



Historic center of Palomonte (SA), View from Monte Tre Croci. (by Simone Valitutto)

Adaptive reuse process of the Historic Urban Landscape post-Covid-19. The potential of the inner areas for a “new normal”.

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ABSTRACT

Often in the past, the great disasters (environmental calamities, earthquakes, epidemics) activated unexpressed energies, triggering transformations of the built environment, able to give rise to unexpected conditions of economic, cultural and social development. The fragility of settlement systems in the face of unexpected threats brings out the need for a new planning, changing our gaze on the city.

The new framework of needs drawn by the pandemic and the renewed sensitivity towards the combination of health - sustainability rekindle the spotlight on inner areas. These emerged as "reservoirs of resilience", areas to look at, in order to reach an eco-systemic balance.

The aim of the paper is to return an experience of adaptive reuse of the Historical Urban Landscape in an inner area of Southern Italy, where the needs of health and safety of the community are integrated with the transmission of the built heritage to future generations. The goal is the promotion of inclusive prosperity scenarios, towards the so-called "new normality".

Starting from an in-depth literature review on the cases of pandemics in history and the strategies implemented, the research identifies health security requirements at the scale of the Historic Urban Landscape and design solutions aimed at reactivating lost synergies between communities and places.

KEYWORDS

adaptive reuse, inner areas, health security, design requirements, pandemic, inclusive prosperity

1. INTRODUCTION

Often in the past, the great disasters (environmental calamities, earthquakes, epidemics) led to significant impacts on settlement systems. A lot of consequences affected the use models of urban space, the morphological, distributive, material and construction solutions, initially developed in an experimental way, but then destined to persist over time (Neiderud, 2015).

Assuming the Historical Urban Landscape as the result of community processes of transformation and management (UNESCO, 2011), the paper deals with these consequences due to unexpected events. Often in the past, these catastrophes activated unexpressed energies, triggering transformations of the built environment, capable of starting unexpected conditions of economic, cultural and social development. The fragility of settlement systems in the face of unexpected threats reveals fracture lines that were previously unclear to us and on which to affect. Our task as architects, as researchers, is to address the emergency through a plan for the future, and a modified vision of the city. The crisis triggered by the pandemic accelerates the processes of community awareness raising towards the combination of health and sustainability (Bollyky, 2019). The inner areas have already been studied to explore their critical points and the potential of new development models. They, however, can now take on a new design centrality for a renewal of lifestyle. Faced with a disruptive event such as the pandemic, the number of actors who have the right to participate in the processes of transformation/conservation of the built environment increases, changing their needs/expectations. Starting from these insights, the paper returns an experience of regeneration of the Historic Urban Landscape in an inner area, the Municipality of Palomonte (Sa). In this case, the health and safety issues of the community are integrated with the transmission of the built heritage to future generations and the promotion of inclusive prosperity scenarios.

To define a design approach, the key is to observe what happened in another sudden threat - the earthquake of 1980. In Palomonte, as well as in many

other countries, the event returned a permanent impact on the settlement system. The epidemic opens a different horizon, based on the return to ancient buildings as a design priority. The goal is to overcome the fracture caused by the earthquake of 1980 that drove the inhabitants of Palomonte away from the old settlement, thanks to public funds that allowed the construction of new houses. In concomitance with the current pandemic, the Municipality, the University and local associations started a heritage-led design process. Noting the availability of publicly owned buildings, characterized by large outdoor spaces for collective use, the project team recognizes the needs of residents and prefigures sustainability scenarios that can guide the Historic Urban Landscape beyond the Covid-19 crisis.

Combining the planning commitment at the building and urban scales, the experimentation integrates preventive and curative actions, taking into account the potential of transitional measures with other definitive ones, aimed at promoting social inclusion and the circular economy.

One of the strategic themes is the rethinking of the public city, through the repurposing of abandoned buildings and the reuse of public spaces, in particular of the green ones, recognized as a system. Another emerging theme is the health safety requirements for the historic urban system with the set of public buildings to be reused and reintroduced into a circuit of normal usability.

Palazzo Parisi is selected as a pilot case to test a reuse strategy aimed at increasing green areas, nature-based solutions, use of renewable energy, closure of the water cycle. The results show that the adaptive reuse project (Pinto et al., 2017) can transform the critical issues of the building into an opportunity for the prosperity of the Historic Urban Landscape. The spatial distribution at different elevations favours a new connection model of the urban system whose attractiveness and cultural vivacity are enhanced by the synergies that the building establishes with the territorial landmarks and cultural assets. Equipping spaces for remote work and training, the project introduces multiple uses, minimizes transformations and adapts the building to the needs of distancing

imposed by the pandemic.

The paper is articulated as follows: first, a literature review on the impact of disasters on the Historic Urban Landscape is discussed within the context of urban regeneration; a focus on the inner areas in the current pandemic is presented as evidence of new needs; the case of Palomonte is described and discussed.

2. THE DISASTERS' IMPACT ON THE HISTORICAL URBAN LANDSCAPE

In the context of the great disasters of the past, infectious diseases have always exposed communities and social organizations to new challenges, leading to remarkable impacts in settlement systems, with consequences in the uses of urban spaces (Connolly, 2020).

The black plague that in the fourteenth century affects Italian cities, is not only the driver of devastation that we know by Boccaccio's Decameron, but it is also the enabling condition of the Italian Renaissance. The several pandemic experiences that affected the Western world over the centuries show how the time of the virus spread can also be the source of innovation, which not only contributes to containing the infection, but also to guide the maturation of new values and visions.

This happens with the design of the modern city proposed by Leonardo da Vinci with toilets and areas reserved for the circulation of horses and wagons (Vereycken, 2010).

The analysis of the scientific literature produced in recent months gives us a diversified framework of theoretical approaches and proposals. The research areas where the most has been produced, in recent months, are medicine, pharmaceutical industry, public health and related sectors. The solutions proposed to control the transmission of the effects of SARS-CoV-19 are mainly related to hygiene measures and physical distancing.

Globalization with its significant impact on movements of people and goods is confirmed, as one of the main causes of infection transmission (Neiderud, 2015). Several researchers have in recent months

started studies on the relationship between the urban environment and the spread of infections, trying to confirm, also in the case of Covid-19, the thesis - widely supported for other pandemics - that cities create the conditions for the growth and spread of microorganisms, becoming the main vectors of infectious diseases. The pandemic dimension of the Covid-19 virus places our society in front of the need to:

- promote strategies or rather long-term action plans;
- define and coordinate preventive and/or curative actions.

The rethinking of the built environment and lifestyles - for buildings and urban areas - is, in this perspective, the response that research can put in place to facilitate the application of public health measures and the reduction of the risk of infection. The state-of-the-art's analysis examines previous cases of pandemic infections (Fig. 1), identifying the strategies and actions put in place (Reyes, Ahn, Thurber, Burke, 2013). The most significant infectious epidemics, that affected Western countries since the 2nd century A.C., have been observed:

- Typhoid fever, systemic, febrile infectious disease, with oro-fecal transmission caused by the bacterium *Salmonella enteric*, particularly widespread during the Roman Empire, from the 2nd century (Belfiglio, 2017);
- Black or bubonic plague, an infectious disease of bacterial origin that spreads in Europe in the mid-fourteenth century. The disease was caused by a bacterium, the main form of contagion was through trade routes (Herlihy, Cohn, 1997);
- Smallpox, an infectious disease of viral origin, transmitted through the respiratory contact with contaminated objects; it was responsible for an average of 6% of deaths that occurred between 1670-1810 (Oxley, 2003);
- Cholera, an infectious disease that spreads in the early 19th century. Spread through the routes used by middle eastern traders, it caused the deaths of millions of people between 1835-1893 (Szczygiel, Hewitt, 2000);
- Tuberculosis, infectious disease caused by various strains of mycobacteria. Today we know that it is transmitted by air through droplets emitted with

| Strategies & Actions | Black Death (1300) | Smallpox (1670-1810) | Cholera (1835 –1893) | Tuberculosis (XIX – XX c.) | Spanish Flu (1918 – 1920) | Design requirements |
|---|-----------------------|-------------------------|-------------------------|-------------------------------|------------------------------|--|
| Design and construction of new infrastructures | | | | | | |
| Realization sewage systems, aqueducts, public baths, spas systems | | ✓ | ✓ | | | Zero emission of smells and harmful substances, Biodegradation of sewages, Asepticity |
| Construction of sanatoriums | | | | ✓ | | Wellbeing, Health and Safety of patients |
| Construction of buildings equipped with balconies, verandas, terraces, practicable flat roofs | | | | ✓ | | Exposure of users to air and sunlight, Control of solar and radiant factor |
| Integration in private gardens of small summer houses | | | | ✓ | | Equipable spaces for home quarantine, Flexibility of spaces to be used for temporary functions |
| Creation of open spaces for collective use | | | | | | |
| Realization of gardens and urban parks | | ✓ | ✓ | | | Distancing between users of the public space, Control of health-hygiene and microclimatic conditions |
| Creation of long avenues | | ✓ | ✓ | | | |
| Widening of sidewalks | | | ✓ | | | |
| Realization of squares | ✓ | ✓ | ✓ | | | |
| Reorganization of urban accessibility | | | | | | |
| Deny access to public baths | ✓ | | | | ✓ | Distancing between users of the same public space, Hygiene |
| Deny access to ports | ✓ | | | | | |
| Deny access to schools, theaters, churches | | | | | ✓ | |
| Creation of unidirectional pedestrian paths | | | ✓ | | | |
| Demolitions of dense neighborhoods | ✓ | | ✓ | | | |
| Improvement of distances between buildings | ✓ | | ✓ | | | |
| Integration of technical devices and furnishings | | | | | | |
| Design of furnishings as reclining chairs, benches, handrails | | | | ✓ | | Exposure of users to air and sunlight, Flexibility in terms of location and positioning |
| Design of personal protective equipment | | | | ✓ | ✓ | Reduction of the virus transmission through the contact |

Figure 1.
Historic Urban Landscape strategies and design actions adopted to mitigate the infective diseases.

dry cough. In the 19th century it invaded Europe (Martini, Gazzaniga et al., 2018);

- Spanish flu, between 1918 and 1920; it caused the deaths of 40 million people worldwide;
- Pandemic of severe acute respiratory syndrome (SARS), manifested in 2003 and caused by the coronavirus family (SARS-CoV-1), with about 8000 cases reported in 26 different countries after 8 months.

Summarising, it can be said that there are four strategies for intervention on the urban historical landscape, which return for the containment of infections, in the most violent epidemics:

- design and construction of new infrastructures;
- creation of open spaces for collective use;
- reorganization of urban accessibility;
- integration of technical devices and furnishings.

The understanding of what has been done in the past is indispensable to provide the definition of potentially repeatable strategies and actions to fight the Covid-19 virus, paying attention to the additional possible collateral benefits that interventions could determine, in terms of increased comfort, lower energy and water consumption, increased social inclusion.

The most recent scientific literature on Covid examines the opportunities that the built environment offers for the reduction of the infection (Dietz, Horve, 2020), starting from the observation of the preventive potential of design strategies (Eykelbosh, 2020), linking the commitment to contain the pandemic to the UN Sustainable Development Goals (Leal Filho, Brandli, 2020).

More operational is the contribution that comes from interdisciplinary research that combines the analysis of medical experts, the design perspective of architects and urban planners (Frank, Iroz-Elardo et alii 2019). These studies also include comparative analyses, which have long been exploring similarities and differences between the current pandemic and the major infections of the past (Pinheiro, Luís, 2020). One of the answers which emerges from the literature review for risk mitigation is in the return to rural areas (OECD, 2020).

For some authors, infectious diseases and extreme events resulting from climate change are warnings from the planet: the limits may have been reached and consequently it is essential to put in place a

more structural approach to change. Taking note of the vulnerability provides an opportunity to identify changes in lifestyles and places of life. With this in mind, studies are carrying out the idea that the pandemic represents an opportunity to accelerate the transition to sustainability (Cohen, 2020). In terms of actions, the framework of the scientific literature is very diverse: by scale of intervention (construction and urban), by timing (expected duration of work), invasiveness of solutions from incremental changes in space (containment of presences, redistribution of functions and accesses), to structural solutions (addition of windows, terraces, balconies). Particularly significant are the proposals that balance the reduction of the risk of transmission of Covid-19 infection, increasing other performance levels (for example related to well-being, improving air quality, reducing energy needs or the use of materials) up to significantly impact on the inclusiveness of the sites and the sustainability of the contexts.

3. THE INNER AREAS FOR A LIFESTYLE CHANGE IN PANDEMIC

In Italy, the inner areas emerge in the current pandemic as places of shelter from the crisis, areas where confinement in a limited space could be relieved by some privileged conditions. The availability of open spaces, green areas, air quality, silence rekindled the spotlight on territories that are strongly in crisis, but at the same time with evident potential. Such a perspective clearly cannot be the solution to the pandemic crisis. Nevertheless, it helped to look at these marginalised territories no longer as places to be assisted, but as places which can support cities with several benefits.

Taking into account inner areas is a global phenomenon that begins in the early 1990s, thanks to the role played by major public decision makers (EU, UNESCO, UN, etc.) and the third sector involved in the redefinition of the status of mountain regions at cultural, legal and political-economic levels (Dematteis, 2018). In Italy, the demand for a more sustainable lifestyle is documented since the 1990s through experiences of "returners" or new inhabitants

of inner areas (Battaglini, Corrado, 2014). Although still limited, these experiences are in line with a cultural change resulting from the "emancipatory reaction" to the threats that are hanging over the biosphere and local ecosystems (Beck, 2016).

The approach that expands the space of relations between the metropolitan areas and the inner ones from a systemic perspective is an integral part of the European cohesion policy (ESDP, 1999) and of the latest developments in the scientific research about inner and mountain areas (Zonneveld & Stead, 2007, Dematteis, 2018; AA.VV., 2020). The main strategies promoted by the EU to achieve a balanced and sustainable development at EU level concern, in fact, the "development of a polycentric and balanced urban system and the strengthening of the partnership between urban and rural areas, overcoming the obsolete dualism between the city and the countryside; [...] equal access to infrastructures and knowledge; [...] the development and conservation of natural and cultural heritage through its proper management" (ESDP, 1999; p. 19). On these issues, the studies by the School of Territorialists (AA.VV., 2020) examine the evolution of the roles that metropolitan and inner areas can mutually play, starting from the analysis of the functions that these latter historically perform for the sustenance of metropolitan areas. They examine, for example, the supply of building materials, water, protected designation of origin products, etc., alongside those priceless goods and services (so-called ecosystems) indispensable for human well-being, about which we are often not aware because they are not monetized and not considered as consumer goods (Marchetti, 2016).

The relationships attributable to the existence of physical, infrastructural, but also economic, social and cultural networks, are at centre of these studies, which shape the territorial system as a whole, whose performance is strongly connected to the effectiveness of its governance (Oppido et al., 2020).

The Italian inner areas represent about 60% of the entire territorial surface, 53% of the municipalities, 23% of the population (Agency for Territorial Cohesion, 2014). We refer to territories defined by the National Strategy for Inner Areas (SNAI) as areas "very different from each other, far from large agglomerations and service centres and with unstable

development trajectories, but nevertheless equipped with resources that are lacking in central areas, that have demographic problems even if strongly polycentric and with a strong attraction potential" (Agency for Territorial Cohesion, 2014). The term "peripheral areas", used by SNAI to define the Italian inner areas, adopted in Europe too, highlights the multidimensionality of the phenomenon, often associated with complex environmental and socio-economic dynamics.

If we refer to the areas of the Alpine and Apennine ridge, the so-called bone of Italy (Rossi Doria, 1982), we take into account very deeply diversified territories, which result from centuries-old anthropization processes; in these places the "roughness of the territory" produced "differences in exposure to the sun and winds, humidity, temperature, vegetation, species; it determined the attraction for permanent settlements by the most varied ethnic groups and the preservation and regeneration of their cultures; so they have been enriched with diversity of languages, attitudes, foods, music, gestures" (Barca, 2018, p. 552). These territories have been affected by long-term processes of deindustrialization, transition to economies dominated by services, marginalisation, exploitation of resources, emigration, abandonment of agricultural land, etc. These are "prolonged disorders", so-called slow burn (Pike et al., 2010), which have stressed inequalities and unbalances, corroding regional and national unity. From a systemic perspective, these processes directly affected the vulnerability of inner areas, and indirectly, the vulnerability of the metropolitan ones (congestion, pollution, etc.). Today, these vulnerabilities increase local risks (seismic, hydrogeological, depopulation, etc.) - if we look at the components of the territorial system - but also the common risks (if not global), such as biodiversity loss, erosion of natural capital, climate change, epidemics, etc..

An urban-rural, metro-mountain, or rather systemic and polycentric perspective, would allow to synergistically address the risks in a virtuous ecosystem circuit.

Starting from these concepts, the paper deals with the permanent effects on the settlement system, that have been generated in a small municipality in the hinterland of Campania Region, a place already

significantly marked by the permanent effects of the 1980' earthquake, in the same ways as for many Italian inner areas. In this case, the damage suffered by the Historic Urban Landscape - in terms of built environment's identity features and perceptual, productive, social functions loss - due to the reconstruction were greater than those generated by the seismic event itself. And it is from this point of view that this research outlines for a different horizon, based on the return to the ancient built as a design priority. Concurrently with the pandemic, the Palomonte, Municipality administration, mostly composed of young professionals, asks for the involvement of the University to start a heritage-led design process towards horizons of a "new normality".

4. CASE STUDY: THE MUNICIPALITY OF PAOLOMONTE, SOUTHERN ITALY

Palomonte is a municipality of 3.904 inhabitants (ISTAT, 2020), located in an inner area of the Campania Region. It is classified as an "intermediate area", according to the indicators provided by the National Strategy of the Inner Areas. In fact, it is more than 40 minutes far from the nearest pole, represented by the city of Salerno, and it is poorly equipped with primary services (health, education, mobility).

At the beginning of the 1900s, Palomonte experienced a growth and development that, more or less consistently, characterized the entire century, until the 1990s, when a slow, but constant process of demographic crisis, caused an increase in vulnerability. Following the earthquake of 1980, and in particular the reconstruction, according to the Law No. 219 of 14 May 1981, Palomonte is marked by a process of misalignment between sedimented construction culture and new design action. Residents built their homes in more accessible places; the recovery of the historic centre caused extensive transformations and demolitions. The vocation and identity of the territory changed because of:

- depopulation;
- fragmentation of the territory and growth of different fractions, which in turn lack services;

- transfer to public municipal ownership of private abandoned residential buildings.

Compared to the inner areas of the Campania Region, Palomonte has a demographic trend in contrast, starting from the positive curve that characterizes the post-war years. In addition, compared to the average of the Italian inner areas, the municipality has a rather young composition of the population. Compared to the 2011 census data with the national average for the 17-34 age group, Palomonte is above the average by about 5 percentage points.

The demographic analysis of the different districts into which the settlement is divided highlights the aforementioned fragmentation of the territory, with the loss of the residential vocation of the historic centre and the exodus of the population to the further downstream and more connected areas. An important feature of the Municipality is the entrepreneurial reality, developed above all in the food supply chain, with companies such as Molino Grisi. Finally, the current public administration aims to promote a new strategy that will once again give the historical centre the role of guardian of beauty without denying the changes required by development.

5. METHODOLOGY

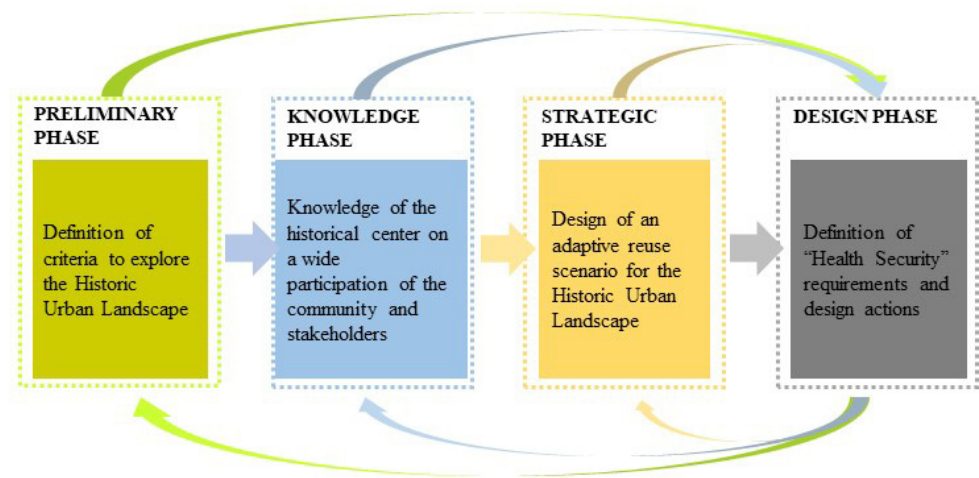
The heritage-led design process (Council of Europe, 2005) initiated by Palomonte Municipality, supported by the Department of Architecture of the University of Naples Federico II, is characterized by a participatory and performance-based approach, in which the settlement system is conceived as a result of a "historical stratification of cultural and natural values and characters" (UNESCO, 2011), with the aim of rediscovering and innovating its qualities, calling on old and new inhabitants to invest in the territory.

The experimental process aims to give back to communities the ancient ability to be, at the same time, keeper of heritage and intermediaries of innovation.

The stages of the experimental process are (Fig. 2):

- a preliminary phase, where the knowledge criteria are defined, taking into account the goal of health safety and adaptability for the urban historical landscape;

Figure 2.
Methodological process.



- a phase of knowledge at the scale of the historic centre, based on the above criteria and on a wide participation of the decision makers and community;
- a strategic phase where an adaptive reuse scenario is designed for the historic centre;
- a design phase, in which from the definition of health safety requirements at the Historic Urban Landscape scale, a reuse project of a sample building is proposed.

6. SYNERGIES BETWEEN THE ADMINISTRATION AND THE UNIVERSITY: HERITAGE-LED DESIGN PROCESS

The experimentation recognizes the centrality of the knowledge project, both for the analysis of the building and for the identification of the relationships between the components of the settlement system.

This approach allows to preserve past identity and recognisability of the built environment and to determine the quality of the final outcomes (Caterina, 2016).

In response to the disruptive pressures that erode the rooted qualities of the built environment, the research

defines criteria for detecting the opportunities that could come from the reuse of Palomonte's Historic Urban Landscape. This in order to identify the potential for adaptability/ transformability that drives the transition to health safety and sustainability (Fig. 3).

The knowledge phase is based on an indirect survey of the Historic Urban Landscape, supported by the involvement of the community and stakeholders. It returns: an articulated built heritage having a strong relationship with the surrounding landscape, mostly underused or disused; the distribution at different elevations, where courtyards, gardens, terraces, open spaces, green areas (mostly abandoned or underused) are connected by a system of pedestrian paths, mostly terraced; the presence of territorial landmarks.

The census of open spaces, public and private, retrieves the consistency of a network characterized by squares, forecourt, green areas - uncultivated or cultivated, and Special Protection Areas (ZPS). In particular, two underused green areas, with dimensions between 300 and 400 square meters, represent significant potential. The first is in a strategic position near the Mother Church of Santa Croce and occupies an extraordinary panoramic position, the second is able to increase the accessibility and practicability of the historical centre. The underutilized

Figure 3.
Criteria for the detection of potential for Palomonte's Historic Urban Landscape adaptive reuse.

| <i>Available Area</i> | | <i>Public/ private</i> | <i>N.</i> | <i>Mq min e max</i> |
|-----------------------|---|------------------------|-----------|---------------------|
| S01 | Abandoned or underused buildings | Public | 5 | 300-1360 |
| S02 | Abandoned or underused rooms | Public | 46 | 9-40 |
| S03 | Open spaces pertaining to buildings: courtyards, gardens, terraces, roof terraces, etc. | Private | 13 | 150-5000 |
| S04 | Open spaces: squares, forecourts | Private/ Public | 8 | 400-1000 |
| S05 | Cultivated green areas | Private/ Public | 5 | 300-700 |
| n | | | | |

| <i>Accessibility and walkability</i> | | <i>Yes/No</i> |
|--------------------------------------|---------------------------------|---------------|
| A01 | Pedestrian accesibility for all | No |
| A02 | Proximity to public transport | No |
| A03 | Parking and rest areas | Yes |
| n | | |

| <i>External correlation/ Adptability</i> | | <i>Yes/No</i> |
|--|--|---------------|
| C01 | Closeness between available areas | Yes |
| C02 | Closeness/ connection between available areas | Yes |
| C03 | Closeness/ connection between available areas ed relevant architectural and naturalistic elements, scenic spots ecc. | Yes |
| C04 | Ramification/ adaptability of the paths network | Yes |
| n | | |

open spaces are equally interesting; among these, there is a residual space between a complex of abandoned residential buildings, currently a waste receptacle, devoid of lighting systems, urban furniture, road surfaces and sidewalks. This area is strategic for location, relationship with the landscape and good accessibility.

On the other hand, within the research area, there are 11 buildings acquired from the municipal heritage: 6 of them intended for economic and social housing and 5 for different public destinations. The latter, currently disused, are a set of available spaces of more than 3,300 square meters, excluding attic rooms also partly usable (Fig. 4).

Due to the pandemic, the involvement of the population was conducted through telephone interviews and questionnaires spread on social media to reach residents and emigrant citizens.

The constant dialogue with the Municipal Administration and the involvement of the community and stakeholders return a demanding framework characterized by the following requests:

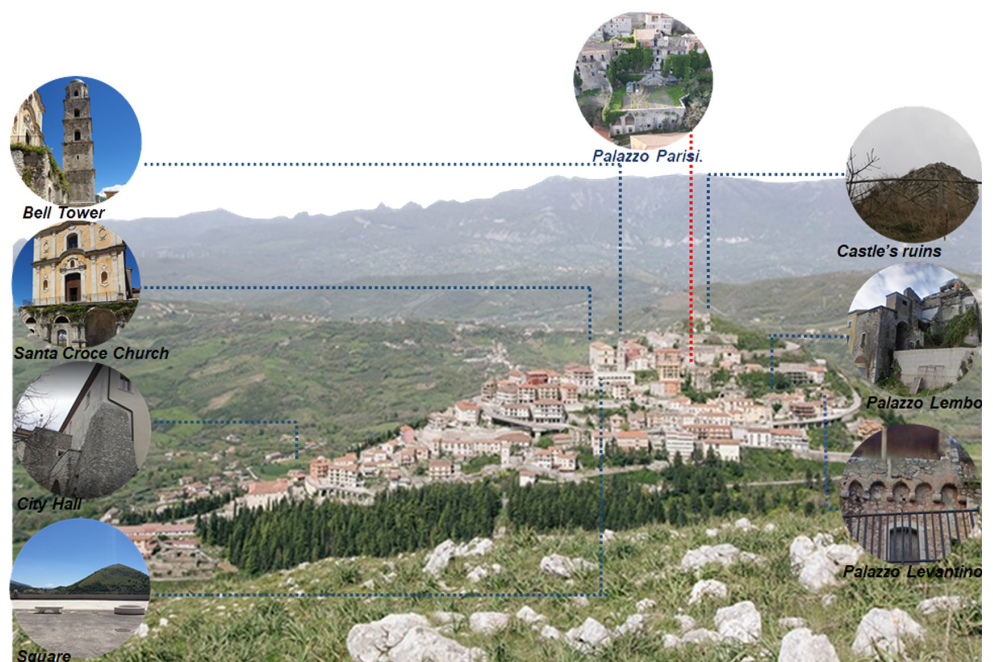
- reactivation of the local economy;

- encouraging the return of residents to the historic centre;
- increased urban security in relation to Covid-19;
- improving the safety, walkability and accessibility of the historic centre;
- integration of spaces for culture and social activities;
- safe use of green areas and meeting spaces.

The settlement demand is marked by the need to make Palomonte a good practice of historic villages regeneration, through the adaptive reuse, redevelopment and maintenance of the buildings. The aim is to encourage the return of uses related to the specificity of the territory, attracting new companies and research centres. Palazzo Parisi (Fig. 5), built in the 12th century and in the 13th century expanded on the northeast side, is one of the abandoned residential buildings acquired on municipal property. It is selected as a pilot case to experiment with an adaptive reuse strategy informed by the increase in green areas, nature-based solutions, use of renewable energy, closure of the water cycle.

The goal of the research is to transform Palazzo

Figure 4.
Identification of buildings, acquired by the Municipality, and of territorial landmarks.



Parisi into an urban cultural infrastructure, capable of generating value. Its strategic position, the dimensional characteristics, the spatial and distributive structures, reconcile the urban and building qualities. It is a large building, which is spread over six levels, consisting of over fifty rooms, two halls and external spaces. It has multiple accesses to the different elevations of the historic centre, as well as a real urban path. This system of horizontal scales and pedestrian paths is one of its identity elements; it is an authentic urban walkable system, which originates in correspondence of the structure that supports the large roof garden, where rainwater are collected in tanks. A staircase, which starts from the garden and crosses the building, connects the lower part of the village and the upper part, where the main square is located, with the Mother Church of Santa Croce.

In the recovery project, the improvement of the performance of the building, respecting its identity, is ensured by the reuse compatibility check. In fact, the comparison between the requirements of the new function and the performance of the building must take

into account its perceptual-cultural, morphological-dimensional and material-constructive constraints.

In this scenario, we highlight some of the strong points of Palazzo Parisi. In particular, the interior spaces, although of limited size suitable for a limited number of users, are characterized by a plan without paths, typical of pre-industrial residential architecture, with adjacent spaces: this contrasts the isolation between the different groups of users involved. The severe decay of the building, characterized by scattered collapses and widespread lesions on the vertical structures, can represent an opportunity for design, defining a new spatiality related to the needs of width, ventilation and brightness of the interior spaces. The collapses of the floors in some rooms generate double-height spaces, which, preserved, meet the requirements of ventilation and lighting to be obtained also through additions to the existing building; the loss of plaster allows the replacement with innovative materials that meet the requirement of cleanability and air purity, improving user safety.

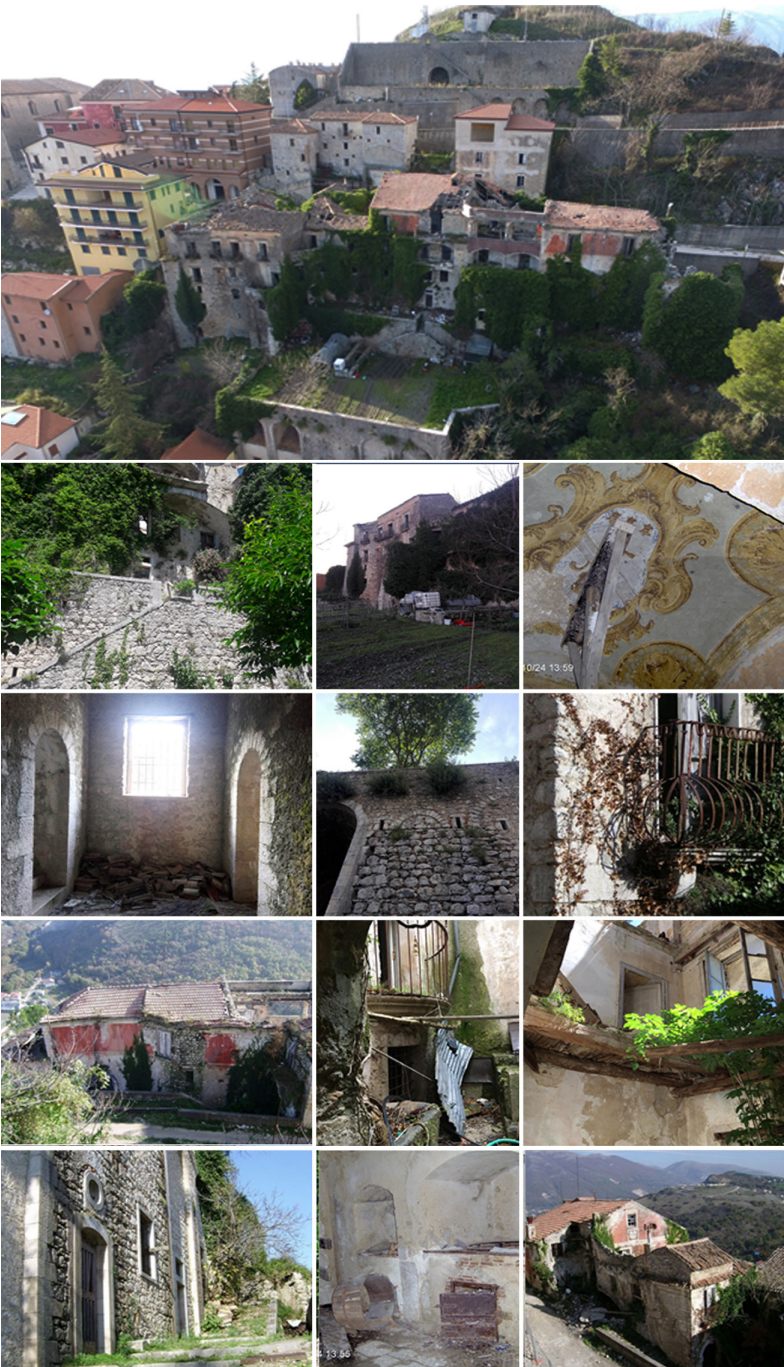


Figure 5.
Palazzo Parisi: current status.

7. RESULTS AND DISCUSSION: ADAPTIVE REUSE STRATEGY AND ACTIONS TO COMBINE PUBLIC HEALTH INSTANCE WITH SUSTAINABILITY

The approach that the paper suggests is to control the infection through coordinated strategies and design actions for urban landscape and buildings that syncretically respond to the imperatives of sustainability and inclusive prosperity.

According with the scientific literature, the intervention strategies are aimed at reducing the risks related to the main transmission routes (droplets and contact), to promote:

- physical distancing;
- reduction of virus transmission by contact;
- increase the immune defences of citizens.

Turning these strategies into action requires, at the scale of the Historic Urban Landscape, to rethink a set of design requirements related to the environmental and technological systems (Fig. 6). Based on this, it is possible to identify some design solutions experimented for Palazzo Parisi in Palomonte.

Starting from the new destination of Palazzo Parisi as a cultural and training hub, the project (Fig. 7) aims to reactivate a previous cultural vivacity of the area, stimulating the involvement of young people, professionals and entrepreneurs in a virtuous circle of capacity building, sense of belonging and social cohesion. Once the feasibility of the intervention has been verified and a company willing to invest has been identified, the project proposes the inclusion of functions strictly linked to a high school for technical training, with equipped spaces for co-working and remote training, for the social, a library, in order to ensure a functional mix that favours the alternate and continuous use of the structure.

The building, as a heart of the Historic Urban Landscape, as well as a potential urban artery, can represent a driver of urban reactivation, while

improving the walkability and accessibility of the historic centre, together with its current health safety conditions. The accesses and stairs that characterize the palace become one of the main urban connections for the citizens to directly reach the areas of the village located at different altitudes and to move to the most important territorial landmarks such as the Mother Church of Santa Croce, the bell tower, the panoramic square and the town hall.

Furthermore, the new artery allows the walkability, so that it is possible to alternate and diversify, in case of emergency, pedestrian flows. The structure becomes the fulcrum of a set of public gardens that make it as a porous and creative living system, an essential hub for connecting the different heights of the city.

The large roof garden pertaining to the palace is an intimate place, at the same time, strongly connected with the surrounding context (Fig. 8-9); it becomes the central node of a corridor of public green spaces. So a network of green areas, urban gardens, equipped areas is defined. The reactivation of these spaces is strategic in the urban health safety project. In fact, these spaces could represent the favourite places, carriers of well-being, for the citizens, where the community can do outdoor activities, increasing its immune defences. In this perspective, the roof garden becomes an urban park open to the public, with areas intended for vegetable gardens, orchards and aromatic greenery.

| Requirements of the environment system | Indicators |
|---|--|
| Control of hygienic - sanitary and microclimatic conditions | Number of fountains and wash-bashers for personal hygiene in urban areas |
| Exposure of users to air and sunlight to increase immune defenses | Number and dimension of green areas |
| Physical distancing between users in public spaces | Width of pedestrian paths |
| | Number of one-way paths |
| | Road section of cycle routs |
| | Dimension of parking area based on the predictable number of users |
| Flexibility and Equipability of spaces to be used for temporary functions | Decentralized distribution of food courts and bar |
| | Number and size of balconies, terraces and flat roofs recovered for use |
| | Equipable spaces for quarantine |

| Requirements of the technology system | Indicators |
|--|---|
| Asepticity of the surfaces | Technical elements and self-cleaning devices (handles, handrails) |
| Control of solar and radiant factor | Presence of windows, skylights, green roofs |
| Distancing between users of the public space | Presence of signs for the direction of the paths |
| | Presence of distance markers for elevators and stairs |
| | Integration of protective barriers (plexiglass in information services for the public...) |
| | Automatic doors and gates |
| Control of health- hygiene conditions | Differentiation between entrance and exit doors |
| | Integration of disinfectant dispensers in strategic public places |
| | Control of the functionality of sewage systems and of the wastewater quality |
| Cleanability of the surfaces and systems | Presence of external finishing elements that can reduce the time of stay of the virus |
| | Cleanability of terminals and plant networks |

Figure 6.
Health Safety
Requirements for the
Historic Urban Landscape.

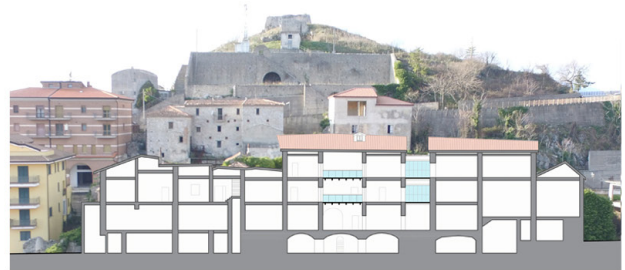
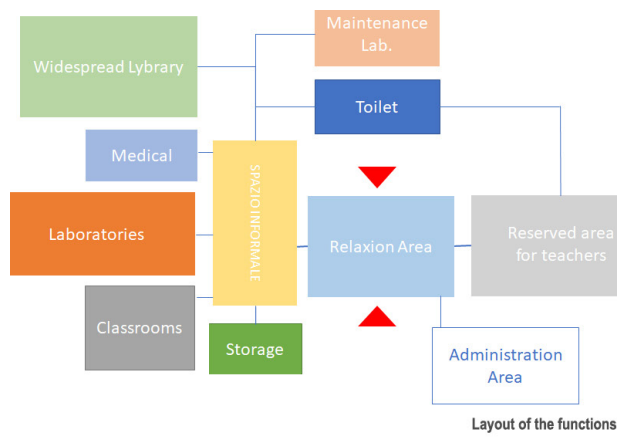
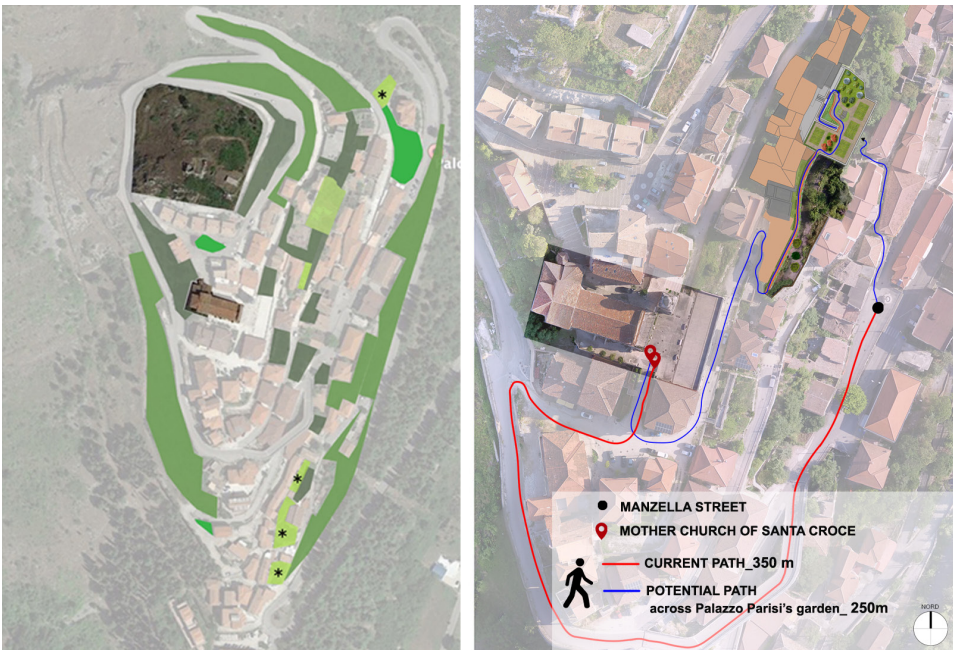
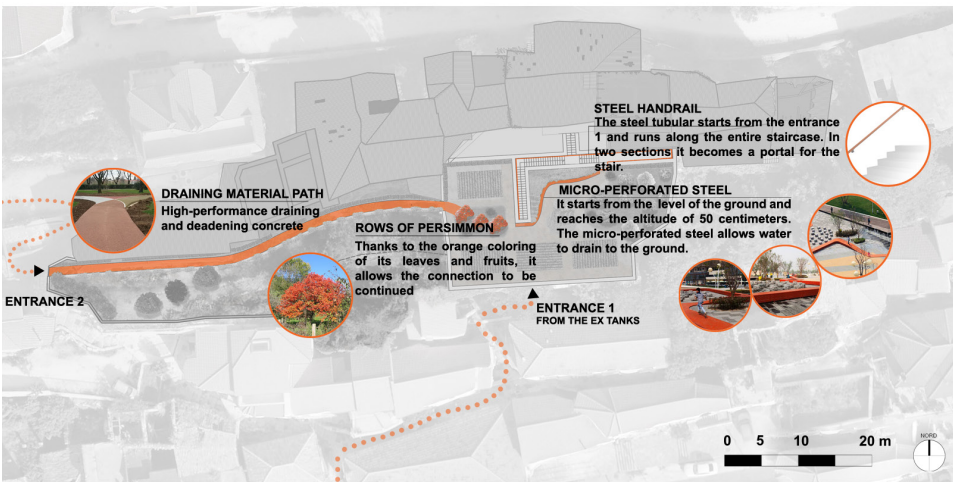


Figure 7.
Design proposal for an adaptive reuse of
Palazzo Parisi.



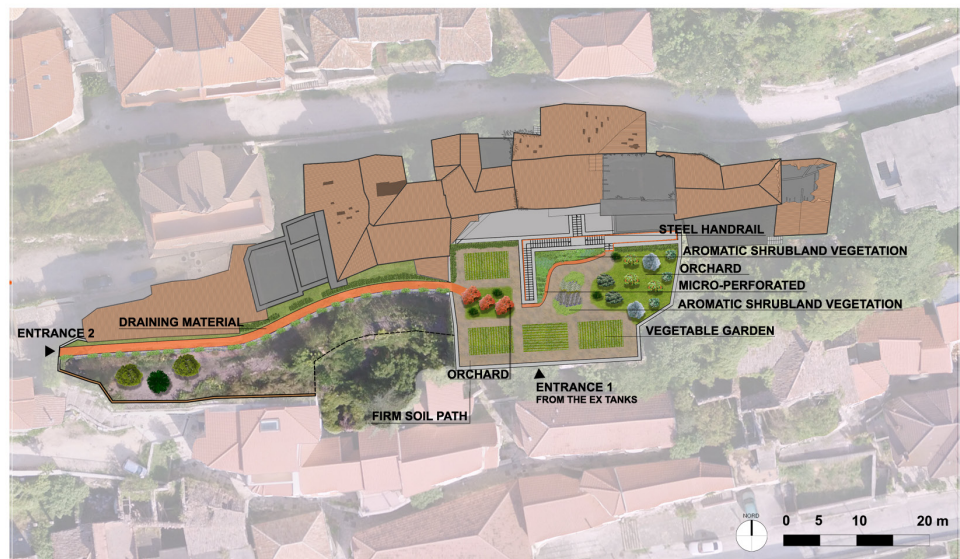
The green network and the accessibility to Palazzo Parisi through the roof garden

Figure 8.
Design proposal: studies for
accessibility and walkability.



Study of the vegetation

Figure 9.
 Design proposal for an
 adaptive reuse of the roof
 garden.



8. CONCLUSION

The future of global health is played out in terms of the health of the built environment and its citizens. The paper moves from this assumption and returns the experience of regeneration for the Historic Urban Landscape of Palomonte (SA), an internal area of the Campania Region, where the health and safety demands provided by the community are integrated with the transmission of the built heritage to future generations and the promotion of inclusive prosperity scenarios. The reduction of inequalities, accentuated inevitably by the crises, and the search for conditions of well-being and high standards of life for all are the major issues that can no longer be postponed. The pandemic outlined a new framework of requirements and a growth sensitivity towards the combination of health and sustainability turning the spotlight on inner areas, which emerged in this global crisis as "reservoirs of resilience", areas suitable for an ecosystem balance. In order to achieve this purpose a new "polycentric-solidarity urban-rural centrality" is needed. In this perspective, the adaptive reuse of Palomonte's Historic Urban Landscape is a short and medium-long term reactivation strategy aimed at sustainability and health safety scenarios, towards the so-called "new normal". The design experimentation integrates preventive and curative actions, taking into account at the same time transitional and definitive measures.

An accurate literature review regarding the cases of pandemics in the history is the starting point to put in place new strategies, and a new research to define a set of project requirements related to the environmental and technological systems on the scale of the Historic Urban Landscape. The results of the experiment show that an adaptive reuse of ancient places can draw a new chronology for places, where the community designs scenarios of inclusive prosperity.

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