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ID 1418 | FOR AN ANTI- AND POST-CRISIS TERRITORIAL REGENERATION AGENDA. THE FRIULI VENEZIA GIULIA REGION AS A STUDY AREA

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ABSTRACT: The territorial impact of the longest and most severe post-war economic crisis is interacting, in Italy, with endemic territorial neglect that exposes people and local communities to devastating risks and a permanent state of insecurity and uncertainty. The "low carbon future" has also assumed, in the institutional and scientific literature and beyond its direct environmental implications, wider technological and socio-economic implications. A decades-long cycle of "reterritorialization", based on the regeneration of "territorial capital", can therefore become a major "Country project", at both local and national levels. It should be aimed at assuring security to the people exposed to risks, redevelopment of the settlements, certainty for investments, basic efficiency in the residential, production and service systems. It should also be oriented, on a broader horizon, towards the low carbon future. The huge financial commitment and the European fiscal compact are often considered the real constraints to the feasibility of such projects. However, the simulation (qualitative and quantitative) that is conducted in this paper, with reference to the Friuli Venezia-Giulia Region (not particularly large although functionally rather complex and governed with a Special Statute of Autonomy), demonstrates that the main problem is not so much financial nor the constraints on public budgets because most of the resources, in the regeneration of territorial capital, would be private (household savings), while public resources (essentially regional) should above all play a leveraging role. The problem appears rather to be cultural and political.

KEYWORDS: territorial capital regeneration, post-crisis plans, low carbon future

1 FOREWORD

The most serious post-war crisis is leaving obvious signs on local and regional economies and territories. This is compounded by the structural inadequacy of much of the national housing stock whose disastrous effects have again recently been demonstrated by the earthquake in central Italy. As a whole, the state of the Italian "territorial capital" (OECD, 2001) is due, in particular, to endemic neglect by central government.

Even the maintenance and upgrading of buildings by private individuals is lacking, apart from the new and promising investment prospects in big cities. Consequently, the territorial capital is visibly degrading: it loses security, cultural features, inhabitants, attractiveness, good performance, in a word, value. In such a

widely problematic situation, it should be attempted to produce appropriate analysis and diagnosis of the territory, along with timely interventions.

What is presented below is neither a policy work in progress nor a plan under study. It is just a simulation of something that, to be believed in, has to be considered useful and necessary by people and their governing elites. If the crisis, by virtue of some strange self-deception, makes it difficult for the governing elites to see the usefulness and necessity of an "anti-crisis" plan centered on the regeneration of territorial capital, this is not a problem of futility or impossibility of the plan itself, but a difficulty of analysis and vision by these governing elites.

The area we intend to focus on is Friuli Venezia Giulia (FVG), the Italian region firmly anchored, until a few years ago, in northeast Italy and its economic performance and also decidedly projected towards an advanced European context and a stable Central Europe (at least in the fields of logistics and transport; see Fabbro and Maresca, 2014). Today, the FVG Region seems to be going back to being a distressed (Mattioni, 2015), if not marginal region, while its border position is no longer perceived and managed as a resource but rather as a threat.

How to act, therefore, in the face of such a contradictory situation?

First of all, perhaps, by trying to put it in a perspective of critical analysis of the territory. In this case, it is inevitable to seek inspiration, guidance and teaching from the long cycles of territorial evolution. In the case of the FVG Region, we are now probably at the end of a cycle of structuration, or better of "territorialization"¹, which lasted from the 1960s and that saw, in the "Friuli model"² of post-earthquake reconstruction of 1976, its "climax" and its political and cultural emblem.

The current phase of "deterritorialization" (Raffestin, 1986) certainly incorporates the crisis from 2008 onwards, but started before then and perhaps in the early 2000s. Deterritorialization implies a loss of functionality, of attractiveness of the urban structures, of value of the buildings and also the loss of control and power over the material, social and symbolic reproduction of the territory itself (Becattini, 2015). It is therefore clear that the return to a redevelopment process of the territory implies a credible and shared socio-economic perspective and also some degree of self-determination. These are faces of the same coin, and remain the pillars of every process that aims to rebuild conditions of self-reproduction in territories. It is what we could call the start of a "reterritorialization" cycle (Raffestin, 1984, 1986), and that here we try to pivot around a decades-long plan for the regeneration of territorial capital. The case study area is, therefore, the Friuli Venezia Giulia (FVG) Region. The simulation aims to verify the main parameters and technical feasibility of this regeneration plan, as well as the possibility of replicating the approach in other regions. The vision is that of a low carbon future but firmly anchored to the current and diffuse territorial needs. The social organization model that supports the plan is strongly based on the subsidiarity principle and not only in the vertical direction (from bottom to top) but also in the horizontal one, which means a strong initiative of individual local units, in cooperation with public bodies, but with distinct missions, tasks and operations (Moroni, 2015).

A plan for the redevelopment and improvement of the national housing stock, given its enormous technical and financial dimension, must be allocated in a decades-long and maybe even multigenerational perspective. As such, it must necessarily also deal with the more general global problems such as climate change, lack of jobs, aging population, migratory flows, which are often cited as the most critical issues of the coming decades (Mason, 2015). Moreover, the context of a stagnant economy amplifies the problems, reduces the chances of overcoming the crisis and also makes the cited criticalities interact with each other. A general plan for the reterritorialization of the country cannot therefore be conceived without putting it in relation to these critical issues and in the face of the European and international policies already in place to cope with them (UNFCCC, 2015). The "low carbon" strategies, i.e. based on the minimization of anthropogenic emissions of CO₂ in the atmosphere, assume, in the institutional (CEC, 2008; ECF, 2010) and scientific (Wilson and Piper, 2010) literature, socio-economic and technological implications in

¹ This refers to the cycle of "territorialization, deterritorialization and reterritorialization" theorized by the Swiss geographer Claude Raffestin during the 1980s.

² The concept of the "Friuli Model" is an ex-post rationalization of what has been thought, decided and realized to completely reconstruct, in more or less ten years, the wide area of Friuli (Northeastern Italy) stricken by the 1976 earthquake and is due, in particular to Luciano Di Sopra (1998, 2016).

addition, of course, to the environmental ones. If the purposes of the strategies are to reduce air pollution and mitigate climate change and its adverse effects (which are often also the origin of large migration flows), the "tactical" action has to meet the shift in energy systems, the acceleration in the production and use of renewable energy, the changes in local communities and regional economies and, not least, in human settlements (Crawford and French, 2008). The "low carbon" strategy must therefore, in the long term, inform and guide the regional and national plans as well as the regeneration of the territorial capital.

2 FROM BUILDING RENOVATION TO THE TERRITORIAL CAPITAL REGENERATION

The old motto *quand le batiment va tout va* has, for decades, described the flywheel function of the building cycle. Is it a still valid motto? The idea that new buildings and infrastructure are just occasions to open building sites and boost the economy is still a quite widespread belief, but that now has to be radically redefined. If we look at some of the data relating to the construction industry, we realize that a historical cycle seems instead to have been completed and that territorialization processes must be radically rethought:

1. The first "macro" data are related to the environmental component of territorial capital. Artificial land use has reached (in territories of different level), in absolute as well as in relative value, a critical threshold: among the major European countries, Italy is the one with most artificial covering (about 10%; Eurostat, 2012); FVG is in eighth place among the twenty Italian regions, with 8% of artificial surface (ISPRA, 2015). This does not mean, of course, that no further square meter of open area should be built on, but that the state of strong urbanization of land, combined with the effects of climate change, is such as to advise against further expansion and to rethink current urban structures (Musco, 2012).
2. The second type of "macro" data are related to the settlement component of territorial capital. In the last decade, in fact, building activity has been halved. The data of the national "Territorial Agency" report that 100 residential sales in 2007 have become, in 2014, 54.8 in Italy and 51.4 in the north-east (non-residential is less than 50.0); other data (the residential area authorized by building permits) pass from a value of 1 square meter per family in 2003 to 0.3 in 2012 (ISTAT, 2015). Moreover, the data of ANCE¹ FVG (the association of builders) on the evolution of companies and employees in the building sector, show that the sector has almost halved in recent years: 100 companies in 2008, have dropped, in 2015, to 57.7 and the workers to 63.2.
3. Other very important "macro" data (ISTAT, 2011) are related to the maintenance of existing buildings. Data regarding the buildings previous to 1971 (therefore 50 years of age and over) show that more than half of the buildings (53.67% in Italy, 53.51% in FVG) are now outdated and consequently more vulnerable to the impact of natural disasters. It is therefore not true that there is less need to work in construction. It is instead true that there is a great need for maintenance, refurbishment and redevelopment of buildings in order to pursue new private and public goods, other than those of the past.
4. The last type of decisive data are related to human and social capital that, in FVG, are becoming impoverished more quickly than in the rest of Italy and Europe: the index of structural dependency (inactive population against working age population) passes in FVG, in the period 2001-2014, from 48% to 61% while it is smaller and slower in the rest of Europe where, in the same period, it goes from 49% to 52% (Eurostat, 2015).

If all this is true, then it is also true that:

1. The crisis in the building sector and, more generally, in the real estate market (the housing bubble of the first decade of 2000), cannot be explained, at least in western countries, only by sectorial and financial factors but also by more general and structural factors primarily connected with environmental, demographic, social and cultural factors.
2. The existing buildings satisfy the demand for space for housing and production. But, at the same time, because the crisis has impacted heavily on household investments, they lack maintenance,

¹ ANCE is the acronym of the Italian association of builders.

renovation and structural adjustments. Consequently they are visibly deteriorating, losing functionality and economic value.

3. Deprived of even the basic interventions of seismic upgrading, the building stock will become even more vulnerable to natural and anthropic risks and will, as a whole, lose performance capabilities that will also lead to a loss of functionality of the settlements as well as the quality and attractiveness of entire areas.
4. There is therefore a great need to return to producing in the construction industry because buildings, infrastructure and settlements inevitably degrade and, like any other artifact, need continuous maintenance.
5. The building sector is also labor-intensive and capable of activating a huge and intricate economic and employment supply chain¹.

A productive relaunch plan of the building industry, suitable to overcome the current crisis and meet the new structural changes on the demand side, must inevitably focus on the activation of a more complex and inter-sectorial supply chain than in the past (Verones and Zanon, 2012). This supply chain is that of territorial capital regeneration which includes, in addition to settlements and infrastructural capital, natural and environmental capital, and social and human capital (Camagni, 2008).

3 THE CET SUPPLY CHAIN TOWARDS RETERRITORIALIZATION PROCESSES

If, together with information on the building sector, we read that related to hydrogeological risk and the degradation and depopulation of settlements, we cannot fail to note that, at least in FVG, a long "territorialization" cycle definitely ended with the early 2000s and that, since then, we have been in a lengthy and strong phase of deterritorialization:

- settlements and infrastructure are in excess in relation to their actual use; in some cases they are also under-utilized and/or obsolete (as, for example, some seaside and mountain tourism centers); entire territories are affected by severe abandonment processes;
- even human capital is shrinking and depleting faster than elsewhere (FVG is one of the regions with the highest rate of aging of Europe);
- the identity of places is strongly affected by external intervention (the shopping centers of the last decades or more recent infrastructure) but also by endogenous, high impact, interventions against which the old land use planning seems no longer effective (since the 1990s, the FVG Region has been trying to replace the old Piano Urbanistico Regionale of 1978, but without any significant result);
- the combination of several factors has therefore generated a loss of economic value as well as of the cultural and symbolic values of the territory. But also, which is possibly even worse, a loss of autonomy and self-government of the local communities.

The question is now which approach to adopt in order to frame and deliver a long-term strategy of "territorialization" based on a wide and deep regeneration of the territorial capital. A top-down macro-structural framework (mainly infrastructural and environmental) as the EU spatial policies have proposed for more than a decade (Fabbro, 2007) starting from the ESDP (1999)? Or a bottom-up micro-structural framework more closely related to the places of people's daily lives and the real local economies (Becattini, 2015)? There is no doubt that a valid approach should represent an alternative against the real difficulties that those macro-frames have demonstrated (Fabbro et al., 2015) particularly in terms of multilevel governance. But a plan for basic interventions aimed at the maintenance and upgrading of the existing building stock could obtain a broader consensus and transcend the limits of a traditional and sectorial policy, only if it helps, cumulatively, to move a larger and integrated supply chain of urban regeneration, land use protection from hydrogeological risks, landscape restoration (which, for simplicity, can be called the "construction, environment and territory" supply chain or CET). The development of a CET supply chain:

¹ According to ANCE to invest a billion euro in the building sector generates a fallout, on the overall economy (direct, indirect and induced), of over 3.3 billion and creates 17,000 jobs, of which about 11,000 in construction and 6,000 in the related sectors.

1. could deliver a multiple sustainability perspective (economic, environmental and social);
2. is also strongly subsidiary and inclusive because it would be based on the effective activation and participation of citizens even as small owners, investors, operators;
3. unfolds on different territorial and social scales: from building to urban block, from city to territorial and regional system; but it is also split into different dimensions of the social reproduction system: from housing, to production, to education.

The question that must therefore be answered is how to deliver a plan for the development of the CET chain onto a wide and diffuse process of reterritorialization. The hypothesis that is supported here is to issue a plan of public and private investment, on the CET supply chain, starting from the rehabilitation of buildings for seismic safety and energy efficiency.

It has been estimated¹ that, in FVG, for the energy rehabilitation of about 136 thousand single or double residential buildings and 146 thousand apartments, all built before 1971 (that, presumably, have very low energy efficiency) would require approximately 8 billion euro in the whole region (including the interventions for seismic safety in the territories at greatest risk but external to the zone of the 1976 earthquake and the reconstruction that followed it). This is a very considerable sum (equal to almost half the cost of the post-earthquake reconstruction in Friuli, at present value) but is extended to the whole region and comprises, for the greater part, the investment of household savings in the durable and primary good of the home.

An intervention of regional finance, equal to about 1 billion euro in five years, would trigger a total investment (private and public) of almost 5 billion euro which, if the ANCE multiplier is correct, would in turn generate a fall-out, on the entire CET supply chain, which is 3.3 times higher and would amount to a total of 15 billion euro. The regional intervention, which would be 200 million euro per year, is relevant but not impossible as it would be equal to 4% of the current annual regional budget. The feasibility of the five-year plan, like the one proposed here, does not seem to be so much financial but more strictly political and organizational because of:

- the competition, for regional financial resources, with other economic strategies (such as those related to technological innovation in the manufacturing sectors and that go under the generic but seductive definition of "factory 4.0");
- the greater political interest in symbolic policies instead of difficult ones requiring strong and durable choices in resource allocation;
- the long duration of a ten-year plan that conflicts with the short horizons of political returns;
- the significant financial, organizational and cultural magnitude of the plan that requires the existence of a particularly able and motivated public management.

The process of regeneration of the territorial capital starts structurally from private houses and embraces the entire territorial system but, at the same time, starts financially from the Region and involves thousands of families. The municipalities and their associations, in a subsidiary position in relation to the families, have to identify the structural territorial elements (linear, punctual or areal) to be considered and restructured for the urban integrated regeneration as well as to identify places, spaces and services centers to be shared for the co-working and co-housing activities. Moreover, the Region, in order to provide sustainable mobility (based, in the first place, on the railway network) and general access to digital information, mainly has the task of identifying and intervening, through "territorial projects", on nodes, networks and connections of the various territories to be regenerated.

As regards the planning tools in the strict sense, these are not to be separated from the larger plan of territorial capital regeneration as they are, in fact, instrumental to this. The Region is responsible, with a regional spatial plan, for identifying both the value areas to be enhanced and the risk areas to be protected, and those areas to be considered as a priority in the redevelopment and regeneration process. But a socially embedded long term vision towards the low carbon future, has also to be promoted (see Fig. 1).

¹ See "Territorial capital and urban regeneration: the case of FVG region", MSc thesis in Civil Engineering by Elizabeth Paviotti, University of Udine, 2016

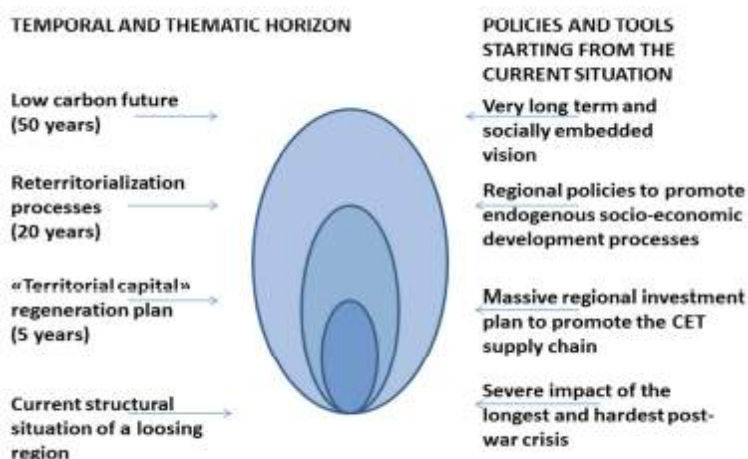


Fig. 1. For an anti- and post-crisis territorial regeneration agenda. Policies and tools aimed at pursuing a "low carbon" regional future along with the overcoming of the regional effects of the ten-year-long crisis

4 CONCLUSION

The territorial capital regeneration process, starting from the redevelopment of the existing houses and buildings, ultimately means to motivate the basic reasons and efforts for redevelopment of the building stock but bearing in mind, if possible, a broader reterritorialization process of the country. It is certainly a "vast programme" but it is no longer an option but a real emergency essential to revive the credibility and competitiveness of the country. Without basic territorial security and quality, in fact, there are not even the minimum conditions of efficiency to initiate credible and sustainable economic recovery plans. Moreover, a massive investment plan, on the CET chain, starting from single houses and small centers, has to be considered regenerative of all the capacities and qualities of the territories. As such, it is the basis and the heart of a real economic program of long-term reterritorialization. Some might argue that it would be easier and more profitable to bet on other scenarios such as the development of manufacturing sectors with higher added value, or territorial smartness (the world of "apps" that promises a happier life by manipulating the smartphone) or research & development or food and wine chains or local tourism. But none of these can, by itself, be an alternative to the CET scenario, only supplementary. The CET scenario is basic in the sense that, without an acceptable level of quality of the territory (in terms of safety, functionality, accessibility, attractiveness, aesthetics etc.) none of the other mentioned scenarios can stand alone.

The question we sought to answer is, therefore, how to pivot, towards a global low carbon strategy, a process of wide and diffuse anti-crisis territorial regeneration. The first answer is that, to be widely consensual but, at the same time, effective, the process would probably require to be reversed according to these steps: a. widespread mobilization of private household resources, through a regional financial leveraging, for energy improvement and earthquake safety of houses and buildings; b. an economic priority attributed to the regional CET production chain in order to pursue a rooted and strong anti-recession perspective; c. local, regional and national spatial plans to promote and encourage long-term investment in the overall territorial capital regeneration. In the paper, simulating the process in a small but functionally complex region like Friuli Venezia Giulia, we have tried to demonstrate that such a process is technically feasible but initially requires both the will to recognize the severity of the crisis as well as the state of the territory (which the governing elites do not normally like to recognize except for a short time after the latest disaster) and, consequently, the necessity for a nationwide long-term plan to overcome both the crisis and the degradation of the territory.

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ID 1462 | THE MENTAL HEALTH ATLAS AS TOOLS FOR AN COMPREHENSIVE SPATIAL BASED MANAGEMENT OF MENTAL HEALTH CARE

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ABSTRACT: Different funding schemes of mental health care coexist in Spain due to the transfer of power made to regional governments. Comparing the efficiency of those regional systems implies assessing several aspects. Among them, one of the most important is the structure and composition of the mental health network across the each region. This work attempt to present the mental health atlases (MHA) as a