Urban Regeneration of Historic Italian *Borghi* after the Pandemic

Andrea Ponsi, Karin Templin

REFLECTIVE PRACTICE

ABSTRACT - *The advent of the pandemic has had a large impact on expectations about the way people live and work. The desire of many to live in situations of environmental health has stimulated proposals and actions aimed at revitalizing the life of Italian countryside villages ("borghi"). This article considers how architects and urban planners can help reverse the escape from borghi to cities, for a migration in the opposite direction, from cities to borghi. The analysis evaluates the opportunities given by smart working and distance learning, the forms of mobility such as the restoration of local railways and car-sharing policies, the restoration of abandoned buildings for new uses such as co-working spaces and "alberghi diffusi" (widespread hotels). Economic incentives to stimulate local agricultural products and artisan traditions are also considered. As an example, the article reports studies by the authors aimed at urban development interventions for historic villages based on the application of the "analog method," that is design proposals inspired by the architectural qualities of existing borghi reinterpreted in forms and building technologies of a contemporary character.*

Keywords: analogous design, *borghi*, pandemic, revitalization, working from home

For more than two years, much of the world has gone through an unexpected, destabilizing, unprecedented experience. With variations, falls, optimistic recoveries, and depressing returns, societies find themselves in an ever-changing and fluctuating condition, certain only of their own

uncertainties. But every lethargy presupposes an awakening, a phase of rebirth that, it is hoped, can be made possible first of all thanks to efficient health policies, the progress of science and adequate economic and social responses. The forced retreat during the pandemic into the privacy of one's own homes, the replacement of physical relationships with virtual ones, the dependence on media and web information, the explosion of the online market portend an epochal change, a transformation of the way of life with irreversible characters.

THE LETHARGY OF SOCIETY

Urban life has emerged as a forced life in the context of the pandemic emergency: in displacements, in fear of epidemic contacts, confined in rooms not designed to be lived in continuously but only at certain times of the day. The lack of private outdoor spaces has forced us to breathe stale air, to limit physical activity. A need for motor freedom and environmental health has pervaded the inhabitants of these dwellings that have suddenly become inhabited cages. So what has been the impact on ways of life since the advent of the pandemic? What are the possible responses to such overwhelming experiences? Research, surveys, and statistics inform us of the effects on the population and the environment of this complex situation. It is, therefore, a question of analyzing this information and proposing possible answers. Among the consequences that seem to have a more significant impact on daily life and the environment, here are some of the most relevant:

(1)   The transformation/mutation of the current city to adapt to the new social and health conditions: in particular, systems of public transport and private mobility, the role and function of external and internal public spaces, and a revision of zoning following the flows of social transformation including the effects of extra-national immigration will have to be reconsidered.
(2)   The desire of a large part of the population to live in situations of environmental and physical health with a wide choice of new "proxemics" of social relations.
(3)   The revision of the relationship between the metropolitan city and the unprecedented interest on the part of many toward a permanent or temporary transfer from cities to extra-urban places and to nuclei of limited size is proposed, such as in the Italian case, namely, the historic villages.[1]

Fortunately, the Italian peninsula allows for a wide variety of rural or semi-rural contexts, even at a very short distance from urban areas. The diversity of settlements scattered throughout the territory has partly contained the migration to the larger urban centers of the local population, reluctant to leave a naturally and anthropologically healthy environment such as that found in a small village. In Italy these villages are known as *borghi*, or *borgo*

in the singular, that is, inhabited centers of small and medium size and of a certain importance, characterized predominantly by a commercial economy and agricultural surroundings.[2] While people in the city have suffered the impact of coercive isolation, the *borgo* provides favorable conditions for casual encounters, direct knowledge of their neighbors, integration with society and models of life, albeit different, but always marked by human values of exchange and solidarity.

THE *BORGO*: A BALANCED DENSITY

The *borgo* implies dimensions such that it cannot be compared to the degree of complexity of the most extensive urban aggregations. Often a *borgo* consists of only a few houses and a few dozen inhabitants. Despite this dimensional diversity, the historic *borgo* stands out from the mass of current construction. It was born based on adaptations, constraints, techniques, and solutions that often are still valid today and therefore can be considered privileged to be the result of centuries of constructive experience and a balanced relationship with the environment. However, these potentials must be verified in accordance with existing conditions. First of all, the physical situation of the *borgo*: its geological and geographical location, the state of its buildings, the availability of spaces to be restored and rehabilitated, and the attitude of the inhabitants. Verification of spatial availability is essential. On this basis, we deduce the state of the *borgo* and its possibilities of development. Therefore, it is necessary to produce a taxonomy of existing buildings by filing them based on their current condition and potential future uses.[3]

The degree of spatial availability depends on the sociological composition of the current and future inhabitants. Even when the priority is the exodus of the local populations (and therefore the existing social structure of the *borgo*) a change in dynamics will occur, including the introduction of new vocations within the *borgo* itself and new events in the community's daily life. Old buildings can become schools and workshops; abandoned houses can be rehabilitated for hospitality purposes such as, for example, diffused hotels; ruined walls can be used to support quality architectural additions, making the *borgo* a witness to the creativity applied to its architectural form.[4] The sociological question remains as the basis of any other prediction or indication. How will the *borgo* community be transformed? Who will be the newcomers? How long will they be physically present? Which social classes will be the protagonists of this post-pandemic migration? Thus, solutions must be proposed to meet the needs for personal health, physical well-being, ease of maintaining appropriate distances, and breathing pure country air.

Working Remotely

On the other hand, how to access the social and environmental values mentioned here and potentially inherent in the *borgo*? First of all, through a revision of the very concept of work. At the moment, people live in the city mainly because they work in the city, but if they can work outside the city doing the same tasks, the answer becomes more complex. What makes this hypothesis real is the ability to access digital culture and participate in working life through teleworking methods. This possibility will depend on the technological capacity of the location, access to the necessary bands, the digital preparation of users. Workers, freelancers, and small business owners have realized that they can continue to work away from their company or customers.[5] The "experiment" of working from home and online learning has shown that it is possible, and even beneficial, for workers to work from home at least part-time through the platforms that have been established and used in the last two years (including Teams, Google Hangouts, Zoom, etc.). In many cases, they have created remote ready-to-use platforms that can continue to be used.

Autonomy and Connections

The *borgo*, one could dispute, does not present the same opportunities for exchange, access to services, and cultural opportunities that are possible in a large city. Here a difficult question arises: to make the *borgo* more similar to life in the city or maintain this socio-anthropological inequality, seeing in it precisely the value and identity of the *borghi* themselves? Probably the answer lies in a compromise between the two visions.[6] The hypothesis is to ensure that *borghi* become places of cultural and social exchange and therefore need easy and fast mobility without frustrating the ambition to enjoy the time lived in the *borgo* working or relaxing by prioritizing the stability of the place and the daily feeling of harmonious times. From this perspective, the interests of various entrepreneurial, educational, or commercial entities to positively transform the *borgo* can be expected.

Among the initiatives aimed at this purpose, we could consider:

(1) Company campuses: Companies are realizing the benefits of locating staff outside of expensive urban centers. Larger companies can now create smaller corporate campuses that could offer employees, especially those with young families, a working base with easier access to the countryside or the sea.
(2) Start-up companies: The lower cost of opening an office in a *borgo* could incentivize start-ups to settle there.
(3) Education: The introduction of online learning even for younger students means it is possible to offer additional educational support and lessons to children in individual *borghi*. Through online learning, it is possible to attract a more stable group of residents,

including foreigners, with online support or groups of *borghi* that
team up to offer a greater variety of lessons. Even the smallest
borgo could be home to an "international school" for those who want
to ensure that their children receive a recognized education in their
home countries.

REUSE AND ADAPTATION OF THE ITALIAN *BORGHI*

It is now a matter of more deeply analyzing some of the phenomena that are
conceivable or already taking place in the *borghi*. In particular, we should
consider the relationship between city and country and the enhancement of
historic *borghi*, especially those in a phase of degradation and abandonment
in the last thirty or forty years. It is estimated that there are over 2,000–3,000
abandoned and up to 10,000 depopulated *borghi* in Italy.[7] The shift from an
economy based on agricultural work in rural areas to industrial work, led to
the emigration of many Italians from the nation's villages, particularly in the
South, to cites in the North. Before the pandemic, it is believed that over two
million Italians, half of whom under the age of thirty-five, relocated from the
South to the North.[8] In more recent years, Italy has suffered a brain drain with
many young people moving to other countries within the European Union in
search of better career prospects.[9] Between 2008 and 2016, it is estimated
that more than 500,000 Italian citizens moved their residency abroad to
countries such as Germany, France, and the United Kingdom.[10]

However, it is impossible to group Italian *borghi* in different geographical
and sociological realities under a single critical cloak. The *borghi* of the
Apennines, which have suffered economic crises and migratory flows from
the 1960s to the present day, are very different from the coastal *borghi* or, in
the case of the coastal strip, favored by the development of mass tourism.
Areas such as the Val d'Orcia or the Apuan Alps, in turn, have their own
characteristics born from particular conditions of economic production and
tourist celebration. Yet it is possible to establish some general characteristics
applicable to these realities.

While upholding as a priority the maintenance of the existing social humus,
when active and functional, and the recovery of this humus with new
interventions by new inhabitants, below are some operational proposals
aimed at the post-pandemic transformation of the Italian *borgo*:

(1)   reuse of abandoned spaces, for example, in the form of a diffused
        hotel, educational facilities, commercial spaces;
(2)   creation of in-depth schools in the field of crafts, agriculture, cultural
        administration;
(3)   development of museum and cultural institutions and planning of
        events such as festivals, exhibitions, conferences, etc.;
(4)   development of local sports-related vocations including trekking,
        cycling, eco-environmental itineraries;

(5)   facilitate the establishment of Italian and international university structures and schools. The village lends itself as an intermediary between the extra-urban campus of Anglo-Saxon tradition and the urban campus of Italian tradition. The presence of teaching facilities at the university level is favored by the availability of homes and indoor and outdoor spaces with high receptive capacity, the possibility of carrying out outdoor teaching, serene environments suitable for study and reflection;

(6)   work on the specificity of the *borgo*: for example, its agricultural, artisanal, productive, historical-architectural vocations in order to attract the attention of both potential "creators" and "users" who choose the village either for temporary stays or permanent residence;

(7)   equip the *borgo* with all the digital technology necessary to perform work activities as closely as possible to the most advanced metropolitan areas.

Mobility

An important aspect of reflection is the relationship between individual and collective mobility. It is assumed that in order to interest newcomers in *borgo* life, no one can be denied the use of an individual means of transport, designed to allow a certain freedom of movement. Living in a *borgo* could prove to contradict the aims of this policy of "geographical redistribution" of society. A means of transport allows trips out of town, the performance of specific work, the transportation of groceries from the nearest supermarkets, the possibility of moving from the city to the *borgo,* bringing personal effects, providing the direct relationship between urban house and home in the *borgo* without stops, waits, or different mediations. Thus, a contradiction emerges that is not easily resolved. How to reduce the incentive to equip oneself with one's own means while keeping freedom of movement? The use of smart mobility, car sharing, and other forms of mobility can open up new responses, [11, 12] for example, by making the use of car rental more efficient, with ease of rent at airport or railway station terminals closest to the *borghi.* In this way, the use of the car would be limited only to the period spent within the *borgo* or to the moment in which there is an actual need for individual transport. In this context, the rehabilitation of local railway lines that are currently underused or completely disused is particularly important.

Economy

The revitalization of the *borgo* presupposes a series of economic repercussions on the various sectors of the population. An increase in the resident or temporary population could result in more jobs for hospitality workers, an increase in agricultural production, and more business for local shops. The financial aspects of the construction market in urban realities

are not to be overlooked. The cost of housing in large Italian cities and abroad has left many individuals and families looking for a home, especially family-sized homes in smaller towns.

In the UK, TV programs such as *A Place in the Sun* and *A New Life in the Sun* follow British citizens as they look for a home abroad or wish to establish new businesses in continental Europe. Other countries offer similar programs, including the Netherlands, with the TV program *Ik vertek* ("I'm leaving"). In the United States, shows focused on renovating Italian homes purchased for 1 € or their ancestral home are popular, including *My Big Italian Adventure* by Lorraine Bracco and *La Mia Casa in Italia* by Brian Boitano. Living in Italy, in short, is an international dream. A quick look at some of the settlements included in a 2017 study for the recovery of Tuscan *borghi* shows what can be purchased for a fraction of what it would cost to buy similar housing in Florence, other cities, or abroad.[13] Most homes need renovations that could help provide work for architects, builders, surveyors, local artisans, etc. A separate discourse implies the provision of tax incentives, eco-bonuses, bureaucratic facilitation, etc. Such an analysis, although decisive, can be addressed in a subsequent study.

ROLE OF THE ARCHITECT

What role can the architect, urban planner, and designer have in this context? The question opens multiple reflections.

The Urban Space

The *borgo* is still set up on urban parameters based on functions valid hundreds of years ago. Over time these functions have been adapted to existing spaces or, when this has not been possible, it has become necessary to extend the *borgo* in its suburbs with new and more mass housing and commercial complexes. The extension that the village has seen in the unfolding of the last forty years corresponds in terms of land use to an expansion often of three or four times the surface of the historic *borgo* itself. Therefore, the designer will have to deal not only with the redevelopment and functionalization of the historic areas of the village but also with the neighboring areas, to readapt them, demolish them, or develop them from scratch.

The design policy in this regard branches into various schools of thought. On the one hand, the school related to "urban density" takes the historic *borgo* as a model for a limited expansion in surface and developed in density and height. Whereas in the historic *borgo*, buildings define public spaces such as the streets and squares. In this case is the creation of shopping centers and malls is not recommended.

Of different opinion is the school of thought for which it is necessary to establish proportional parameters between the internal and external spaces

related to each individual inhabitant. In this case, the logic of sprawl prevails, with the creation of housing units distributed in green spaces with a maximum of two or three floors, with access to nature directly from one's own home. A Garden City model, for example, would facilitate broader land use resulting in shrinkage of agricultural and naturalistic areas. A good compromise would be establishing building types at the same time of high urban density but with availability of individual open or green spaces in close proximity to each dwelling. The presence of common gardens, playgrounds, and squares in front of places of socialization such as bars and restaurants would maintain the value of social exchange in the *borgo*.

Regulatory Adjustments

The renovation of existing living spaces presupposes a sanitary and urban parameters review. For example, homes in *borghi* are often equipped with small openings resulting in a lack of natural light in the interior spaces. Providing the possibility of functional adjustments by building regulations becomes a worthy work, always in the context of a correct modification of the architectural characteristics of the place. Among the most important themes are:

(1)   the increase of surfaces dedicated to individual greenhouses with the function of climate control and the creation of a protected semi-outdoor space,
(2)   the opening of pocket terraces,
(3)   the functional restoration of the attics, and
(4)   the adoption of quality urban furniture aimed at creating spaces for controlled aggregation.

In this regard, the design of new types of benches, shared tables, park, or beach equipment becomes relevant in terms of the proxemics of the project.

Urban Objects and Routes

The public space is the beating heart of the *borgo*. As such, it must be the subject of attention of both the designer and administrators as well as the public. It is necessary to equip the public space with health, functionality, symbolism, and beauty. Lighting, walkways, cladding materials, flooring, rest areas, vegetation elements, and signage are subjects on which to focus attention as much as on the most critical issues of circulation, safety, practical functionality of services.

Relationship with the Territory Circumstances

It will be necessary to produce efficient studies on the limits of the *borgo*, on the infrastructures that may be necessary, and therefore on the attitude that

we will have to take in such cases. The extension of the *borgo* can be made possible if contained in clear and sustainable limits. The architect's function will be to indicate these limits, offer alternatives, and propose visions and projects aimed at creating a friendly, efficient, and ecologically well-conceived environment.

Energy and Sustainability

Although sustainable design principles are similar for every architectural and urban intervention, the village type has unique characteristics. The adjacency with the natural territory makes the landscape and agricultural-productive conditions a not easily negotiable treasure. The aesthetic impact and the effects on land use for agricultural or grazing purposes that alternative energy technologies such as the installation of photovoltaic panels and wind turbines can have on this environment must be adequately weighed given their selected application and low environmental impact. In sustainable design, it is essential to analyze the production of building materials and their distribution chains. In this sense, it becomes advisable to use local workers and materials and techniques whose origins are as close as possible to the *borgo* itself.

Theoretical Debate

In the revitalization and transformation of Italian *borghi*, the debate on restoration assumes primary importance. What is the most suitable way to act in many different contexts? The debates between architects and architectural theorists over the last century will not be forgotten. The comparisons between the various schools of thought are very current which, for simplicity, we have limited to those relating to the proponents of conservative, integrative, or critical restoration. A similar reflection concerns the approach to architectural design in the historic *borgo* more generally. Furthermore, in this case, the schools of thought tend to aggregate under three models of intervention: design by mimesis, contrast, or analogy. From a personal point of view, we tend to favor "analogy" as a model of architectural design in historic contexts. Following the course of analog thinking, the designer can derive inspirations and practical solutions inspired by the existing situations of the *borgo*: or observe them, analyze them, and carry out a process of abstraction to advance answers to problems by proposing solutions that experience both the past and the existing, to propose a leap forward in terms of creativity and innovation.

Project Themes

In conclusion, there are many design themes proposed to the architect in conceiving the development methods of the *borgo*. The theme of restoration and the theoretical approach to any construction or reconstruction has already been mentioned. The subjects to which such theories can be applied in practical terms can be summarized as follows:

(1)   subdivision of spaces of large areas of warehouses, agricultural sheds, etc.;
(2)   adapting living, commercial, and exhibition spaces;
(3)   access walkways, parking lots, elevators, escalators;
(4)   shelters for shuttle services;
(5)   design of co-working spaces;
(6)   securing structures (application of anti-seismic techniques);
(7)   the increased energy efficiency of buildings (solar greenhouses);
(8)   elimination of public and private architectural barriers;
(9)   flooring, street furniture, lighting; and
(10)   organization of public and private green areas.

EXAMPLES AND REFERENCES

There is no shortage in literature and on the web of examples of the revitalization of *borghi* that can serve as a reference or, at least, contain suggestions, ideas, or solutions that can be reapplied in others and new cases. Infinite examples and models can be found throughout the history of settlements in every part of the world: from the constructions and settlements of the pre-industrial society to the quality types of production expansions of the modern era. Through this multidisciplinary vision, the architect must intuit the paths to be taken, suggest possible ways and systems of life, and propose spaces and operational strategies that make this goal accessible. By way of example, the following are some case studies relating to Italian *borghi* that have been the subject of studies or that, at any rate, have undergone a transformation following principles of sustainable economy and ecology.

Santo Stefano di Sassio, Abruzzo – The Albergo Diffuso, a New Form of Hotel

One innovative solution held up as a model for the future repopulation of the abandoned and depopulated *borgo*, is the *albergo diffuso*, or diffused hotel. An *albergo diffuso* is a hotel where the guest rooms, reception, and other hospitality spaces are distributed among a number of existing buildings throughout a town or neighborhood. Although the concept was conceived following the 1976 earthquake in Friuli, the idea did not really gain traction until the introduction of the Albergo Diffuso Sextanio [14] in Santo Stefano di Sessanio in the L'Aquila province in Abruzzo in 2005. Created by the Swedish architect and entrepreneur Daniele Kihlgren, with Oriano Associati Architetti, nearly a quarter of the *borgo* of seventy inhabitants was transformed into a 30-room hotel split amongst many buildings.

Competition for Auletta, Campania

In 2012 an international competition was held to revitalize the *borgo* of Auletta in the Campania region of Italy. It was one of many small towns

surrounding Salerno that were devastated in the November 23, 1980, Irpinia earthquake. The move away from an agricultural economy alongside the destruction of the old town by the natural disaster resulted in the town's depopulation, especially by young people. The town and region had already invested heavily in an Urban Ruins Park, which preserved the damaged buildings. It now seeks innovative ideas to attract more tourists and with them more jobs in hospitality (Fig. 1).

Figure 1. Auletta, Allies and Morrison Architects.

Santa Fiora, Tuscany – Financial Incentives for Online Workers

The Tuscan medieval *borgo* of Santa Fiora, located within the province of Grosseto, offered "teleworkers willing to relocate and rent a house here under the Tuscan sun will be given up to €200 [$240] or 50% of the total rent for long-term stays of between two and six months." [15]

Sambuca, Sicily – House for €1

One of the initiatives introduced before the pandemic to encourage the repopulation of the *borghi* was the sale of abandoned houses for €1. One of the earliest Italian *borghi* to attract attention in 2019 was Sambuca in Sicily.[16] Following the pandemic's beginning, Airbnb commissioned Studio Didea, a young Palermo-based practice, to refurbish a house that it had purchased for €1 in Sambuca. To tempt more tourists and new residents to the *borgo*,[17] in 2022, Airbnb announced a competition to find someone to live in the house rent-free for a year. The competition winner would then be required to host guests via the hospitality platform.

Riace, Calabria – Revitalization Through Welcoming Migrants

Riace is a small *borgo* in the Southern region of Calabria. Seventeen years after the first landing on the Calabrian coast of illegal immigrants from Africa, the local economy has undergone a real revival thanks to projects for reception and integration. One of the most significant data is that relating to the presence in 2020 of 400 migrants who arrived from twenty-five different countries, out of a total population of 1,800 inhabitants. The mayor, Domenico Lucano, has been at the forefront for years to manage the many projects and initiatives that offer work and have strongly boosted the economy.[18]

The primary commitment was to strengthen the social fabric and create employment opportunities through a wide-ranging hospitality policy that affects the territory and its social, economic, and cultural potential. The main actions for this purpose are the creation of laboratories and shops that recover ancient craft traditions and the architectural renovation of the houses, both for the reception of refugees and the so-called solidarity tourists. The Riace experience has generated other similar experiences in the same territory in the case of the Caulonia and Stignano municipalities. The Calabria Region Administration itself has been stimulated by Riace in presenting a regional law on hospitality, setting itself as a virtuous example in terms of welcoming migrants.

Colletta di Castelbianco, Liguria

Colletta di Castelbianco is a village of medieval origin located in the region of Liguria, entirely built in stone and probably founded as a defense against the Saracens in the thirteenth century. Following a series of earthquakes in the early 1900s, the *borgo* was completely abandoned. In the '90s the architect Giancarlo De Carlo undertook a general restoration of the ancient urban scenery in accordance with the original construction techniques. De Carlo wisely used all the elements of the local architecture: materials, colors, private, and public spaces creating spaces in full harmony with the historical and natural environment. The *borgo* was one of the first

in Italy provided with a sophisticated technological infrastructure which has enabled new inhabitants to benefit from the widest possible range of telecommunications resources.[19]

CASE STUDIES

The Experience of Educational Design Workshops

Identifying strategies for the revitalization of *borghi* can find important opportunities for reflection in the context of the academic world, especially at a university level. The results of research, seminars, and educational workshops that address these issues become platforms on which to set urban regeneration policies at the national and local level and tools to outline themes and project areas that can be used, for example, for public design competitions. Below are some examples of personal experiences of academic workshops at university level [20, 21] focusing on the *borgo* of Magliano in Toscana.[22]

Design Workshop: "Beyond the Limit," April 2018

The workshop "Beyond the Limit" resulted from the collaboration between the College of Architecture & Environmental Design at Kent State University Florence, and the Department of Architecture (DIDA) of the University of Florence (Fig. 2). The workshop imagines the overall redesign of a medium-sized area close to the walls of the *borgo* of Magliano in Toscana, a settlement of about 2,000 inhabitants located in the Grosseto Maremma. As an object of research, a site was selected on the outer limits of Magliano in Toscana in an area where a settlement development for mixed residential and commercial use is already envisaged, according to an approved structural plan. The workshop aimed to identify settlement principles and spatial solutions; alternative morphological choices to the forma-urbis of the "periphery" as it has been configured over the last decades.

The architectural types currently used on a road layout with a regular road network are the three/four-story condominium buildings with several houses between four and ten units, or the two- or three-story terraced houses. The buildings, surrounded by private gardens of relevance, do not continuously define the line of the street front. The development of alternative typological models, the object of the workshop, was open to multiple proposals. It was suggested that particular models derived from an analysis of the settlement characteristics of the existing historic *borgo* should be verified, in particular the high volumetric density of the building and a formal configuration so as to give the site under study a recognizable character of urban intimacy (Fig. 3).

Case studies:

Bientina
San Miniato
Magliano in Toscana
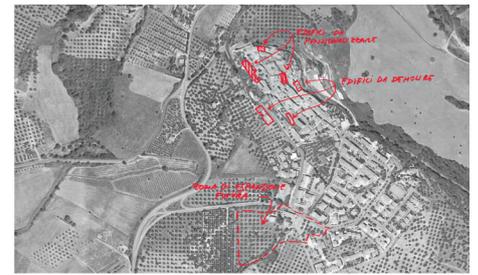
Magliano in Toscana -

Urban expansion
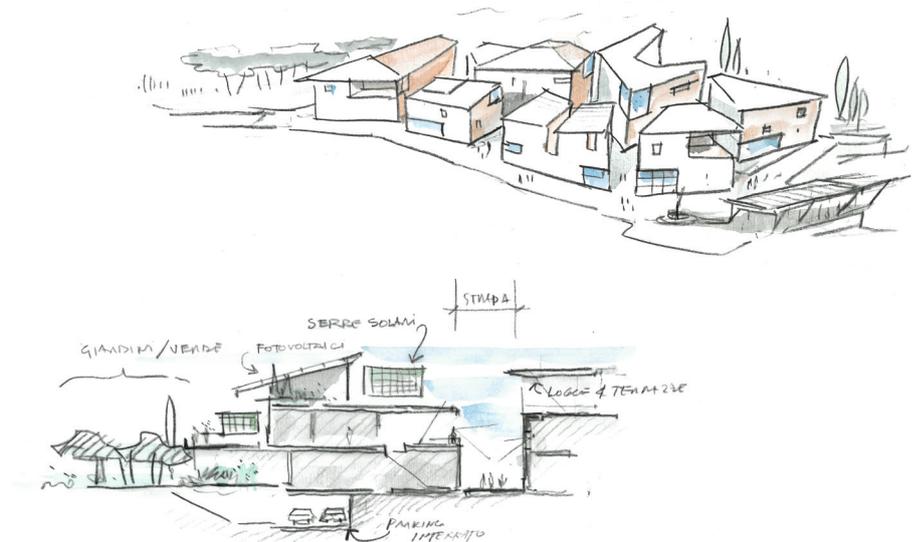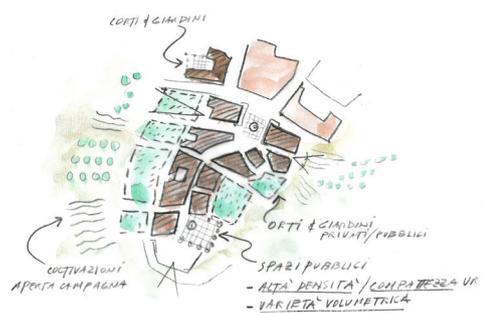
Figures 2, 3. Workshop in Magliano in Toscana.

The Analogous Borgo

The strategies to deal with revitalization projects of historic *borghi* are varied depending on different schools of thought. Whether it is restoration works, new buildings within the historic walls of the *borgo*, or new settlements located beyond its borders, the theoretical approach that is proposed here is based on analogical reasoning. The designer can identify new solutions that refer to the historic *borgo* model in both formal and functional terms through analogous thinking. Here are some reflections on the design by analogy, referring both to the urban design in general and to the particular case of the Tuscan farmhouse. Although located beyond the physical boundaries of the *borgo*, the farmhouse is still an essential part of it as it depends on the *borgo* in terms of services on offer and from an administrative point of view. The watercolor sketches shown here represent formal exercises in the application of analogous thinking.[23]

The reference models, in this specific case, the *borgo* and the farmhouse, are reworked according to a sequence defined as the "method of the four phases" [24] (Fig. 4). The four steps: "observation," "analysis," "abstraction,"

1. Observation

2. Analysis

3. Abstraction
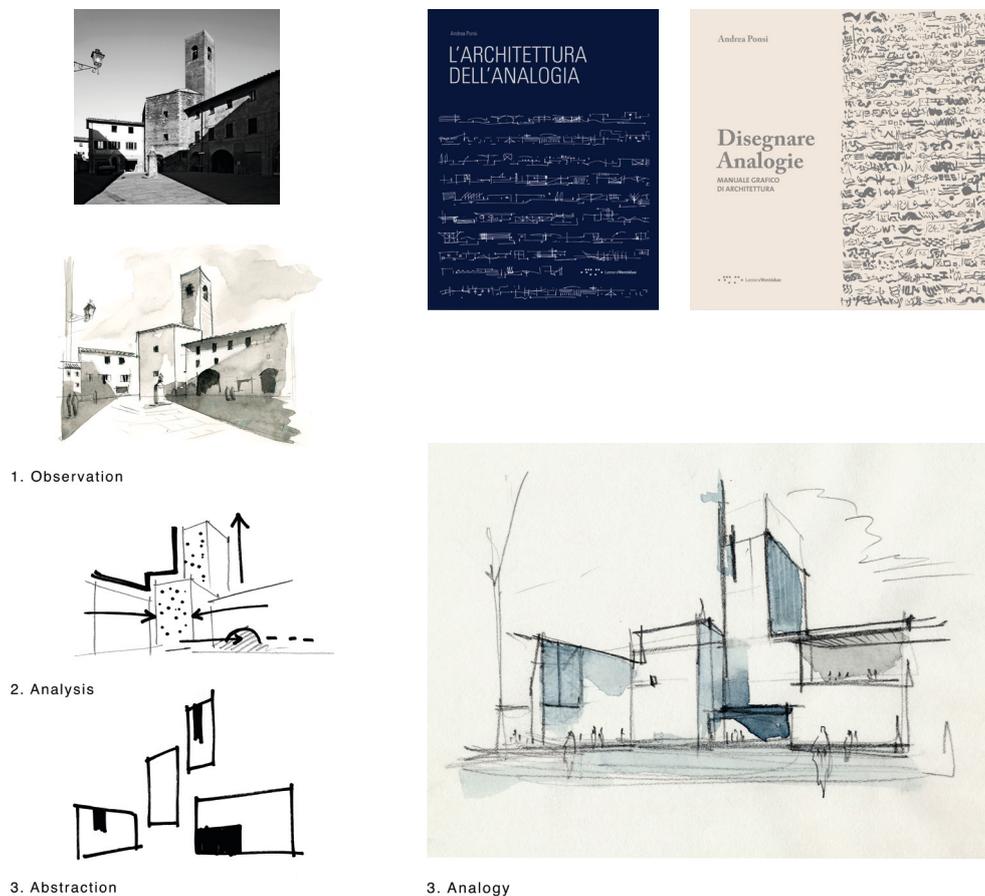
3. Analogy

Figure 4. Four phases drawing method.

and "analogy" imply a graphic sequence that each designer can carry out in a personal way according to his elective affinities or his personal style. The drawing of "observation" helps us remember, focus attention on detail, and memorize it by fixing it on paper. In the drawing of "analysis," the focus is on specific aspects related to functions, structures, and overviews organized in the form of diagrams and annotations. In the drawing of "abstraction," the model undergoes a formal and conceptual metamorphosis; it opens up to digression and subjective interpretations. It is a design inspired by colors, geometries, profiles, paths, tactile, auditory, and olfactory sensations. In the drawing of "analogy," architecture takes on material and functional characters in the form of façades, walls, windows, and paths similar to the reference model designed to solve circulatory, residential, structural, and symbolic needs (Figs. 5-7). Thus, a new analogous architecture is being created, but one in which we recognize the traits of the ancient; as in a person's face, we can recognize the traits of the most distant ancestors.

Exercises of analogous architecture
The analogous *borgo*
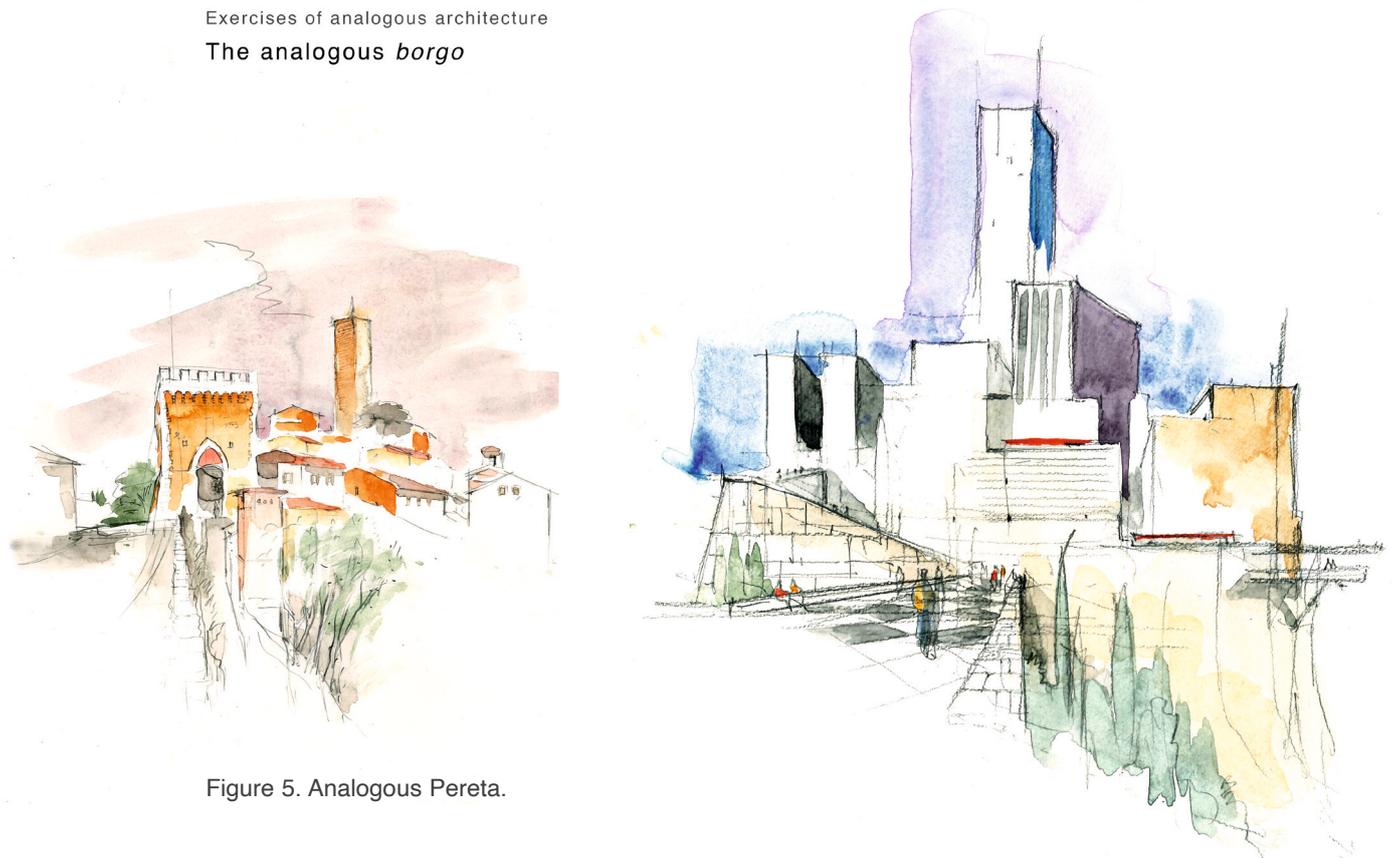
Figure 5. Analogous Pereta.

The analogous *borgo*

San Gimignano
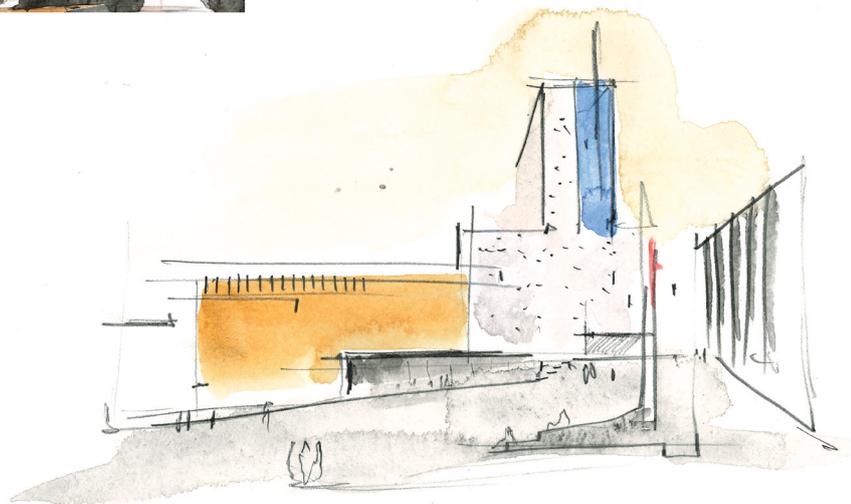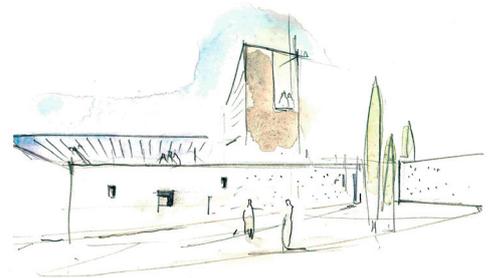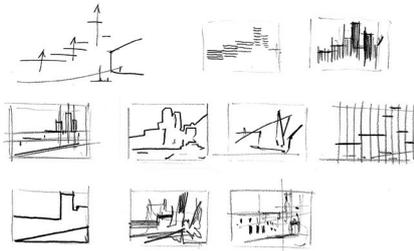
Figure 6. Analogous San Gimignano.

Figure 7. Analogous Magliano in Toscana.

The Analogous Farmhouse – A Tuscan Case Study

Perhaps more than in any other Italian region, the Tuscan countryside is sprinkled with beautiful and poetic architecture built and inhabited by peasants and their families over time. Indeed, the value and poetry of farmhouses reside in their history marked by continuous transformations, adaptations, abandonment, decay, and frequent ruin. The farmhouse fits into the landscape like a living body that has found its ideal condition. Withdrawn into the woods or dominating the horizon, it seems to want to offer shelter, protection, encounter. At the same time, solid and gentle, resistant to winds, snow, and sunny summer days, it protects those who live there with its dark intimacy.

The shapes adapt to the ground; they lean to let the rain slide, they are engraved in deep windows carved into the walls. As you walk through its spaces, your gaze lingers on the arcades, the stairs, the loggias, toward the beams of the roof, the large fireplaces, the harmonious terracotta vaults. Due to its intrinsic constructive richness, the farmhouse pushes our imagination to conceive similar forms and solutions. We think by analogy by imagining where a reflection aroused by these buildings, which are so full of stimuli for the designer, can lead us. The analogy stimulates the invention; it pushes to continue a story: a stone wall becomes a perforated diaphragm, a window, a large glazed loggia, a staircase, a wooden truss, a terracotta floor is reborn in diversified forms while maintaining the memory of their history. The analogous farmhouse will also be, like the original, authentic, strong and gentle (Fig. 8).

The act of analogical transposition is, therefore, an operation of truth which, by preserving the beautiful and the useful, can extend or restrict the original characteristics of the reference model; it can divert them into paths different from those already given, but equally fascinating for those who are about to follow them.
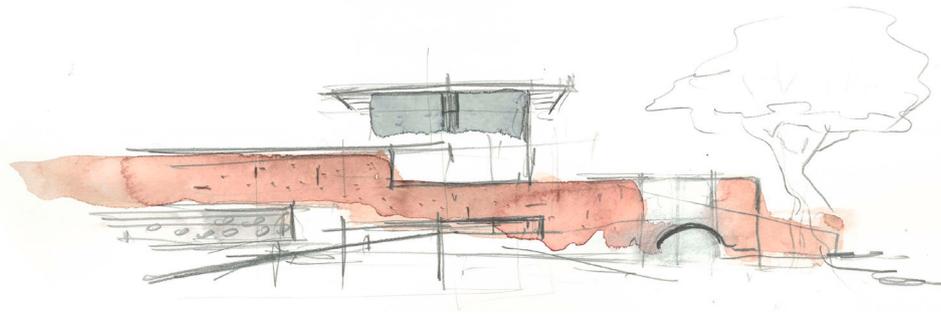
Figure 8. Analogous Tuscan Farmhouse.

Notes

1. Carlo Berizzi, Lucia Rocchelli, *Borghi rinati – Paesaggi abbandonati e interventi di rigenerazione* (Padua, It.: Il Poligrafo Casa Editrice, 2019).
2. *Enciclopedia Treccani*, www.treccani.it.
3. Clemente Ultimo, Francesco Carlesi, Daniele Sinibaldi, *Borgo Italia – Identità,demografia,innovazione. Per la rinascita delle piccole Patrie* (Calenzano, It.: Eclettica, 2021).
4. Mario Cucinella, *Arcipelago Italia - Progetti per il futuro dei territori interni del Paese. Padiglione Italia alla Biennale Architettura 2018* (Macerata, It.: Quodlibet, 2018).
5. Simona Polli, "Smartworking & Longstay, Workshop di Co-Design del Prodotto," February 2021 - www.toscanapromozione.it.
6. Stefano Boeri: "La città del futuro? Un arcipelago di borghi che ci riavvicina alla natura," *Huffington Post*, July 31, 2021 - https://www.huffingtonpost.it/entry/stefano-boeri-la-citta-del-futuro-un-arcipelago-di-borghi-che-ci-riavvicina-alla-natura_it_61050cc5e4b0fd216c25e432/.
7. "Borghi da ripopolare," Fondazione per l'architettura / Torino website - https://www.fondazioneperlarchitettura.it/2019/03/27/borghi-da-ripopolare/ .
8. "Svimez, secondo il rapporto 2019 due milioni in meno al Sud," *Corriere della Sera*, November 4, 2019 - https://www.corriere.it/economia/lavoro/19_novembre_04/svimez-2000-2-milioni-hanno-lasciasto-sud-meta-sono-giovani-ea7ac216-fee1-11e9-aa9d-60f7e515e47b.shtml.
9. Lorenzo Tondo, "Battle with Time: Italian Towns Face Demise by Depopulation," *The Guardian*, July 12, 2019 - https://www.theguardian.com/world/2019/jul/12/battle-with-time-italian-towns-face-demise-by-depopulation.
10. "Fuga dall' Italia per trovare lavoro: via in 800mila," *Adnkronos*, June 21, 2017 - https://www.adnkronos.com/cervelli-in-fuga-in-800mila-lasciano-litalia-per-trovare-lavoro_2PayJlOfdJOMpqmn1sJPgJ.
11. See https://www.mobilitadolce.net.

12. "Borghi del futuro," MITD Ministero per l'innovazione e la transizione digitale website - https://www.innovazione.gov.it.

13. Irene Guzman, "Nuove strategie per il territorio," *Abitare*, April 1, 2017 - https://www. abitare.it/it/habitat/landascape-design/2017/04/01/toscana-recupero-borghi/.

14. "Sextantio: L'albergo diffuso che risveglia un borgo abbandonato," *Ecopolis Newsletter*, July *24, 2014* - https://ecopolis.legambientepadova.it/sextantio-lalbergo-diffuso-che-risveglia-un-borgo-abbandonato/.

15. Silvia Marchetti, "These Beautiful Italian Towns Will Pay You to Work Remotely," *CNN*, May 9, 2021 - https://edition.cnn.com/travel/article/italy-towns-pay-remote-working-cmd/index.html.

16. Silvia Marchetti, "Italian Town of Sambuca in Sicily Sells Homes for a Dollar," *CNN Travel*, January 18, 2019, - https://edition.cnn.com/travel/article/one-dollar-home-sambuca-sicily-italy/index.html.

17. Luca Brandoli, "Airbnb Is Looking For Someone to Live In Sicily for a Year, Rent Free," *Domus*, January 21, 2022 - https://www.domusweb.it/en/news/gallery/2022/01/21/airbnb-looks-for-someone-to-stay-in-its-sicilian-house-for-a-year-rent-free.html.

18. Tiziana Barillà, *Mimì Capatosta. Mimmo Lucano e il modello Riace* (Rome: Fandango Libri, 2017).

19. Giancarlo De Carlo, "Colletta di Castelbianco [Speaking of Places]," *Places Journal* 16, no. 2 (2004) - https://placesjournal.org/assets/legacy/pdfs/colletta-di-castelbianco.pdf.

20. Fabrizio F.V. Arrigoni, Antonello Boschi, eds., *Dentro le forme del vuoto – Bientina, Urban Design Workshop* (Milan: Skira, 2008).

21. Antonello Boschi, Andrea Bulleri, eds., *Suture(s) – San Miniato, Urban Design Workshop* (Milan: Skira, 2011).

22. Andrea Ponsi, Fabrizio F.V. Arrigoni, eds., *Sul Confine /On the Hedge – Architectures for Magliano in Toscana* (Florence: Didapress, 2022).

23. Andrea Ponsi, *Analogy and Design* (Charlottesville VA, USA: University of Virginia Press, 2015).

24. Andrea Ponsi, *Disegnare Analogie* (Syracuse, It.: LetteraVentidue Edizioni, 2016); English ed.: *Drawing Analogies* (London: Prestel, 2019).

Credits

Figure 1: image by © Allies and Morrison Urban Practitioners.
Figures 2-8: images by © the Authors.

Andrea Ponsi's activities include architecture and city planning, design, painting, and writing. He has taught at the University of California-Berkeley, Syracuse University, Kent State University, and the Institut Technion in Israel. In 2017 he served as Paul H. Kea Distinguished Professor at the University of Maryland. He is the author of *San Francisco: A Map of Perceptions, Analogy and Design* (2015), and *Drawing Analogies* (2019) among other books and his work has been the subject of exhibitions in both Europe and the United States. E-mail: andrea@studioponsi.it

Karin Templin is a practitioner and researcher specializing in the relationship between urban housing typologies and urban development and has worked on urban regeneration projects in Italy, the UK, and Qatar. She has taught at Kent State University, Kingston University, and the University of Cambridge, and is currently a Visiting Professor at the University of Bologna (Cesena). She is the author of *Street Architecture: Work by Hans van der Heijden* (2018) and the upcoming *The Mansion Blocks of London*. She is currently completing a PhD at the University of Cambridge. E-mail: ktemplin@studioackt.com