assoluzione per il cimiterio, per li defunti del popolo; e mi dicono li parrochiani, che quando la cerca non basta per lo stipendio; supplisce la comunità; il qual caso non è ancora accaduto ai miei giorni. Quanto stipendio si trattenessero li miei antecessori io non l'ho potuto trovare scritto. Li parrochiani pretendono comandare essi in quella cerca, e darmi soldi venticinque.

Si rifletta, se ciò ia secondo li decreti nostri diocesani, /atteso anche l'incomodo di levarsi sul far del giorno / e conforme alla discrezione.

(Termina a pag. 675)

Document 6. Document related to the construction of Dorio new church, 1860

Calcolo del nuovo importo delle opere eseguite dall'appaltatore Todeschini Pietro per la demolizione e ricostruzione della Chiesa Parrocchiale di Dorio in base al contratto d'appalto 21 ottobre 1858, istituitosi dietro le rispettanze del Processo Verbale di collaudo in data 17 settembre 1860 ed antecedenti =.

A delucidazione delle opere calcolate col verbale suddetto si richiamano le nuove tavole di disegno A e B.

Qualità delle opere	Quantità		Analisi	Prezzo		Importo	
Opere e lavori d'apparecchio							
Le effettuate risultano nel conto separato delle opere eseguite in via economica =							
Muri di sostegno in asecco = con rientranza in calce, ampliamento della nuova piazza m.c.	547	67		£ 4		£ 2190	68
Parapetto effettuato complessivamente	19	40	10"	"		77	60
Riboccatura dei due lati del parapetto	92	02	"	20		19	40
Copertine di farizzata lavorate	27	72		2	50	69	30
Demolizioni							
Demolizione del tetto come al Progetto	174			30		51	
simile della rimanente porzione di Chiesa vecchia	80			30		24	
svalimento di pavimenti come al Progetto	93	07		17		15	41
simile della rimanente porzione	49			17		8	33
A levar i serramenti come al Progetto n.	6			2	80	16	80
Demolizione delle volte come al Progetto	101	20		40		40	48
Simile della rimanente porzione	50			40		20	
Demolizione dei muri come al Progetto c.	180	67		50		90	33
Simile della rimanente porzione	54			50		27	

Escavazioni							
Effettuato complessivamente sterri e riporti c.	2017	37	1 ^a		33	675	70
Selciato alla rampa di S.Giorgio rifatto l.	26	28			50	13	14
Cordonate rimesse alla stessa rampa l.	16	20			70	11	34
Muri di fondamento in calce							
Effettuati complessivamente m.c.	265	96	2 ^a	£ 6	20	1648	95
Muri fuori terra in calce							
Effettuati complessivamente	1018	89	3 ^a		6 90	7030	33
Tetto effettuato							
Armatura della cupola= quattro radici e quattro travi con ometto di legno di larice della porzione di cui 30 e 35 l.	67				4 50	301	50
Terzere intermedie di legno larice, di sezione cui 22	18				2 75	49	50
Due radici di rialzo per la sezione di cui 12	19				80	15	20
Regia e chiodi per l'unione dell'armatura 15 k	15				75	11	25
Armatura del rimanente tetto della Chiesa = due capriate di m 6.80 lunghezza col fondo di castano, ed ometto e brani simili n.	2				48	96	
Paradossi e diverse terzere di collegamento con colaco, cantonali e converse di larice e castano, tutti della porzione ragguagliata di cui 0.20, di differente lunghezza l.	140				2	280	
Radici all'ingiro del tetto della porzione di cui 14	140				70	98	
Canali all'ingiro di tutte le gronde di lamiera in tutto m 2.128 con quelli della sagrestia k.	409				1 10	449	90
Copertura del tetto con coppi di Balerna, con travetti e cottichette un po' minori di spessore delle prescritte essendo minori le lunghezze in tutto l.	296	43			3 35	993	04
Simile con piotte di Moltrasio e relative zanche di ferro, travetti e cottichette come sopra	152	41			4	609	64
Simile con piotte come sopra all'ingiro del campanile m.l.	4	80			£ 4 20	20	16
Muri di Penacchi e Volte in Mattoni							
Effettuate per Pennacchi, tazza e volte a bote della Chiesa c.	288	44	5		6 47	1866	10
Simili per le due sagrestie ed atri laterali	64	42			2 80	179	20

Chiavi e Coppi Chiavi							
Chiave di ferro messa alla tazza, due agli arconi capi chiavi, grappe di ferro d'unione dei legati di legno, chiodi da cantilo K.	245			75		183	75
Legati di Legno							
Legati di legno castano e rovere della sezione di cui 13 messi in opera complessivamente l.	147			70		102	90
Riboccatura e Stabilitura							
Riboccature e stabiliture effettuate esternamente in tutto	693	50	7°	50		346	60
Simili effettuate internamente in tutto	1067	14		70		747	
Attaccata di mattoni con riboccatura e stabilitura	35	50		1		35	50
Cornici interne							
Cornici d'imposta alla calotta di soli m 0.30 per m 0.30 di sporgenza, minore del prescritto l.	25	50		1	50	38	25
Simile d'imposta al perimetro e trabeazione m 0.45 coll'architrave di m 0.40, e sporgenza di m 0.40, minore del prescritto	74	70		2		149	40
Simile inferiori di m 0.20 per m 0.05 sporgenza	25	25		1		25	25
Capitelli Bramanteschi in Stucco							
Alle otto principali lesene capitelli n.	8			11	25	90	
Alle lesene d'angolo capitelli quanti de sudd.	8			2	25	18	
Pel trasporto posizione in opera e serramenta						16	
Per maggior finimento e spostato delle lesene interne						15	
Cornici esterne con lastre di Moltrasio e trabeazioni di finimento							
Cornice a due lati della Chiesa, facciata col frontone e lati trasversali col giro del coro coll'architrave m 0.60 per m 0.65 m.l.	87	50		3	20	280	
La prescritta era col frontalino di vivo e col canale di lamiera compreso							
Simile all'ingiro da due lati del campanile con investitura nel muro vecchio l.	7	50		3	70	27	75
Simile ai due lati delle sagrestie m 0.20 per m 0.25	19	50		1	50	29	25

Capitelli in muratura alla facciata						
Alle quattro lesene di facciata capitelli toscani di m 0.45 altezza con tondino ed inco... e larghezza m 1.20 colle rientranze d'angolo n.	4			6 50		26
Per maggior lavoro di finimento delle lesene della facciate						10
Zoccoli di vivo						
Alle basi delle lesene interne ed in corrispondenza ai suddetti capitelli, zoccoli in pietra Saltrio come alle prescrizioni soli di m 0.75 colle risvolte, e m 0.35 altezza levigati	8			9 50		78
Simili agli angoli delle lesene corrispondenti come sopra	8			2		16
Esternamente alle lesene ed a tutto il basamento della porzione di facciata sporgente = lastroni di ghiandone lavorati a punta e di spessore m 0.20 m.l.	4 80			£ 13		62 40
Basi alle lesene d'ordine toscano con plinto, toro ed inco... di ghiandone l.	6 28			17		106 76
Trasporto e posizione in opera dei suddetti basamenti e basi in tutto						35
Gradini						
Per salire al Presbitero gradini di pietra saltrio come alle prescrizioni a lucido ma col sol tondino e di soli m 0.31 larghezza in tre ranghi in tutto l.	11 50			7 20		82 80
Gradino e soglia di molera alla Sagrestia di confratelli l.	5 20			2 75		14 30
Pavimenti						
Viale di lastre moltrasine lavorate e refilate con pezzi obbligati l.	42 77			4 30		183 91
Trasporto e posizione in opera delle dette lastre	42 77			40		17 11
Pavimento vecchio di Marmo nero e bianco riattato e posto in opera a parte del coro l.	18 20			80		14 49
Valore di cessione del suddetto pavimento	18 20			2 80		36 24
Pavimento di pianelloni come alle prescrizioni al resto della Chiesa e Sagrestia in tutto l.	161 21	8 ^a		3 05		491 69
Serramenti da finestra						
A due finestroni semicircolari del diametro di m 3.40 di fianco si sono messi in opera due serramenti d'assi larice di cui 0.50 a vetri, con baccheti di ferro e piombo, imbiancate a due mani n.	2			78		156

Reti di ferro esternamente con viti e bianca k.	30			1	35		40	50	
Scosci e davanzali di Moltrasio in due pezzi lavorati a punta n.	2					4		8	
Alle due finestre rettangole del coro di luce m 6.75 per m 1.40 riattati e posti in opera due serramenti usati con telaio in due antine a vetri con staggetta di legno, inverniciati n.	2			£	10		20		
Due ferriate usate con bianca k.	30					80		24	
Due reti di ferro nuove con bianca	9			1	35		12	15	
Due scosci di granito ghiandone lavorati a fili in quadro n.	2			3	75		7	50	
Alle finestre rettangole delle Sagrestie di luce m 0.90 per m 1.55 =									
Serramenti con telaio in due antine a vetri di larice colla spagnoletta e ferramenta imbiancati	3					40		120	
Tre ferriate con telaio come sopra del prezzo di k.	135					1		135	
Tre reti di ferro come sopra del prezzo di	18			1	35		24	30	
Scosci di granito e ghiandone e.s. n.	3			3	75		11	25	
Serramenti di Porta									
Alle tre porte di luce m 0.95 per m 2.20 delle Sagrestie si son poste in opera tre serramenti di noce fodornate in specchia come alle prescrizioni	3		14 ^a			75	10	225	30
Al campanile e ripostiglio delle pilastrate si sono poste in opera portine a raso muro in un anta di luce m 0.85 per m 2.1, di specchia con reggia e viti serratura e chiave da una parte inverniciati e dall'altra stabiliti	4					27		108	
Alla porta laterale d'ingresso di luce m 3.30 per m 1.72 un serramento in due ante d'.... specchia, doppia serratura, ramponi, inverniciati da una parte	1					50		50	
Alla porta grande di luce m 3.30 per 1.72 serramento in due ante con fusto di pecchia e zoccolo di larice, guide e fodere simili, serratura e ... con manettone, due ramponi e inverniciata n.	1					£	95	95	
contorni di vivo di S.Fedelino alla porta laterale suddetto lavorato in quadro colla soglia m.l.	10	25				5		51	25
Altro contorno di vivo alla porta principale suddetta = di serizzo, lavorato con cappello a sagoma di provenienza della Vecchia porta riattamento e posizione in opera da scalpellino	9					3		27	

" muratore	4	1/2		2	60	11	70
Zoccoli di ghiandone alle spalle, in nuovo lavorati a dado n.	2			3	50	7	
mezzaluna suddette alla porta principale con serramento semicircolare a raggi di legno, telaio e raggi d'assoni larice colla ferramenta opportuna di diametro di m 2.40 per 1.30 di raggio	1			72		72	
Rete di ferro corrispondente seggia e viti in quattro pezzi k.	12			1	35	11	70
Scopo di moltrasio in due pezzi come i suddetti m.c.	2	60		4	50	7	
Tubi di latta e cotto							
Tubi di lata in opera pel scarico delle pluviali del diametro di m 0.08 come alle prescrizioni l.	38			2	30	87	40
Simili di cotto come alle prescrizioni	24			1	50	36	
Balastrata							
Balastrata di pietra Saltrio levigata , nero e bigia come alle prescrizioni e sagome in opera m.l.	4	35		£	50	217	50
Bianco e tinte							
Alle pareti interne come alla stabilitura ml 1067.14							
Alla facciata " <u>123.50</u>							
ml 1190.66	1190	64		10		119	06
Spoglio da dedursi							
Come alle prescrizioni di perizia già calcolate complessivamente in				£	1,472	72	
a cui si aggiunge il ricavato dalla demolizione della rimanente porzione di Chiesa =						£	21,970
Per il legname del tetto con capriata e terzere	90						44
Per piotte del tetto m.l. 100	54						
Per parti di provenienza da muri e volti met.cubi 40	92						
Per parti da muri a secco esterni per maggior ampliamento della piazza m.c. 40	96						
	£	332	=	332		1,804	72
				£	1,804	72	£
						20,165	72
Bellano li 30 Settembre 1860							
Ing. Pietro Giglio							

Document 7. Main land-taxpayers list, 1893

Elenco maggiori contribuenti all'imposta fondiaria per l'anno 1893

N.	Cognome, nome e paternità del contribuente	Estimo [£]	Quote	
1	Sormani conte Lorenzo fu conte A.	723.66	664	1
2	Comune di Vestreno	363.08	334	82
3	Comune di Sueglio	349.35	322	17
4	Comune di Introzzo	303.09	280	28
5	Società Ferroviaria meridionale	569.33	114	46
6	Andreani Carlo fu Angelo	113.63	104	78
7	Prebenda parrocchiale di Dervio	94.67	87	15
8	Prebenda parrocchiale di Dorio	72.13	66	52
9	Dell'Era Maria fu Tomaso	68.92	63	58
10	Bettega Serafino fu Tomaso	65.61	61	1
11	Bettega cesare fu Carlo	64.24	59	24
12	Petazzi Giovanni fu Giuseppe	61.88	57	5
13	Prebenda Parrocchiale di Corenno	56.23	51	85
14	Orio Giuseppe fu Giuseppe	50.77	45	28
15	Dell'Era Margherita di Antonio	40.72	37	56

Dorio, dall'Ufficio Municipale li 1893

Il Sindaco
Cargasacchi

(Dall'Archivio Comunale di Dorio)

Document 8. Pastoral visit report, 1911, Card. Andrea Ferrari (summary)

Visita pastorale del Card. Andrea Ferrari effettuata 9 – 10 maggio 1911

Sintesi della relazione.

A Dorio sono presenti le seguenti confraternite: la confraternita del SS. Sacramento, fondazione molto antica: è composta da 30 uomini e 90 donne. Poi ci sono associazione dei Luigini fondata nel 1904 con quaranta ragazzi e le Figlie di Maria fondate nel 1904 con 60 ragazze. C'è pure la confraternita dei Terziari fondata nel 1904 con 4 uomini e 60 donne, quella delle Madri cristiane fondata nel 1906 con 70 iscritte, la Pia Unione Sacro Cuore fondata nel 1910 con 200 persone. Infine vi è la confraternita della Beata Vergine del Carmelo con 200 iscritti.

Rispetto al ballo si afferma che in paese non si balla: ma si va altrove specie specialmente vanno le maestranze forestiera. A questa maestranza, avverte il curato, si concede troppa libertà con infinito danno morale di tutta la gioventù. Si indica come gravi peccati presenti nella comunità la maldicenza soprattutto contro la religione e turpiloquio tra gli uomini. Il curato annota che ci sono moltissime discordie tra le famiglie per un nonnulla!

Riguardo alle superstiziose si registra che in paese vi è perfino una strega che fa il gioco delle carte. Infine si rende noto che in paese c'è un socialista spacciatore di giornali. In occasione delle elezioni portò un socialista ascoltato e applaudito anche da qualche donna. Si parla del circolo vinicolo neutro. Il socialista vi spaccia i suoi giornali e si rifiutano i buoni giornali anche gratuiti. Tra la stampa cattiva che circola in paese si menziona La Provincia di Como, il Lavorator comasco, il Seme, l'Avanti. "Un signore, vecchio, priore redarguì perfino il parroco perché combatte la cattiva stampa. Il parroco diffonde libri. Vera biblioteca cattolica popolare non v'è, sarebbe necessaria". Il curato sottolinea che la cancrena di Dorio è la stampa cattiva.

Le donne sono tutte operaie gli uomini tutti o quasi muratori nel contempo sono contadini. Vi è il setificio Nava; con 120 operai, quasi tutti forestieri. Si annota ancora che circa 30 ragazze circa vanno a giornata a Bellano al cotonificio e 20 giovanetti e giovanotti a Dervio alla ferriera (Stabilimento Redaelli). C'è anche

una decina di emigranti permanenti, mentre è più consistente l'emigrazione temporanea: una settantina in Svizzera (Lago di Zurigo) "fra costoro" scrive il curato "alcune ragazze protette dai genitori sciagurati che pur vengono in chiesa. Ritornati in patria vengono a messa, poco a dottrina chi una volta chi due ai sacramenti. V'è alcuno che manca. Il parroco da fraterni avvertimenti a costoro ma questi "lo coprono di disprezzo o almeno d'indifferenza". Questa emigrazione, secondo il curato crea grande disordine in tutto il paese. Si annota pure che i padroni del setificio coi loro modi allontanano la maestranza e che vengono in paese le ballerine di San Colombano.

Le urgenze per il parroco sono le seguenti: allestire una biblioteca cattolica, fare un ammonimento serio contro la stampa cattiva, richiamare i genitori ai loro doveri, "togliere" il circolo vinicolo, fermare in paese almeno le ragazze. La festa di san Giorgio celebrarla nel giorno corrente, regolare i funerali per gli abusi. Le statue del Sacro Cuore, di San Francesco, di Santa Agnese, di San Giuseppe, di Maria Bambina furono acquistate dopo l'ultima visita pastorale.

(Trascrizione dalle Visite pastorali, Archivio Diocesano di Milano)

Document 9. Document related to Dervio, Dorio and Corenno Municipalities union, 1927

Documento dell'unione dei Comuni di Dervio, Dorio e Corenno

Per grazia di Dio e per volontà della nazione re d'Italia

In virtù dei poteri conferiti al Governo col Regio Decreto Legge 17 Marzo 1927, N° 383;

Sulla proposta del Capo del Governo, Primo Ministro Segretario di Stato e Ministro Segretario di Stato per gli Affari dell'Interno; abbiamo decretato e decretiamo:

I Comuni di DERVIO DORIO e CORENNO PLINIO, in Provincia di Como, sono riuniti in unico Comune denominato DERVIO, sede del Capoluogo.

Le condizioni di tale unione, ai sensi ed agli effetti dell'art. 118 della Legge Comunale e Provinciale, Testo Unico 4 Febbraio 1915 n° 148 saranno determinate dal Prefetto, sentita la Giunta Provinciale Amministrativa.

Ordiniamo che il presente decreto, munito del sigillo dello Stato, sia inserito nella raccolta ufficiale delle leggi e dei decreti del Regno d'Italia, mandando a chiunque spetti di osservarlo e di farlo osservare.

Dato a Roma, addì 11 Dicembre 1927 Anno VI

F° Vittorio Emanuele

C/F Mussolini

Per Copia Conforme

il Direttore capo divisione

F. Ottoviano

Commissario prefettizio di Dervio

(Dall'Archivio Comunale di Dorio)

Document 10. Dorio separation request from Dervio Municipality, 1945

Richiesta per la separazione del comune di Dorio da quello di Dervio

Alla Giunta provinciale Amministrativa, Prefettura di Como

Il Comitato di Liberazione del già comune di Dorio, ora frazione di Dervio, interprete della volontà ed in difesa degli interessi dell'intera popolazione fa presente:

Il comune di Dorio sito sulla sponda orientale del Lago di Como, composto da 500 abitanti, con una superficie di ettari 938, con scuole e palazzo comunale proprio in ottimo stato, in obbedienza al decreto fascista, in data 1927 fu annesso al comune di Dervio, distante da Dorio km. 3.

Irragionevole, dannosa fu l'annessione decretata dai legislatori fascisti per i danni e gli immani disagi che, in conseguenza, ne subì la popolazione di Dorio, la quale intuì subito quanto falso e illusorio fosse quel compenso di carattere generale cui alludeva il decreto di annessione, che, dolorosamente fu riconfermato, nonostante l'esposto per la revoca, immediatamente fatto pervenire alle infallibili alte gerarchie fasciste.

Sicuri che il presente Governo, riparerà i gravi danni che forzatamente, dovette subire, ponderando con giusto e passionato esame le ragioni nostre ci permettiamo esporle:

il già comune di Dorio, per la sua vasta superficie, per i suoi beni immobili, per la saggia sua amministrazione, poteva vantare una situazione finanziaria privilegiata, confermata dal bilancio in attivo anche per le sue proprietà che, amministrate da autorità tecniche e direttamente interessate, davano un reddito massimo, di modo che l'aliquota delle tasse cui era soggetta la popolazione era minima.

- 1. Tutti gli scolari senza discriminazione alcuna, erano riforniti gratuitamente del fabbisogno scolastico, testi compresi. Senza ricorrere a prestiti si poté provvedere alla costruzione dell'acquedotto. L'igiene curata e fatta osservare, nonostante la caratteristica prettamente rurale di questo piccolo centro, permise di evitare lamentele e, peggio, casi, anche sporadici, di malattie epidemiche.*
- 2. Avendo l'ufficio proprio e localmente era possibile agli abitanti il disbrigo dei più urgenti bisogni che l'autorità comunale evadeva in giornata, ogni volta se ne presentava la necessità.*

Senza poter far giustamente valere le nostre ragioni dovevamo subire
L'alienazione disastrosa delle risorse naturali, ordinata dal verbo podestarile per bisogni impellenti di carattere finanziario del Comune cui venivamo aggregati.
Il la perdita del capitale che gli amministratori del già comune di Dorio, avevano con previdente giudizio raggranellato per eventuali spese straordinarie e per calamità.
L'abbandono vergognoso in cui fummo lasciati pur sapendo che il maggior cespite d'entrata del Capoluogo di Dervio era dato dalla cenerentola frazione di Dorio, abbandono provato, fra l'altro della rete stradale di Dorio, resa impraticabile dal nubifragio del lontano 1934 che asportò ponti e rovinò strade; nessun provvedimento fu preso in merito, se non per ragioni di comodità, almeno per ragioni di buon senso onde evitare danni maggiori.
Il forte aumento delle tasse comunali.
L'aumento del personale di servizio che, date le contingenze, è diventato insufficiente, e spesse volte assente l'autorità, è impossibilitato a dare il consiglio o l'informazione per cui si è intrapreso il cammino.
Il disbrigo delle "pratiche" più comuni reso difficoltoso e oneroso per la distanza esistente col dislocato capoluogo di Dervio. Specie se l'interessato è vecchio ed invalido, meglio non contare quante volte bisogna percorrere i 6 Km. diconsi sei chilometri per ottenere anche solo la vidimazione di un certificato, per es. medico se la fortuna non assiste con il far trovare in ufficio l'autorità o l'impiegato del quale si ha bisogno.
La questione annonaria aumenta più enormemente la necessità di recarsi in Ufficio, e, donne anche in istato di avanzata gravidanza, vecchi carichi d'acciacchi, sono costretti ad affrontare i disagi del percorso con buono e cattivo tempo, e, soprattutto, il giustificato timore che suscita la strada asfaltata resa assai pericolosa da dall'acqua, dalla brina e dal ghiaccio. Quando la temperatura è rigida.
Stando i fatti così, come esposti, questo comitato a nome dell'intera popolazione di Dorio, domanda a codesta Giunta Provinciale, per ragione di giustizia, che la frazione di Dorio sia elevata al grado primitivo di Comune, con la revoca dell'inumano decto fascista che addolorò i Doriesi, coscienti dei loro doveri e diritti, nell'umiliante privazione del diritto di amministrare quel patrimonio che, per tante generazioni, in modo lodevole hanno dimostrato di saper tutelare nell'interesse della Nazione, e del Pese e del singolo.
Nella certezza che l'esposto non verrà come nel passato odiosamente respinto, ma preso in considerazione per giusta, equa comprensione sempre a nome dell'intera popolazione, ringrazia vivamente. Il comitato riionale di Liberazione.

Dell'Era Federico fu Pietro, Cristina Pietro fu Antonio, Fallati Carlo fu Battista, Bettega Giuseppe fu Giacomo, Cristina Celso fu Antonio, Tinuper Agnese fu Giuseppina Bettega, Bettega Innocenta fu Ambrogio in Bettega, Bettega Teresina di Battista, Bettega Felice di Palmerino, [...] Primo di Giovanni operai.

Dorio 23 dicembre 1945

(Dall'Archivio comunale di Dorio)

Document 11. Document related to Dorio separation request from Dervio Municipality, 1947

Richiesta di Autonomia del Comune di Dorio

Il comitato ha ritenuto pure indispensabile iniziare le pratiche per l'eventuale separazione del Comune di Dorio da quello di Dervio assorbito da quest'ultimo nel 1928 "per ordine di un infame decreto fascista". Il 23 agosto 1945 consiglio si delibera di chiamare tutti i Doriesi dall'età di 21 anni compiuti a porre la propria firma al documento stilato per poter riscattare l'autonomia del vecchio Comune. Due mesi dopo il Garolini riferì che erano state pubblicate nuove disposizioni riguardanti i Comuni assorbiti dai comuni vicini con maggior popolazione. Quindi si decide di mandarlo a Como per prendere tutte le informazioni necessarie e per sapere se il fascicolo inoltrato dalla commissione era stato corredato da tutti i requisiti richiesti per il distacco da Dervio. A fine novembre si riuniscono in consiglio il comitato di Liberazione di Dorio e i consigli direttivi della Sezione Democristiana, Comunisti e Socialisti per discutere una sottoscrizione di £. 50 minimo per famiglia, per anticipo spese. Si nomina una commissione composta da Bettega Cesare, Bettega Carlo, Garolini Riccardo e una commissione per la raccolta fondi composta da Amedeo Bettega e Antonio Frigerio. Il comitato di Liberazione per la frazione di Dorio, costituito in data 12 maggio 1946 è composto dai seguenti membri: Bettega Alberto comunista, Tinuper Luigi socialista, Bettega Amedeo democristiano, Bettega Cesare contadino e Dell'Era Attilio operaio.

Oltre ad altre pratiche svolte, il Comitato di Liberazione compreso della necessità e del desiderio della popolazione di Dorio, iniziò immediatamente dopo la sua costituzione le pratiche per il riconoscimento in Comune autonomo della frazione di Dorio. Con sua delibera in data 20 agosto 1946 decise di convocare gli elettori e le elettrici di Dorio per consultarli in merito. All'unanimità tutti i doriesi si sono espressi con voto favorevole. - Inoltrata detta pratica alla Prefettura di Como, venne ritornata per esenzione di autentica notarile. In data 28 novembre 1946 riunitesi in assemblea il comitato di liberazione di Dorio congiuntamente ai rappresentanti dei partiti democristiani, comunista e socialista, vista la necessità di entrare in possesso di mezzi finanziari decise di indire una sottoscrizione. È nominata una commissione appositamente incaricata, composta da Amedeo Bettega e Antonio Frigerio, nella medesima seduta nomina altra commissione incaricata dello svolgi-

mento delle pratiche necessarie alla ricostituzione del Comune e nomina tre membri: Cesare Bettega, Calisto Bettega e Riccardo Garolini. La commissione incaricata di raccolta fondi incassa la somma di lire 6000.

La seconda commissione per l'espletamento delle pratiche, provvede a far riconvocare gli elettori e le elettrici per apporre la firma sull'atto notarile necessario per l'attenzione di quanto si chiedeva. Della pratica venne immediatamente inoltrata alle competenti autorità ed ebbe seguito. E la segreteria del Comune di Dervio a sua volta ricevette l'ordine di iniziare le pratiche contabili necessarie per lo sdoppiamento dei due Comuni. Le pratiche non poterono avere immediatamente seguito, causa il ritardo per la formazione del ruolo delle tasse comunali. Nel frattempo nuove disposizioni vennero emanate dal Ministero dell'Interno. Il comitato incaricato decise saputo della nuova disposizione di riunirsi chiamando a far parte i consiglieri della frazione di Dorio. Questi riunitesi decisero di accertarsi presso il Comune a che punto erano le pratiche. Visto che questo non avevano avuto seguito, decise di provvedersi degli stampati richiesti dal Ministero degli Interni e di dare immediatamente seguito alla loro compilazione. Viste le disposizioni, prima decise di convocare gli elettori e le elettrici contribuenti per la nomina di tre rappresentanti della frazione incaricati legali per discutere con il Consiglio comunale di Dervio e le autorità superiori la ricostruzione vera e propria della frazione di Dorio in Comune autonomo e avvertire gli elettori stessi che in ottemperanza alle nuove disposizioni dovranno riconvocarsi per la firma della regolare domanda del distacco della frazione dal Comune di Dervio". Nel 1947 le riunioni vertono quasi esclusivamente sullo sdoppiamento del Comune. Parallelamente si prendono contatti con i comuni della Valvarrone per costituire i consorzi per il Servizio Sanitario, Ostetrico e Amministrativo.

Il 15 marzo 1947 La commissione riferisce al Comitato in merito all'incarico avuto per le trattative del costituente consorzio con il Comune di Dervio, e informa di aver preso accordi di formare con quel Comune un consorzio sanitario, Ostetrico e amministrativo per ragioni di interesse finanziario. Un mese dopo la commissione di tre membri eletti, riferisce al comitato di essere stata convocata a Dervio con quell'amministrazione per i problemi della separazione, ed informa che accordi sono stati presi in merito alla delimitazione dei confini, ai mezzi finanziari, ed alla separazione dei mobili fra i due comuni. A settembre i tre membri eletti informano il Comitato di essersi recati a Dervio presso quell'Amministrazione comunale e di aver apposto la propria firma in calce ai documenti componenti la pratica di separazione, ed aver incaricato il segretario si sottoporla all'approvazione del Consiglio Comunale di Dervio. Nello stesso tempo, gli stessi in accordo preso all'unanimità dal Comitato, effettuano al segretario Comunale un primo versamento di £. 10.000 per spese e competenze spettantegli per la redazione di tutti i documenti necessari per la separazione dei due comuni. Il 5 ottobre, il comitato decide di incaricare l'Avvocato Lilia, vice presidente della Deputazione Provinciale di Como di appoggiare presso quella Deputazione la richiesta di separazione dei due comuni. Decide inoltre di elargire a favore dello stesso avvocato la somma di £. 4.500 per sue competenze. Nel mese di dicembre "riunitosi il Comitato dopo aver preso visione del buon seguito delle pratiche di separazione, decide di convocare la popolazione di Dorio per informarla del lavoro svolto, e nello stesso tempo di invitarla ad aderire a una sottoscrizione per coprire le spese inerenti all'esecuzione delle pratiche di separazione del Comune.

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