

# **RETHINKING IN-LAND RURAL AREAS**

TOWARDS RENATURALIZATION

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Polytechnic of Turin  
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## Abstract

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The Calabrian hinterland case study may represent an opportunity to discuss and debate the central problems of in-land areas. In-land rural regions are territories quite distant from the welfare of urban centers and are positioned far away from the established infrastructure network of the country. Demographic trends, despite the availability of natural resources, entail marginalization, abandonment, and depopulation mainly due to socio-economic changes. The considerable social cost of traditions that disappear also implies, for example, degradation of land use and hydrogeological instability. In recent years, different types of strategies aimed at reversing such demographic trend, mostly based on tourism economy, but sometimes they revealed cons as destructive as abandonment itself. As those strategies prove to be ineffective, some claim that the abandonment of small towns and villages located on the slope of the mountain ranges should not become a collective cost. Instead of working with the assumption of future repopulation through temporary devices for each in-land area, the research aims at showing an alternative approach to the loss of permanent population by prioritizing hydrogeological stability and naturalization of landscape.

## URBANISATION IN EUROPE: ONGOING PHENOMENON

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Rural areas changed dramatically during the 20th century. The process had two different implications: on the one hand the countryside depopulated lost the characteristics that until then had dominated it, on the other the city expanded redesigning the structure of the city.

The countryside was the place where most people lived almost because agriculture was the primary source of livelihood. But the introduction of new technologies and new sources of income transformed cultural, political and social trends.

At the end of the 19th century, the European and American cities, due to industrialization processes and demographic boom, changed their structure. Until that time the city was a place of exchange of goods, center of religious power and political-military administration. The city became a centre of production: many people migrate from the countryside to the city to work in factories introducing new welfare policies, new ways of living.

While some urban areas experienced a period of intense activity, the rural areas, in comparison, did not undergo the same modernization processes.

In the rural areas, new technologies introduced new methods of cultivating the land that reduced the amount of human labor force employed, thus requiring less and less human presence. The small families, already in precarious situations, took little advantage therefore from the cultivation of the land mechanized by the big investors. Countryside lost the human presence that had hitherto shaped the territory.

Factories in the city required a lot more work force in the processes causing a massive migration from rural areas to the city. The inhabitants' lifestyle changed from a condition strictly related to the land to a unexpected daily routine in factories. For example, film *Modern Times* by Charlie Chaplin shows how, in industrial cities, human life is totally focused on factory work. It was, for the most part, unskilled labor employed to perform mechanical and repetitive gestures simultaneously with the machines.

Where there were favorable conditions for urban development, the city expanded and entire neighborhoods called "dormitory suburb" are built and they reflect the model of life of this new reality. This is the first step towards "modernization" and the development of the contemporary city. New collective services are introduced, new systems such as the so-called "Welfare state" dominate the organization of entire parts of the city and all services for the community are implemented, such as hospitals, schools, transport, infrastructures. However, towards the end of the 1970s, the model of an industrial city came into crisis and new social and economic dynamics centered on material and immaterial relations rise, towards a Global

City model (Sassen, 2005).

The dynamics involved in the city have echoed in rural areas in different forms. Rural areas were the repository of waste and provides support to the maintenance of the city being drawn by deserted artificial landscapes. They were intensely exploited for their resources. For example, its dams, wind farms, wheat and solar fields have produced energy on an unprecedented scale (Carlow, 2016). To met the needs of the urban structure that is spreading like wildfire, the resources of the immediately surrounding countryside were sometimes not enough to satisfy the demand by taking entire portions of rural areas that were exploited and viewed as "supporting" the city.

There were almost a rupture of the territory in two distant visions.

The city is much more attractive by the way the image of the city is strongly influenced by events, by the quality of connections, by the presence of business and financial districts, driving today's economy.

Of course, it cannot be said that these processes afflicted all European territories, due to different history and realities, but it is also true that the majority of them are involved in dynamics that plowed our time.

Industrialization is partly responsible for the growth of the city if it considers that the European population passed, in the 19th century, from 180 millions to 425 millions and from in the early 1900s most of the population resides in rural areas.

In Europe, the population residing in cities with fewer than 20,000 inhabitants, which was equal to 65% of the total in 1920, decreased in 1940 with

61%, lost in 1960 with 52% and stayed less than half in 1980 (42%). At the same time, the resident population grows in the larger centers, with over 100,000 inhabitants. In 1920 was 23% of population, in 1940 equal to 26%, in 1960 rise at 38% and in 1980 about 48% (Haddock 2004, p.33).

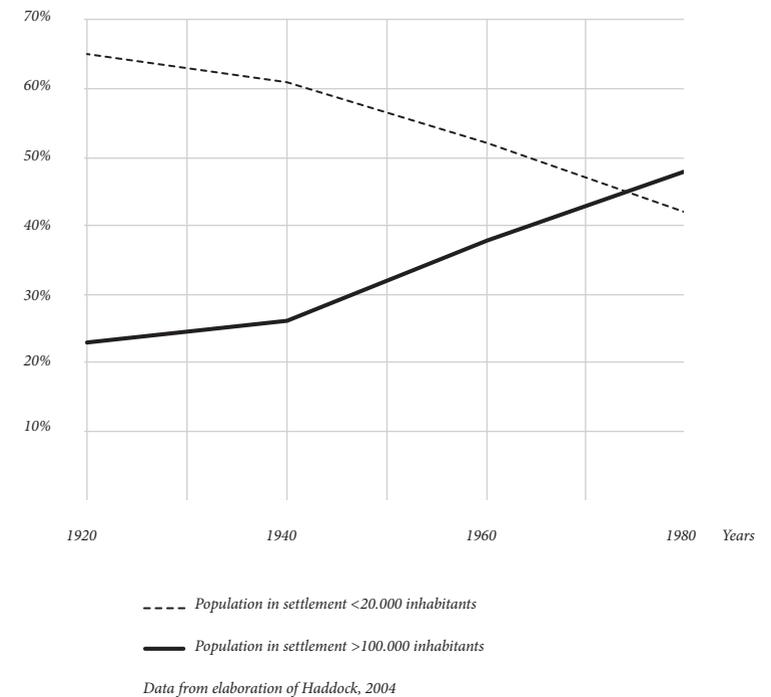
If, however, the demographic increase has contributed to the demographic expansion of the city, since the 1980s new scenarios that do not include population growth.

Cities are the economic and political center, they have a huge cultural offer and way of living usually combined with welfare. The people who move there adopt that lifestyle and take advantage of transport and education services and are usually included in a well-established relational network with other cities. Sometimes it consists of short-distance and the high-tec networks that connect them. The most important metropolitan areas, generally located on the north-eastern axis of Europe, take the form of a densely populated region of municipalities with over 10,000 inhabitants. Belgium-holland-Germany-North-Italy join this axis.

More than a quarter of the territory of the European Union is now urbanized and the consumption of land is destined to grow progressively, even where the population pressure is irrelevant or even non-existent (Governa).

The flow of capital, resources and people that is manifested in large cities attracts people.

Are the core of innovation, brings unlimited opportunities to reach fortune and stability, and offer the best service in terms of environmental sustainability (Beauregard, 2018).



Europe map urbanisation.  
Data: European Environment Agency (EEA)



Europe map area settlement >10.000 inhabitants.  
Data: Moriconi-Ebrard



Europe map area settlement <10.000 inhabitants.  
Data: Moriconi-Ebrard, European Environment Agency (EEA).



The Report of United Nations already in 2010 estimated that the percentage of the people that lives in urban area will increase at 80% in 2050.

In *Blade Runner* we can see a kind of reality shaped by the skyscraper, high density settlements, flying cars and hyper-tech devices that change radically the environment where people live.

New technologies modify the way of life and so the nature of the space suggesting the turn the settlements could take.

Sometimes happen that the space is modified and transformed, a new layer covers the morphology or, considering the urban phenomena like a sum of different time or nature of spaces, it changes.

Sometimes happen that there are no conditions to develop the same prospects and imagine different scenarios.

The collection of paintings by Tullio Pericoli from the 70s to the present shows the change in the Apennine landscape. The author builds over time a sort of plot that shows the diversified balance, stratifications and features of the territory. A work that opens up to a wider imaginary that leads the observer to retrace the Apennine campaign and draw an imaginary line on the successive transformations of the landscape in the collective imagination.

Image of wastelands that constitute a real oasis, paths in wild nature, intact landscapes.

The green valleys of the Apennines in contrast with the gullies that form the background. A place where nature dominates undisturbed, drawing an environment that is far from the hectic life of the city. Place where to escape that is not formed of monotonous and equal landscapes but they are

influenced by the time and by the heterogeneity of the vegetation that varies according to the strips of the territory.

There are a wide range of factors that contribute to the de-ruralization. It is possible to suppose the problems, analyze the trend, but nowadays there are no sufficient information about to clarify the weight of all the aspects of the phenomena.

Certainly it is possible to identify some factors that contribute to the phenomenon. The attractiveness of the city due to its network of relations, the crisis of the agricultural sector, the birth of a new economy, the infrastructure, the opportunities offered by the environment, the presence of collective services, the culture and the presence of institutions but we don't have enough elements to determine the exact percentage on the final result of each factor.

It is too complex to be able to evaluate it correctly, thus is something that can only be mapped, monitored, compared and cataloged (Brenner, 2016).

The migration, less or more percentage, is something that affect all the world over the time. Most of the European territory is urbanized by small to medium sized centers of less than 10,000 inhabitants. The population therefore moves towards urbanized centers, especially along the so-called blue banana area also identified as a European megalopolis.

The megalopolises are classified for their territorial, demographic and functional dimensions.

Concept of megalopolis is related to the spatial continuum between the various points, must exceed 20 million inhabitants and is considered the main engine of development.

The continuum is not characterized by the uniformity of the settlement, but it is mostly about flows of goods, information, as well as the accessibility of services.

Spatial-development of the contemporary city is based on a model called polycentric. For example, the city of Milan expanded incorporating the existing municipalities and mending the fabric between the various poles. We can speak of a metropolitan city with widespread urbanization that include 670 towns.

Is a system of a dense network of small centers that form a city in which activities are distributed over the entire morphological structure, denying a only one center typical of the traditional radial form of expansion.

The formation of periurban centers, which in Italy is called “città diffusa”, underlines the passage from the city as a nuclear or areal entity to the extended reticular city, organized according to a multicentric settlement model on the territory and is the

equivalent today, also as regards the modalities of life of the inhabitants, of the traditional city (Governa, Memoli, 2011).

The most part of land recover in Europe is rural; nowadays, in Italy, centers with a population under 20,000 are considered to be rural (Haddock, 2004).

Most of the municipalities are distributed along the slope of the hangers, Apennines, Aspromonte and low range of the Alps.

Depopulation is such a huge phenomenon that re-activation policies are varied. For example, the European Commission has established a “European Agricultural Fund for Rural Development (EAFRD)” fund to re-activate the economy that predominantly rural areas make up half of Europe and represent about 20% of the population. Yet most of them are among the least privileged regions of the European Union, with a GDP per capita significantly lower than the European average (ec.europe.eu, 2019).

Many areas classified as European Disadvantaged Zones have undergone huge demographic changes due to mass migration from rural areas to cities, the so-called “agrícola exodus”, which began during the Industrial Revolution.

Today, in Italy, the abandonment from the countryside is a phenomenon still in progress.

Which is the destiny of those areas?

## CONSOLIDATED DRAFT

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Rural in-land areas, in Italy, are subject of re-population projects. The following chapter explores some types of intervention in order to identify the implications of such operations.

Rural in-land areas are significantly distant from the centers offering essential services (education, health and mobility), full of important environmental and cultural resources and strongly diversified due to centuries-old processes of human settlement (UVAL, 2014).

Depopulation of rural areas in favor of central urban areas constitutes a social cost in terms of hydrogeological instability, degradation and disappearance of traditions.

In the second post-war period in fact it was marked by the exodus from the countryside, causing a drop in demand for public services, a drop in the employment rate, a reduction in the occupation of the territory and degradation of the national heritage.

For this reason it is considered important to act in

order to strengthen the possibilities of the territory and obtain a turnaround in the demographic collapse.

The report has clear assumptions: the internal areas are not adequately exploited; there is insufficient maintenance; social problems are related to the lack of basic services;

Through a polycentric interpretation of the territory it is possible to explore the structure of the Italian country. There is a first infrastructure consisting of a network of cities that extends over the whole territory which constitute the center of essential services for the population.

if we exclude the areas in close contact with the central urban center, the remaining part of the national territory is classified according to different degrees of peripherality. The peripheral areas have not been adopted the same public policies as the primary centers during the past.

All areas that are more than 40 minutes away from the primary center are considered peripheral (Acierno, 2015).

This is one of the criteria used to classify an aspect of rural in-land areas.

## Depopulation

Internal depopulation is an alarming phenomenon that has taken a back seat during the 1980s due to international migration and attention to the problems of the city, but still today it is important to talk about this. According to ISTAT data, in the year 2018 inter-municipal residence transfers are estimated at 1 million and 359 thousand (+ 1.8%). In the South the balances are everywhere negative and the loss net population of the area is 65 thou-

sand individuals (ISTAT, 2018).

Only 5% of the Italian territory hosts 33% of people. In contrast, municipalities with low urbanization cover more than 70% of the country but host less than 25% of people. In total there are 6,943 municipalities in the national territory below 10,000 inhabitants in 2001. Depopulation involves complex socio-economic dynamics.

The reasons for the move are studies opportunities and work; family reasons for inter-provincial ones; Frequently, as statistics shows, there is a substantial migration of the south towards northern Italy.

## Policies

Policies adopted are based on local development projects and the adaptation of services such as school, health and mobility. In addition to local development projects aim at protecting the territory and enhancing natural resources which, the introduction of basic community services, would lead to economic and population growth.

Definitely, development of new economies with the ultimate goal of a population increase.

Activating a latent productive activity, therefore introducing a economic engine, is the first step for stable and lasting growth.

The first prerogative is to provide essential services such as health, secondly to provide adequate education capable of developing a civic sense, coordinating mobility with innovative and sustainable technological solutions both for the transport of goods and people.

Local development projects focus on producing specific products, creating daily actions, attracting tourists, renewable energy and sustainable inter-

ventions, consequently reduction of social costs (hydro-geological structure; soil maintenance; protection of biological diversity).

But if it is true that depopulation has caused significant costs for society, will it be equally true the repopulation prospects of all these areas is the right solution to mitigate social costs?

### **National Trends**

The economic situation of our country in the current historical period does not give any prospect of imminent growth as shows the trend of economic growth rates, considering the public debt and demographic data (MICELI, 2014).

According to estimates and ISTAT data, Italian GDP is estimated to reach + 0.1% at the end of 2019, placing last on the European scene if we consider that Ireland is at + 5.6%. Investments make up about 18% of GDP.

At the beginning of 2019, according to ISTAT data, it is estimated that the population more than 90 thousand out of 60 million residents (-1.5 per thousand), therefore an increase in the percentage of elderly population.

This implies a reduced capacity of the municipalities to invest large sums in ambitious requalification projects. However, a margin of growth is not excluded through lucid strategies and intervention policies.

Through a careful analysis of the places it is possible to recognize potentialities capable of stimulating the demand of investors and stakeholders and start a process of requalification with good prospects of economic recovery in the medium-long term. A particular case may be the redevelopment

of places that are in a position considered strategic, but this is not guarantee an economically prosperous solution.

Other cases, some areas, even if they have interesting artifacts or potential environments, do not meet the minimum conditions for an intervention in economic terms. At least, not now.

An example is the ancient villages, especially in the south of the country, there are no convincing economic prospects based on the action of private operators.

Given the scarcity of investments and available resources, huge infrastructure works to improve the accessibility of inland areas are not taken into consideration because they represent a very risky investment. Activating or triggering economic development processes based on local economies could prove effective in the short term, but does not ensure long-term effectiveness given the general frame of socio-economic trends.

Therefore, tourism as a driving force for triggering processes appears to be an attractive alternative with reduced short-term return of economic costs and an activity that has always yielded in our country rich in variety and beauty recognized all over the world.

It is considered a productive activity made by limited availability of goods and services with the peculiarity of being deeply rooted in the territory and collective goods. Although it affects the public sector, those who benefit from it are the private sector with their activities that contribute to the growth of essential services.

Although the productive activity is profitable, it does not solve the problems caused by depopula-

tion. An example would be the case of the 10 tourists who overwhelmed by an avalanche of mud in the Raganello gorges. having one excursion were hit by an avalanche of mud due to the washing of the ground following the flood ([cosenza.gazzetta-sud.it](http://cosenza.gazzetta-sud.it), 20/08/2019).

The enhancement of the territory whose aim is tourism, concentrates activity related on tourism itself. it is possible a variation of the residents of the area with an increase, but this does not imply that the putting in safety of the land and the return to the care of the land that could mediate to the hydrogeological instability. So although there is economic growth, it could happen that there is a high risk that the problems associated with inadequate land use persist.

### **Migratory Phenomenon**

The migratory phenomenon is ancient and a constant of the human condition.

It is something that involves the relationship that man has with his environment and its evolution. The city, as an organism, is capable of surviving itself in the event of dramatic events such as an earthquake or a flood. Rebuild from its rubble and re-invent if there is the desire of the community and of the inhabitants in general to remain there. An example may be the city of Reggio Calabria, the oldest Greek colony founded in southern Italy, which in 1908 suffered one of the most destructive events of the 20th century: the earthquake of 1908. The earthquake, of intensity 7.1 Mw, destroyed the city and caused the death of one third of the population. Despite this, there was the reconstruction of the city and the population increased by 28.7%



(ISTAT, 2019).

The earthquake, although destroying the stability and everyday life of entire families, has not compressed the economic flows, the sense of belonging of the inhabitants and had in itself still the attractive power.

Assumed that the settlement is a complex system of social and economic human capital flows, It is an unstable system that contains in itself, by its nature, infinite variables. However, it is demonstrated that the presence of a sort of economic engine is one of the fundamental themes of its existence. Consequently, engaging new production activities and providing basic services to the community can be useful expedients to ensure the survival of small towns.

Is this enough to guarantee the reversal of the demographic trend?

Especially, is it important to reverse the demographic trend?

The city, as organism, is the result of the existence of several variables (Lynch, 1984). When a fundamental variable is compromised or the relationship between some variables is simply damaged due to exhaustion, restoring the compromised element does not necessarily restore the system's ordinary balance precisely because it is a complex system.

As described in a clear and simple manner by the writer Herman Hesse in one of his stories, the city is born from the human presence starting with the construction of the transporting system, it evolves, undergoes various transformations and acquires an image. Then, another city rise close to the existing with more "gold and silver" that attracted the



population and the town slowly returns to nature. Novels and movies have explored and illustrated the “return to nature” that may follow human settlement development.

## Strategies

The repopulation strategies adopted so far show a common line of action based on a more or less consolidated view of the internal areas. There are characteristics of the place that cannot be overlooked and are involved in the design process. The strategies such as the follows case studies start from the assumption that re-inhabiting the internal areas is the most suitable solution to overcome the problems caused by depopulation.

They are distributed throughout the national territory and are concentrated on the Apennine and Alpine belt of national morphology. These areas are recognized for being difficult to access. It is the obvious and not negligible assumption of the territory.

The four projects, selected from the publication of “Archipelago Italy, at the 2018 Architecture Biennale”, are presented according to a renewed interpretation.

Archipelago Italia investigated how contemporary architecture approaches marginal areas, collecting a series of examples that stand out for their ability to dialogue with the local context and needs for the revitalization of territories.

The cases examined, in fact, were selected according to the type of key intervention to highlight the logic and processes that structure the hypothetical modus operandi.

The hypothetical actors, the predominant actions

that intervene in the project are extracted to be inserted in a scheme of relationships.

Each case has its own structure and internal logic derived both from the potential of the territory and the built, from public or private clients, and from the analysis by the designer.

The selection criteria include: area located in the peripheral area as indicated by the Department of Development and Internal Cohesion (DPS); objective and purpose of the project for the territory and the development of the internal areas; presence of problems in the environmental and socio-demographic fields;

A further typological selection was carried out according to the projects that distinguished themselves in their field of action taking into consideration the purpose of the intervention and the subject dealt with.

Through the study and the deepening of the projects it is possible to identify four lines of action:

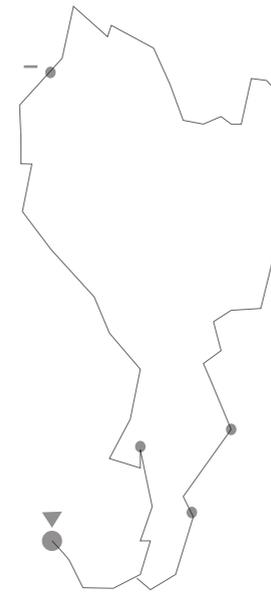
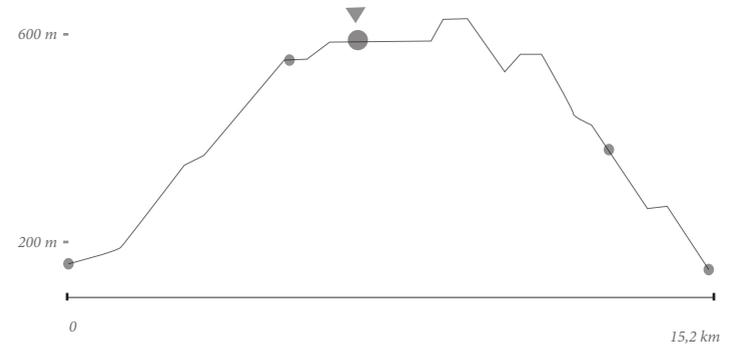
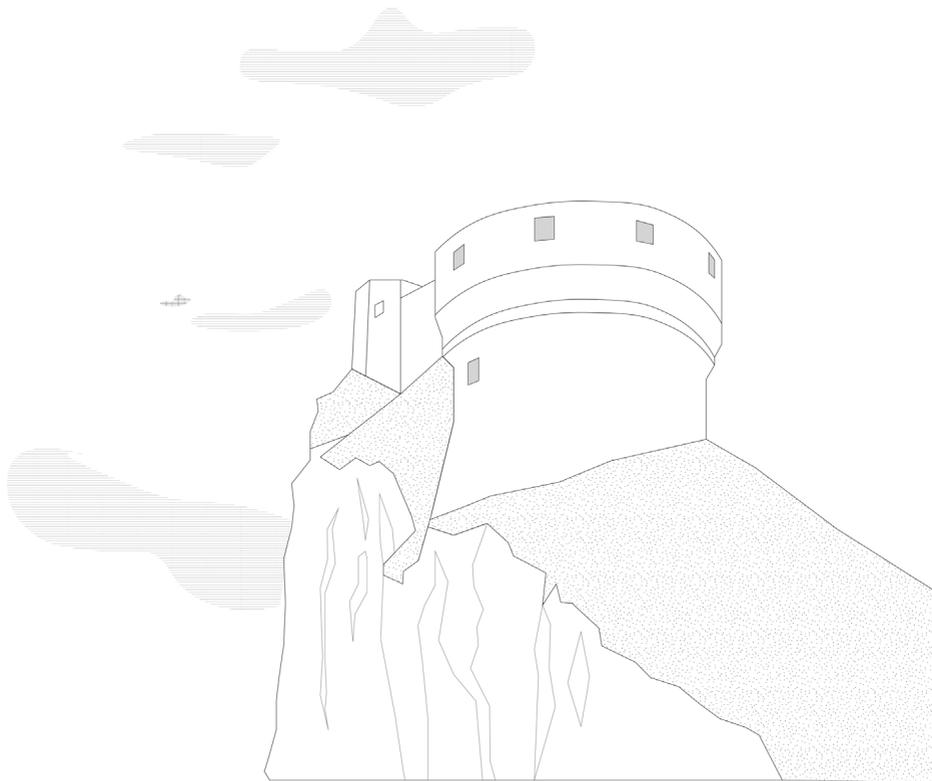
- intervention aimed at the enhancement of the territory with a tourist purpose;
- intervention to re-populate the abandoned places addressed towards a specific target of users;
- punctual interventions for urban development;
- urban and private recovery operations for a large user base;

Actions develop along a different timeline with diversified economic sources.

The following details illustrate the strategy adopted for the redevelopment of the area. With positive and negative implications and processes still under development.

San Leo "Borghi più belli d'Italia"  
View of the village

San Leo itinerary | Plan | Elevation profile  
Source data: [www.visitwellnessvalley.com](http://www.visitwellnessvalley.com)



## San Leo | Borghi più belli d'Italia

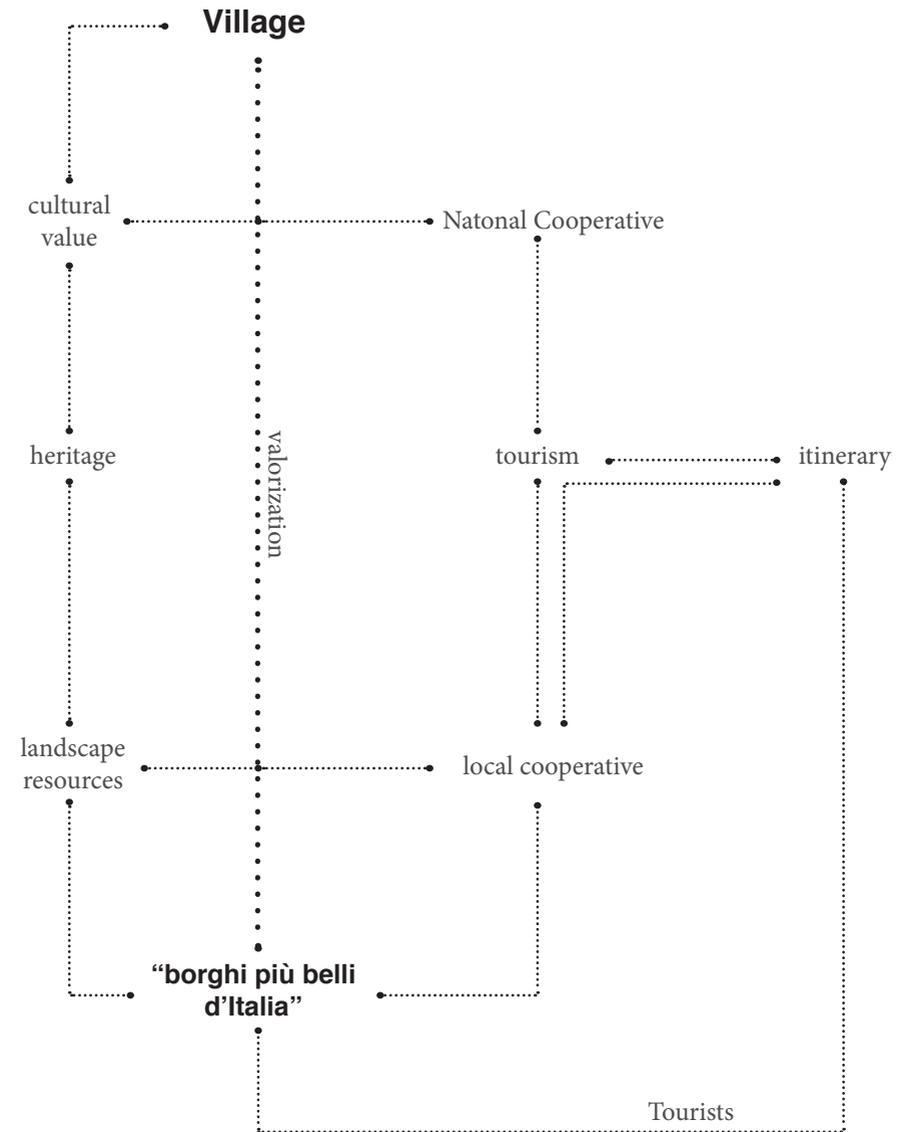
The village of San Leo is located in the hinterland of Emilia Romagna. Travel time from the city of Rimini is about 50 minutes.

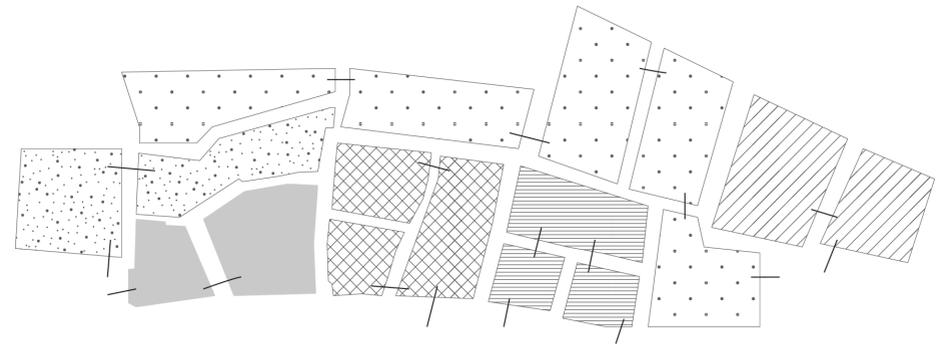
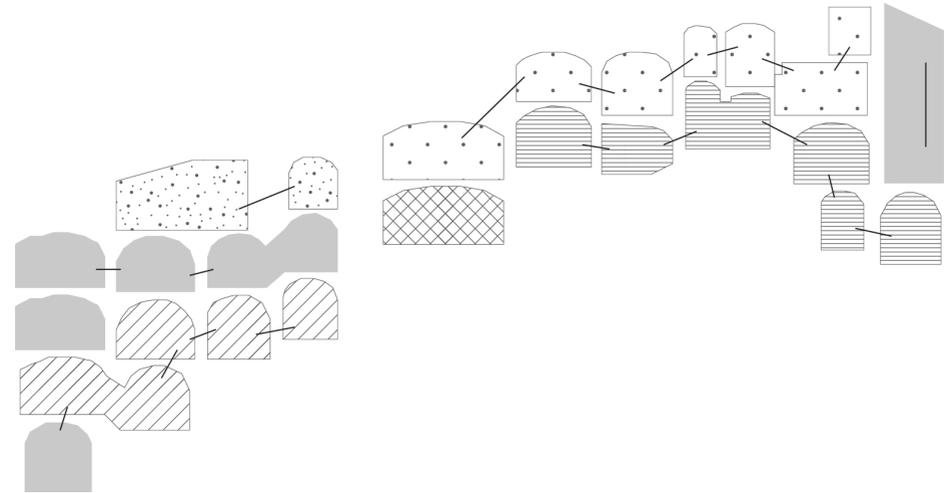
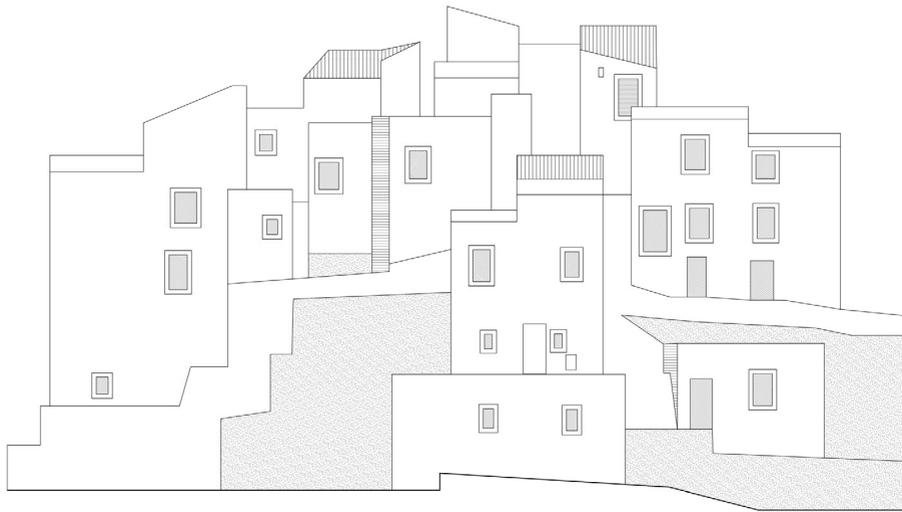
It is currently presented in the “most beautiful villages of Italy”. The set of the Borgo in this list is a marketing intervention and territorial strategy that aims to enhance the territory.

In 2001 the Association of The Most Beautiful Villages of Italy was born on initiative of the Tourism Council of the National Association of Italian Municipalities (ANCI), an initiative that aims to increase the flow of tourists and visitors to these areas that present a strong depopulation and degradation index. To be included in the integrated tourism promotion operation, each Municipality must meet certain criteria based on the characteristics of the village, the presence of historic buildings, and the landscape value.

The action, obviously, will have resonances on the territory and on the associations that operate or that are born by promoting a local development of tourism. An example is “Wellness Valley”, which acts in the field of sport and tourism has promoted a series of itineraries that include the aforementioned village. The goal is to give visitors a unique experience in the Romagna area, which brings economic well-being to the local population and urban development.

According to ISTAT statistics its population of the resident municipality rose from 5,824 inhabitants in 1921 to 2,970 in 2011 with only 250 in the village.

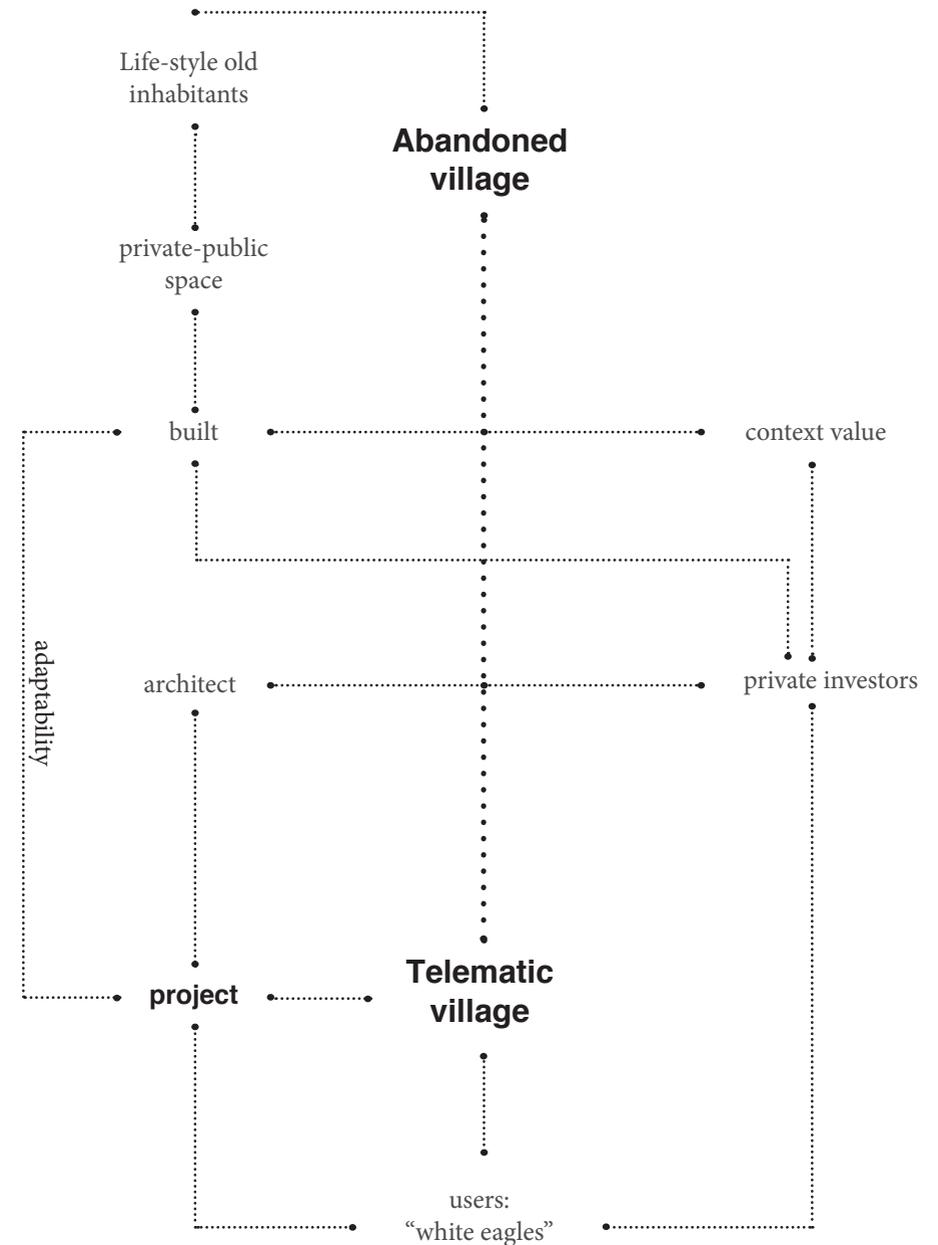




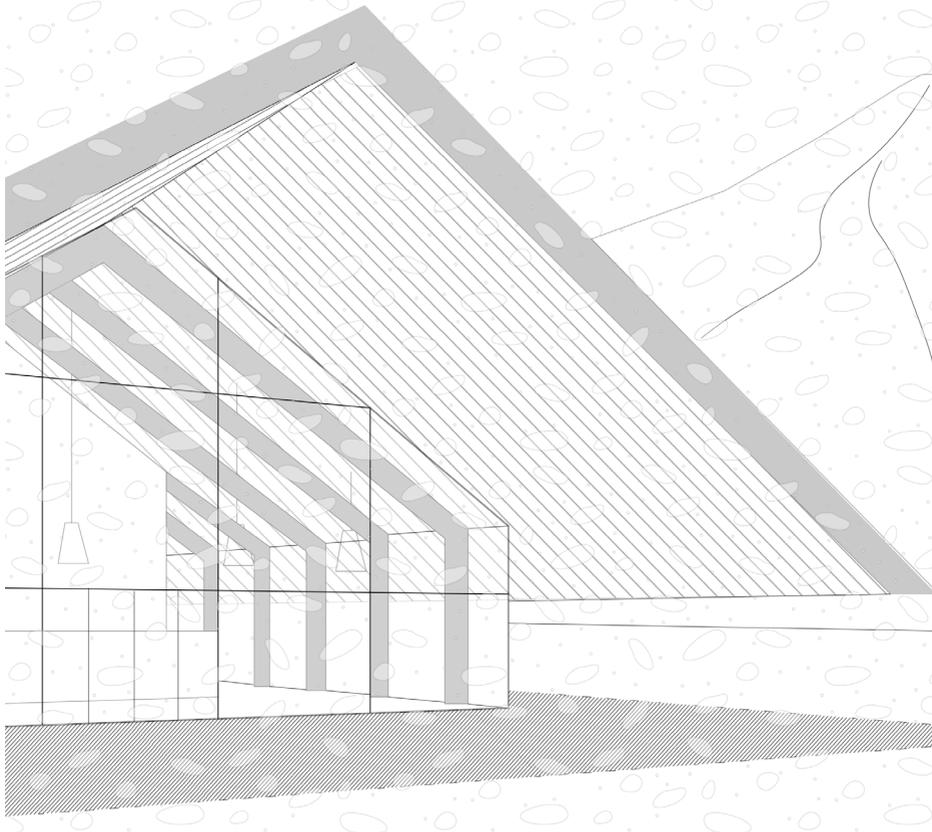
## Colletta di Castelbianco | De Carlo

The village of Colletta was completely abandoned about two hundred years ago. During the second half of the nineties it was the subject of intervention by the architect Giancarlo de Carlo on the initiative of a group of private investors.

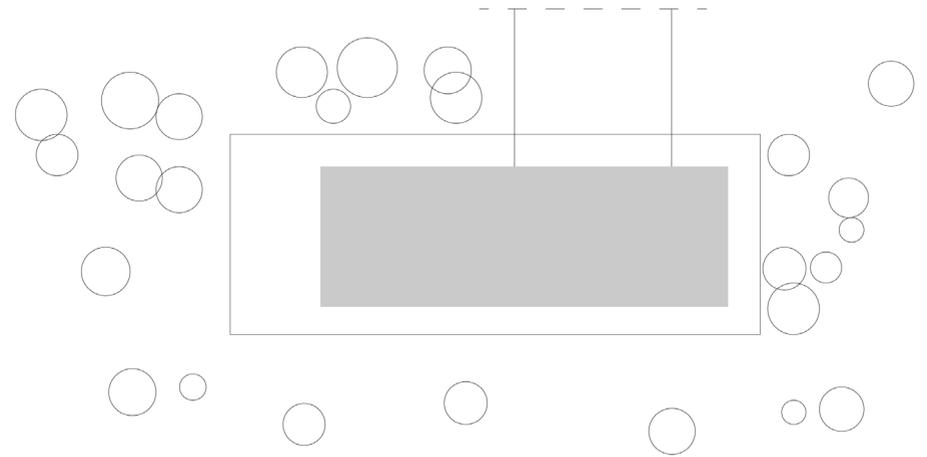
Currently the village, after more than 20 years, has apartments for rent for short and long periods. Given the evocative landscape and the essence of the village, the project aims to re-inhabit this village in an innovative way by integrating the new telematic systems. Allow, therefore, those who will live there to work at a distance, isolated and enjoy the nature. This category of people are called “White Kids”. The project is addressed to a specific category of users given the identifying characteristics of the space. The project follows the logic of the “crustacean”, that is, to adapt the existing structure to the new typology of spaces focusing on the connection of the different environments. The architect welcomes the challenge proposed by private investors in the transformation of the village to try to repopulate it and at the same time obtain an economic return. The project explores and manipulates the possibilities offered by the existing emerging a new theory that is detached from that of the “vertebrate” that had been adopted until then during the modern period. The structure that adapts to the space and not the space that adapts to the structure, revolutionizing the concept. However, it is not possible to trace the advantage of economic investment, but given the availability presently marked on the site, it can be deduced that there is not a large turnout nowadays.



Valtellina Social Dairy | PIUARCH  
The project



Valtellina Social Dairy | PIUARCH  
Section | Plan



## Valtellina social dairy | PIUARCH

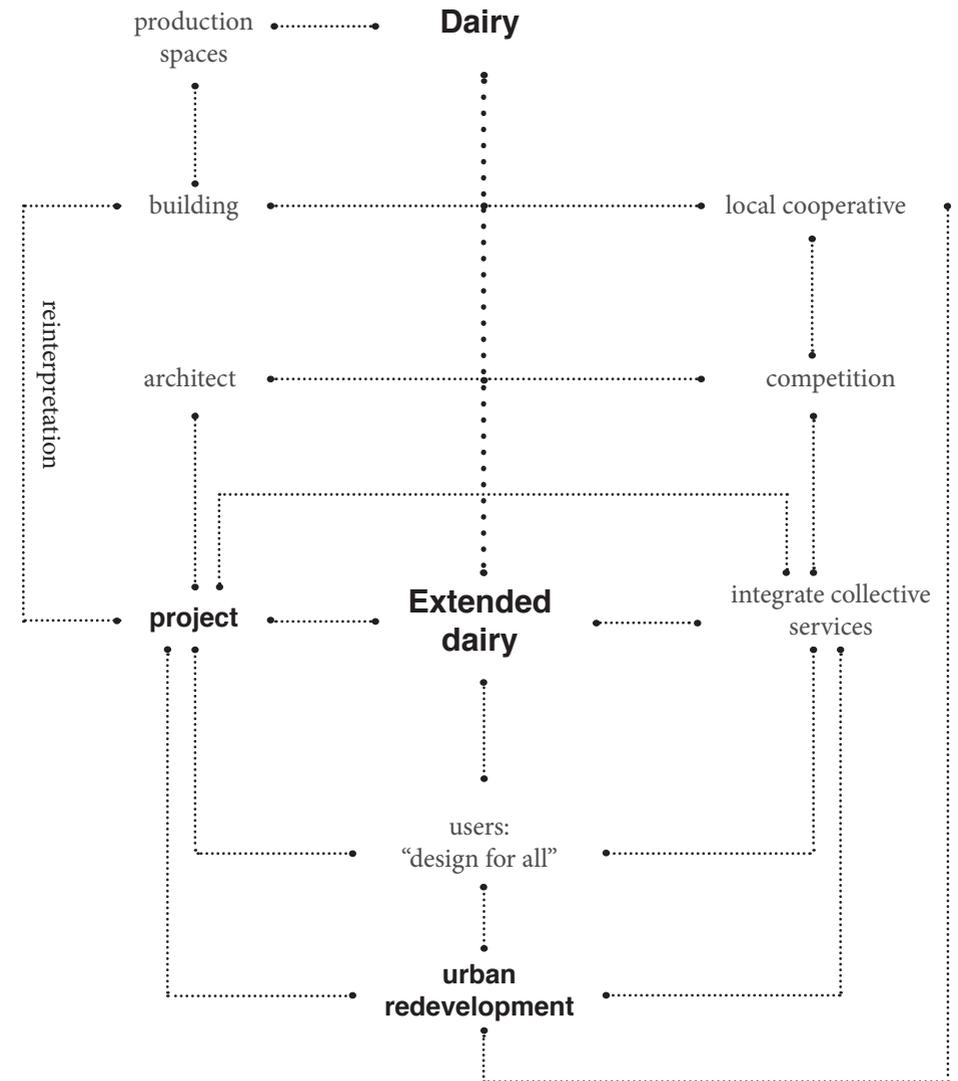
The dairy expansion project is seen as an opportunity to generate new urban developments. The extension, in fact, provides for the creation of spaces “for collective use” such as a conference room, exhibition spaces and all the rooms needed to welcome visitors.

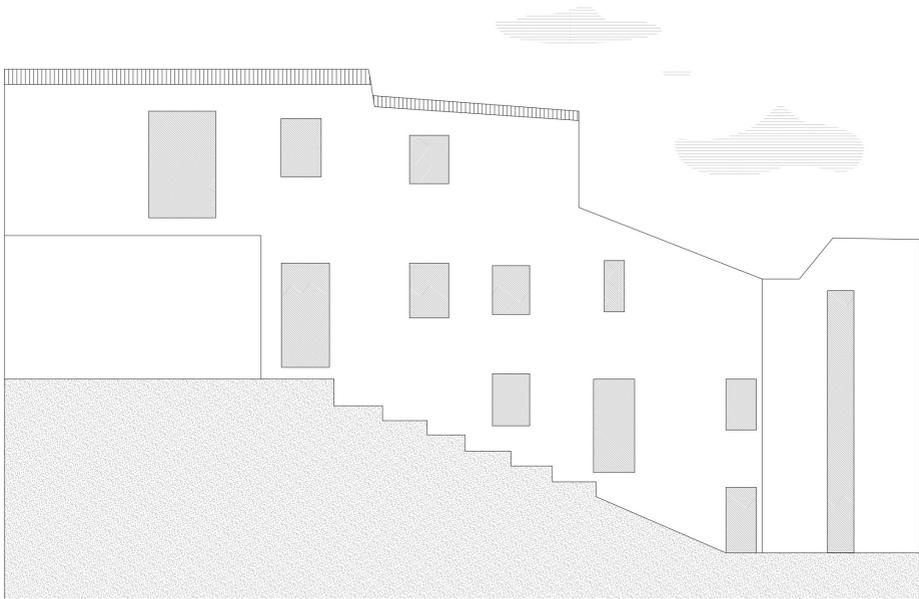
A punctual intervention, where the architect interfaces, through a competition, with the requests of the client.

The building is the site of cheese production of a company in the evocative landscape of the Alps. Section and the plan show it hooks onto the existing building reinterpreting the formal language of the typical Alpine construction.

The design follows the logic of “design for all”, ie spaces accessible to all without creating the least inconvenience for the user. An address that promotes accessibility to spaces for any person with psychophysical discomfort.

These themes interface with each other creating the image of a project open to all and aimed at enhancing the landscape, the tradition of the place through design choices.

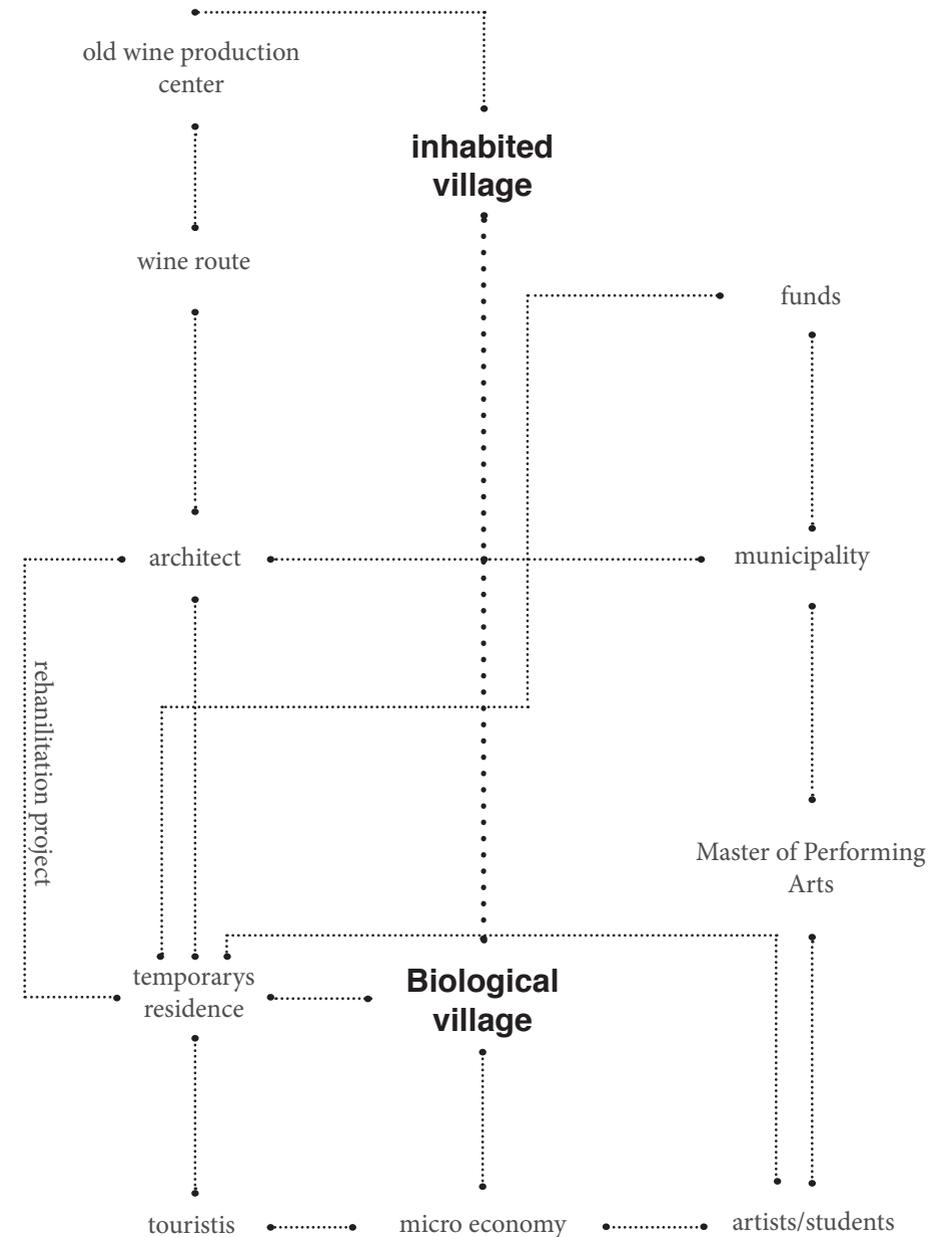




## Cairano | Verderosa architect

The village of Cairano is located in the southern Apennines. Inhabited where once the main productive engine was the screw. In fact, about 3,000 liters of wine were produced per year, then unfortunately the vine was destroyed by phylloxera in 900.

This caused enormous damage to the economy of the small village, aggravating the situation of unease in which it already existed. The village of Cairano is part of the so-called “pilot projects” of Campania. Through the funds allocated by the region for this municipality it was possible to intervene on the building by carrying out a rehabilitation, safety and integration operation for the construction of a diffused hotel. We took the opportunity given by the presence of the branch of the fine arts master. With the hope that the presence of people from other countries, albeit temporary, trigger a process of re-activation of the economy and economic development. The village has been inaugurated for about two years, so it is not possible to verify the result data of this operation. However, it fits into that margin of interventions that promote the transformation of homes, in this case also cellars, which are no longer used to build a temporary residence for a certain type of user. So tourists and artists will be the users of these spaces, in fact the rehabilitation project also includes the construction of spaces dedicated to performers such as an outdoor amphitheater. it is logical that the project meets current needs.



## Overview

The projects examined are reported in their essential structure through the components that most influenced the design strategy and indirectly touched upon the design choices.

The guidelines for the in-land areas are based on a reading of the territory mainly for national statistical indexes and all the characters that highlight the polycentric structure comparing essential collective services for the city.

Obviously are involved the requests of the actors with the ultimate goal of repopulating these territories. The interpretation of the territory influences the design choices that will be mainly oriented to an economic “trigger” by setting up an engine of development such as tourism or retail.

Although the characteristics of the landscape are mentioned and all the problems that derive from it, none focuses on the analysis and deepening of value. It is assumed that action on the territory for repopulation can mediate all the problems caused by it.

All the projects present a component aimed at increasing tourism, a source of development together with the identification of a specific user target.

That tourism is an engine for the economy is a fact, represents a resource for the country if we consider that it constitutes 6% of national GDP. But what happens if a territory is purely conceived as a tourist place? A useful index to monitor the phenomenon could be the percentage of resident population compared to the average tourist presence.

In this case, directing the offer to a specific type of

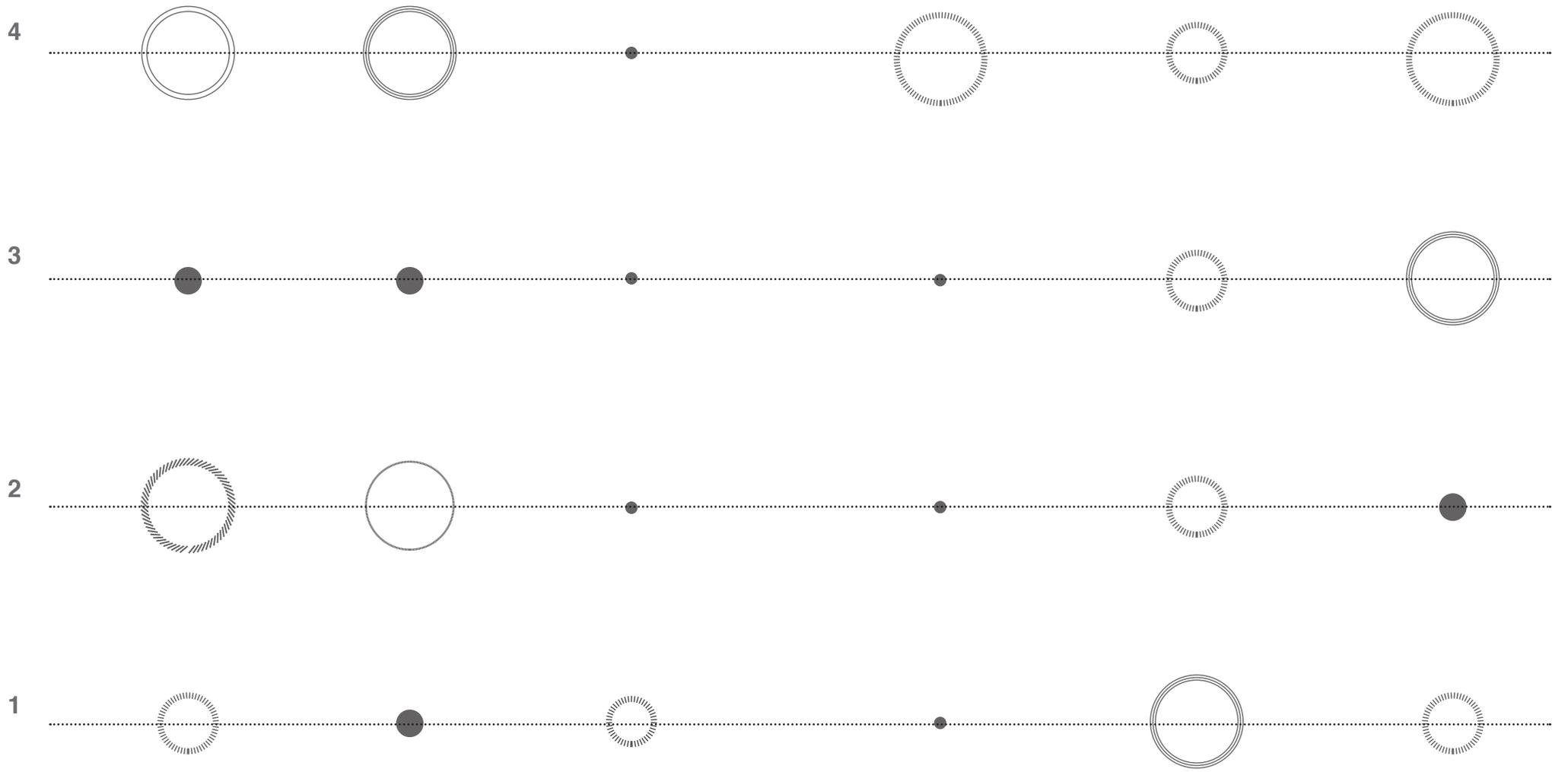
tourist could mediate the phenomenon.

Tourism is one of the appropriate solution for in-land rural areas, but a failure to control development that focuses on the number of visitors and not on the quality of the services offered can negatively impact the environment and the landscape. Faced with the growing increase in global mass tourism, this can be a risky and credible prospect. The moment the tourism is not integrated with a system of equilibrium of the inhabitants of the place the place itself will be disposable manifesting deficiencies in the care of the territory.

The almost total absence of public investments and the scarcity of actions on the landscape constitute a further junction point.

The strategy adopted in the first case focuses on the enhancement of the territory and promotion by title. Therefore it is mainly addressed to the promotion of tourism. The second case, although the project addresses a complex issue, the re-population strategy is addressed to a particular target of users by creating a new population center. The third case analyzed is an intervention mainly carried out by the private individual who follows the requests of the client but at the same time has the strength to generate urban development. The last case deals with securing the existing building by creating a new urbanity for a specific type of user.

The following table provides an overview that summarizes the weight of each generalized model of factors on the entire strategy applied for each case.



Target Users

Economic engine

Landscape action

Public Funds

Tourism

Urban development

## LANDSCAPE AS READER

---

The presentation of a new vision, through the landscape intended as a lens, which is not limited to re-elaborating the priorities of intervention but also to the interpretation of the territory.

The architecture of the landscape is certainly not a new discipline, its history does not only concern public spaces and parks, but also questions related to agriculture, cartography and planning.

If until recently it was closely connected to an ephemeral role, supporting the planning of the city, it acquires a new structure in the design after the announced failure of modernism (Marot, 1999).

The image of landscape, taking up Simmel's discourse, is far from a mere direct association with nature. If nature is made up of fragments and elements, only the perception of individuals in the entirety of their whole can be given a landscape image.

Therefore there is a synthesis, from the point of

view of the observer.

Literary, paintings and descriptions are concrete examples of this statement.

Etymologically the term landscape refers *Landschaft* to the contemplation of the Land, land in association with *schauen* in German means to contemplate. *Paesaggio* (der. of *paese* on the model of fr. *paysage*) in Italian the Treccani dictionary indicates it “Part of a territory that is embraced with the look from a specific point.” Is strongly linked to the sense of sight and perception.

The long history of our times has left us an inheritance of images that start from the elements of reality and then build an image filtered by the sensitivity and perception of the individual that can be identified in a collective feeling. Example the poem “Infinite” by Giacomo Leopardi that extract in images the sequence that are presented in the mind starting from the observation of the real.

At the same time, a landscape wireframe classification is made by aggregation of elements for the same type by the public agency. Not only that, the elements of the landscape were also identified to delimit the parcels at the land registry.

Given the unlikely success of exaggerating one or the other meaning, it converges in a single way with the contribution of different disciplines that merge a theory that draws from multiple disciplinary fields to take its strength.

Therefore rethinking the landscape today means taking into account also the modern technologies and the environmental-sociological dynamics that characterize the current dimension.

The notion of landscape in an “ecological” sense that includes hybrid processes and structures

between anthropic and natural emerges from a geographical matrix.

The foundation of the IALE (International Association for Landscape Ecology) defines ecology of the landscape: “*Landscape ecology is the study of variation within and between landscapes at a variety of spatial and temporal scales. It is to understand the biophysical and societal causes and consequences of landscape heterogeneity. Above all, it is interdisciplinary.*”

The detectable structures in the territory are formed by ecosystems, mainly by processes and conformation in relation to each other. Each type of spatial configuration is determined by a model called pattern that can represent a minimum unit called patch. The patches are related to each other by simple or complex bonds.

In view of an ever increasing number of degraded and / or abandoned territories and the transformation of the scenarios and housing models subordinated to the national environment-friendly programs, new territorial readings are opened. James Corner in landscape architecture, in order to engage policies and programs, the landscape goes from being a manifestation of culture to an instrument of education (Kullmann, 2018).

For over two decades, mappings and ecologies are the basic tools to open the frontiers to a new methodological approach. In contrast to the static view, immobilized, not sufficiently incorporated in the social-economic and temporal dynamics (Padoa-Schioppa, 2017).

Considering the landscape as a set of elements and

structures that change over time in close relation to each other, his vision changes. Along this perspective emerges the awareness of the landscape seen as a public space, where landscapers acquire an increasingly important role in urban planning (Marot, 1999).

The intertwining of ecology, landscape and urban planning moves research into a new field called Landscape Urbanism. Widespread thanks to the contribution of Charles Waldheim and James Corner since the late 1990s.

*Landscape urbanism describes a disciplinary realignment currently underway in which landscape replaces architecture as the basic building block of contemporary urbanism. For many, across a range of disciplines, landscape has become both the lens through which the contemporary city is represented and the medium through which is constructed.* (Corner, 2006)

The new paradigms are created by a first recognition of reality as a complex system of social dynamics, changes in space over time. The relationship is a constant that affects the interaction between human activities and the landscape where space is the background of social activities that can be foreseen but also not foreseen. The protagonist is therefore the landscape and the place understood as the place of the relationship. Is abandoned the idea of the genius loci understood as a static character and where the presumed identity of the place predominates in favor of a genius itineris. Landscape urbanism therefore provides the tools, drawing from its interdisciplinary lexicon, to formulate a project in contemporary space. Promote an ecological approach to the project, first of all

to understand the space and then to formulate a dynamic and non-static system.

The protagonists are the places in a state of neglect and discomfort where there are no conditions for combining a future anthropic repopulation, but only a strategy to cure the landscape, which seemed inevitably marked by degradation.

The symbiosis between architecture and landscape architecture is articulated by the network together with economy, between form and social, and provide an alternative to the crisis condition of the territories also marked by climate change that took the modern movement by surprise.

Although the theory has not found much success due to a perspective anchored to the margins of growth and development, landscape urbanism is proposed as a realistic alternative to the future for a construction of healthier and more sustainable spaces (Padoa-Schioppa, 2017).

Good intentions aside, the urban planning of the landscape presents some enigmatic points that do not favor the reading and the exact understanding of the method of action. The methodology used for urban planning up to the nineties, even if static and limiting that used tools such as zoning, provided a clear and ineluctable model. The contradictions and conjectures advanced in the 90s persist in the modern era even if the advanced questions no longer arise from the rigid scheme of traditional urbanism. In fact, with the par de la villette by Rem Koolhaas it is possible to notice a change in urban planning that is composed of dynamic and de-hierarchical flows.

## Approach

The scheme on the side does not propose a model of action but a methodology that is inserted before the design itself. An interaction between more or less defined variables that propose a reading of the territory far from the objective of establishing a productive activity or creating obligatory urban lines for a specific type of user. Given the more or less common characteristics of the internal areas, the algorithm starts from assumptions related to the morphology of the territory and therefore a large-scale vision of the whole site.

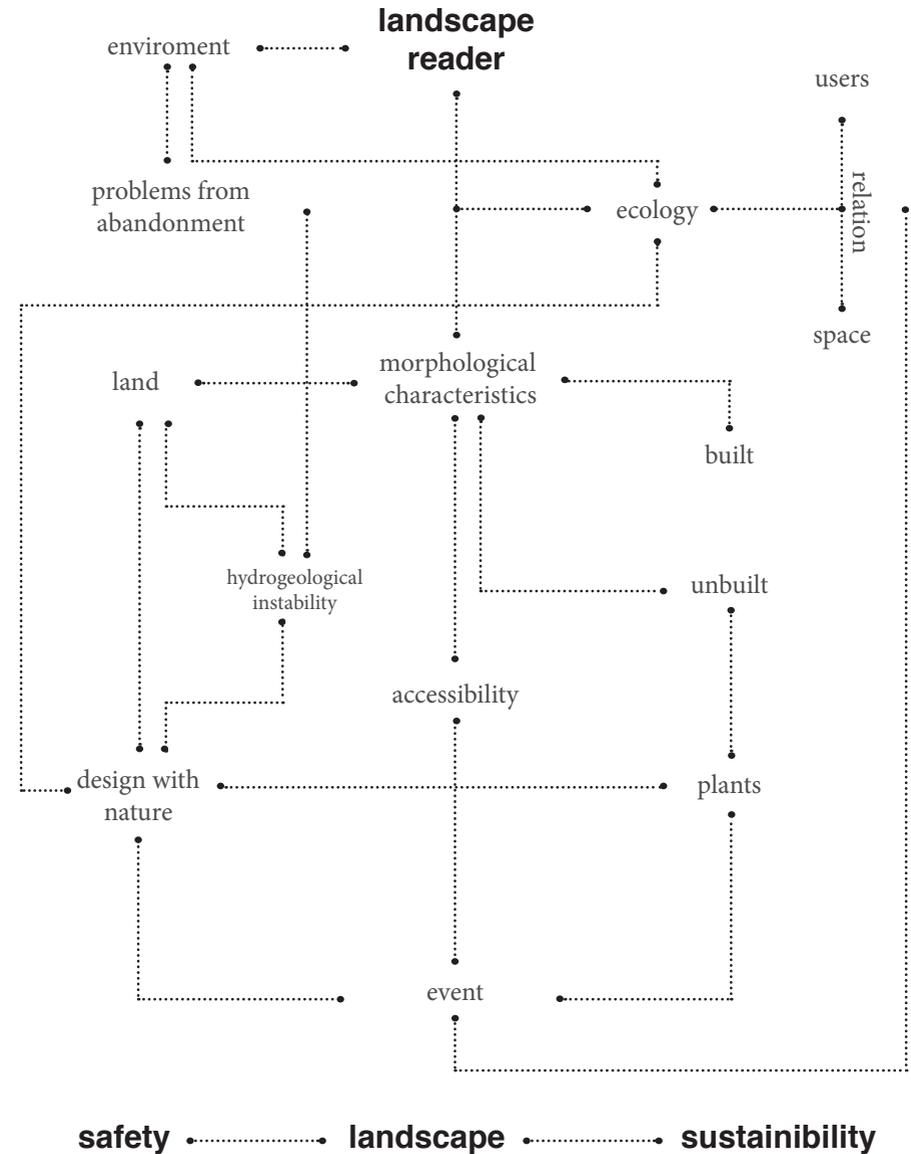
The goal is to provide a different interpretation that stands out from the national strategy to imagine new developments in the territory.

The interdependent variables between them do not follow a given flow in a hierarchical order but navigate together and take on different meanings in relation to the case study.

Starting from urban ecology, therefore, a type of approach oriented towards the care of the territory is formulated to improve the quality of the liveability of the environment and mediate the problems caused by depopulation.

Given its “address” nature, this does not provide a static and unidirectional methodology and does not replace the designer’s interpretation, which in this case is he who selects and triggers the processes.

The open strategy takes into account an essential truth: time. The margin within which dynamics will certainly develop.



## Tools

Through the development of new technologies based on earth mapping it is possible to draw on a vast library of information.

The new mapping systems, the drones, and the satellite images allow to observe the characters of the territory from the top. The introduction of GIS (geographical information system) systems, provides geo-spatial information produced thanks to the combination of database and images acquired via satellite, from which it is possible to extrapolate in a short-time maps with useful data on different scales. The database is represented spatially through overlapping layers. The main utility involves not only environmental, statistical, demographic and urban planning data, but also the possibility of observing the flows of the territory at a considerable and dynamic scale. Reading in this way, as a whole, provides information that, although real, develops an appropriate point of view to draw wide-ranging considerations.

Ecological themes emerge, transformations over time through interpretations of the signs that have helped shape the landscape.

The territorial scale to analyze the relations between built and not built, between landscape and infrastructure that allows, for example, the lack of borders between rural and urban, undermining some dogmas of the discipline. New reflections evoked by a conscious mapping of the territory which, together with the critical judgment of a competent person, trace scenarios that draw from reality but are difficult to perceive in the observer's space.

## Landscape as process

The maps and observations of the territory are part of a complex relationship network where the individual elements and themes develop according to an unpredictable and non-linear trend in a relationship of interdependence.

Subject to the change of time, the seasons, the changing of the landscape and its image. Starting from this, the landscape is seen as a process, subject to changes in social and physical dynamics. Interested by the "natural" mutations but also by the information that man has operated and continues to operate over the centuries. The project, in this case, is seen as an open source strategy. The network of relationships between material things and immaterial things structure the schedule. Material and immaterial are linked by a transversal reading at different scales of the place examined. Material, we can define, all that is visible and perceptible that materializes in a form. Immaterial is configured as the network between actors and actions in the space that can be identified and associated through elements on the territory, however they do not express and define the identifying characteristics.

The scale variation allows to represent the agents that operate and structure the place without limiting to a hierarchical scheme. It is precisely the place the starting point, which in a first phase of observation is detached from the land division and from the separations of economic interests and autarkic functioning that imprisons thought and is responsible for the disgrace of places (Marot).

The methodology that draws inspiration from the paradigms of landscape urbanism and the ecology of the landscape involves multiple scales, starting from the local one that interfaces with the ecosystem of the place.

The knowledge phase consists of a part of direct observation of the space, gathering useful information on how public places are lived; and another part of maps and horizontal surfaces that serve as indicators for the descriptive detection of ecosystems.

The exploration allows to identify the flows and the things that contribute to the transformation of the territory over time.

It is possible to identify how the elements form a network composed of patterns and maps that overlap and relate to each other in an apparently chaotic manner, but actually defined by an ecological system.

The result is a socio-ecological landscape pattern. Defining a typology of space a priori is limiting because of what it entails. In fact, the long architectural tradition is made up of typologies and models that defining the prototype in which way must design, limiting the potential and possibilities of multiple developments.

In the social, environmental and cultural environment, the dynamics intersect and are the common thread of the entire observation. The scenography becomes from a background field to an active field that participates in the processes of metamorphosis.

The relationships between the various elements follow the ecological structure. The relationship is not univocal according to a flow diagram, but acts

in both sense and directions. Those indicated obviously are not the general set of all the variables that contribute to the metamorphosis of the territory, but selected and addressed in macro-elements to structure a possible alternative way to reach the terms of sustainability, safety and exaltation of the landscape in certain contexts.

Analyzing an urban fact from an ecological perspective means analyzing an eco-system composed of an interrelation of infinite variables. The eco system, according to Kevin Lynch, undergoes adaptation processes that start either from an action from below, or from actions from above. The key principle is made up of elements that transform over time, called units, but which are interdependent of one another and all work towards maintaining the equilibrium of the eco-system.

All this to define the changing and dynamic character of urban fact.

Abandoned places, on the margins of urban centers, have common characteristics that can be defined both by taking statistical indexes as reference and the problems that interest them. In this case the percentages are not a selection criterion of what is called "in-land rural area" but the problems and processes define the condition of "in-land rural area" and the percentages support the description of the processes.

The interdisciplinary and heterogeneous nature of representation tools allows us to have at our disposal a larger amount of information that contributes to a "tailor-made" project, calibrated to pay attention to the place by unhinging the assumptions from which today's lines of action are structured on the internal areas.

## Variables

The methodology represented does not want to constitute a single and general reading to be applied to all projects in peripheral areas. It constitutes a possible guideline for territories with certain problems and characteristics. The in-land rural area presents common problems related to the environment. One of these is the hydrogeological instability, due to the lack of care of the territory triggered by the depopulation process. So landslides and floods are often present and constitute a cost for the territory and the population that lives in the places, albeit sporadically. The morphology of the territory, in Italy, can be seen as influencing the isolation and marginality of places due to difficult access. Therefore, in a perspective not of repopulation, a different exploration opens up. Within the proposed strategy, there are keywords that we will call project variables. The variables cannot be defined specifically because they are linked to the characteristics of the territory. Although linked by identifying characteristics and inserted in macro-themes, they are obviously affected by the territory. The morphology, understood as a form, can be examined according to two variables belonging to two different elements. The soil is a complex physical resource not only for the physical-chemical and biological processes that develop within it, but also for the link with the built and the transformations that man has operated.

The interaction between physical space and place triggers landscape modification processes but it is also the landscape itself that modifies the identity characteristics of the public place. Marked therefore by a bi-univocal relationship, the actions on

the territory leave traces that can be interpreted by the observer. At the same time the natural ecosystem adapts to changes in the landscape with both positive and negative implications. Living in a public place means doing things in the same space that we can call an event. It is not the design that defines the action to be taken, but works to make something happen. In an area dominated by nature, securing is certainly a variable to be taken into consideration to make the place habitable without dramatic consequences. Human cooperation and biological participation modify the landscape over time.

McHarg in "Design with nature" recognizes the initial phase of observation of the territory as an important moment. Designing with nature consists of a series of controlled actions that start from the territory and incorporate a series of integrated disciplines that enrich the formal vocabulary and provide the necessary knowledge to design in a conscious manner taking into account the variables in the perspective of social sustainability, economic, environmental.

The landscape, dunque, is key to reading but also process and open strategy capable of structuring the territory.

## ECOLOGY IN GRECANIC AREA

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At the extreme southern border of the Italian boot, an archipelago of villages on the slopes of the Aspromonte witnesses a gradual and progressive depopulation.

Roghudi, the ghost town of the surroundings, has some very peculiar characteristics of the built.

As reported by “ilsole24ore” Calabria is affected by an unpleasant economic situation. According to the newspaper, agriculture remains in a condition of almost no growth, the industries increase but not significantly, while for tourism the presences increased by 2.7% in 2019 compared to the year 2018. A growth rate which, however, was concentrated in the summer and spring months, while the rest of the year the situation worsened.

Growing occupations related to tourism, as well as the emergence of particular occupations arise during the summer period and then disappear during the winter months. Tourism, given the unique beauty of the places, is increasingly increasing due to a media factor more than for a real investment in infrastructure and equipment, it represents an opportunity for sustainable growth in some rea-

lities while in others it destroys the environment and creates problems for land management. Where there is no control over the growth of tourism, and the safety of places due to a broader plan, the resident population suffers social and environmental costs.

Numerous initiatives start from associations, such as festivals, which animate the summer months.

Unfortunately, this year the annual cultural event was not held, whose protagonist was the abandoned village of Cleto. The Cleto Festival, as reported by the Calabria 7 newsletter, “will not be held due to security issues”. This village comes to life only once a year, on the occasion of this event organized by associations with no public funds.

There are many villages in Calabria, located mostly on the slopes of the mountain that are slowly and inexorably depopulated. Numerous initiatives to re-populate the villages for tourism purposes, bearing in mind that there is no management plan, such as the Borgo of Morano Calabro which, as reported by the republic, is “risen” thanks to the investment of young people and have created a widespread hotel.

Il Borgo di Roghudi, was the subject of an episode of the series “Ghost Town” broadcast on RAI. Authenticity, beauty and the evocative landscape of the place are not yet finished in the hands of investors. The resources available to the Reggio Calabria area to build new infrastructures are insufficient and the possible solutions are almost utopian. Given the nature of the place, the landscape, the qualities and the potential that nature offers, the area of Roghudi represents a likely case of “non-project”. The context, therefore, will be

the occasion for a landscape intervention aimed above all at remedying the hydro-geological instability through the natural vocation redesign of the landscape that presents critical points.

Roghudi, now in a condition of laughter, witnesses a slow and inevitable naturalization. The nature regains its space.

The villages that are part of the “Grecanica region” are mainly Bova, Roghudi Vecchio, Gallicianò, Condofuri, Roccaforte del Greco.

All in a stage of “progressive abandonment”.

The following chapter returns a careful survey of the territory where landscape, environment and uses intertwine. What is really important during the work is not the result, but the tools and the process to achieve the result with the aim of opening a renewed analysis and intervention methodology. The landscape and the territory are essential for reading. The case study represents an opportunity for reflection on the modality of intervention in the in-land rural areas starting from the point of view of the landscape.

## ROGHUDI REPORT FROM THE FRONT

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I'm driving in a small street in the center of Melito Porto Salvo. A cluster of unfinished houses, with exposed bricks and concrete pillars, follow in sequences along the main one-way street. Occasionally a palm tree appears from the sidewalk as the only form of life in this August morning.

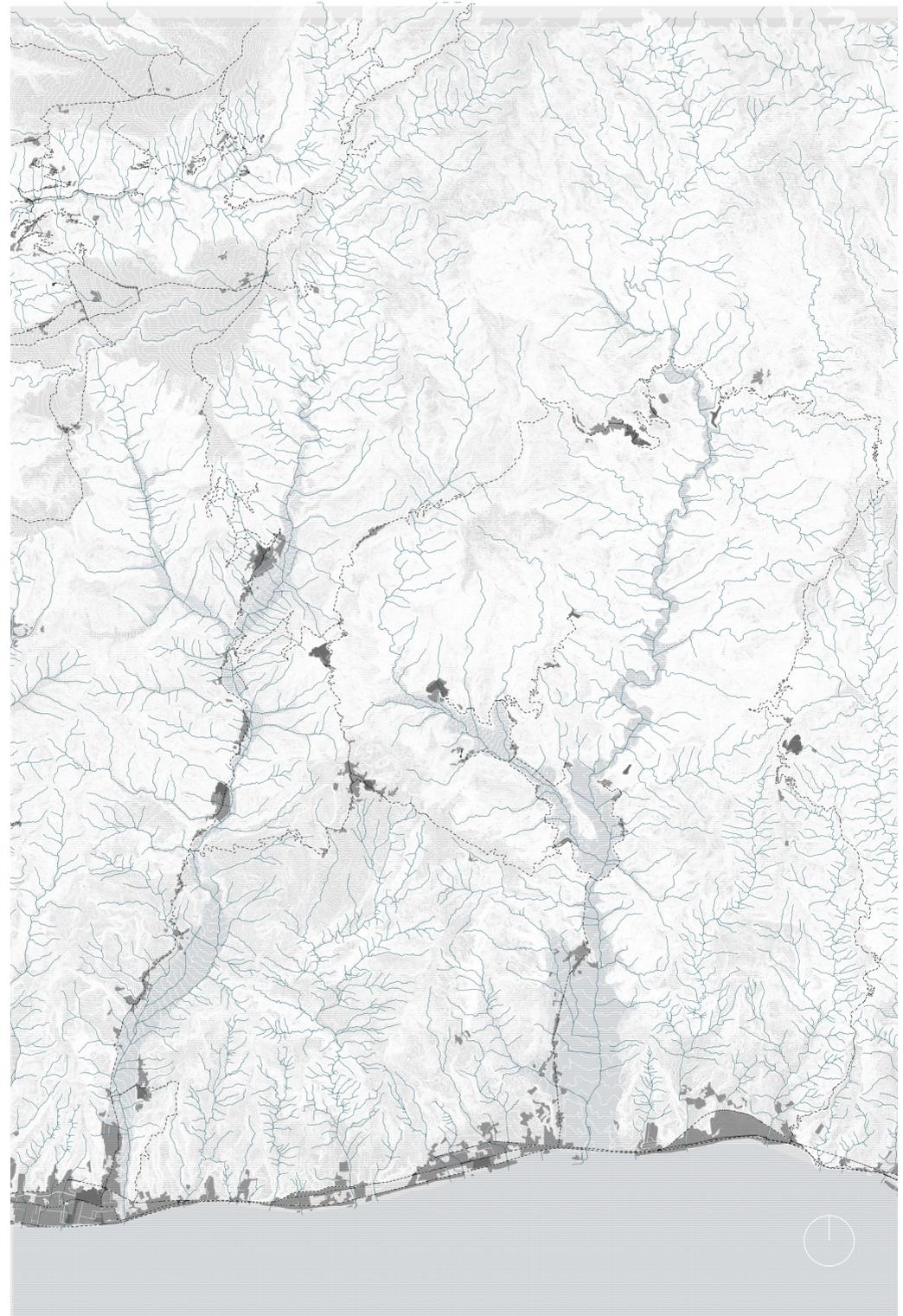
The sun is already burning at 10 am, a brisk walk guided by the hearing of distant voices towards someone who can show me the way to reach Roghudi Vecchio. A rudimentary sign of a coffee catches my attention, in front, there is a group of people that is called by name "Cumpà, u vua u caffè?"

I asked for information, an elderly gentleman shows me two possible ways to reach the ghost town:

the first crosses the towns of Roccaforte del Greco and starts from Melito Porto San Salvo, the other possible via Bova Marina, through Bova Superiore and Ghorio di Roghudi.

The two solutions are the same, even though they are only 40 km long, at least an hour and a half is required due to the narrow hairpin bends that affect the Aspromonte. The roads are paved up to the first municipality, afterwards, they are in pre-

# Route





cipitous beaten earth with a high risk of landslides. I thank and continue my trip .

I realized that the landscape changes rapidly as I move away from the coast. A rich green vegetation borders the road making the precipice just to my right barely noticeable. Fig trees and broom trees alternate with shrubs, olive trees and oaks that are moved and pulled at times by a violent and violent wind.

Through some hamlets of the municipality of Roccaforte del Greco, simple stone volumes articulate the margins of the roadway. A small stone platform marks the entrance of the house, on which a wicker chair floats, a wheel of a truck that acts as a table and a gentleman who prepares figs to dry in a basket. The image of a scene of everyday life, at the edge of an extra-urban street, introduces the character of the place.

Once past Roccaforte del Greco, the shadow of the green that I had followed for most of the journey, disappears to open the curtain to the immense barren and arid nature, characteristic of the southern stretch of the Aspromonte park.

The river, now dry, takes on the appearance of a silver snake that from the sea makes space between the clayey rock, creating a deep and decisive furrow on the ground. The crests appear to be spiers of a Gothic hospital, the slope is steep and rich in painted cracks of various types of vegetation. On the spur of a mountain, in the distance, a strip of concrete follows its outline: Roghudi dominates in solitude the lowest ridge of the district.

The road to follow is studded with boulders and rudimentary walls, so I leave my car at the end of the hamlet of Ghorio di Roccaforte and head for



Roghudi with my backpack.

Ghorio alludes to “Chorio”, a Greek word that means “country”. It is often placed next to the municipality to which it refers, indicating its fraction. Ghorio di Roccaforte is a collection of ruins and unfinished 70s houses. Traces of human life such as bicycles, tents, and freshly cut wood indicate that someone has been here recently. The church and the fountain, elements that are always heavy in every cluster of Calabrian houses built before 900, have been painted with a sweet pink some years ago. They stand out in desolation like cathedrals in the desert.

Next to the word “Beginning of competence of the province” another sign encrusted with rust and punctured by numerous bullets catches the attention, the writing is barely perceptible but easy to understand: “attention to falling rocks”.

The road follows the profile of the mountain, the wall traces its level curve and it is my only compass. The village disappears and reappears from my view as I pass the creeks. The street looks like an excavation in the rock, cluttered with boulders, completed by a cement graft. To my left a wall of white rock seems to be about to overwhelm me, to the right a ravine could swallow me.

From a distance, I see a figure under a chestnut tree watching the goats grazing in the ravine.

You hear the echo of the bells attached to the neck of the beasts propagating in the air along with the cicadas and the rustling of the wind but in my eyes they appear as points that merge with the stain.

I approach and greets me as if we had known each other for a lifetime, his name is Sebastiano and he



is the “guardian” of this no-man’s land.

It has golden skin, dirty clothes covered in white powder, eyelashes frame a wild and almost childlike look. Sebastiano is the only word he did not have to repeat twice, I struggled to understand it because he speaks in Greek, an ancient language of this area of Reggio Calabria. It is said to be a mix of Greek and Calabrese dialect. The lack of access to this archipelago of countries and the isolation seems to have been key elements to preserve the practice of this language and all the related culture.

He offers to accompany me to the fountain of the village and on the way tells me fragments of his story.

He spent 5 years in my city (Lamezia Terme) but he never saw it, it took me a long time to understand how it is possible. He points to a forest on the crest of the highest mountain “Do you see that forest up there? I was 15 years in nature without electricity, without television, with nothing at all, completely alone”.

Sebastiano has neither a watch nor a smartphone, he lives according to the time of nature in a halo of freedom.

Another ex-inhabitant of the village from Bova joins us bringing with him some fresh cheese, some foreign fruits that remind me of miniature pears with a sublime taste. Cut one slice of “capocollo”, bread without yeast and shares it with Sebastiano and me.

The phone does not even mark a line, I seem to find myself in a distant time, entrusted to the case of events and the resulting uncertainty emerges, I just have to rely on the perfect strangers who wel-

come me like a lost daughter.

Between one bite and another, they chat about the organization of the village festival to be held in September on the occasion of the Feast of the patron saint of the city. All the former inhabitants of the old village of Roghudi gather in the only square of the city, in front of the only church, to celebrate the feast with a banquet flavored with goat sauce.

Roghudi winds along a main axis that coincides with the crest of the mountain, to then branch off into narrow and winding streets along the cliff. From a distance, the houses seem to cling to the rock precariously as they fall into the void. It is said that children played in the streets with one foot tied to a huge hook on the outer walls of the houses to avoid falling into the ravine if they leaned too far. As I enter the heart of the built-up area, the steep slope is almost imperceptible due to the irregular course and the forced environment that create the external walls of the houses.

Every now and then a lot of louvers introduce a glimpse of the river.

The roofs of the houses no longer exist, the wooden fixtures slam violently because of the wind, the vegetation climbs the walls, invades the houses. For example, the trunk of a fig tree goes beyond the balcony slab and I wonder how it could grow in such a hostile environment.

With a few exceptions, everything is in a state of ruin.

The first house on the outskirts of the village has the remains of a makeshift counter and glass bottles on the floor, probably located on the shelves that have fallen from the rusty hooks on the wal-



ls. Opposite, the boundary wall of the 80 cm high street is hollowed out suggesting seating.

This was to be the village bar.

Through the objects, the details of the walls and the internal distribution of the buildings I reconstruct the possible use of the environments and the lifestyle of the disappeared inhabitants. The bathroom is generally located in the basement or outside the houses, the remains of a bed, a fireplace and a table are located in a single environment in many of the houses. The entrance is in direct relation with the main road and the openings of the house on the slope framing the profile of the surrounding mountains and overlooking the void. agriculture and pastoralism were what allowed the population to survive, the side of the mountain visible from the town square is furrowed by terraces, and the goats that still graze in the territory are audible from any point in the valley. The acoustics are crazy.

A detail surprises me: In the middle of an uninhabited place and in an evident state of abandonment of solar street lamps with Tilttable Photovoltaic Panel are located below the obsolete public lighting. The square looks like an extension of the main street bounded by the church, a stone parapet and three buildings. The vine constitutes the porch ceiling and shelters the family sitting on a wooden bench from the sun. They tell me that three times a year, when it is possible to face the journey, they go to this square to have a packed lunch and enjoy the peace of this place.

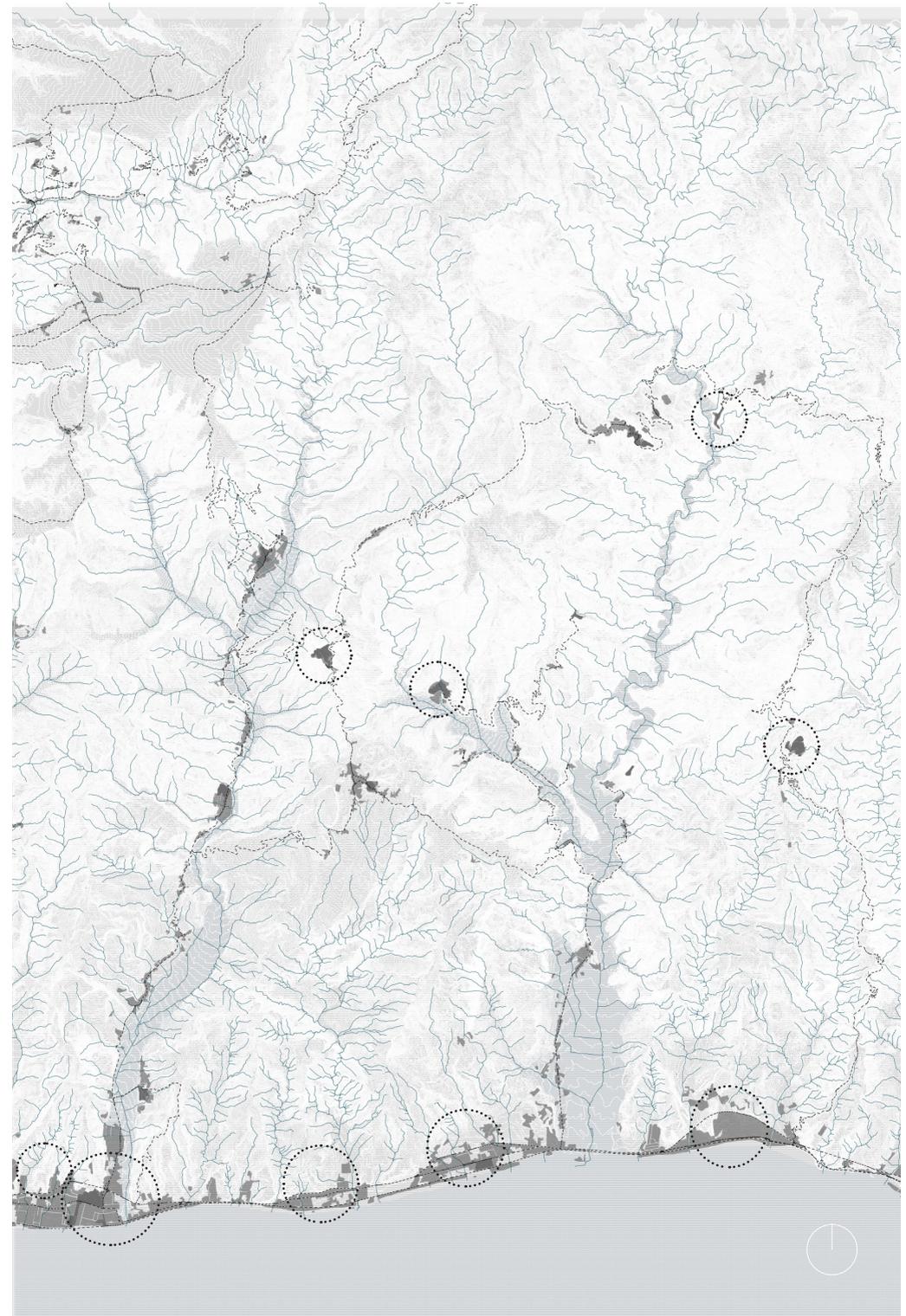
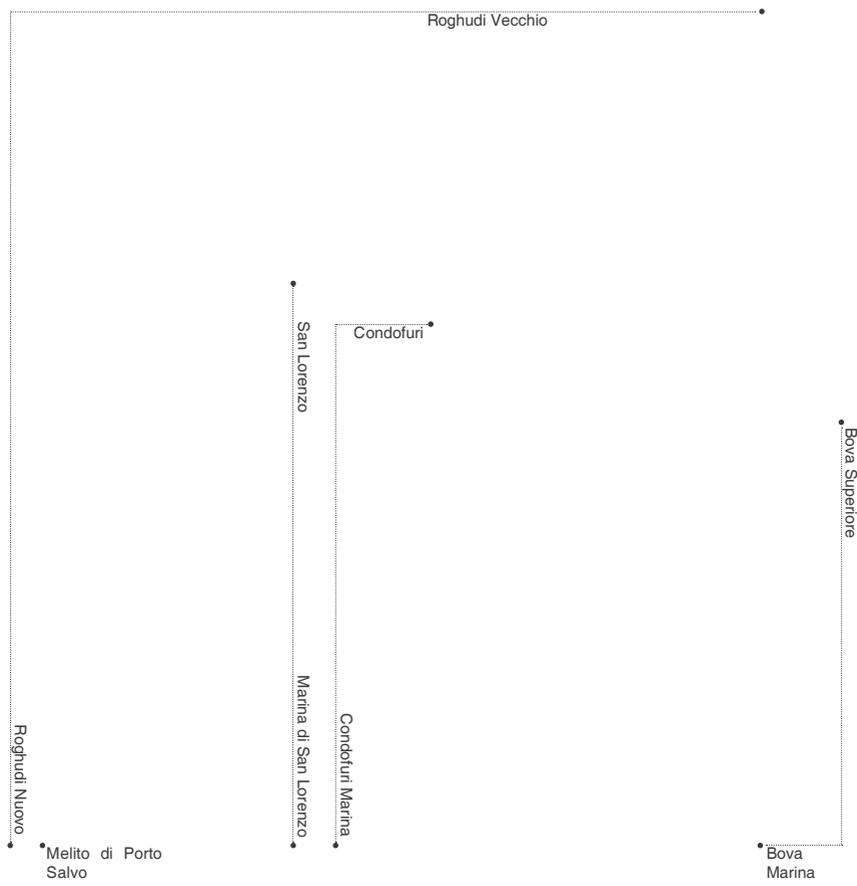
Time consumes the traces of a life that no longer exists, the community celebrates these places sporadically, rituals and customs is what keeps the

collective memory of this place alive.



# Depopulation

Img.1 double town  
Img.2 general plan



# Depopulation

*Img.1* Settlements 1954 1: 120000

*Img.2* Settlements 2008 1: 120000

Fonts: [www.geoportale.it/](http://www.geoportale.it/)

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## Depopulation

The economic boom of the 1960s, technological innovation, the substantial change in socio-relational dynamics and the construction of new infrastructures were decisive variables for the progressive depopulation of the Grecanica area.

In the 60s, many municipalities in the inland areas created the “double” town along the coast, considered much more accessible and inserted in a more efficient relational network than the slopes of the aspromonte, given the complex morphological characteristics of the place.

Considering that the main economic activities of these small businesses were, up until then, agriculture and pastoralism, the possibility of a renewed source of easy income and the possibility of accessing services and infrastructure was a thriving alternative to the precarious style of life led up to those days.

If we observe the demographic changes, according to Istat data, we can note that while Melito di Porto Salvo passes from 8,704 inhabitants to 11,115 inhabitants in 60 years, in the same time frame, Roccaforte del Greco passes from 1778 to 550 inhabitants.

One thing to keep in mind is that during the economic boom in Italy, there is a very complex transformation due to all the factors mentioned above and subject to a massive migration of the southern Italian population to the cities of central and northern Italy, where it was very the employment rate was high and there was a need for labor force in the industries.

Therefore, we can observe that Roccaforte del-

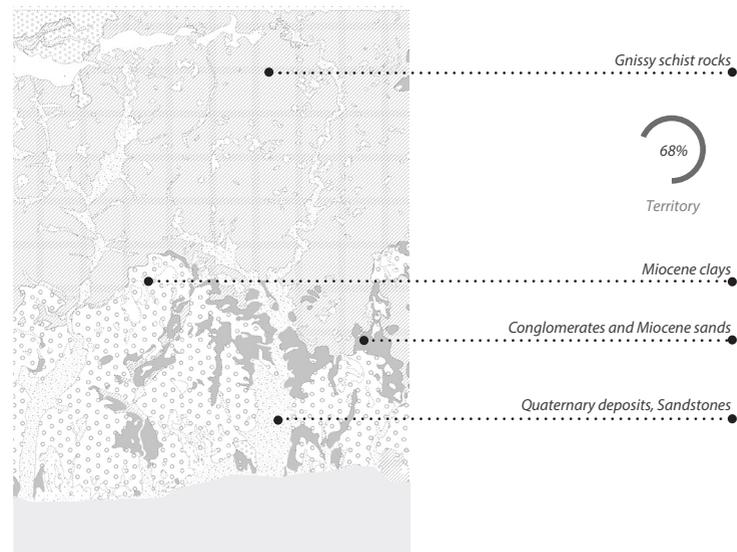
Greco witnesses a progressive depopulation and halves the town by about two thirds while Melito witnesses a limited but significant demographic expansion, probably due to the migration of citizens from inland areas as the social, economic characteristics have remained almost unchanged since the 60s.

Roghudi Vecchio, now uninhabited, is clearly in a state of neglect. The building is almost reduced to ruins and the lands are uncultivated, it is lived by the inhabitants of the neighboring municipalities as an isolated public space. Opportunities for those wishing to escape the urban center of the modern city model.

Indeed, Roghudi Nuova, located near Melito di Porto Salvo, it's a cluster of houses in a rationalist style with poor quality of public space. I suppose that the speed of construction of the town did not allow the designers to dwell on the design and care of the common spaces. It therefore appears, as an unfinished, inhospitable pseudo-modular shared space.

# Land form

Img.1 Landslide risk  
Img.1 contours 1: 120000  
fonts: www.geoportale.it



## Land form

The Grecanica area extends to the southern end of the Aspromonte. The land is characterized by marine terracing with ridges and ridges alternated with valley incisions due to the presence of water-courses and Fiumare with high risk of landslide especially in inland areas.

The area presents a high landslide risk due to the morphology, the degree of soil permeability associated with meteorological events.

“The intense rains, if preceded by other rains, find the soil almost saturated. Under these conditions the permeability is maximum, so the infiltration is rapid, and saturation is rapidly reached in alteration levels, permeable by porosity, while the underlying rock, within an interface of a few dm or at most a few meters, is much less permeable. The permeability contrast gives rise to a high neutral pressure in the alteration levels which in many points are conducted in conditions of instability. In some cases, the rapid movement of the debris causes an undrained overload on the downstream sections which in turn collapse. This has an “avalanche” effect, with the involvement of increasing volumes downstream.

“The maximum is reached between the rivers Amendolea, La Verde and Buonamico, where not only the frequency is impressive, but also the dimensions are the most relevant, with dozens of phenomena that exceed 1km in length or in width. The reason for this frequency is to be found both in the high degree of degradation of the soils, in the high buildings, and in the extreme violence of the meteorological phenomena that reached this

level in this area historical records, in large areas, in Calabria. “

The streams are streams of water that do not have a single source, dry during the summer and in full during the winter period.

“The rivers are particularly effective in eroding the banks even in rock, in this case aided by the intense billing that characterizes the

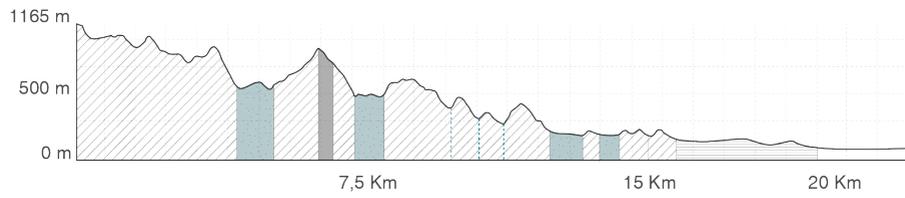
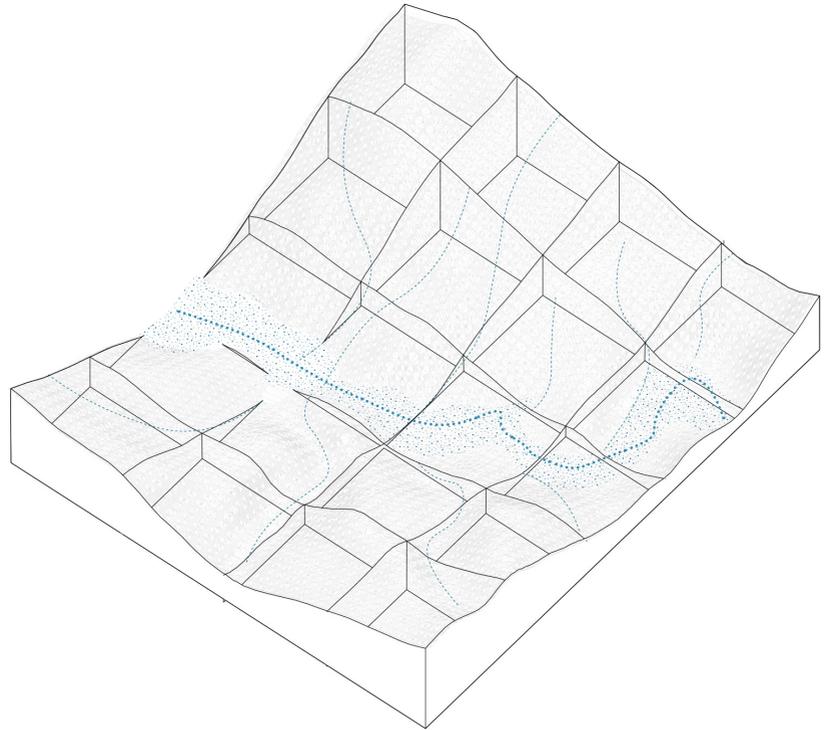
rocky outcrops of the Aspromonte. Therefore, there are innumerable sites where the water channelled erodes the base of the slopes causing landslides due to undermining the foot of the slope, so that this is one of the most frequent causes of medium or small landslides, with some case of considerable size (Fiumara Amendolea upstream of Roghudi, Fiumara di Butramo). Given that the bends of the rivers in the gravel beds tend to migrate downstream, these stretches of contact of the current with the slopes move continuously, eroding the base with a slow, inexorable regularity, so that most of the slopes of the wide beds are located, or she found herself and finds herself in this situation. In the sections where the bed is not flat and wide, the areas of erosion are obviously the external parts of the loops, where, given the high speed of the current, cavitation can tear entire rocky blocks, which are already predisposed by billing. “

Its silver color is due to clayey alluvial deposits.

<sup>1</sup> Report “piano parco dell'aspromonte.”

# Land form

*Img.1 hydrography 1: 120000*  
*Img.1 Cross sections Roghudi*  
*Img.1 territorial section*



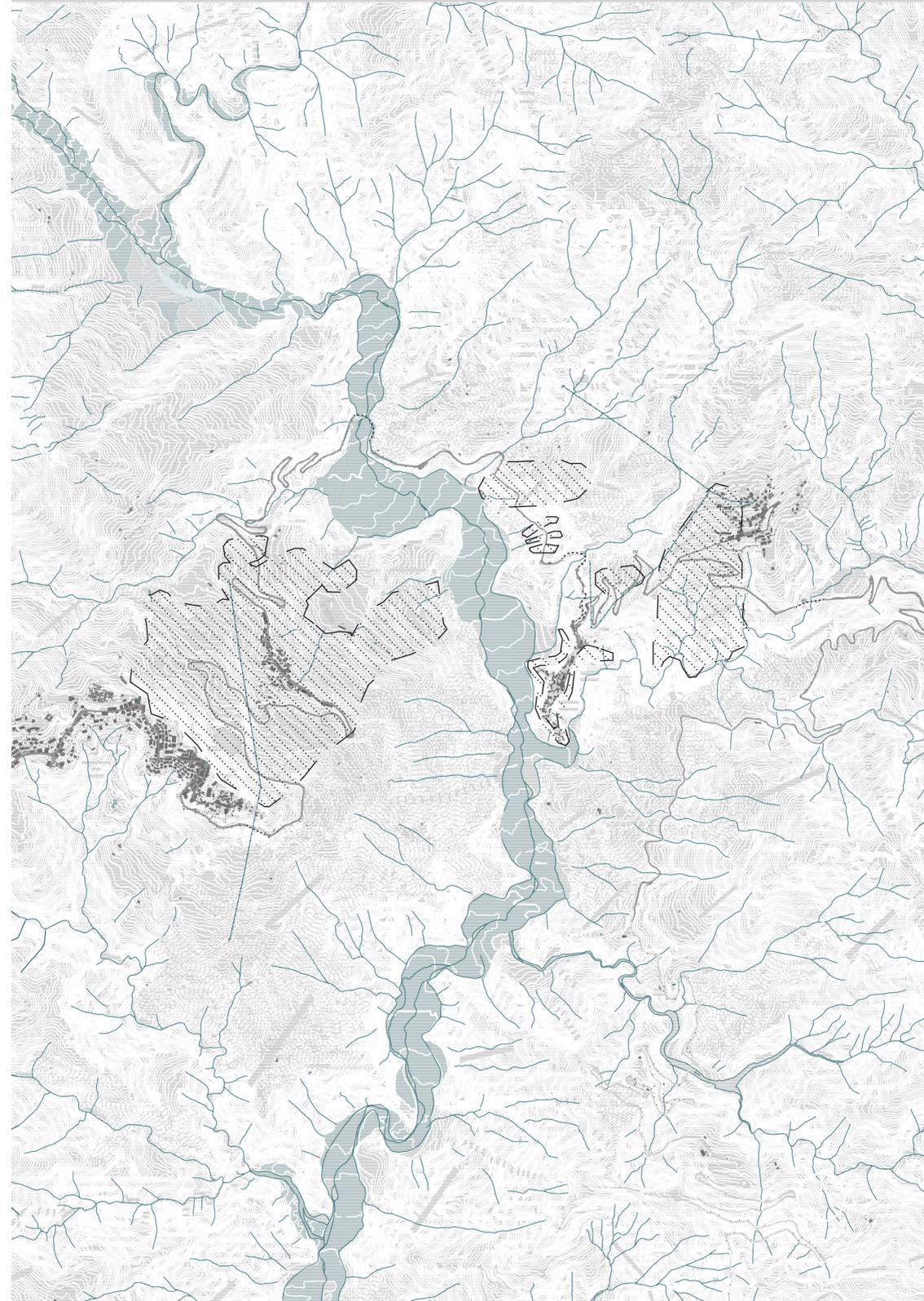
## Landslides

From the ISPRA data the Italian municipalities at risk of landslides and floods are 88.3% of the total. Deforestation, overbuilding and illegal construction contribute significantly to the precarious stability of the soil. These territories lack control and maintenance of the territory that even only through small interventions could mitigate the spreading phenomenon.

*Img.1 landslides areas.*  
Source: [www.geoportal.it](http://www.geoportal.it)

It is estimated that a densely wooded terrain has a capacity 67 times greater than water to penetrate compared to a grassy area. This is due to the fact that the roots of the trees, reach good depths capable of acting as “drainage channel” and therefore the water instead of washing away the ground surface insinuates itself in depth and is “absorbed”. The climate change that is transforming the ecosystem of the world scene, causes an increase in temperature, reducing rainy days but increasing the intensity. This leads to an increase in rainfall over the 24 hour period of 90/100 mm which will have devastating effects on an already unstable ground. Concrete, dry stone walls and applied nets are actually just a palliative that does not solve the problem, on the contrary, they increase the danger already because they are near roads could cause the landslide of the same invading the town and the countryside.

Today new “naturalistic” models are applied, it is the trees that will give greater “porosity” to the earth.



# Accessibility

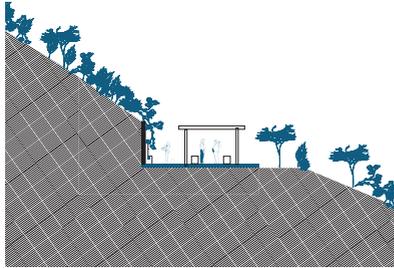
Img.3 Scheme  
 Img.3 Streets 1: 120000

-  Slow road, with the presence of boulders, in beaten earth
-  Road with frequent hairpin bends, medium flow
-  High-medium flowing road, busy
-  Fast flowing road, busy



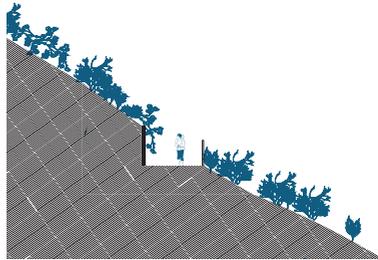
# Use

Img.1 General Plan 1:120000  
(www.geoportale.it/)



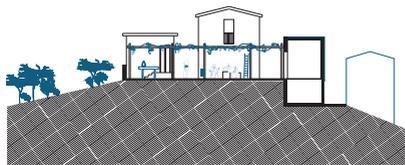
Meeting point - Source

The water source consists of a rudimentary stone basin with seats at the edges. The natural re-entry and the presence of a water point represent the characteristic elements for social practices related to the culture of the place.



Free time type 1 - Pathway

pathway immersed in the suggestive landscape.

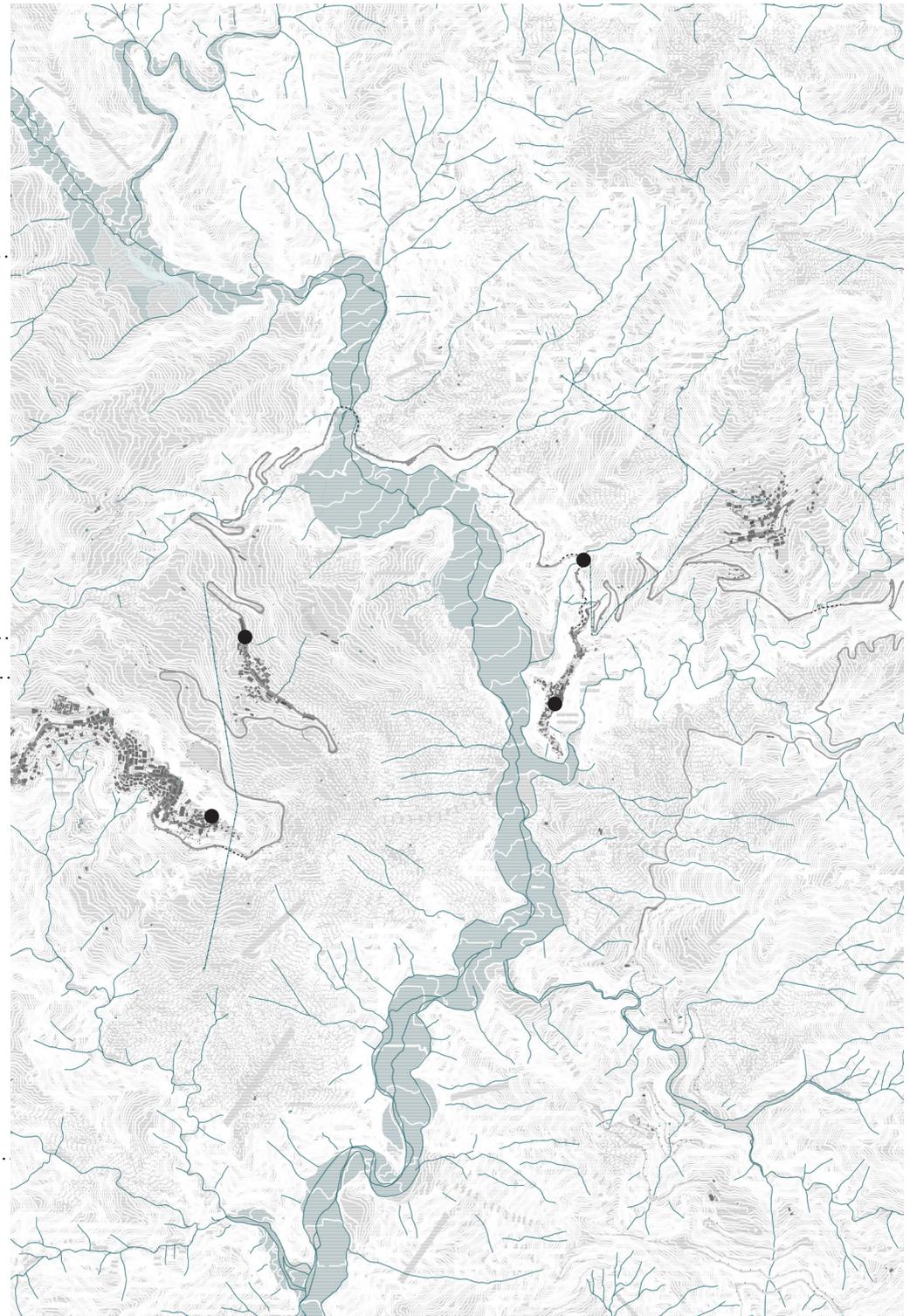


Meeting point type 2- Piazza di Roghudi

Central square of the abandoned town, lived sporadically by the former inhabitants of the town during festivals and ceremonies or simply as an excursion on sunny days.



Public space- Roccaforte del Greco





Pathway

Meeting point

Roccaforte del Greco

Roghudi Vecchio

## Use

Four categories of uses can be defined around Roghudi. Although the country is officially abandoned and so there is no permanent residence of the inhabitants, some elements suggest sporadic practices at points within the territory.

These customs are not normalizable or recognizable through a plan, but it can be perceived only by observing the territory.

To distinguish the different practices that take place, it is appropriate to insert classification criteria such as the time spent during the day, the type in relation to the actions that take place and the agents provocateurs.

The main street of Roccaforte del Greco delimited by private dwellings is the place where the collective and social dimension of the inhabited area is usually manifested.

Public space is the place where ordinary collective practices take place characterized by socially recognized, temporary and reversible actions. It can be perceived as a place of exchange, a place of passage, a scenario for exchanging ideas and knowledge but also a place for hosting community events such as public events or celebrations. The traffic, the elements of the private subjects drawn at the edge of the road (lying linen, planting, lighting, religious signs, near the entrance of the houses) indicate an active and continuous use.

At the northern border of the town the road changes its characteristics. The urban road, at first paved, becomes a dirt road bounded to the left by a rocky wall and to the right by a rudimentary device of 90 cm high concrete holding due to the

immediate proximity of the precipice.

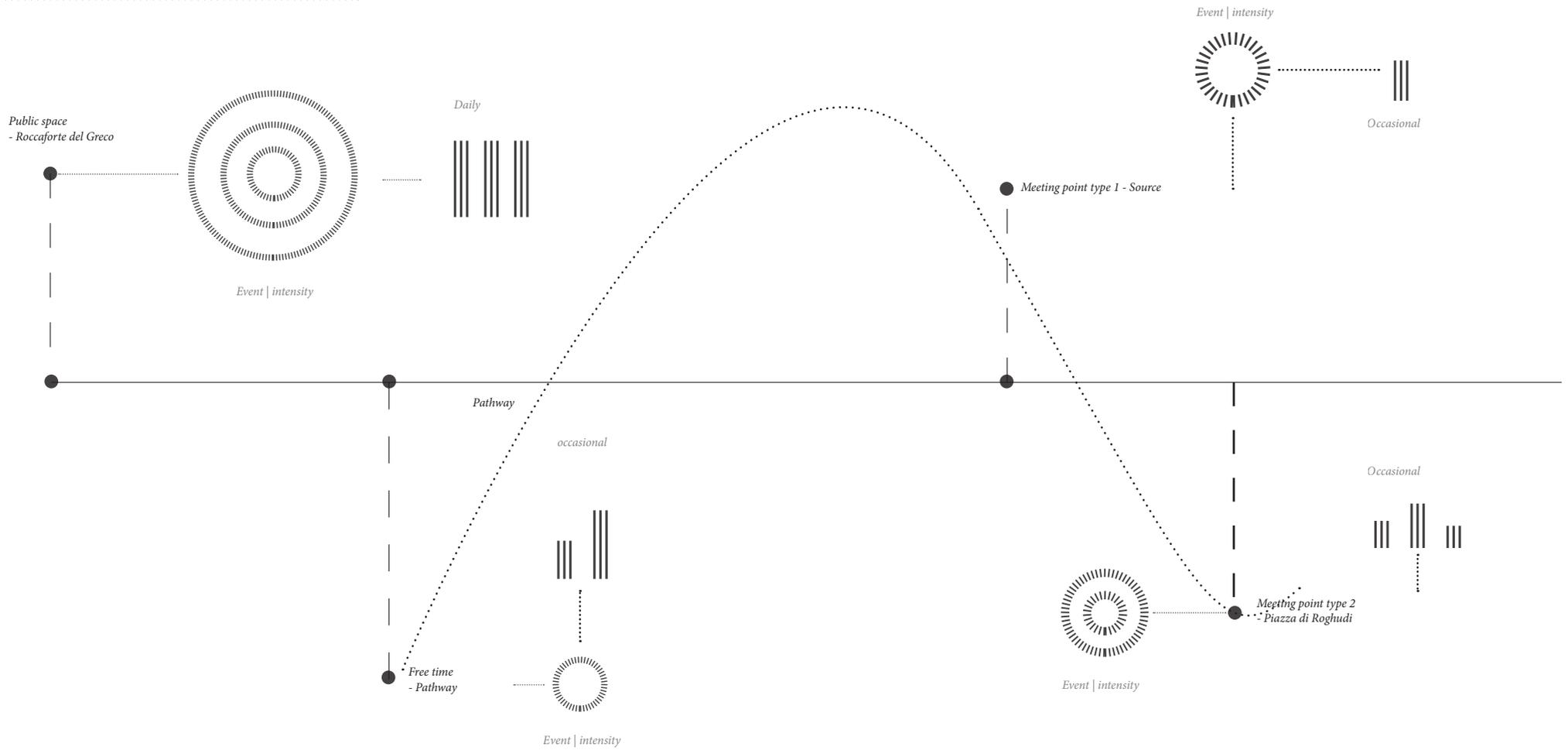
Given the morphology of the area rich in vertiginous slopes, the road is the only viable way out of the town towards the north. Given the impossibility of walking by ordinary vehicles and the proximity to the grazing areas, the inhabitants of Roccaforte del Greco and the municipalities constitute a path that can be followed by pedestrians. It is possible to define the path, according to the characteristics mentioned above, as a path traced and shaped by the passage of man.

It is not a daily trafficked route, the peculiar characteristics of the landscape, the vegetation, the presence of hairpin bends and the natural pavement is a path sporadically frequented by those who wish to leave the city center for an excursion or by those who practice pastoral activity.

The source is an element engraved in the collective memory of this area. The source represents the ancient point of exchange, a daily appointment for the former inhabitants of the village of Roghudi to “go and get the water” indispensable for survival. The characterizing elements of the source are still present: water, stone construction to contain water, seats and a horizontal plane. Still today it represents a meeting point outside the city center. The central square of Roghudi is both a meeting point and a place of commemoration and celebration of collective events of the new Roghudi community.

# Use

Img.1 Scheme of uses relationship



# Plants

Img.1 Abaco  
 Img.1 Map vegetazione  
 Source: www.geoportale.it



 *Quercus ilex*



 *Cytisus scoparius*



 *pistacia terebinthus*- Arbusto



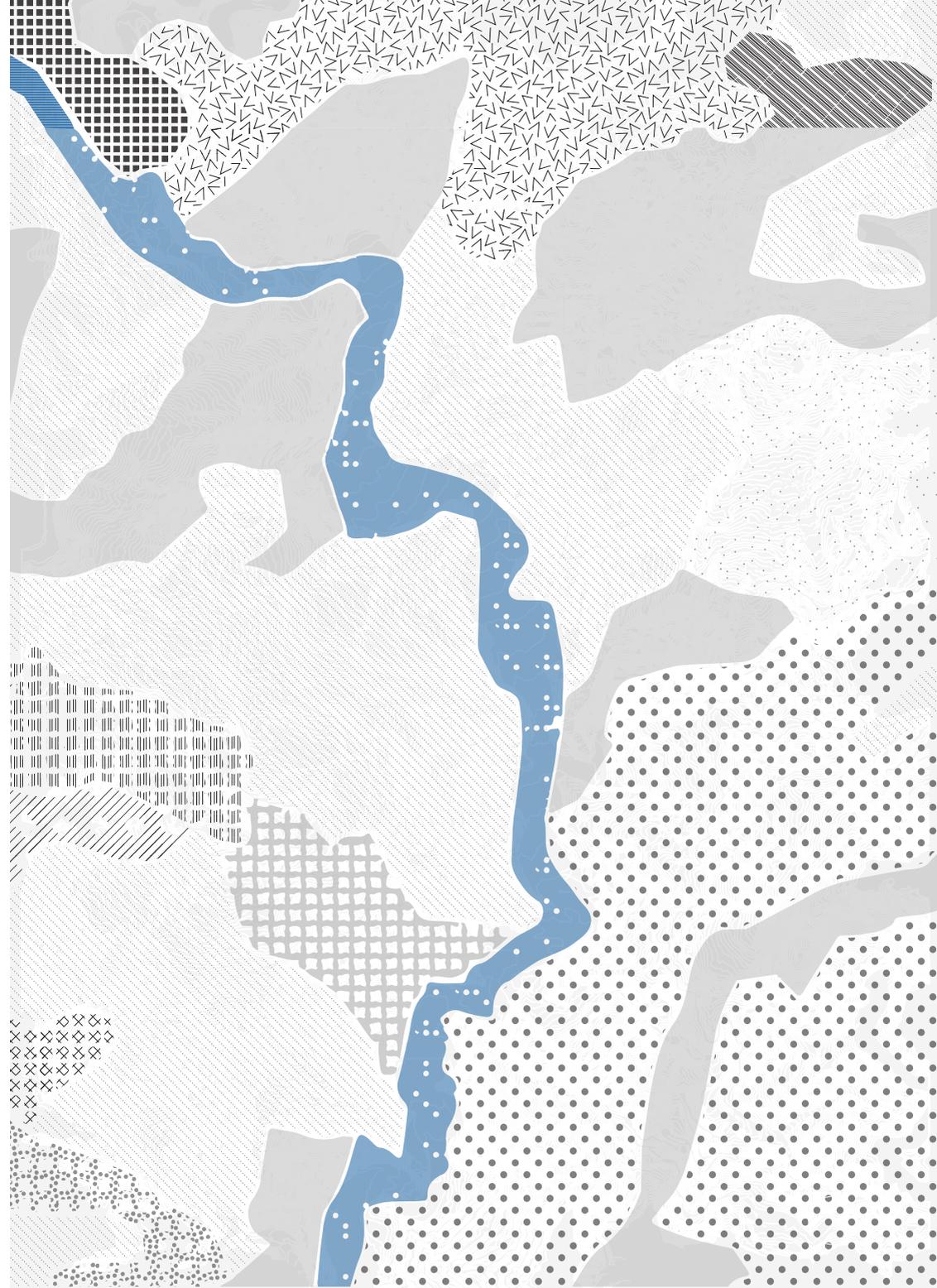
 *Phillyrea latifolia*



 *Quercus virgiliana*



 *Citrus bergamia*



Img.1 Relazione piano parco dell'aspromonte.

## Plants

The vegetation is characterized by trees and shrubs that together restore the image of a landscape dotted with sparse and scattered patches of green.

The cutting and fires of the beech trees favor the growth of carbonari broom (*Cytisus scoparius*). During the past years, trees have been cut and destroyed for the production of wood and to make room for crops. Once the local crops have been abandoned, the broom with its superial roots, is worked.

In particular, the holm oak groves with Sicilian camedrio (*Teucrio-Quercetum ilicis*) are absolutely the best represented typology occupying about 17% of the Park territory. (Spampinato, Cameriere, Caridi, Crisafulli, 2008)

The holm oaks are fragmented, forming a pattern on the surface of the park formed by narrow polygons.

The oak and chestnut woods owe their inclusion also to the characteristics of the soil.

The shrub formations cover about 25% of the surface with a high incidence of brooms. (Spampinato, Cameriere, Caridi, Crisafulli, 2008)

*Quercus ilex*: Tree. Max. Height 25 m, has an oval crown, very dense with a predominantly dark green color.

*Cytisus scoparius*: Shrub, also called “ginestra dei carbonai”, can reach a maximum height of 2.5 m. Its yellow flowers are characteristic.

*Pistacia Terebinthus*: Shrub, max. 5 meters. it is characterized by berries that at maturity they change color becoming red and purple.

*Phillyrea latifolia*: shrub or small tree. Max height: 6 m. Excellent ability to reproduce from the stu-

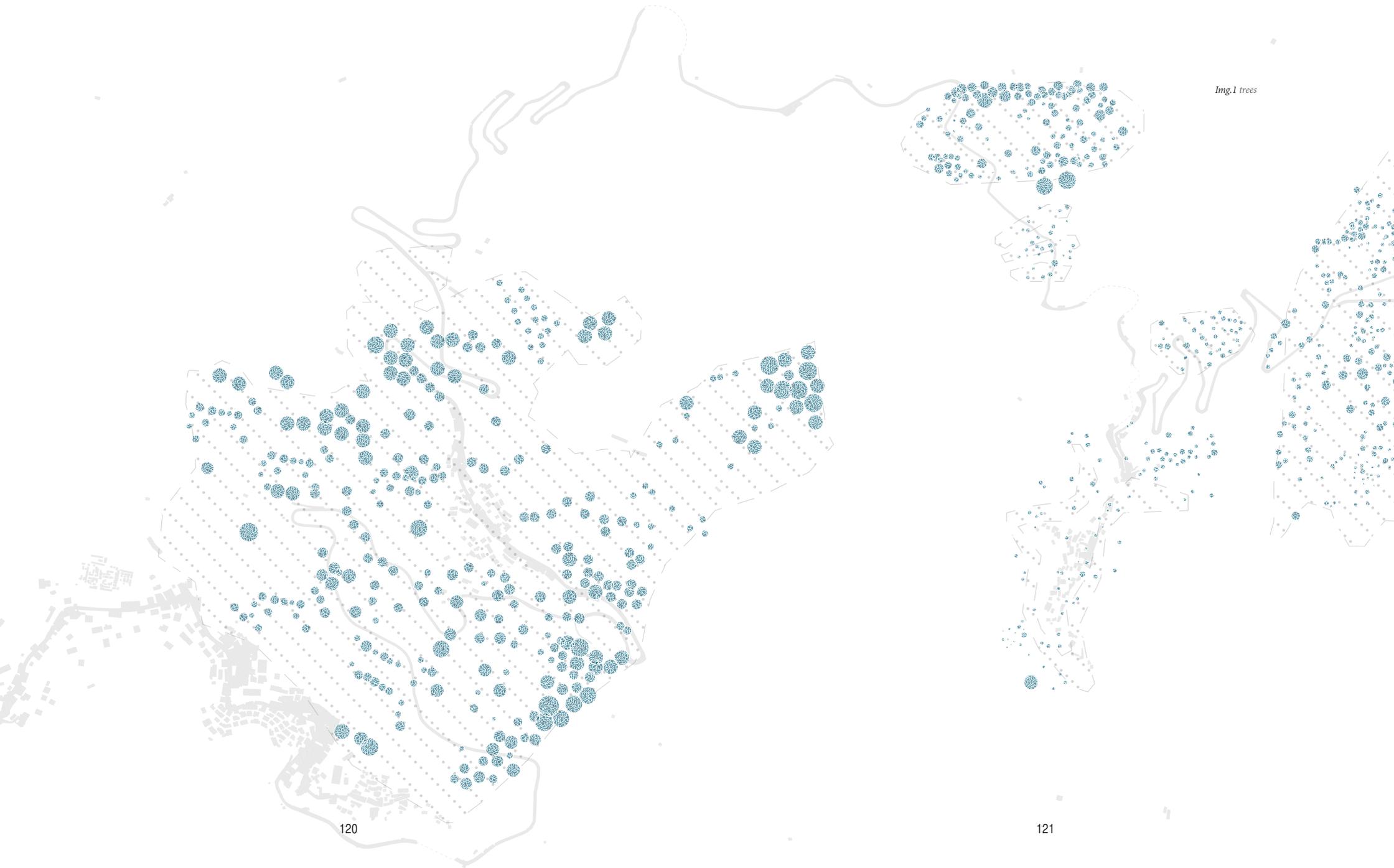
mp.

*Quercus virgiliana*: “Quercia Castagnara”. Max. Height 20-25 m. In 1863 the deforestation began in the territory of the Amendolea river due to the construction of the railway on the Ionian coast of Calabria. It is now at risk of extinction. Edible fruits.

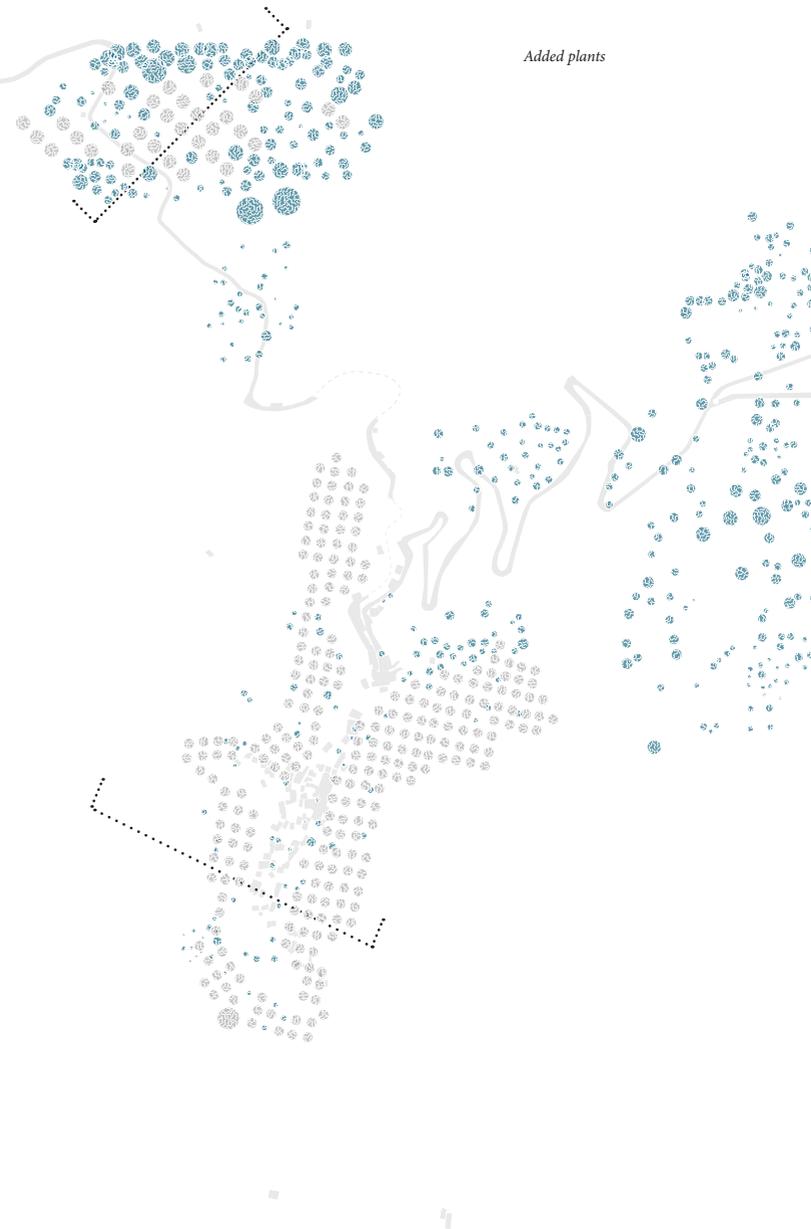
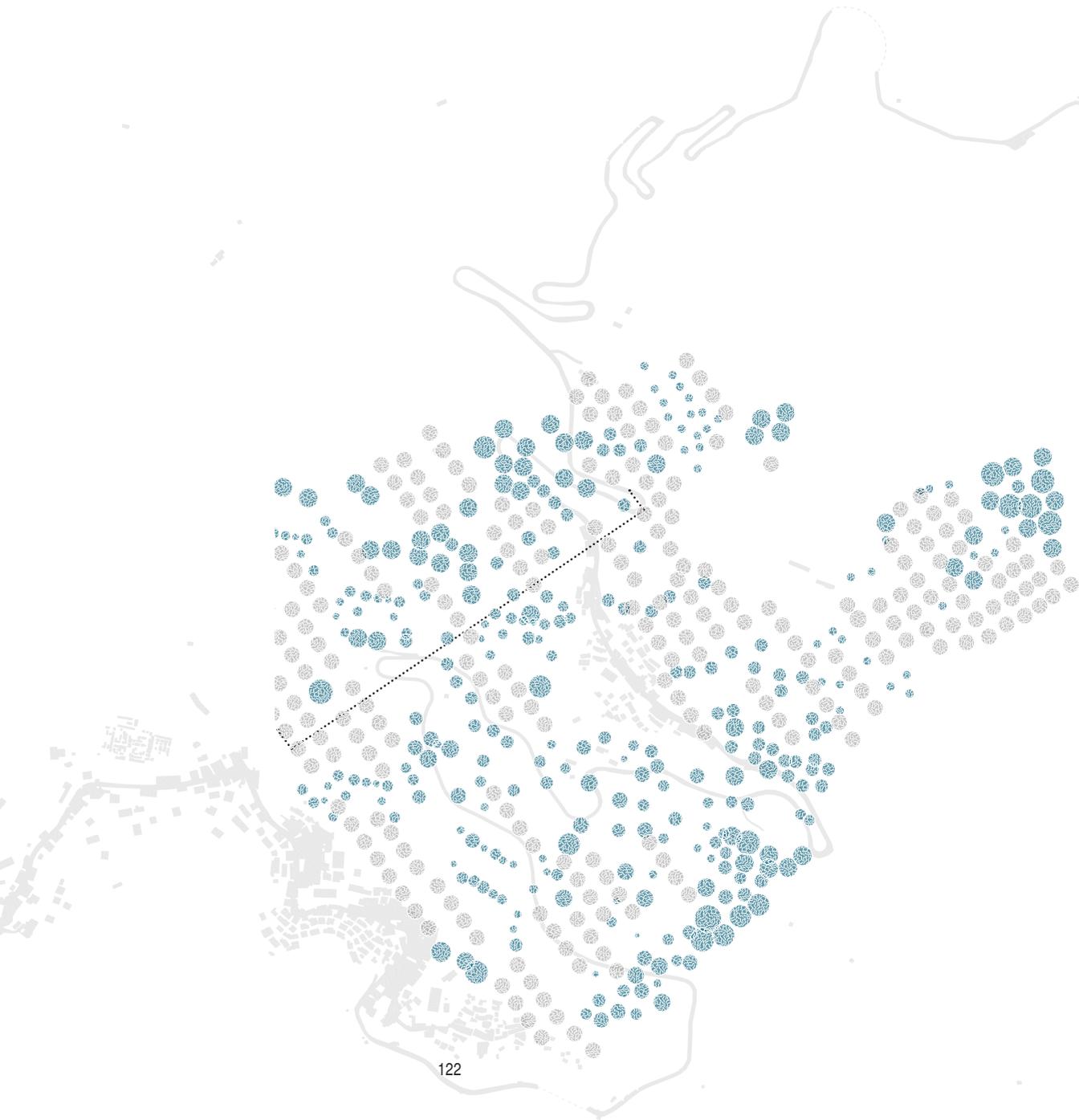
*Citrus bergamia*: “Bergamotto”. Shrub. Max. Height 4 m. it is a typical plant of the area. The present ecosystem is the key to its survival. The cultivation of quality bergamot is limited to the Ionian coasts of Calabria all over the world..

In the analyzed area there are no artificial plants, and according to the report only 6.7% of the area of the Aspromonte Natural Park. (Spampinato, Cameriere, Caridi, Crisafulli, 2008)

The identification of the potential species and the present series allows to plan the reforestation and environmental restoration interventions.



img.1 trees



*Added plants*

## Design with nature

In naturalistic engineering a typology of plants and trees is used to consolidate scarps and landslides. In relation to the habitat and favorable climatic conditions, new plant forms are chosen.

In this case, they have been added *Quercus ilex*, *Fagus sylvatica*, *Salix alba*, *Quercus cerris*.

Which not only act on the soil in a draining function but also modify the landscape and the perception that one has of it.

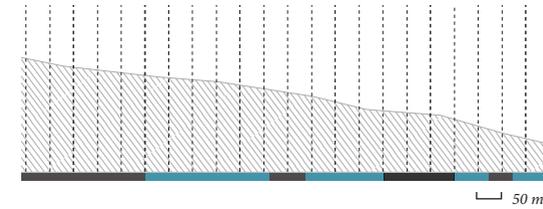
The area under analysis is a low presence of high-trunk vegetation with a prevalence of bare rock and ochre-yellow soil. Returns the image of a barren and barren landscape.

In this case, species of trees with deep roots have been inserted that can survive the hot and dry climate in summer and rainy in winter.

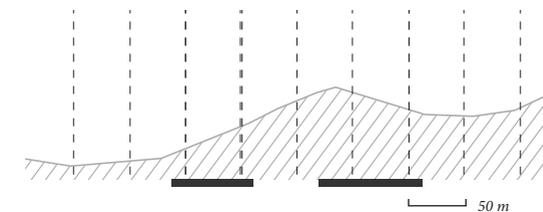
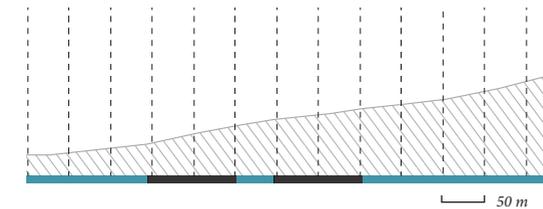
Depending on the type of intervention area, taking into account the slope, the existing vegetation and the proximity of the river, it is assumed that oaks and larches are suitable for the conditions. This typology stands out on the low-profile landscape consisting mostly of shrubs as seen before. It conditions the view but the in-line layout follows the slope in correspondence with the contour line trend.

From a purely perceptive point of view, the landscape boasts a peculiar characteristic: the irregular and rich in inlets of the ground that gives the image of a large-scale labyrinth and draws the jagged and pointed profiles.

Therefore the intervention aims to enhance the features present, and to counteract the hydrogeological instability.



Img.1 Sections





The planning strategy implemented involves the involvement of naturalistic engineering knowledge as regards the specific technical and structural skills to be grafted onto the territory.

One of the objectives is to conceive the landscape as a common good to improve individual and collective quality. The landscape is a tool to respond to the needs of the environment and the territory, putting nature back where the city has failed.

Very often the existing strategic plans aim to solve the problems of the city with concentric effects. The absence of a territorial vision that encompasses various knowledge and disciplines, but also actors involved determines the failure of the strategy to proliferate and to stop because of lack of funds.

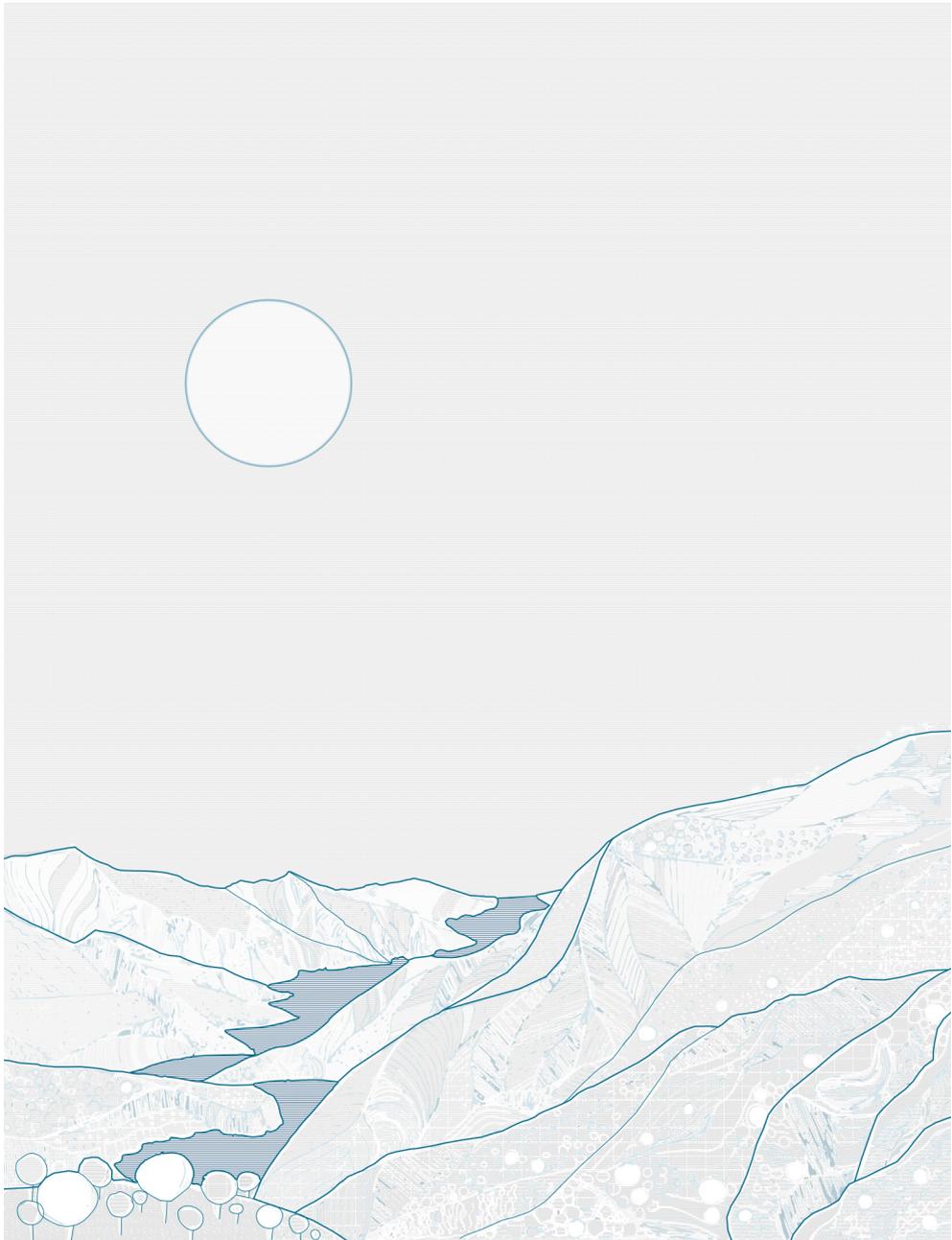
The vegetation graft to protect the environment allows to reduce maintenance costs that could be managed by the Aspromonte National Authority.

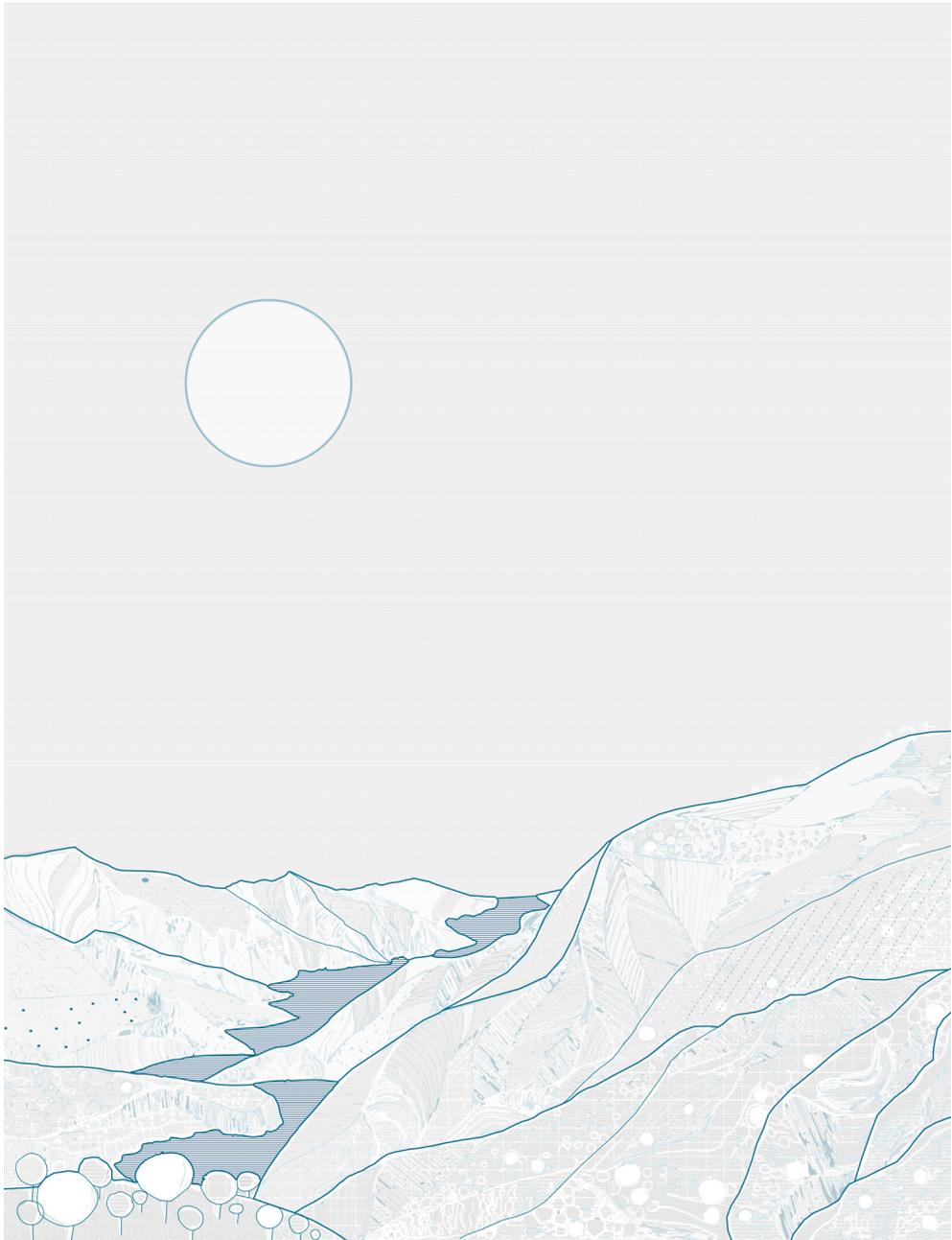
By highlighting the network of actors that is embedded in the territory, we can consider the current project as an evolution of urban configurations, which does not outline the function of spaces. The abandonment has caused problems leaving the spaces in a waiting state. But where are the conditions to foresee a repopulation, what roads must be taken? The disposal, the abandonment

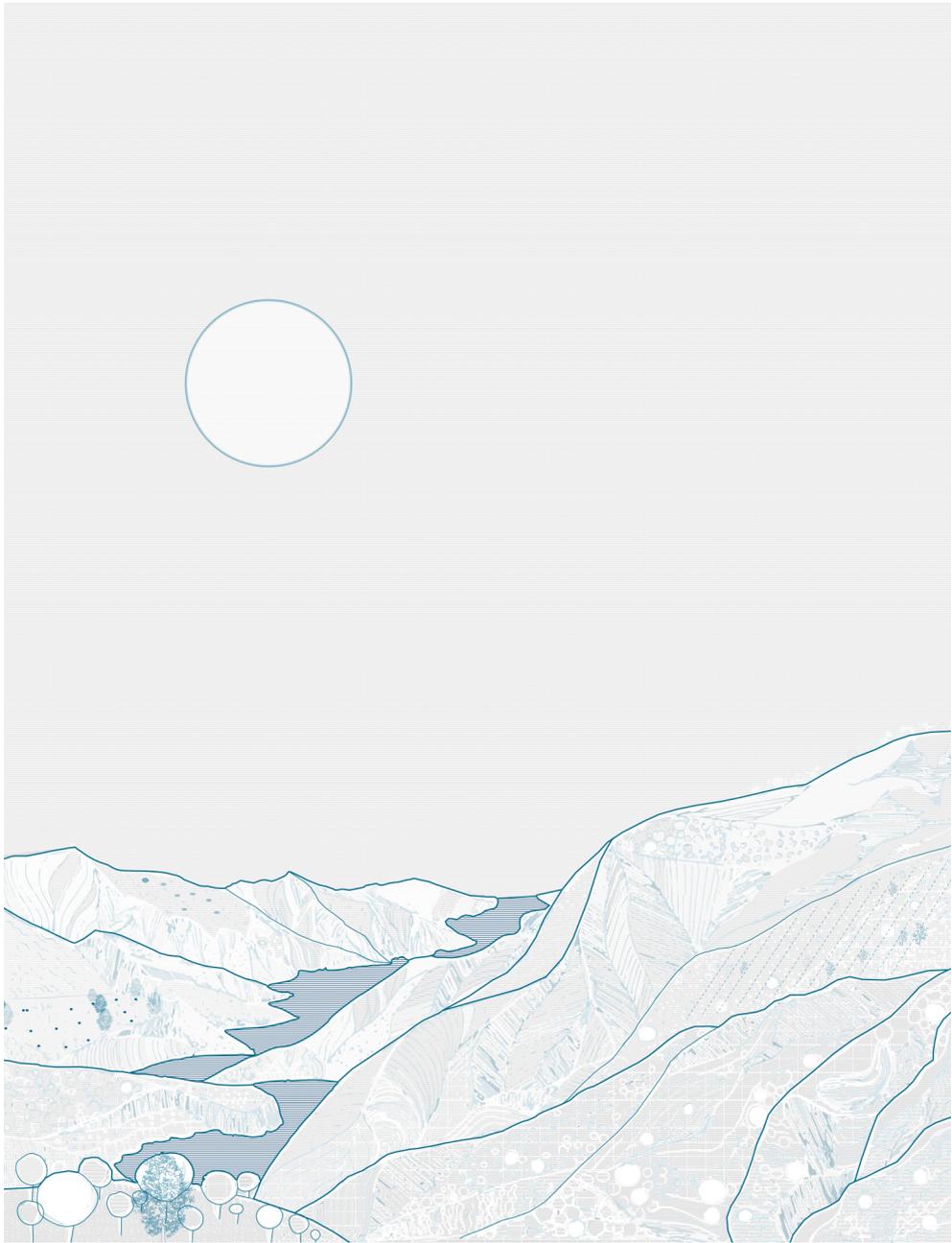
they are sometimes unavoidable processes which, if left unchecked, will have harmful effects for the downstream population. A program and a process of re-appropriation to work on the fragmented space

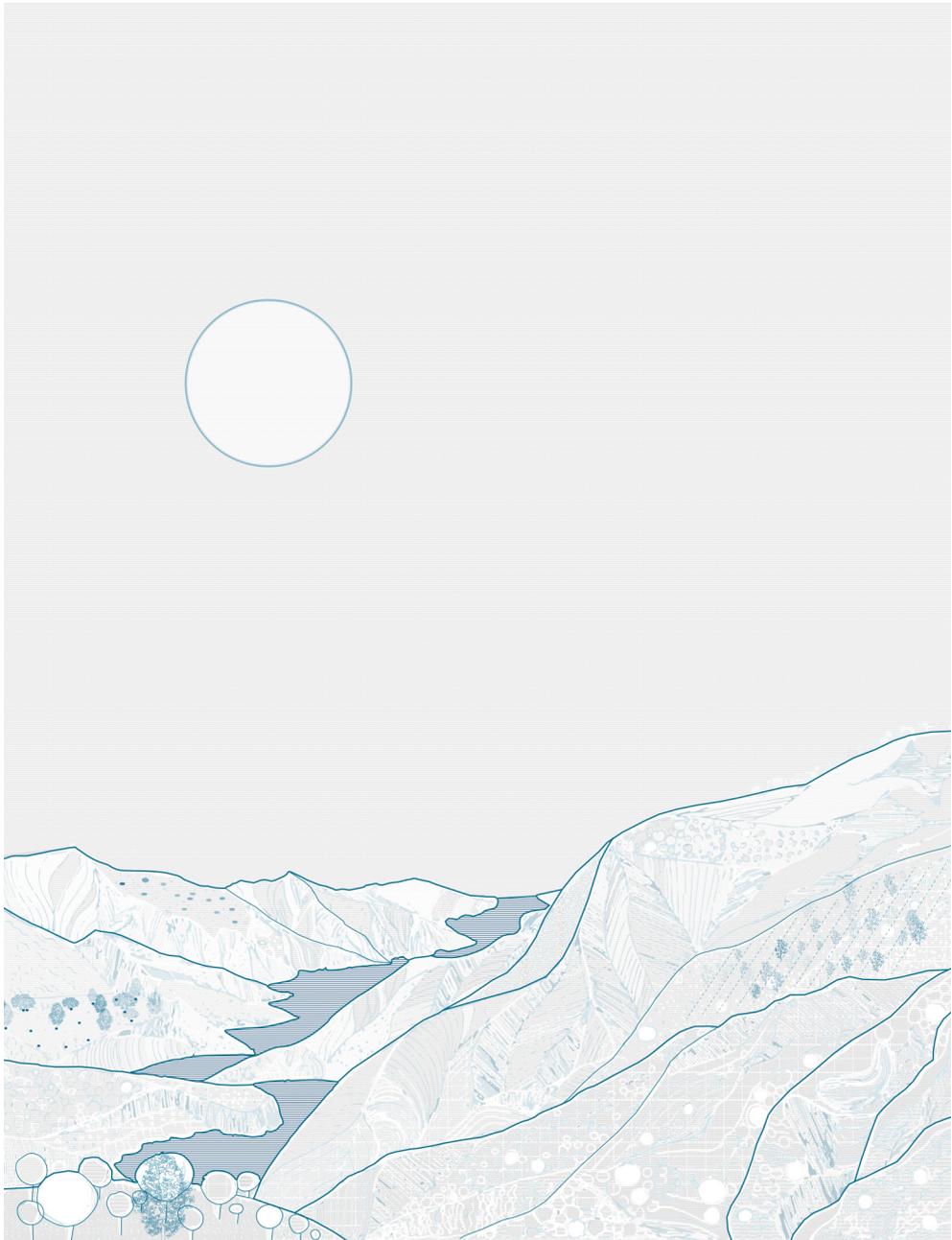
A designer of possible scenarios, as tools and not as static models to pursue.

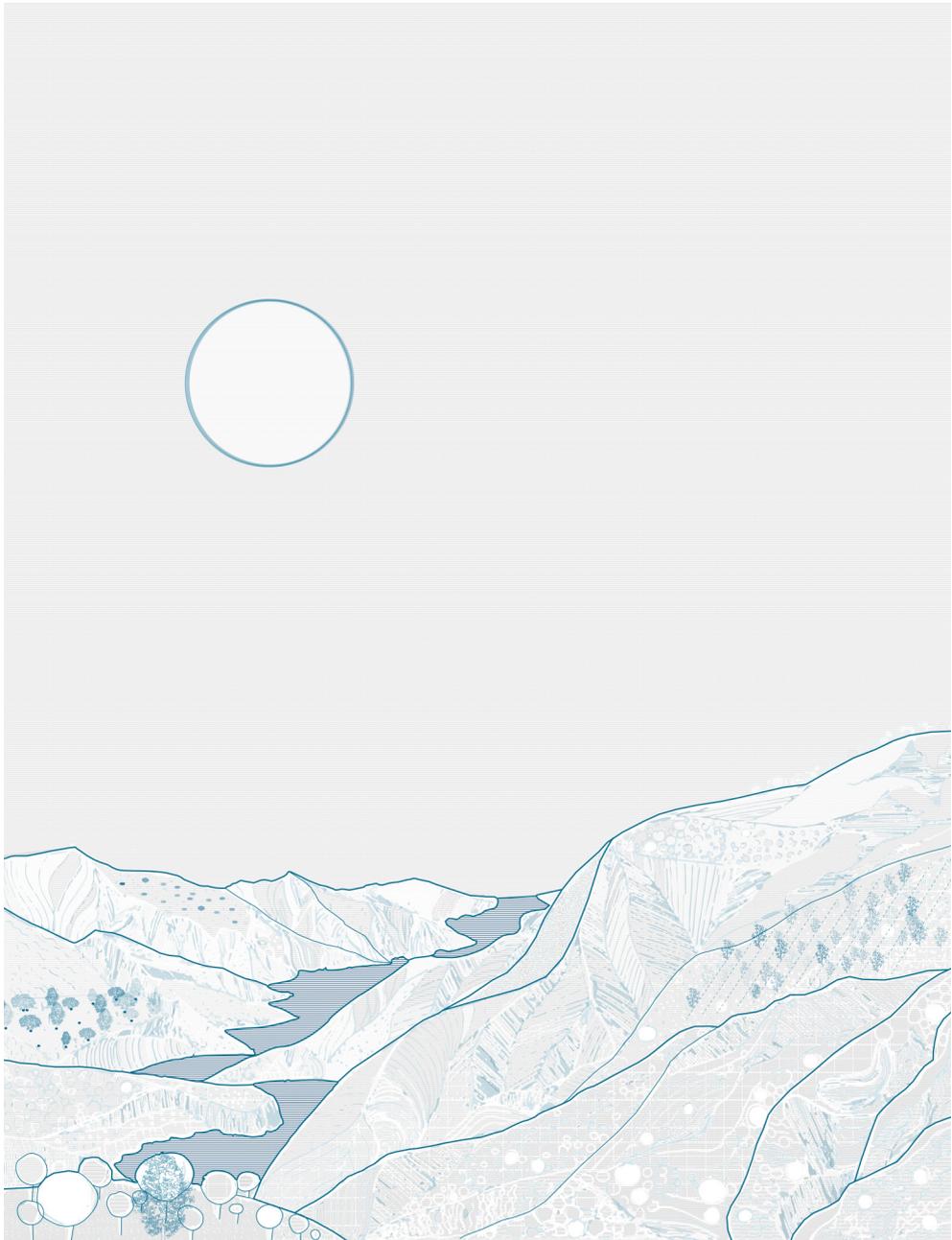
Space for experimentation of the relationship between man and nature. A balanced relationship between population, equipment and the environment.

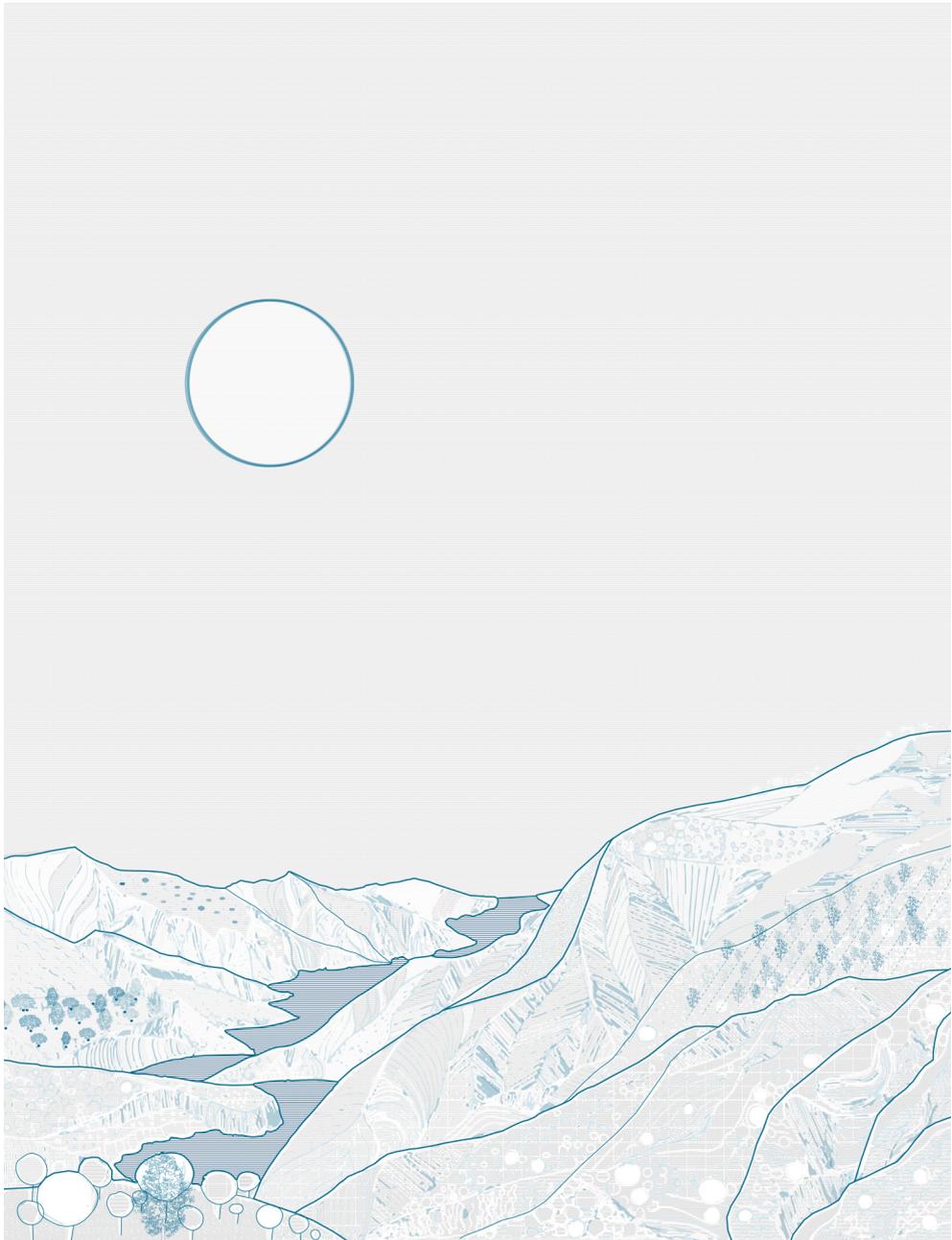


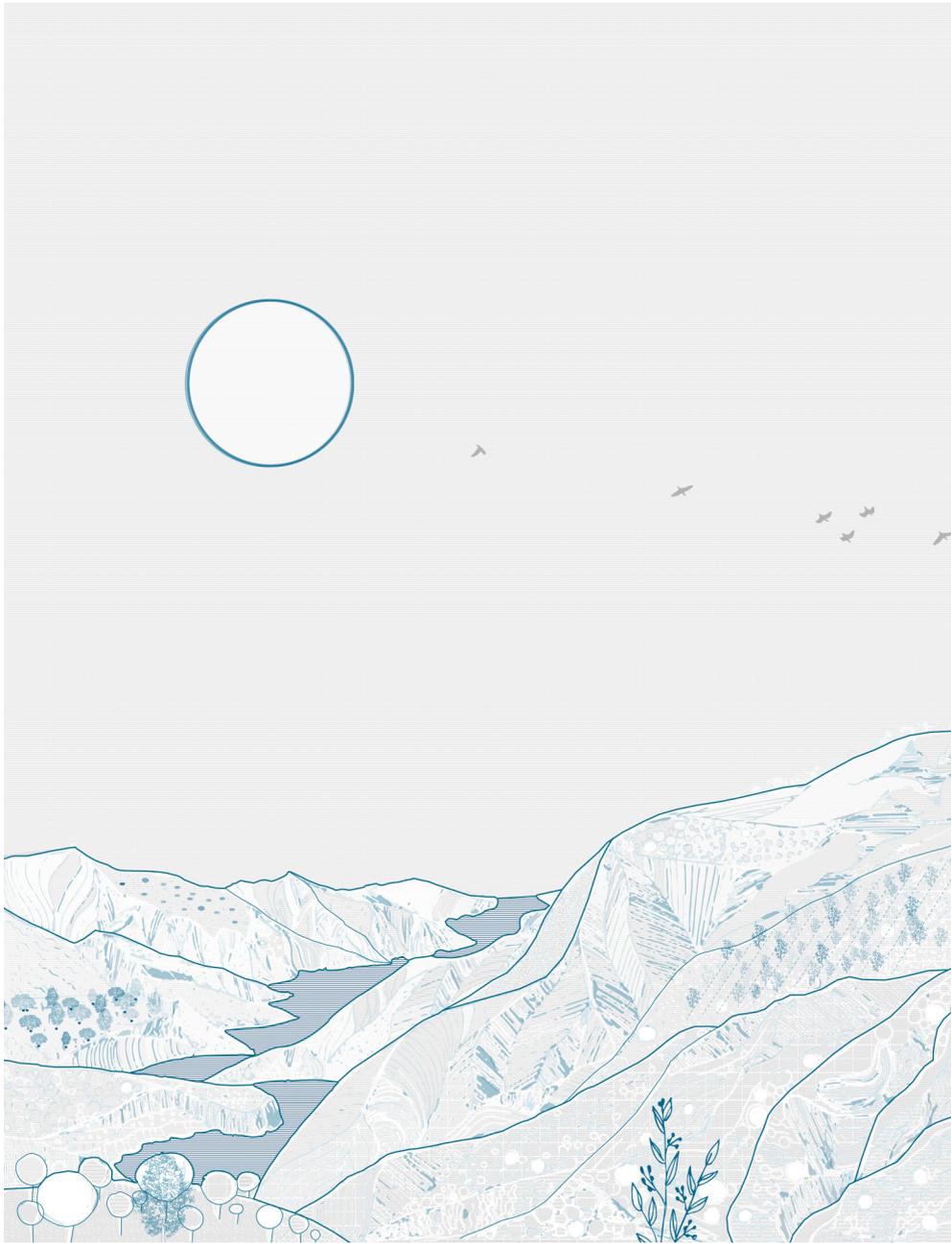






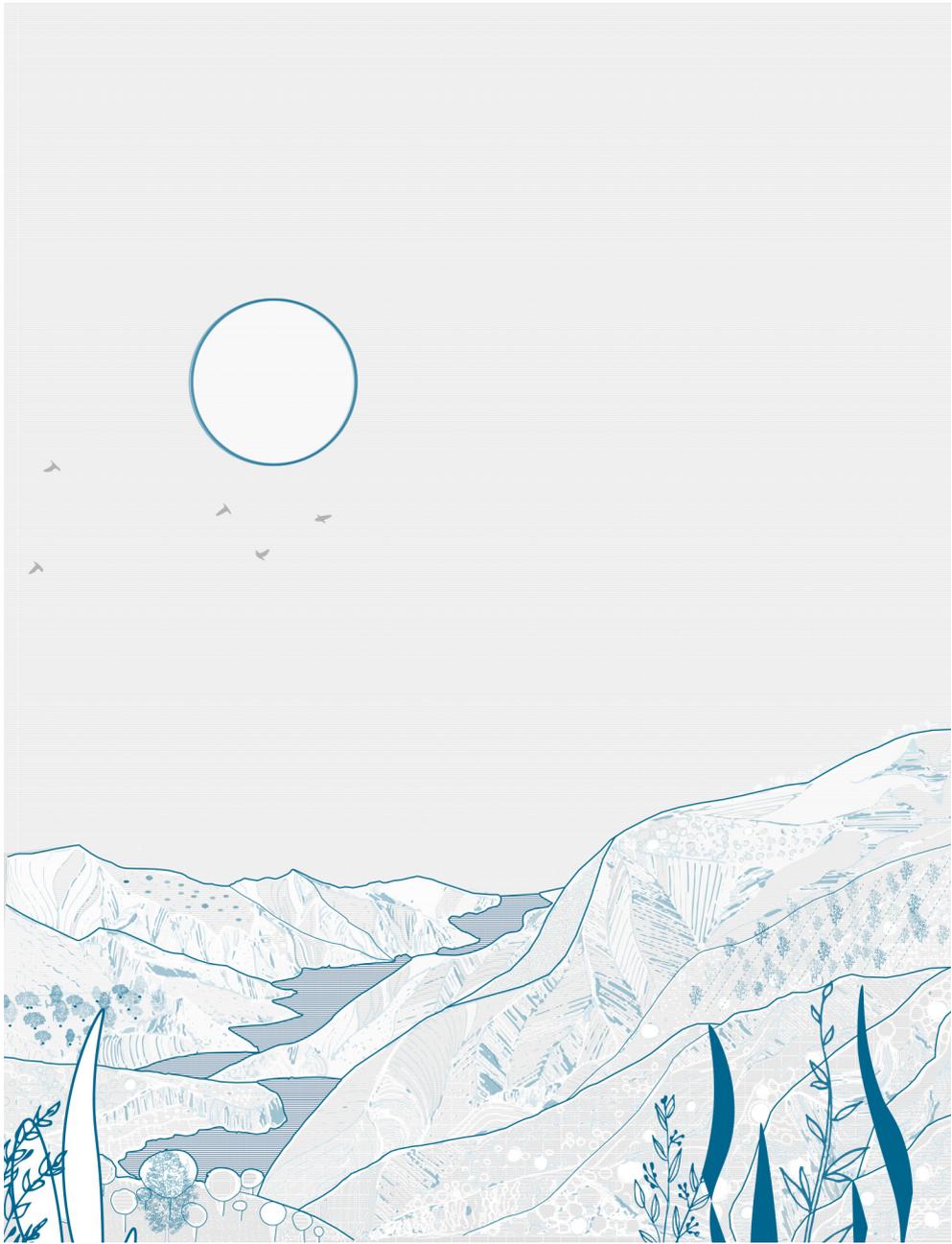


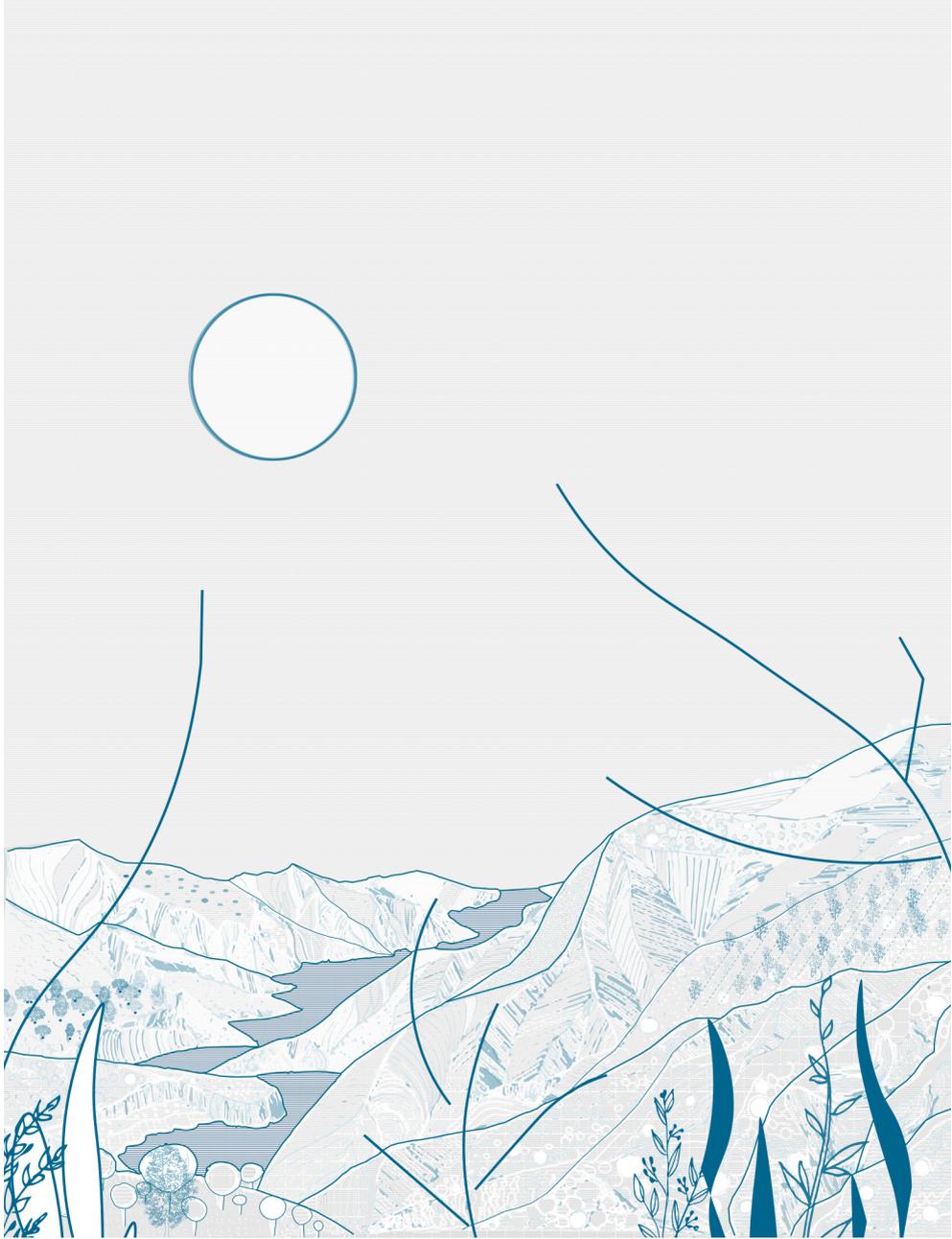










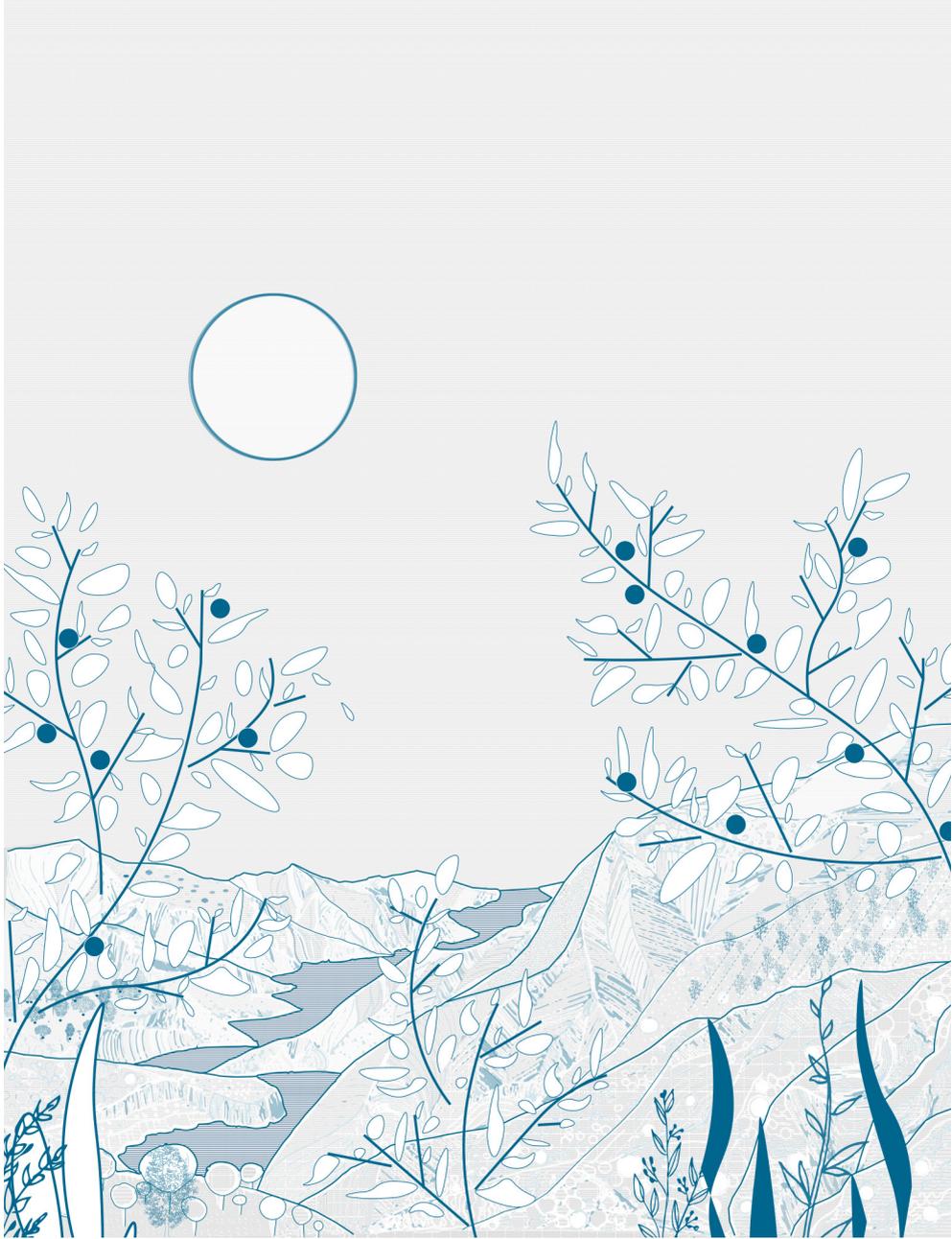


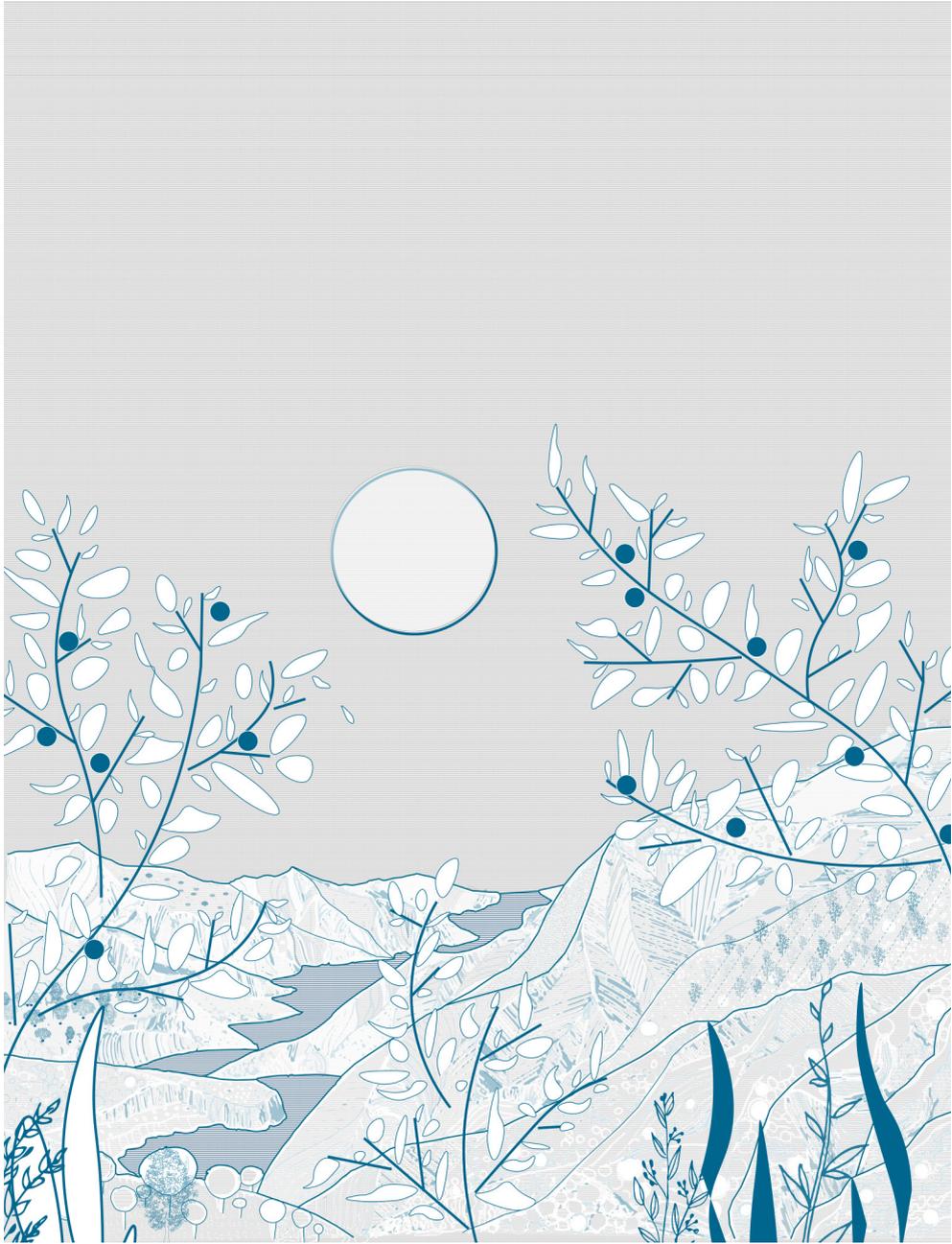


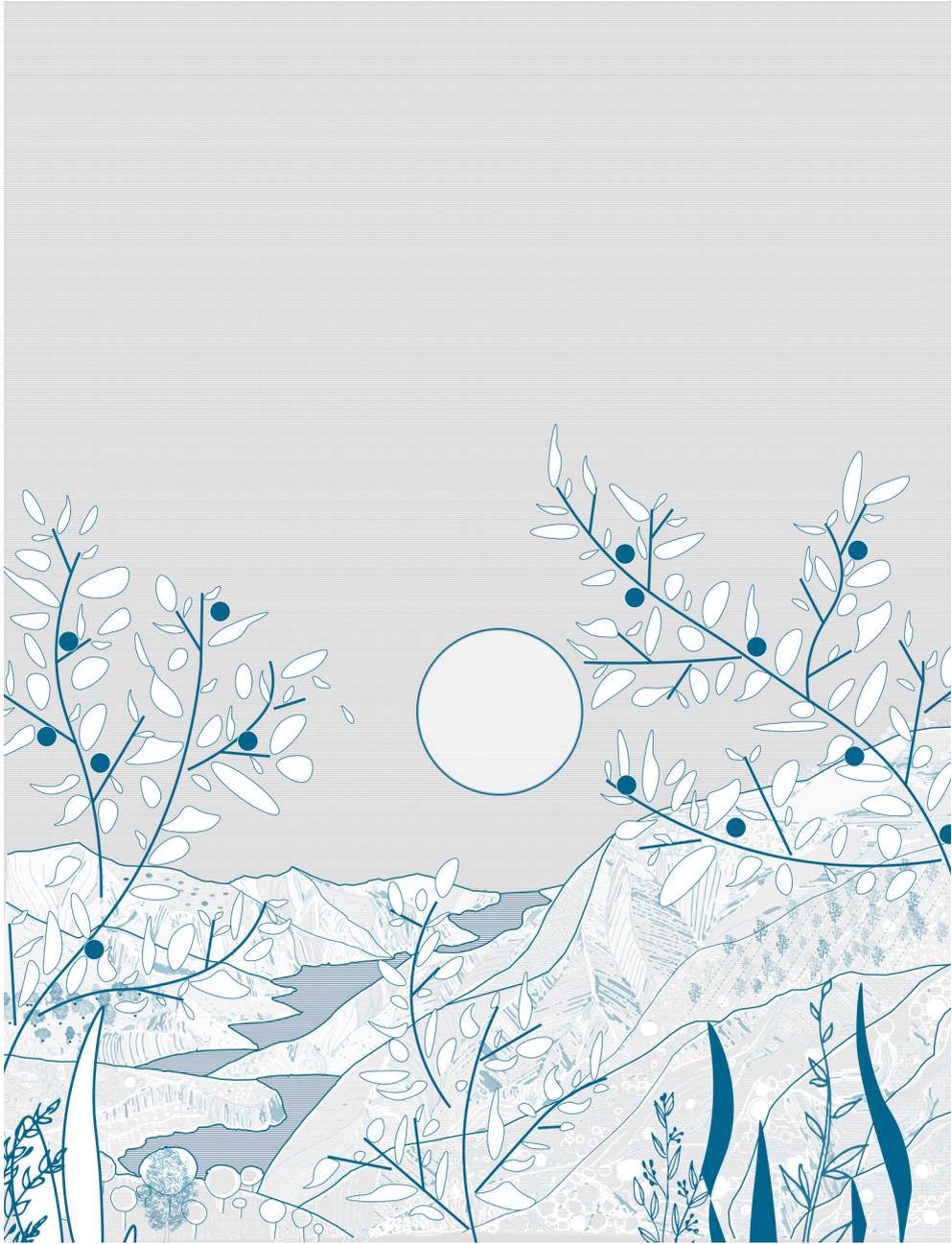


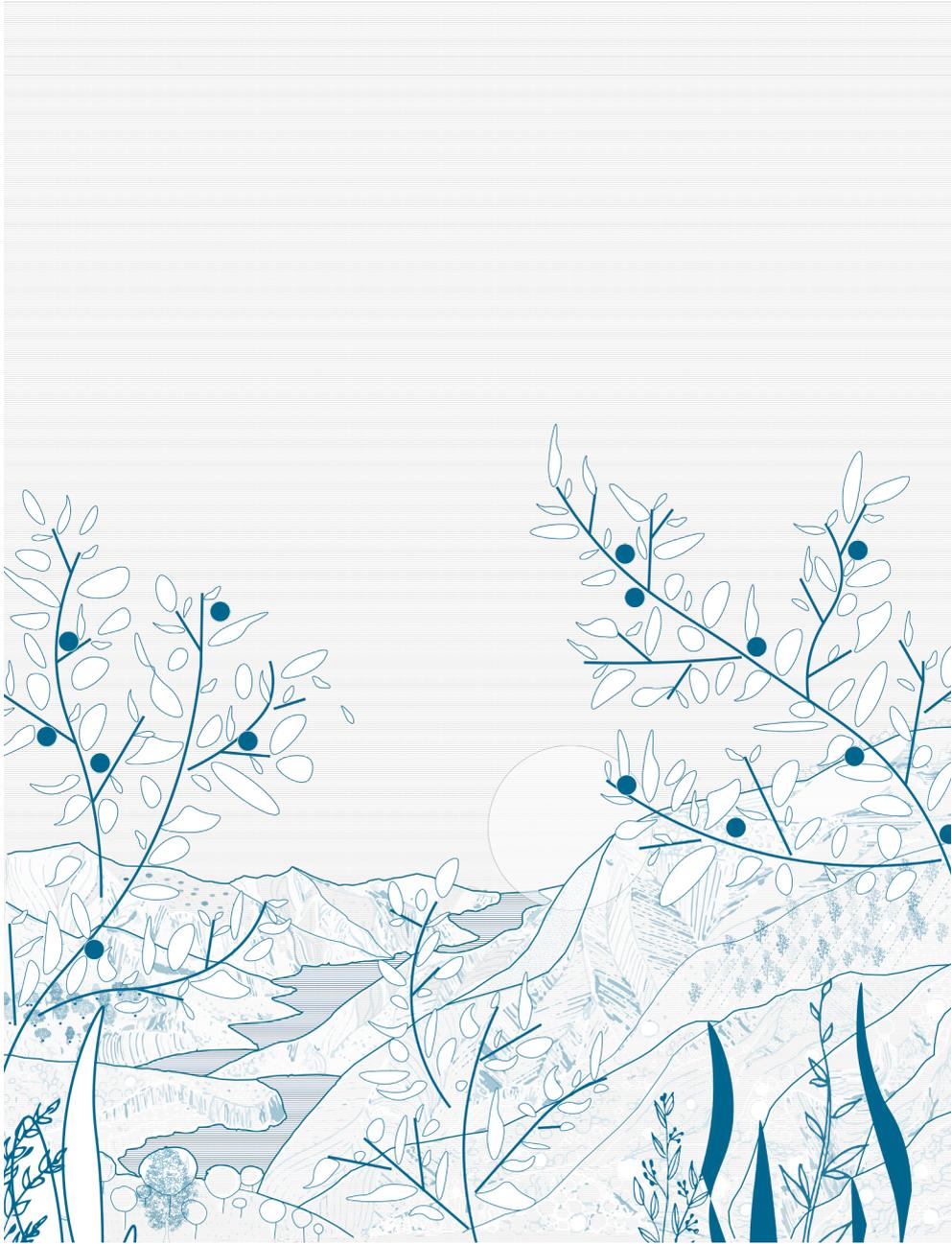












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