The rural case of Sardinia Contextualizing edges
The thesis has been developed through the guidance of the mentors:

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A mia madre.

I am very thankful to my parents which supported me, not only financially, during the amazing experience that I carried out. This work would not have been made without the support of my friends, especially my colleagues Germana and Aditya, with whom I shared the best, and the worst, of the last two years. A special thanks to all my “old” friends who visited me, and supported me during the tough moments in The Netherlands, in Venice, and back home in Cagliari. Finally, I am grateful to my mentor, that since the very first day believed in me and in the project, which eventually we brought to a conclusion.
The local writer, and philosopher Antonio Gramsci once described: “If Sardinia is an island, then every Sardinian is an island within the island.” (Gramsci, 1937)

Apparently superficial, the meaning of the sentence is hidden in between the introverted mindset of the inhabitants, and the wild geography that characterizes the region. In my interpretation I see rural settlements so far from the main infrastructures, and main urban areas, that they seems islands within the island. The integration of the settlements with their surrounding nature creates a landscape so spontaneous, that it seems an organic part of it.

As the island of Sardinia blends with the sea creating marvelous beaches, the rural cities blend with the surrounding context generating harmonious edges of gardens and courtyards.

I come from the main city, Cagliari, which I may refer to as a metropolitan area, but actually of metropolitan it has nothing, and on the contrary is more a bigger village with the same introversion of their inhabitants, and by the weakness of the economy, that since the prehistoric era has never been very fruitful, therefore until the modern era the house was just a shelter where to rest, where comfort was not yet invented, and proximity to the place of work was the only guideline for the creation of urban morphology (Atzeni, 2009).

Everything that inhabitants needed was close to them, the environment itself was the source for the nutrition with its natural water streams; the crops where to cultivate, and the woods where to hunt. Also it was the main source for the construction materials. Therefore each and every settlement established a relationship with its natural context, which had to be strong in order to survive and still nowadays this bond is clear and evident; architectures, architectonic typologies, courtyards, public spaces, land parcels, dry stone walls, are few among many other landmarks, that bond heritage nowadays with tradition once a time, into one unique landscape.

The post-modern conditions, as the welfare gained after the two great wars, the changes in the agricultural production, the industrialization, the tourism, and the increasing level of education, recently made the people moving out the rural areas in order to reach more beneficial situations in the coasts, in the urban centers, or overseas.

This made me wondering about the actual situation, and a question jumped in my head: what is going to happen if the youth permanently moves out of the rural areas? How these places will look like without active inhabitants? What is the future?
Introduction

1.1 Research background

- Rural flight and brain drop
- Loss of local identity
- Coastal, seasonal, mass, tourism
- The “resortification”
- Cultural and rural tourism all year round

Rural Flight.

The island of Sardinia is big, distant from the Italian peninsula, and with a sparse population, is a place where the rhythm of the life, especially in the countryside, runs slow and static. Usually, when transformation happens, they are not heard or felt, or they are not seen at all. Sardinia is the type of place where the problems are not usually solved, but brushed under the carpet, and when somebody enlightened foresee any serious situation is common to hushed-up the opinion, and pretend nothing will never change. This is the case of the inner areas of the region, those areas in between hills and ridges, where a weak agro-pastoral economy is not able to keep the inhabitants, that after the first level of education are unwillingly moving to major city centers in order to find better opportunities. The youth moves, the elderly increases, the population reduces, and as a result there’s not a solid base for the economy to grow, even if potentials are high and various. Villages shrink, and cities grow, which lead to the paradox that in the end the population is regionally growing in an uneven spatial structure, where main cities are becoming metropolitan poles, and coastal areas are becoming touristic resorts. Because of the lack of services, many people from the rural areas commute every day towards near urban centers or even farther, towards the coasts. The transport facilities struggle to give a good service, and often the bus ride is only one per day, forcing people to make the inconvenient decision of moving to the near cities. Therefore who really moves is the young generation, that mostly is not prone to come back.
Loss of local identity.

“Leaving” is not only a physical term, it also refers to the culture and the customs & traditions these settlement collected through endless time. Archeology, old production practices, food, textiles, that once a time were part of a usual daily production, now become a sort of heritage so prestigious, that many national and international visitors come to watch exhibitions, to buy products, and to learn the techniques. Already the rural architecture is an exhaustive content for the tourists, but also the commerce which goes around the local food production & consumption, especially for foreign tourists, is a growing business. Leaving the potentially fertile ground of the rural areas means also leave behind those customs which can be fruitful also in economical terms. In example one important pride is the local dress, both for men and women, which is so local that it changes from village to village and it is usually remembered in parades that involves locals and visitors; the Sardinian traditional dresses are now models for the contemporary fashion industry.

Coastal tourism.
The touristic business is a stable and growing activity with eleven-million of presences per year (which is almost eleven time the regional population), it is usually highly seasonal, but it doesn’t really involve the local economy. Resorts, hotels, and field staff either, are usually part of a complete foreign touristic offer. Entrepreneurs (nowadays especially from Saudi Arabia and Russia) can afford to buy the land and make the business there, and because of political weaknesses, corruptions and complicate bureaucracy, usually the only local consequence is an unsuitable exploitation of the land, with serious impacts on the landscape.

The “resortification”.
One possible scenario for the future would be the “resortification” of the rural areas. The rural flight will go on, increasing always more the major
The historical comparison shows how the isolation of Sardinia led to the lowest density, and still the region is among the lowest figures.

Graphic: Antonio S.  
Data: Urbistat #M.Breschi
cities to the disadvantage of the small settlements that will become extinct; the coastal tourism will increase as well with always more foreign investors (especially considering the recent European crisis), and taking into consideration the recent trend of rural tourism, a landscape made out of ghost towns and resorts will most likely become reality by having as a result an irreparable landscape damage. Also huge investments in infrastructures would be necessary to host a mass tourism in a context which is not ready for that.

Still, something is moving.

Cultural and rural tourism. The “romantic” rural is always more an attraction, not only for the young families which are willing to come back to a more genuine life style, but also for the tourists that are seeking culture and heritage, slow food and rural activities. I said tourism is an increasing business, not only, is an international increasing business. Out of eleven million presences, half of them come from abroad (RaS, Sardegna: 2013 anno di rilancio, stranieri protagonisti, 2014) and is not only the type of tourism which is looking for an organized vacation in a resort, there’s a growing interest in the pure and uncontaminated nature. Visitors are always more interested in the possibility to have a vacation in the coast, and easily reach the inland, where they would stay in an old rural B&B, rather than a brand new hotel. The type of tourism is changing as well, and besides the short vacations on the coasts, people now appreciate also longer stays in the countryside. Not only, as coincidence with the settlement’s depopulation, always more foreigners invest in rural properties for their low costs and for the environmental qualities of the context, it is occasionally a property for vacation or a destination for the retirement. It’s a type of tourism which is evolving. Countless consequences derive from being the land owner, as first the responsibility of the property’s care and maintenance of its characteristics, secondly it can be part of a strategy to counteract the lack of inhabitants. Especially because of the abundance of vacant properties, the estates’ business is becoming always more prosperous for foreign tenants. The potential of the “rural tourism” depends on the quality of the services that are offered, such as transport, digital infrastructures, basic facilities; it depends on the quality of the environment such as architectonic typologies, urban morphologies (the public space) and the landscape. Culture and heritage are leading guides as well. Acting as a driving force, the international and the local increasing interest in the rural areas is already revitalizing all the traditions that characterize these places, but is not enough. There are already consortium which gather different municipalities towards an economic development based on tourism and local products, there are already funds from the province, and from the European union in favor of rural developments, but a unique strategy that really makes the system works is still missing.

1.2 Research Goal, Questions, and Hypothesis

Research Goal
Is it possible to boost new forms of rural economy through a strategic design approach and thereby counteract the trend of depopulation:
- by taking into account the spatial, social, cultural, and economic heritage, which development would be based on “fine tunings” of the existing system, and an ecological strategy?
- by combining the development of local heritages, and local productions towards a strategy which includes tourism as repopulating, and economic benefit?

The region of Sardinia is at a turning point, as inland settlements are disappearing in favor of sprawling major cities. In fact, the population is increasing, however, in a spatially uneven way, and tourism, a growing business, is not a business of Sardinia. The “resortification” which is happening along the coasts, is prone to happen in the inland too, and even though it is a phenomenon which I don’t want to pursue in this thesis, it has enormous economical potentials that need to be taken into consideration. Therefore the key questions that this project addresses are:

Where and how does the trend of depopulation affect the region?
Which spatial conditions are crucial to be established in order to counteract the process of depopulation, and strengthen existing potentials?
How is it possible to define the potentials, which are often hidden?
Where is it possible to find beneficial conditions for developments and where is it possible to intervene?
How is it possible to activate the potentials in terms of strategies and interventions?
1,7 mil
1,6
1,5
1,4
1,3
1,2
1,1
1
0,9
0,8
0,7
0,6
0,5
0,4
0,3

Population

1,01
1,02
1,03
0,99
0,98
0,97

Inhabitants

1 648 837
24.000
377

3 707 000
23 000
280

Sardinia
Tuscany

13,6% 18,5%
67,9%

25,1% 8,1%
66,9%

Valley
Hills
Mountains

Sardinia
Italy

Present/ resident ratio
The chart below shows the ratio between the present/resident population, a value below 1 means there are practically less present people than the registered residents. This is especially the case of the youngs that leaves to study/work abroad.

Graphic # Antonio S.
Data # Urbistat # M.Breschi
This research explores the possibility to create the spatial and strategic basis for a more resilient and flexible economy, based on the potentials of the local production, and the increasing touristic demand for the rural.

A strategic meeting between a bottom-up and a top-down approach, where the revitalization of the rural, starting from the inhabitants and the architectonic voids, meets a strategic re-thinking of the physical and digital infrastructures towards a broader inclusion of different types of users. The research goes towards the rediscovery of the already existing, but weak, economy with the insertion of the foreign “missing tile” in the strategy, where export, sale of know-how, which would be conducted in family owned businesses, and provided by a centralized system, are key parts of the whole process.

The strategies behind the case studies include three spatial components. First, the development of an integrated local transport system, which would serve as the basic structure for mobility of two layers of society, the locals for daily life practices, and also the foreign visitors/tourists which would use it to commute from the main transport hubs. A morphological renewal of the urban texture which would explore the original rural typologies to allocate pocket activities in the mixed use form, starting from the local production workshops, exhibitions pavilions, hosting services, and food services for production and consumption. Finally the physical insertion in the landscape of an architectonic event, in the form of an existing structure’s refurbishment, which function is to be a meeting point between the rural, slow, closed environment, and the “outside”, the national and international context. Investors and entrepreneurs, or only tourists and visitors, would be directly put in contact to an otherwise unattainable and introverted world.

1.3 Research aims

The aim of the research is to provide an alternative approach to counteract the rural flight, which starts by providing a tool to explore a non-physical problem field from a spatial point of view, and then by providing the spatial conditions to boost the existing micro economy and the touristic vacation, which are identified in the research as fundamental strategies to counter the problem. A problem, that as a matter of fact, is unshakable.

Spread Population

The infographic shows the comparison of Sardinia with the national type of land seizure; the lower the ratio, the centralized the type of land seizure. The low level for Sardinia means there are mainly small, compact urban centers rather than single spread properties. Nowadays urban centers are the main solution at a national scale, but in Sardinia it’s an heritage which led to the comparison of small, compact, rural settlement in the territory.

Graphic: Antonio S.
Data: Urbistat #M.Breschi

1861 1901 1951 2001

% 32 6.3 8 7.6 4.2

National max
National average
Sardinia
National min
Baunei

The village in the eastern mountains is an example of compression and compactness caused by the step hills, which made difficult the colonization of the land. The complex morphology mainly belongs to the narrow and steep paths which cross the village in perpendicular, alternating the more wide and accessible roads which run parallel to the slope.
The morphology of the villages in flat and hilly areas is less compact and more fringed, but because of the origins, the definition of the borders is still very clear. Within the urban area, double courtyards usually characterize the countryside architectural typology.
1.4 Methodology

The thesis is divided into two main phases. The first phase define, and contextualize the problem and the potentials, and thus narrows through different steps the spatial frame for the research. The second phase reacts to the findings with strategies of intervention, which are contextualized in the territory through the proposal of three interventions. The projects are presented as three case studies exemplar of an unique strategy of intervention, and they deal with the mobility and accessibility as first ground element from where to start. The second intervention aims to strengthen the local economy, and the third to translate what is local to a global market. In the whole research process, the section as drawing element is used to understand and synthesize the complexity of the territory and its problems, and later to show the insertions of the proposals in such a complexity. Finally there will be room for the relevance of the research, and thus the applicability of a solution that can be applied in the same way to different areas with the same characteristics.

Territory I - contextualizing the problem

As first the research explores the social and economical problem of the rural flight from the national scale to the regional spatial understanding of the phenomenon. The narrowed framework sections a portion of land with an emblematic variety of topography and rural settlements, in order to better understand how social-economical issues are linked to the physical structure of the territory. The literature review gives the insights to understand the morphological differences related to the geographical positions, while the mapping of the actual situation adds the layers of the mobility, and the problem field. The result is a synthesis as broad macro system into different micro systems, which in the research are considered as homogeneous system. In order to strengthen the efficacy of the strategies, and therefore the proposals, the research explores the potential of the “temporary” tourism as driving force in the economy, and the “sedentary” tourism, so the people who become owners of the properties which therefore become sort of residents, and hence directly counter the rural flight.

Territory II - the micro system

A more detailed analysis, through research by design and GIS mapping, gives back the potentials and the weaknesses of the projects’ framework. Each settlement is analyzed individually through graphs and maps which insights come from the literature’s review. The physical and digital accessibility play a significant role therefore buffer analysis and graphs show the existing situation, and prepare the insights for the general understanding of the regional topography and morphology, which relevant features are mapped among the research. Therefore, mainly through the help of the literatures, a broad, social, phenomenon is contextualized, and the framework is narrowed where the problem is more evident.

Territory II - edges

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Territory III - strategies.

The set of proposal refers also on the best practices of similar situations but different contexts. The research proposes three main families of strategies adopted in the USA and a project/workshop conducted by Winy Maas (MVRDV) in Spain. The literature suggests practices of requalification of rural economy based on the sale of local products, as potential in the market compared to the mass production. Another strategy shows how the rural requalification in spatial terms, the integration of services and mobility plays an important role in the attraction of new/vold inhabitants to the rural settlements. The third strategy explores the potential of the “temporary” tourism as driving force in the economy, and the “sedentary” tourism, so the people who become owners of the properties which therefore become sort of residents, and hence directly counter the rural flight.

Territory III - Case studies

The project proposed in this research starts from taking into consideration the result of the preceding “diagnosis”, the problem field of the rural flight, and the best practices of other countries. Therefore it is an inclusive strategy of rural revitalization based on the “fine tuning ” of mobility, accessibility, and infrastructures, where an integrated transport system is proposed to give back the access to the most remote, and service-lacking areas, in order to maximize the commuting through different types of transports. The transport types and system will be designed according to buffers of walkable radius, and the infrastructure of users refers to the traffic conditions of the existing service. A second intervention regards the fine tuning of the local and global economy system, through spatial (re)developments. In the second case study, there will be the insertion of pocket activities in a mixed-use strategy that would fulfill the needs of local production and sale, as the transport services, the local food production and consumption, and the hosting facilities for temporary and permanent stays. The type of services and activities are planned according to the literature insights and the research conducted on each rural settlement of the micro system.

As third intervention there will be the design of logistic center, hereafter called the Manufacturing Center, which holds the concept of the thesis of the rural revitalization, and it carries out the function of gate between the local, slow, introverted context, and the global market. It takes place within the rural area as an insertion in the buffer zone between rural and urban while is still connected to the principal transport systems. The functional program proposes a project which: is a showcase, where it will be possible to “address to” where the local production is held and which goods are produced, so that can be the vehicle for national and foreign entrepreneurs which are interested in the local goods export and also in the know-how; it is also a hub center where from the direct connection via train from the main city is possible for visitors and residents to refer for commuting into different transport types; it holds workshops where is possible to create exchange of knowledge between local-local and local-global, where heritages and customs are transformed into strong products for the global market, especially textiles and foods, and where is possible also to create knowledge for the improvement of the local production. The activities proposed are mapped among the rural villages (within the pocket insertions), while the Manufacturing center unfolds a service of mediator.
Contextualize the rural flight
Define the systems
2.1 The depopulation

The concept of rural flight belong to a more broad phenomenon called depopulation (human depopulation) which as a matter of fact is a demographic trend of decline in terms of inhabitants in relation to a given area. We refer to this loss of population in terms of rural flight because the concept refers to a demographic movement from rural areas into urban areas which on the other hand causes urbanization for those areas. It usually occurs because of the industrialization of agriculture when fewer people in general are needed to achieve the same result on the market (Weeks, 2012, p. 353-361), in this case the phenomenon tends to increase when also primary and basics services as schools, post offices, organization for public safety as police and sport infrastructures fail and then people start to seek those services in bigger centers.

"Sardinia for its extension and fertility of soil could fits various million of inhabitants but it just counts eight hundred thousand. Many reasons contributed to detain the growth of the population. Of course if crop’s cultivation and industries would had developed more there where be less misery, fewer voluntary birth controls, less marriage’s delay and then there would be a flourishing population. This because the number of inhabitants alone is not the strength of a village, it’s on the other hand its weakness if it lacks of quality, a quality which is degraded by poor-nutrition, by conflicts between the few healthy and by dissatisfaction.”

(Corridore, 1902)

In this way Francesco Corridore, a demographer of the XX century, described the region on the account of the census obtained in 1901, and he stressed the fact that the main reason for this was the few newborns as general average because of late marriages which is related to a poor and static economic condition. (Breschi, 2012) Besides the descriptions of enlightened travelers and cartographers which I’m going to refer later, in the more specific territorial descriptions, the Unification of Italy (1861) gave the chance for the first time to really have grounded figures of what were the conditions of Sardinia by that time and the data which are more relevant for this research are the shortage of population with only six hundred thousand inhabitants for a
region bigger than twenty-four thousands square km² (Urbistat) which result is a density of twenty-five inhabitants per km², a value which was the national lowest by that time, so even lower then ones for region as Valle d’Aosta which is a very tiny and mountainous region of the French-Italians alps big as just three thousands km².

Therefore the comparison with the region of Tuscany where land features are almost the same in terms of amount of flat lands, hills and mountains and population by that time was almost two millions gives more the idea of the Sardinian situation. Of course there are quite obvious geographical considerations on this account because one is a far island in the middle of the Mediterranean sea and the region of Tuscany relies on its peninsular position but the spatial conditions which derives from this differences are an interesting point which created rural entities, spread in the territory, which often did not communicate each other in terms of trades and social life resulting in villages’ morphology way more prone to deal with the surrounding natural context then to other settlements. To better explain this concept of “isolation” within the island I better refer to the percentage of spread population (Urbistat) and also the definition of three different type of colonies which were typical during the period of the Italian unification (Breschi, 2012).

The literature distinguishes the colonization by farmhouses conglomerates (casali), the colonization with defined urban centers (housing clusters) and the spread population. Within the Sardinian case the spread population was and is an exception, while in the peninsula there were the sixty-six percent of spread population in Sardinia only the four percent of the population where able to settle independently from an urban center. Even though the national tendency went towards the urban center solution this analysis which roots far in the past explains a lot about the spatial conditions of morphologies isolated in the territory, and even though the land features would allow more proximity between different settlements (as in the case study I am going through this research) the infrastructure’s condition where such as to strengthen the already existing isolation. (Atzeni, 2009) As the writer and journalist
Sightsmap

The brighter the spot, the most visited it is. The area in comparison with the darker area (not absolute values). Besides the coastline, many places scattered in the rural areas reveal to be captured by visitors. The map helps as indicator of places of interests both for locals and foreigners, and it endorses that the inland is worth visiting a touristic destination.
Vittorio Angius described in his travels at the beginning of the XIX century while he was in the village of Villasalto:

"Roads which from here brings you to the surrounding villages are not passable if not with burden animals" (Angius, 1833)

Having these historical trends as a background helps to understand how the situation is now, population as number increased and this lead to a spontaneous question: Why are we talking about depopulation?, the concept indeed is related to a transition from rural to urban, is related to the growing and sprawling of the main urban centers and the shrinking of the villages in the inlands. The increasing in population even though quite static is an indicator of a more complex demographic dynamic which spatially results in the sprawling of areas that because of proximities and infrastructures can give more in terms of activities and basic needs and on the other hand the shrinking of those areas where the static rural life and economy are not able to provide. Before going into the details of the spatial considerations it's interesting to have a look at the growth rate which apparently confirms a rural flight from the countryside to the main urban centers and coasts (besides exceptions) creating a pattern of inhabitants moving out for study or work which from the beginning of the XX century became a more permanent pattern instead of a temporary one (Breschi, 2012). Only in three episodes and precisely in 1871, 1881 and 1936 there were more “present” people than registered residents because of the seasonal woodcutters and miners which would occasionally come from overseas for the job opportunity.

A crucial element is that the part of population which is leaving is the fertile one, the so called young generation which eventually would continue abroad the education after the second level (high school). The necessity belong to the lack of opportunities and because there is not such an institute which would teach and train the agricultural activities they would carry out in their hometown. This does not mean that the skilled young generation would not come back: surveys state that because of the strong social identity and the high living quality, an high percentage of who leaves would come back.

The conclusion about the territorial conditions that brought this to happen is related to the high dynamism of a polarized situation where the cities of Cagliari, Sassari and Olbia because of their administrative activities behave as attractors for the countryside. As well for many coastal areas where the strong touristic vocation act as an attractor for families and investors and that’s why the grow rate in the regional scale is positive. Therefore the inlands areas suffer of a progressive depopulation and an...
The comparison between the two maps puts in evidence the common pattern of the urbanization that evolves according to main infrastructure, main urban poles, and in this case the important coast line.
Sardinia 24 083 km²

31.46% (7577 km²) Crops
37.18% (8955 km²) Woods
increasing elderly rate. In conclusion the poles of Cagliari, Olbia and Sassari are the most vibrant poles because of their airports and harbors, the north-eastern and the eastern coasts because of the tourism are not affected by the trends but actually further densification will happen. The central areas, especially the central western part (as Oristano, Carbonia-Iglesias and the Medio Campidano) are the most affected by the rural flight trend. (Biggieri et al., 2006)

The conclusion given by the experts is a translation of complex social analysis through different intervals and it gives the diagnosis of the “Health Status” of the municipalities which are prone to extinction or the ones which are growing.

The spatial counter-effects

The research put in evidence that the rural entities which are affected the most are the settlements which are scattered around the hills and the mountains, the settlements which are far from the coast, and the main city centers which population’s average is fifteen hundreds inhabitants. The typical settlement which the analysis refers is the one that rely the most on typical rural economies, local production of goods, handicraft and local food processes. The link between the problem of rural flight and spatial consequences rely on this connection. These typical settlement are not flexible neither resilient, they’re not capable to challenge the modification which happened in the last century; their nature, their morphologies and architectonic typologies belong to the rural activity that where happening there. Even though these activities were not profitable, they were not only part of the settlement itself but also the main reason for the typologies to exist. This economy now is weak and often is perceived as just an heritage to occasionally celebrates during festivals and to remember through atlas and museums.

What I believe on this extent is that one of the keys for bring a sort of competitiveness back is to push the pre-existing micro economy via stitching together weak textures of the territory while keeping their identity.
The metropolitan area is the union of 6 different municipalities, and is the main regional pole in terms of size and services. The residential expansion is mainly due to the people that from the rural areas moves to main urban centers.
According to statistical studies, it is possible to evaluate the “health condition” of a municipality, and therefore state if it is prone to extinction, or if it’s growing. Some of the elements used are e.g. the income, the elderly rate, and how those data repeat through time. The map that shows the results is a key part of the thesis, and the further analysis belongs to this “territorial division”.

Settlement’s profile

Above, the graph explains the synthesis of the relations between geographical position and depopulation.

Graphic: Antonio Sanna
Data: #GIS #Urbistat #Regione Sardegna
#M.Breschi
“Appropriation of the land, the usage and the construction of the rural edges define ranges of extraordinary values because they are buffer zones, membranes that set the permeability of the relations between urban and rural, places to rest and places where to work, inside and outside.”  

(Atzeni, 2009, p. 24)

The quote is referred to the physical edges of the small settlements within the context of valleys and hills in the central part of Sardinia, it gives the idea on how the relation between work and life, between society and nature happen in a defined edge which represents the appropriation of the nature that happened not through domination but through a mediation of gardens and dry stone walls that follows the ridges and the features of the topography.

The Tourism

Sardinia has always been a famous destination for leisure within the Europe; beaches, resorts and warm climate since mid XX century have been attracting in a seasonal way tourists all along the regional coastline. And they are increasing. Nowadays because of the new European connections and the cheap air companies there are different types of tourism and as the local council member for tourism, Luigi Crispioni, pointed out in the 2013 there has been eleven millions presences which confirmed the touristic vocation and there is a growing difference between the tourism type of: the national tourism which is extremely seasonal and focused on the coastal leisure spots where resorts, hotels and touristic villages are the main hosting services and there is the international tourism market which not only relies on the coastal beauties but is always more attracted by other features as cultural heritages, religious festivals (village’s festivals) nature wildness and slow-food culture. More than half of the presences of 2013 came from international destinations. (RaS, Sardegna: 2013 anno di rilancio, stranieri protagonisti, 2014)
Tourism for Sardinia is the most stable and profitable market and while in the past the coast was the main attraction, now because of the well maintained rural identity (I would even say emphasized by the desolation created by the rural flight) there’s a growing interest in the rural tourism and sometime this is one of the only reason because rural festivities and events still happen.

Conclusion

The tendencies given by the literatures are that the existing trend will slowly continue until many settlements will completely disappear as it happened to more then four-hundreds between the XIV and the XVIII century (Breschi, 2012). Scientific studies put in evidence that thirty-three villages will completely disappear within the next sixty years, the village of Semestene (hundred-thirty inhabitants) will count zero residents before 2023. This is not a trend I want to fight in this research, on the other hand is an interesting stage for new type of urban revitalizations that could happen in such a situation where the people who is leaving the rural is generating “densification” in the main poles.

I will pursue strategies to revitalize the rural and not to accept their abandon because I believe that a real economic reactivation that would regards the owners of the territory instead of foreign investors would be achieved via taking into account the existing economic potentials and organize the spatial conditions to make them happen again in broader scale including the new dynamics of rural tourism.

Castle of Las Plassas

The countryside in the region of Marmilla, in several passes with this and because the forest is significantly greater alternating to thin lands, large fields, and a collection of hills and small mountains. The Castles on the hills and small mountains are typical examples of the region, the castle of Las Plassas is one of them.
Ulassai
The village is a typical settlement of the “mountains”, characterized by high density, architectonic elevations, and organically shaped public spaces and roads. The picture puts in evidence the “sedimentation” of the new “anonymous” architectonic typologies, that happened on top of the existing structures. The later happened due to constraints of the surrounding geography.

flickr_#Marco

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Major urban areas will expand whereas rural settlements will continue shrink. The sprawl does not only regard the main poles, but because of the high seasonal tourism it also involves the smaller centers that are spread around the coasts. While the city «runs» for the entire year, the small coastal villages are expanding for a population that does not exist, or better is extremely temporary, generating thus another type of ghost town.

Increasing crisis, shifts in agricultural production technologies, and shift in working sectors, made the rural areas a weak environment where to work. The last generations because of informatic technologies are always more aware of the possibilities that bigger cities, even abroad, can offer and therefore they make a choice. Usually who leaves is willing to come back only for temporary stays, or for a quiet lifestyle after retirement.

Tourism is a recent potential for Sardinia, and thanks to the increasing number of flights and the reduction in travel fares, the island is easily reachable. Due to the undisputed beauty of the coasts, the majority of the accommodations are there, owned by foreigners, and often built without consideration of surrounding context. Nowadays there is the awareness of a vast, wild rural nature, and is always more a sought destination.

What would happen if it would be possible to carry out a revitalization of the rural areas which involves as first the locals, that would share services and facilities thanks to an improved network? What if the tourism is involved, and what if the system become strong enough to be the symbol for further renovations, that would lead to a big system of systems which take advantages from the coastal potentials?

1. Integrate

Strengthen the existing digital and physical network, to foster local connectivity, in order to provide a solid base, where an economy based on local production and tourism can take place. Multi-modality nodes, and the sharing of facilities improve the quality of life, and make the place attractive for locals and foreigners.

2. Revitalize

Reinforce the local economy via providing the facilities necessary for the local activities through pocket insertion in the existing rural context. It will activate a system which is locally strong, and that could be increased with other economic potentials as tourism, and international investors. It revitalize the urban quality.

3. Represent

Developing a physical center which would represent the local economy internationally. The center will represent the rural environment while being well connected with the main network system. It will be a reference for the local production abroad, and also for the foreign investors and visitors interested in the local economy.
Diagnose through section
Unfold potentials

Territory II edges

Passo di San Giorgio
#Provincia Nuoro

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Due to its morphology, Sardinia is polarized in a north-south direction. As the previous maps put in evidence, if we would trace horizontal sections more or less everywhere in the region, we would have as a result “similar” portion of land. The mountains lay in vertical on the eastern part of the region, leaving a more flat corridor on the western side. The infrastructures therefore follow the pattern, and besides the local networks, the main road and rail system run vertically both in the coast, and in the more gentle western orography. The use of the section as tool to explore the territory, aims to visualize the differences at a glance. Also it gives back more flexibility in terms of relevance to the research, and to the applicability of the projects; different horizontal portion of territory show same features int terms of depopulation, urbanization, orography, and infrastructures. Therefore similar strategies of interventions can be applied with the same methodology in different areas. The section hereafter proposed is emblematic for the topic of depopulation, and it contains a high shift in altitude.
The Approach to the Territory

There is a high polarization of the regional infrastructural system where Cagliari on the south and Sassari and Olbia on the north lead the attractions in terms of economy and urban sprawl. Not only, the origin of this polarization relies, as often, on the territorial structure, its topography. As very old region, the topography of Sardinia is made of rocky and sandy coasts, plain lands (I Campidani), rocky step mountains (Le Barbagie) and systems of valleys and plateaus (as La Marmilla).

As the problem field is the depopulation in terms of rural flight, this has been also the spatial guideline to frame the area of research considering the most problematic areas of the region. The Municipal Health map gives an homogeneous displacement of the phenomenon where system of hills and mountains far from the coast and far from the main urban centers are the most affected, the pattern suggested me to continue the research and therefore frame a more restricted area of the region through a scheme which could protect the most valued environment in terms of topography, settlements’ morphologies and cases of rural flight.

The concept is thus to restrict an homogeneous area and understand its dynamic creating defined microsystems of homogenous topographical and morphological features in order to provide the research of a broader and more functional relevance, therefore the process of analysis and synthesis of the territory can be applied in the same sections of the island (due to the homogeneous topology and the strategies of intervention as well, with proper smaller tuning, would be applied to other macro areas).
Already from the elevation is possible to recognize different geological systems.
Lake Flumendosa

The river which generates Lake Flumendosa has the highest regional flow rate. The artificial dam made possible the lake, which water flows even to Cagliari.
A section based diagnosis

The territory is strictly defined by the hydro-graphic and orographic features which characterize the settlements introducing important variables in the morphologies. The entire area is already defined by group of types that many literatures agreed on their division. I will therefore summarize the main features of the systems narrowing them to smaller systems according to the existing infrastructures and economies.

The territory

The Campidano area which is easily recognizable in the elevation map, starts on the central western area (Oristano) and it runs diagonally towards a south-eastern direction until it reaches Cagliari which plays the role of “vehicle to the sea”. The sub-region is characterized by the presence of fertile earth which best suits the cultivation of grains and grapes where famous wines come from. Another important and well-known product is the adobe brick as construction material because of the notable presence of clay on this muddy territory. The driving force which led the villages to settle in this environment was the potential of having the water courses nearby, but because of the flat and muddy territory, the benefit of the water has also dangerous side effects, and floods occasionally happen, and due to the construction materials based on adobes, this typology is very weak to water. Because of this relation with the element the geometric center of this villages was constructed on higher elevations, thus religious elements as first and then the first urbanization are placed above the area under flood risk. Is also possible within this “adobe’s family” that the settlement lays in between the feet of the hill and the valley (which main example in this area of research is Sardara) then the main problem is to control the water streams which come from the near mountains and pass through the city centers, in this case the water is diverted via artificial channels. The heterogeneous group of the raw-earth settlements is characterized by the use of walls. Introversion in this case rules the lifestyle and thus morphology, the presence of the wall is not only fundamental but it prevails on the surface of openings as doors and windows. (Antonello Sanna, 2009)
The families

The territory described in the section embeds strong geographical and morphological differences, altitudes, climate, differences in terrain quality, are the starting point for a division which as first is made by the literature. What changes the most are the architectonic typologies, which indeed depend on the land use, climate and altitude. Narrow, compact, and introverted lots are characteristic of the mountains, where the space is dominated by rocks and slopes are steep. The hunting has been the main occupation and source of food, therefore lifestyle and typologies depended on this. While on the more gentle areas of plateaus, hills, and level grounds, where agriculture was the occupation, and thus urban morphology and architectonic types where devoted to that use. Larger lots, introversion, and mostly the role of the private environment has been the guidelines to structures the urban form. Big mansions with front yards, or double court, allowed every task to be fulfilled at home; daily life, kitchen gardens, animals, raw material collection, and final refining where easily conducted at home.
The synthesis

Already the literature gives a division of different families according to the regional features. However, that division explains mostly how those settlements born, and why. On the other hand there are many more differences and relations that takes into consideration the pasting infrastructures, the presence of services, and the society itself, which is now different from the past. Therefore the map shows a scheme of further groups of settlements that start by taking into consideration the pre-existing families, and add the internal relation of the settlements themselves and the main infrastructures which cross the region to reach the main poles. The result put in evidence different “microsystems”. The area of Arborea relatively new, was artificially created from land-reclamation at the beginning of the century, for agricultural purposes, and still today is one of the major production site. The area of the Campidano is now splitted in half by the main regional road (SS131) that connects the major cities of Cagliari and Sassari. On the other side of the highways lays the ancient territory of the hills and plateaus of Gesturi, which settlements are famous to be old, compact and small; the area is morphologically similar to the previous, but due to internal dynamics the settlements are poorer, introverted, and within this section the more affected by the issue of depopulation. A long lasting history, relates them to their territory, and their urban expansion actually never happened, leaving thus intact the relation those places hold with the surrounding nature. As the elevation increases, network comes less, and the context, from the gentle and fertile hills, becomes aridious, steep, and rocky. Settlements are far from each other and since the beginning they are strictly related to the infrastructure as only “connective tissue”. Architectonic expansion happened in elevation instead of ground area,
hard edges strictly defines the borders, and still, as in the lower lands of hills and plateaus, a strong relation with the nature characterize those places. Banks allow kitchen gardens, and tapered lots ensure the domination of the land in the urban area. (Atzeni, 2009)

On the other side of the ridge, the landscape still shows up as steep, but the presence of another important road which runs all along the eastern coast, the presence of seasonal tourism, and therefore more economical benefits, led to less isolation.

The recognition of different homogeneous systems allows to propose strategy of rural revitalization which can be more effective, also the same system, or strategy can be applied in different terms to another microsystems which share similar features. In example the hills and the plateaus are characterized by a gentle orography, compact and "agricoltural" architectonic typologies with big backyards; afterwards a strategy which involves networking, slow transportation methods, and usage of the private space, can be more effective for the whole microsystem, rather the another one.

Basic Services
As M. Breschi describes, one of the component of the rural flight phenomenon is the lack of services. On this page the map shows a comparison between samples, connected by same road type, and characterized by same size in population. Not a coincidence that the area with the most problematic settlements in terms of services and facilities, matches the area of the section where the people is leaving the most. This map has been crucial in the selection of the microsystem, that hereafter will be analyzed, and where the proposal will be tested.
Ambitions

A common strategy in literature suggests avoiding the beginning of new migratory flows, especially those related to the human asset of high education. This is also referred to as "avoiding migration patterns towards the major city centers." (Breschi, 2012, p. 86)

Which does not really sound like a solution for a problem that roots in more delicate and spatial conditions. I would rather allow the fruitful exchange of education or so-called "brain drain" and on the other hand propose a spatial-strategic solution in order for the brains to come back. This brings up the questions:

• What if it would be possible to create the spatial conditions for the rural businesses to happen in an organized way, where production, consumption, and local sale happen in place and exportation is carried out in a centralized way?
• What if... this centralized system is capable to sell the know-how to the foreign entrepreneurs taking advantage of the presence of the already skilled elderly unoccupied presence and thus giving potential for young to stay.
• What if... a spatial restoration of the characteristic rural typologies would allow room for the tradition of pocket activities which would reveal new rural centers in hidden.
• What if the existing touristic trend which always more is focused on the rural area and is interested in those rural features such as architectonic values, archaeological remains, slow food culture and traditional handcrafted products will take part of the system.

The aim of this research is to explore the problem field of rural flight through its spatial consequences and therefore understand the spaces where the human asset happens. After having the systems which characterize the space there would be room for proposals in the form of case studies which are meant to be relevant for other systems.
3.1 The Strategies

“Where you live shouldn’t determine your access to opportunities, education and health”  
(Central for Rural affairs)

Local business, self-sufficient economy and goods exchange between micro systems of rural settlements had always been part of the daily life for the rural realities. But market rules changed from the past and thus old fashion productions now weaker compared to big firms is prone to extinction with many small enterprises breaking down every day. Education, wealth, well being are complementary features which quality is related to this economy and, as in a loop, they don’t set the conditions to grow.

Comparing the situation to the north-American rural area where the same problem field affects regions as Nebraska there are consortium as The center for Rural Affairs that since many years has been providing solutions to counter the rural shrink, I quote here some of the strategies they have been proposing. If there is a main difference between the contexts, Sardinia relies on a broader variety of local businesses, from food to handcraft because of its origin that is rooted in centuries while Nebraska is more related to the food industry.

“The communities are stronger then when the people of the place have the opportunity to own the business, having quality jobs as an asset for communities. As well local owners are more committed to communities than distant corporations which, besides business are not interested in the actual reality of the place. The economic development should not come at the expenses of the environment but it should be an asset because product produced in a way that protect the market have always an edge in the market and so the environment created is a strength which keeps and attracts inhabitants.”  
(Hassenbrook, 2003)

_Strategy #1_  “Niche Market” and small entrepreneurship

The most effective and desirable economic development strategy is the
small entrepreneurship which is based on locally owned and owner operated small business. The social advantages is that this strategy keeps the profits within the community and also it provides opportunities for people to build their own career generating thus more equality and identity. For small business the hardest part is to overcome the local subsistence market and export goods to a broader metropolitan sector or overseas. In order to deal with this there would be necessary a locally based organization that would engage the bigger market and the e-commerce.

The potential of such a strategy is based mainly on how many parts join the network.

Another strong potential of the local business is their high-end value in the market. The so called niche market offers products which are unique and with specific attributes, opposite of what the mass-market usually offers.

"More than half of the mass-market consumers would pay more for food produced in a more healthful and environmental good manner."

(Hassenbrook, 2003)

The concept is even stronger when the rural production includes also handcrafted goods and similar peculiarities. Also not only the quality of the product would make the difference but also the way it is produced, so if sustainable and environmentally responsible (organic) it would attract more consumers.

"Surveys find that about two thirds of consumer they would pay premium for pork produced humanely, on environmental responsible farms or on family conducted farms."

(Hassenbrook, 2003)

Nowadays a product offered by small local entrepreneurs is not strong enough to compete with cheaper mass-markets standards so the way to raise the competition is gather the owners into consortium based
organizations and export a product which quality excuses the higher prices. A market with more difficult standards offers higher premiums.

**Strategy #2 Making Communities Desirable Places to Live**

“Making rural communities desirable places to live is not the whole answer. If there is no economic opportunity in an area, young families can’t live there no matter how much they might want to. However, economic opportunity is more likely to be created in attractive places to live because they draw young families and entrepreneurs who start new farms and businesses and revitalize existing enterprises.”

(Hassenbrook, 2003)

Education in example is one of the driving force, communities that provide good education as service and invest in them will always have powerful advantage in attracting young families with children. Of course the problem in this case is the always more increasing financial pressure that led many existing institutes to close. Solutions for communities to work together would hold the line on costs. In example schools of different villages can share some part of the staff, as superintendents and teachers gaining also the advantage of having more qualified staff than they could have hiring it individually. Also joint classes between different institutes would create less classes of bigger groups and it would increase the quality of the service. All these proposals would mainly rely on the infrastructures and on an integrated transport systems.

Also the sense of community is a driving force to revitalize the rural.

“Valorizing the sense of community definitely increase the quality of the environment, especially for settlements of such a size, surveys on happiness and life satisfaction suggest the factor most strongly correlated with satisfaction is regular contact with a network of friends - community. It’s more strongly correlated with satisfaction than income.”

(Hassenbrook, 2003)

Especially public spaces where the people gather and where everything that concerns the community take place are the core of the rural life, already the PPR foreseen a set of policies which are meant to preserve the existing morphology and architectonic typologies of the territory, from the urban scale until the single architectonic element. This avoid that anonymous constructions or restoration happen in an area which main characteristic is the aged bond with the nature and its topography.

**Strategy #3 The rural resort**

“Nature and leisure parks, lakes and seas have been surrounded by heaps of second houses and hotel sentiments that affect the use of these outdoor-entertainment-zones. They become busier and therefore more urban. Through this process, Norway has turned from a remote Nordic forest into a Supervillage with delicately distributed settlements of wooden houses. The Alps has become a park with Hotelcities. France changed itself to a " Guide du Routard” landscape in which the agricultural products became the instrument for a gastronomically oriented zone penetrated by hotels and restaurants according special “nostalgic” rules, so finely described in guidebooks like Michelin or the Guide du Routard. Tuscany has become an international Villapark, where Italians own less than 50% of the grounds. The demand for the Italian villa in a pastoral rural setting has become so enormous that land prices compete with those in Manhattan. The farmer oriented landscape has become a Villa park with gigantic private gardens maintained by the former farmers; a system that protect the areas against further urbanization and stabilizes the new owner configurations.”

(Winy Maas, 1998)

As mentioned earlier, the touristic trends changed during the last years and ecological and rural destinations are increasingly appreciated, especially by international visitors. Owing to many more flight connections to the main cities and the possibility to advert even a remote B&B through Internet services the ”demand for the rural” is a steady increasing business. Not only temporary vacations endorsed by guest houses and accommodating services but also people who are looking for a more permanent solution are willing to own a property most likely in a typical rural typology. Therefore as the temporary visitors would need hosting services, the people who are interested to move to the rural are seeking those architectonic voids that endorse all the values I have been describing so far. If the spatial conditions are attractive enough for the business and demand would be supported by an organization the pocket insertions for the "rural resort” sector would be a key intervention for revitalizing the weak settlements.
Territory III
3 study cases

Network
Facilities
Manufacturing center

Genoni
flickr_ #Comune of Genoni
Synthesis

System
Understanding of the context and the issues

Macro system
Division into families with similar social, economical, and topological features.

Micro system
Exploration of one system, and its relation with social and economical issues.

Applicability of the research method within the System

Strategies

1. Development of the local market, and the small entreprenurships.
   CfRA, Hassenbroek

2. Making communities desirable places where to live.
   CfRA, Hassenbroek

3. Rural tourism as growing potential for revitalizations.
   MVRDV, Winy Maas

Interventions

Connection
Proximity buffers
Multimodal transport system
Bus
Bike
Road section

Insertion
Local potentials
Design of pocket facilities
Morphology
Production
Heating

Representation
Iconic
Connected
Manufacturing center
Export
Import
Represent

Tourism
To translate the previously defined ambitions into spatial interventions, the system framed previously and its villages serve as testing ground for the proposed strategy.

Network integration
As first the existing network system is analyzed to understand what is the local situation. In Sardinia the regional bus system is mainly provided by the local, private company ARST, and the national company FdS (Ferrovie di Stato) provides the transportation on rails. As the map in this page shows, the service covers all the urban areas; not only, there are even countryside stops, by the junctions of local roads between the villages. Also, other important features of this system are the close proximity between settlements, and the gentle terrain, which well suits e.g. the use of the bike. According to a radial buffer of 4km, in mostly all the area is possible to easily bike between different villages. One of the key point of the proposal is the creation of a multi modal transportation service as unique system. The train line which start in Cagliari, passes through the eastern side of this system, reaching the town of Isili. If buses and train coaches are upgraded to carry in bikes, and the whole system would be covered by “one ticket” system, it would be easy to commute and shift between different transport systems. The project aims to give as first reliability to the existing communities, but also a functional service for future, higher load of users. Now the public service of buses provides a high range of lines, but the problem, as is possible to notice in the following maps, is the very low frequency of the service, and the absence of a real local network of public transportation. Mainly all the tracks pass by this system, but only to reach farther places. This results into an high car dependency of the inhabitants, and therefore the insufficient willpower to “believe” in the public service. Furthermore, the facilities, so the bus stations are in a decaying state, which reflects the type of given service. In the “junction’s stop” there is not even the station itself, and it’s only by experience that it is “locally known” there are those stations.
Transport tracks

Graphic: Antonio S.
Data: ARST private bus company
Googlemaps
The digital infrastructures, the Internet connection is a key element for the rural revitalization. Broadband connection is an unavoidable service, especially for activities, and locally dispatched managements. The strategy that this research unfolds, propose local and independent services, that can achieve results only if they’re part of a broader network. Online product promotions, sharing of facilities, management and cooperations, employment opportunities, are only few among many more issues connected to the use of Internet. As every step in the strategy, the provision of Internet connectivity, is as first a basic need for the inhabitants, and for the foreign investors as second step. The actual condition of the coverage is however fair enough to allow a connection to the majority of the areas. There are urban areas without wired connection, but only a 3G network that is sufficient for emergency-use only. Other areas less inhabited are totally out of connection. This map allows to plan where the new digital system will take place.

Internet coverage

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In order to map the weakness in terms of services and facilities that affects those rural settlements, a mapping of the basic services is provided for each of the villages within the area. Educational facilities as first, pharmacies, and structures related to the sport activities are an important element of the urban fabric (M. Breschi, 2012). The lack of those services, especially if combined with the absence of basic digital connections, are the primary issue that the proposal aims to solve. Giving as fact that for settlements smaller than a thousand of inhabitants is not feasible to provide new structures, the key element is the sharing of the already existing facilities. According to the areas which are served the most, and those which are lacking the services, it is possible further on to design where the digital and physical network intervention will be the “solid ground” for a system of service-sharing.
The highlighted area shows where the integrated transport system can take place, and which are the elements that need connection the most.
WISP providers are always more used in delicate, rural landscapes. The precious, and wild landscape of these rural areas doesn't allow to design heavy infrastructural changes, also the users are few and scattered around a vast territory, and thus not enough to justify the investment. Therefore the use of WISP provider well fit this context. The system uses the existing broadband connection and through an antenna it spreads the signal wireless to a quite broader area. On the side of the user it is necessary the use of an WISP receiver, which act the same as a normal broadband router. The quality of the connection is comparable to a standard wired connection. However there are not invasive intervention in the territory, if not the a bypass that allows the connection of the WISP antenna to the existing wired network, that lays below the road infrastructure. According to the radius the network is able to cover, already eight antennas would be enough to get rid of every "black spot". The antennas must be placed on high spots, thus the ridges of the hills are natural places where they can be placed, also this will avoid the use of towers that would affect the wild landscape.
The core of the intervention regards the connection between the “weaker points”, and the areas that are well-served by facilities and basic services. The area highlighted is given by the results of the basic services analysis, the places which lacks the most are connected in a first phase to the areas that can provides those services, not only, those areas are close enough to be reached by slow transport system. The infrastructural renewal can’t be an invasive intervention, however small adjustments, “fine tunings”, have to be made to provide safety in the roads for every transport types. The local system therefore created uses as point of reference the city of Isili, to create a multi-modal node where it is possible to shift to regional commuting services, as the train. The intervention aims to create a strong local system for the residents, which keeps the environmental quality of the “slow moving”, but works with efficiency and flexibility.

The qualities of the slow environment are not only sought from the residents, but they are precious element that tourists and foreign investors area always more looking for. The bus station itself is the symbol of this renovation, thus the design of a new structure for the existing bus stops would change the way the system is seen from the users. A unique design for the stops in the urban centers, and in the countryside would charge the renovation with the power of a project that is meant to be for the local, and meant to be flexible in commuting with other way of moving. The existing infrastructures already connect...
the local area, however the tracks which are parts of the first and second phases must provide also a separate bike lane in the case of the faster roads, and safety devices for the local roads. Even if invasive intervention are not part of this “fine tuning”, road illumination can be provided by solar driven lamps and road marks (as shown in the collages). The network is already present, it only needs “fine tunings” on the infrastructures, and new public services strategies. Now the system does not really provide a service for the inhabitants.

Even though the lines cover the whole area the service lack of frequency, and if not for twice a day, residents are forced to rely on their vehicles. The proposal for the public transport leaves the already existing lines, and stops, but it proposes a “circular” line that according to schedule is divided into further loops. The proposed vehicles are smaller coaches, more suitable for local, narrow roads, with the possibility to carry bikes on. In this way the network system is ready not only for local uses and commuting, but also for whom, as tourists, have to shift from faster regional networks, to the local, slow context.
The spatial renovation of the settlements is based on the usage of the existing spaces, architectonic voids, left overs, and under-used properties. Taking into consideration the already existing “rural” activities, what lacks is the organization of the space. The key points between the business that can be conducted, and the attractiveness for local foreigner, are indeed the qualities of the historical places where these activities have been taking place. The historic fabric of this system is characterized by wide lots, with either front yards or double courts, that once a time were vibrant of daily life activities. Now, because the people are leaving the countryside, and because there has been a shift into production processes, and agricultural technologies, the big properties are left empty, spaces are underused or eventually vacant.

The aim of the second proposal, is to reuse the historical spaces, and give them new life with activities that can be carried out by engaging the local, skilled people, in order to create a local network of mutual benefits. As the intervention of the physical and digital infrastructure, this one as well is meant to locally boost the economy as first, and to promote further businesses with a broader load of users.

The settlement of Isili, highlighted in this page is medium-sized village which is emblematic of the whole system. Its spot is at the same time far from the main infrastructure, but connected enough to the local context, and directly connected with the major city of Cagliari though the railroad. Isili already plays an important role into the network intervention because is the node where is possible to commute from the local network system to the regional-global one. Isili is therefore taken as case study to show how the renewal of the space, and the insertion of pocket activities happen.
Chart of Typologies
The types that characterize the rural area of the hills and plateaus, therefore hills, are shown in the charts of both pages. The big, private courts where the place where the production of goods and food, was conducted at a family level.

Graphic: #Manuale del Recupero dei centri storici
The revitalization of the urban fabric is characterized as first by the recognition of the suitable area, and then by the adjustment of the architectonic features according to the activity, or facility that are planned to happen. As it is possible to notice from the sections on the next page, the density of the private environment is relatively high, and characterized in majority by the open spaces of the courtyards. The renewal and categorization of the architectonic spaces is a further step that this research doesn’t deal, what is important to understand is the type of activity and facilities, and how the process of modification can happen. Part of the rural revitalization is also a physical center with multidisciplinary tasks (the manufacturing center), which aims to manage and represent outside the local context, the rural renewal. Task of center is also to physically recognize the suitable places, and to organize the engaged citizens into cooperatives where they can perform the activity. The project of the network redevelopment, is on this account the solid ground where this system can work, both from the side of the “rural cooperatives” that move within the system because of the general
sharing of facilities, and both from the user side which reaches the rural world from outside the system, and it has the possibility to commute via the integrated transport system, and to know where to go, and what to get thanks to the multidisciplinary center. The range of activities that can take place vary according to the predisposition of each settlement. The idea behind the strategy is to leave intact on the places what is attractive for the people who wants to come back, for the citizens, and for the tourism, which is sought as important economic source. The elements that characterizes the attractive factors are summarized, and mapped in the next page.

After the suitable properties are framed for the renewal the first stage of the proposal foresee the sharing of the space within the community of the micro system by a group of people organized in consortium, in order to boost the local economy, and create a strong local network. In a second stage the “market” is also open for foreign investors and tourists. As analyzed in the beginning of the research, the new type of tourism which from the coasts always more reaches the inland areas, is attracted by the rural qualities of the life, and therefore is often interested in long visits, or either permanent stays. Once the local economy of the micro-system is stronger, the attractiveness of such places is stronger either, and thus more passionsates would be engaged. In the second stage of the proposal, part of the architecture is available for accommodation purposes, so that not only the classic formula of hostel, or Bed&Breakfast can happen, but also workshops, showrooms, and festival can be yonder organized, and directed by the “centralized”administration of the Manufacturing Center.
The map shows the geography of the chart, which summarizes the calling for each settlement.

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The strategy for the rural area is meant to be for the citizens, and from the citizens. Therefore small interventions in the local digital and physical infrastructure, localized spatial renovation are key of this not-invasive project. However, in order to “make it happen” there is the need of physical and emblematic “reference point”. Even though Isili has been used as test ground for the second proposal, which instead happen scattered in the territory, to what concerns the physical center, Isili is the place of reference for the whole system. The position far from the “fast” infrastructure, the well-maintained historic center, and the presence of the rail station with a direct connection to Cagliari, make of Isili the proper spot for a project which is meant to be the gate for the local system to the bigger regional scale. Within the context of the rural renewal, and the “fine tuning” operations, the center could not had be a brand new structure, instead a former supermarket at the edge of urban area could fit the size of such required program. Not only the renovation of a structure which hosted a supermarket it is a symbolic act itself, but also its position in the buffer between countryside and urban area, and at the same time its proximity with the train station are important criteria that characterized the choice. The aim of this project is as first to give an identity to the rural revitalization, and secondly to advertise the “rural”, especially all the projects that concerns the first two proposals, abroad. From the organization of the integrated transport system, to the organization of a network of “rural facilities” happen inside the structure. Investors interested in the local production would find in the center the mediator with the families or consortium, as well as trainees interested in the local production processes would find there the management of specific workshops, that would be carried out in the rural typologies. Tourists for both long and temporary stays would be addressed by the multidisciplinary center where to find vacant properties, temporary accommodations, and events related to the rural life.
4.1 Relevance

The future of the strategy depends on the strength of the micro system. If the local economy boosts, and people are attracted by the “old new shape” of the rural environment, then many would engage the process, and therefore many would use the network which connects the single entities of each settlement. This research went on using a process of synthesis, which from the regional scale brought to the division into homogeneous groups, or families that eventually were called Microsystems. The key behind the tool of the synthesis is the applicability that this process can gives to the strategy, that via following the same procedure can be applied in other recognized systems. Not only, the use of the section as tool to explore the different scale makes sense when the same type of interventions is applied to other systems. The result is a big network of independent system that pursue the aim of the rural revitalization, but in a stronger alliance that takes advantage of the presence of the western and eastern corridors of the island, as show in the previous page. The generated macro-system, even though being organized in a similar way, would be different in all the specific aspects. From the geographical context, to the architectonic typologies, and therefore the activities, and the infrastructural network. All the system would have a physical center that would combine them into a stronger macro system.

The final step of this vision would be the connection with the beneficial eastern and western coastal corridors, and therefore an already strong economical area that would be directly linked to the different, independent systems.
The depopulation, the rural flight, is something current, that regards a broad range of countries. What makes the difference between different contexts, is the approach that is given to the issue; it’s not about considering it a problem to solve or an opportunity to take, I believe that it depends on a wider range of casualties, that eventually bring to a positive or negative situation for the people who lives the place. As a matter of fact all the actions I took during this research were balanced both into giving the “missing” opportunities to the local residents, and to give back a new shape to an economy which is potentially high, but actually declining. At the beginning of the research I started with the strong position of “re-populate” the rural areas as final goal of the thesis. Actually nothing could had be more wrong. The social and economical process which is happening in the region of Sardinia is deeply rooted into the “fabric” of the territory, and there wouldn’t be a strategy, a design solution able to counteract the phenomenon. The word counteract, as if it would be a disease, it is wrong itself. Therefore what I learned during the work, is that as first it is an irreversible phenomenon, and that is not actually a problem. The area of the hills and plateaus of Gesturi, is home of more then three different civilizations, which as a matter of facts are now extinct, an evolution process that the villages of the micro system are facing now. Nuraghe, Roman aqueducts, and Phoenician ruins, are scattered there as important, attractive archeologies. Eventually, after the suggestions of my mentors and friends, the context thereby created by the rural flight is an interesting ground where to test new possibilities. In this way I develop myself a different perspective while mapping the area and trying to design solutions. Thus the word counteract has been transformed into bypass, and the word problem into opportunity, potential.

However at the same time I realized the size of the topic, a regional scale to understand and frame into categories sounds as difficult, as dangerous as well. The project and the relevance of it actually lays on the synthesis I made of the complexity of geographical, morphological, social and economical aspects. Such a synthesis is only the beginning, and if strategy should take place, then a way more deeper analysis should be made on the settlement’s scale. The reality of Sardinia, the tangled and introverted mindset of its inhabitants, badly fits such a extemporaneous synthesis. On the other hand, a project that takes into consideration these puzzling situations, has to start from whole complexity of the region. If I would start the research from scratchs again, I would directly frame an area of intervention and then go backwards to the research from that point. Acting in this way would probably ensure more feasibility to the design itself, that from generic, would become specific and more feasible for the area of intervention. However that would deny the applicability of the proposals to other similar contexts, which has been one of the goals of this thesis. The discovery of Sardinia, through mapping, made me see its geography from a completely different point of view; the pattern that relates the rural architectures, and the urban morphology of the settlements, has been a fascinating lesson which unfolded sides of the territory I didn’t even expect they exist. The achievement of the “understanding”, through the translation of data into maps, has been probably the most thrilling and pleasant side of the research; the possibility to add non-spatial information to geography has been fundamental to easily “grasp the territory”, and draw conclusions on top of it. However of conclusion is not possible to talk about because, as many in this fields, these processes are dynamic, and the strategy proposed in this thesis if realized , would be only the beginning of a project which continuously evolves, and need maintenance. As for every proposal, especially for difficult environments as Sardinia, the most difficult part, is the one that comes after the realization of an idea.
The Regional Landscape Plan (Piano Paesaggistico Regionale)

The system which regulate the land use in the region of Sardinia start by taking into account the importance of the coastal area, it gives regulations for landscape, heritages, old city centers and it even classify each and every important tree within the region.

“A modern set of laws which lead and coordinate the planning and the sustainable development of the island of Sardinia that begin with the coastal area.”

(RaS, Piano paesaggistico regionale)

The plan pursues the aim of preserve, protect and value the unique characteristics of the entire territory following different layouts as landscape, historical settlements and biodiversity. In order to achieve this goal the plan is divided into the phases of: analysis of the landscape features, analysis of the historical quality of the settlements and their inter-relations. Then it follows the analysis of the dynamic of transformations of the territory through the recognition of what can be causes of hazards and what are the weakness of the landscape or heritages, finally it gives the measures for the preservation, restoration and management in order to appraise the qualities of the landscape, the properties and generally all the areas which are considered as important element to be safeguarded.

The regional landscape plan of Sardinia is the first one within the nation to be edited and it follow previous principles, as the previous national “Codice Urbani” (set of laws regarding cultural assets and landscape assets at the national scale) [d.l. 22 January 2004] and even though is conceived at a regional scale, its “power” lays on the fact that each municipality has to adapt by giving the qualities that regard their areas and thus by managing the land use. The plan is a sort of big, general guideline that designate who and how should take care of the territory. Attached to the plan there are comprehensive cartographies as result of all the local contributions and manuals that comprehensively includes historical urban morphologies, architectonic typologies that are solid basement for the local identities and are useful to understand the place and thus take appropriate measures.


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6.1 Images cited

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#Aleksandra Boguslawska #Flavio Littera #Francis Beacon #Luca picciau #Umberto luparelli #Stefano #Gianluca Longu #daniele cherenti #Barbara sessini #Isabella pirastu #veronica f #sergio poppi #gian luca floris #matteo de felice #italia #foto e luci #alessandra vita #meppi 73 #lorytravelforever #biagio leone #laura bozzo #franco cancu #jeep roosen #carhove #riccardo guantini #alessandro orlandi #fiorenzo attene #sara mugittu #fussibi #riky deiana #celeste #naturally exposed #barbara #giorgio allieri #ogliastra #alex redmond
La vita in Sardegna è forse la migliore che un uomo possa augurarsi: ventiquattro mila chilometri di foreste, di campagne, di coste immerse in un mare miracoloso dovrebbero coincidere con quello che io consiglierei al buon Dio di regalarci come Paradiso.

Life in Sardinia is probably the best a man can wish: twenty-four-thousands kilometers of forests, countryside, and shores immersed in a miraculous sea, should correspond to what I would suggest God to give us as Paradise.

(Fabrizio De André, 1996)