

Urban Regeneration. The case study of PORU - Senigallia (Ancona, Italy)

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Abstract

Few Italian authors have investigated the term “regeneration” as it is dealt with in the international literature. The current interpretation of “Urban Regeneration”, in Italy, seems to be a re-interpretation of the old term “requalification” rather than a change of the paradigm for spatial policies.

Nowadays, “Urban Regeneration” is perceived as the traditional practice of “requalification” which had been abused by planners and architects referring to an urban design practice for brownfield re-use.

Such approach, leads to increased confusion and misleading interpretation between the authentic way of face with deep innovation for spatial policies, especially during a credit crunch period which request radical innovations in land use planning. The Italian case suffers from a lack of appreciation of the original interpretation of the term “Urban Regeneration”, which is (particularly in the UK) deeply rooted in urban policies than in urban design practices.

The paper argues how the contemporary Italian interpretation of “Urban Regeneration” is poor and ambiguous in comparison with the authentic one: it will be presented how it is mainly focused on the final goal of urban transformation project which remains, as usual, an urban design project for land transformation. In contrast to this, the paper try to argue how regeneration practices being strictly dependent on Public Private Partnership (PPP) for managing and steering projects of transformation, and presents a case study (Senigallia, AN) which is going to define new paths to achieve a pioneering regeneration process for the existent city.

Even not concluded, the Operative Program of Urban Requalification” (Programma Operativo di Riqualficazione Urbana - PORU) generates innovations on process (it is adaptable to administrative capacity of negotiate with real-estate operators) which is going to steer urban transformation policies and define new paths to achieve urban transformation (it uses innovative procedures for define rules of transformation).

Introduction

The term “Urban Regeneration” is increasingly becoming a part of national and local policies of re-use and requalification for built cities. This is the effect of both emerging environmental questions and the economic crisis which has dramatically dropped down private investments on the real estate market¹ (Calafati, 2010), and Urban Regeneration is a good practice in re-imagining a sustainable future for shrinking cities (Alpopi & Manole, 2013; Sclappa & Neill, 2013).

Recently, in particular in Italy, this attention to “regeneration” is rising attention because two questions emerge: the dramatic assessment of the land take phenomena and the economic crisis of real estate market. Both issues are at the base of the actual debate, but misleading interpretation arise when “regeneration” is biased to be only a spatial practice asked to “solve” such physical problems. Hereafter an Italian contextualization of these issues shed lights on the poor

1. “Overall between 2005 and 2012 the building permits of dwellings (new buildings and enlargements) fell by 70.3%. In terms of volumes granted in the same period, the decline amounted to 67.3%” (ANCE p. 30). Direzione Affari Economici e Centro Studi dell'Associazione Nazionale Costruttori Edili (ANCE) (a cura di), *Osservatorio congiunturale sull'industria delle costruzioni*, EdilStampa, Roma, dicembre 2014. Banca d'Italia (a cura di), *Supplementi al Bollettino Statistico. Sondaggio congiunturale sul mercato delle abitazioni in Italia*, suppl. n. 26, Divisione Editoria e stampa della Banca d'Italia, Roma, 20 maggio 2014.

debate on Urban Regeneration.

An overview of the existent literature on Urban Regeneration demonstrates how Public Private Partnership (PPP) property redevelopment and the presence of Public/Private agencies for land management are strategically integrated in the process of Urban Regeneration (Couch & Dennemann, 2000; Codecasa & Ponzini, 2011; Kort & Klijn, 2011).

Such cases demonstrates what essentially is requested in order to implement Urban Regeneration: firstly, a joint process of planning and design able to produce a draft action program (called “Accordo di Programma” in Italy) which is a negotiating tool provided by regional planning laws to design rules (masterplan) for big private real estate investments; secondly, the definition of special Agencies that guarantee an agreement between PPP for redevelopment targets and the effective control of land ownership, which is the most important thing to control.

But even if this approach on real estate redevelopment is operating as a normal procedure for Urban Regeneration, the modes, actors and operative tools used to manage its implementation are still the same of the long urban phase called “generazione della trasformazione” (Campos Venuti &

Oliva, *Cinquant'anni di urbanistica in Italia. 1942-1992*, 1993). This phase unfolded in Italy at the end of 70s, when important Companies left their central position in the city and thus big brownfields.

Urban Regeneration, according to Roberts and Sykes (1999) it's an action aimed to solve urban problems and finding a long-term improvements to the economic, physical, social and environmental aspects of an area to be changed (*The evolution, definition and purpose of urban regeneration*, 1999). The paper present also a case of study where a Regeneration process was launched with the application of an innovative Regional law: strength and weakness of such case of study will be pointed out. It will be assessed why some minor experiences, such as the ones presented in the paper, are particularly innovative in comparison with other "flagship project" even results of such innovations are not yet reached.

New urban questions: reduction of land take and empowerment of "Urban Regeneration"

During the Congress of the National Institute of Urban Planning (Salerno, 24-26 October 2013)² one session of the debate conducted by Patrizia Gabellini was focused on "Urban Regeneration as Resilience". It has been pointed out that Urban Regeneration is a contemporary physical approach to the existent city³ strictly related to a lack of (both economic and ecological) resources (Gabellini, 2013).

A technical and political agreement seems to converge on such assumption: if land use change has hardly affected agricultural and natural areas in the phase of suburbanization (Antrop, *Landscape Change: plan or chaos?*, 1998), nowadays it has to focus only on previously developed soils, then regeneration becomes a practice that stimulates land transformation within the settlement system, recovering the part of the existent city, even fragmented and affected by sprawl and sprinkling. Moreover, such transformation is focused to improve the "quality of life" for citizens and, in general, the "quality of the city".

Often, in the actual debate, is used the terms "quality" to emphasize the physical environmental conditions of contemporary city. For example, the National Council of Architects, Planners and Landscape Architects (CNAPPC) of

2. The document of the session is downloadable from http://www.inusalerno2013.it/inu/attachments/article/72/XXVIII%20Congresso%20INU_1%20sessione%20introduzione%20Gabellini.pdf

3. In the Italian context the term "città esistente" (from now on: "existent city") means a man-made system, consisting of built spaces (buildings, blocks, districts), which are interconnected and held together by open spaces (streets, squares, public and private gardens, parks). It is an urban concept used to describe the consolidated part of the contemporary city and as such will be mentioned in the text.

Italy, considers a "true urban dehumanization" the absence of public spaces and the land take reached which has caused an uncontrolled increase of a number of vehicles, excessive consumption and high price of energy, waste and recyclable materials (Alpopi & Manole, 2013). Other research showed that half of Italian citizens believed that live in buildings safe in terms of seismic, while only 6% of respondents live in safe houses; even if 24 million Italians living in seismic regions, only 10 million believe they are safe in an earthquake.

Another problem is air pollution inside the home, where 83.3% consider that their home is affected by the use of unhealthy materials, while most of the buildings were made before 1991, so before the application of rules on the main unhealthy materials used in construction (*Territorio e Paesaggio*, 2012).

Reduction of land take and empowerment of "Urban Regeneration" policies and practices are the aim of some national and regional legislative reforms in Italy (Arcidiacono, Oliva, & Salata, 2013), especially in a context where the "city" is redefining its boundaries, but also its significance by the lens of new environmental/social issues which arise from political attention.

Data on land take phenomena do not only bring into question that the quantities of free land turned into urban are abundant but also that the model, shape and morphologies of land use in Italy are highly dominated by low-density models with disperse, fragmented urban systems (Geneletti, 2013).

Sustainable development (United Nations, 1987) has become the major task of urban policies and implies that cities must be more attractive places in which to live and their ecological footprint must be reduced (Smith, et al., 1998; Couch & Dennemann, 2000; Campos Venuti, 2010; Hale & Sadler, 2012). Efforts of Urban Regeneration are underway to protect and enhance the quality, quantity and accessibility of green infrastructure within cities, including biodiversity features within new developments.

Also the academic debate is gradually turning back to older-define fixed land use categories (for example the opposition urban vs rural) because land use change regulation request accuracy, reliable and standardized data on actual, and predicted flows of cover/uses (Antrop, 2004; Millward, 2006; Benini, et al., 2010; Salata, 2014). This is happening when, on another side, the debate on "post-metropolis" and "regionalization" is pointing how physical limits between land use categories, and administrative boundaries cannot fit anymore with the real "urban dimension" which is based on a large scale homogeneity of spaces and landscape, based on flows of long distance mobility. After a period where de-regulative approach has been applied (Mazza, 1997, 2004), actual debate is reconsidering how the physical dimension of regulation is capable to govern territorial transformations.

For the above mentioned reasons, the recent debate on Urban Regeneration shed light on the importance of the re-use approach to urban transformation, which is the only possible approach to contemporary post-metropolitan⁴ city planning. Obviously this interpretation is an oversimplification of the political sense of Urban Regeneration (Savini, 2011; Mak & Stouten, 2014), which keeps its roots in the social debate while the contemporary mainstream maintains a traditional spatial approach to urban issues.

Basically, what seems to be codified by the emergent approach is that Urban regeneration involves the distressed urban areas revitalization, through actions such as:

- the rehabilitation of historic areas;
- the improvement of living conditions in residential districts;
- the redevelopment of public spaces as squares, parks and urban furniture;
- the modernization of urban infrastructure as water networks, gas, electricity, transport infrastructure.

Towards a new paradigm of Urban Regeneration

The term “regeneration” was first used by the British Government during the 70s to launch a new phase of national policies aimed at increasing the employment of the middle class of workers and, at the same time, solving the housing problem (Butler, 2009). Carried out as means of economic and occupational relaunch, this policy has stimulated the real estate market and made it possible for the second and third ring of British suburbs to expand in conformity with the housing needs of the middle class.

In that sense, “Urban Regeneration” was a national program developed as a social paradigm of inclusion which at least generated an increase of the “size” of the city (suburbs where created to give houses to new employers of the city), so what it was socially “inclusive” was spatially “additive”.

The recent interpretation of Urban Regeneration is missing to re-habilitate the historical debate on Urban Regeneration, which is far from getting involved in the Italian, but also in the international context (Couch, Sykes, & Borstinghaus, *Thirty years of urban regeneration in Britain, Germany and France: The importance of context and path dependency*, 2011).

4. International literature clearly talk about an explosion of the urban (Brenner, 2013) (Ove Arup & Partners International Limited, 2014) in which the relationship between the central city and the surrounding regional space cannot be described anymore in terms of an “inside” and “outside”, of a center and a periphery, at least in traditional way. Within this perspective metropolis is gone. In its place, there seems to be a post-metropolis, a space without limits and with extremely diversified social and spatial models of order subject to continuous assembly and disassembly processes, leading to a progressive loss of meaning for terms such as city, countryside, suburbs. A fractal city, extremely heterogeneous, with constantly changing centers and peripheries.

Some of the aims of the new approach on Urban Regeneration included sustainable strategies for cities; the preservation and development of favorable settlement structures; mixed land uses and social integration; higher development densities and, moreover, the protection of open space through the limit of urbanization (quantitative or qualitative) (Couch, et al., 2011; Hale & Sadler, 2012).

Such new paradigm, which is taking place at different levels (from national down to local debates), is generating legislative reforms and this, in turn, is pointing out a new “phase” of city development focused on the tools, instruments and economical resources facing the slogan “building on the built city”. Renzo Piano himself used this slogan during *Planning cities 2011* (the conference of the major European cities for urban planning, held in Genoa on 2nd-5th November 2011) to stress the fact that contemporary cities cannot expand anymore (EEA, 2006; European Commission, 2012) because:

- the urban development model is still based on expansion (with low population density);
- the land take caused by urbanization is mostly concentrated on prime quality land;
- the urban development model increases the private use of vehicles;
- the urban development model presents a weak approach on re-use of brownfields putting pressure on greenfield;
- there is a general lack of the soil value appreciation, which is consistently overlooked as well as a limited resources.

New questions emerge, and a new planning approach request an adjustment of the legal planning system, a technical upgrade of tools and practices of urban planning and at least a cultural agreement and the economy of investors as it can be applied for facing this new phase of urban development.

As for the legislative framework, some of the recent initiatives⁵ in Italy are aimed at introducing tools to stimulate the densification of the existent stock of urban fabric. If the approach on city expansion is declining, then new operative (fiscal and technical) tools are required to plan, design and act on the existent city. National and regional laws define Urban Regeneration as an operative method to face land take limitation⁶ (CRCS, 2012; Munafò & Tombolini, 2014) and

5. Since September 2012, Italian Parliament is preparing (whithin the work of specific commission) legislative reforms aimed to define and stimulate “Urban Regeneration” and limiting the “land take” phenomena. According to this, many of the Italian Regions have prepared regional reforms for land take limitations and re-use development. For deep informations on this see the Rapporto CRCS “Politiche, strumenti e leggi per il contenimento del consumo di suolo” edited by Arcidiacono, A.; Di Simine, D., Oliva, F., Pileri, P., Ronchi, S., Salata, S.; (2014), INU Edizioni, Rome.

6. See what the National law on land take (AC 2039, Disegno di legge di contenimento del consumo di suolo e riuso del suolo edificato, presented on 2thDecember 2013) defines at art.2 comma c: *per “urban regeneration” [is] a coordinate system of urban planning and socio economical tools aimed to requalificate the existent urban areas, within the recovery of the build up space, the reorganization of settlements, the*

to govern the contemporary city, the one called “città diffusa” in Italian (Indovina, 2009).

The European environmental approach on land take regulation by plan suggests to limit, mitigate or compensate soil sealing (European Commission, 2012): it advises to act as soon as possible in order to stop land use change on greenfield sites using Urban Growth Boundaries (Gennaio, Hersperger, & Buerge, 2009), physical regulation (Weitz & Moore, 1998) and even further additional fiscal measures aimed at reducing the amount of land suitable for urbanization (Nuisl & Schroeter-Schlaak, 2009).

Even if it is generally agreed upon that urban regeneration today is associated to sustainable development against land take (Antrop, 2004; Couch & Dennemann, 2000; EAA, 2011; Breure, et al., 2012; Artmann, 2014) planning practices and the technical culture is weakening the possibility to rapidly change the perspective of work. Urban planners in Italy have not seriously considered the rising of environmental questions into the land use plan, but they find themselves in the middle of a general debate which was supported by the deep environmental disciplines able to capture civil instances against the process of urbanization.

Despite this, the contemporary interpretation of Urban Regeneration requires a re-think of the role, the tools and target of urban planning: social agreement, political sense, planning culture and thus new spatial rules for its definition (Nemeth & Langhorst, 2013). From temporary uses of vacant abandoned land to the reversible definition of structures and land covers or, again, to a naturalization of the brownfield (Gabellini, 2013), all that is a part of a process called Urban Regeneration which request new way and modalities for being applied and also for being assessed.

How to assess Urban Regeneration

One of the questions regarding the assessment, is that even in a general “neoliberal global trend” (Geddes, 2005; Couch, et al., 2011; Pares, et al., 2014) which exposes cities to common problems (e.g. environmental, social and economic), the nature of the issues or problems that Urban Regeneration are called-upon by society to address enforces the need of studying regeneration policy and practices in different local settings (Sanyal, 2005). This is why the paper present a case study where the definition of urban problems and the development of solutions is influenced by the specific socio-economic, institutional and cultural context of the case of study (Pares, Martí-Costa, & Blanco, 2014).

According to this, it seems that what some international literature proposes as Critical Success Factors (CSF) for

provision of green areas, and ecological infrastructures.

assessing Urban Regeneration projects is still based on standardized procedures for international flagship project. Such approach extract sets of project success factors based on the reviews of relevant literatures and the project characteristics, and then validating them quantitatively or qualitatively through questionnaire surveys. Even standardized, this does not match with the needs of understanding local small process of innovations that the approach to “resilient city” request for face with Urban Regeneration.

A lot of literature argues that “flagship projects” (Otsuka, Dixon, & Abe, 2013) of Urban Regeneration are mainly affected by consequent processes of gentrification and social expulsion of poor citizens (Raco & Tunney, 2009; Uysal, 2012), this being mainly a consequence of the weak management of drastic land use substitution (which can't be called “regeneration”) over time. At least this kind of problem is dependent from the dimension of land use transformation, and the degree of urban fabric substitution. Urban Regenerations is mainly a “smart adaptive” process steered by urban fabric regulation, and adaptations require long consultations with citizen's need.

According with existent literature an Urban Regeneration project can become successful through the success of project management by implementing appropriate functions through the whole life cycle of the projects and establishing a favorable context considering the characteristics of the projects. Thus, although they are the basics of management in any setting, the proper application of key management functions such as planning, organizing, leading (motivating, influencing and communicating), and monitoring/controlling (Yu & Kwon, 2011).

But rather than having a general overlook of key management functions for big project of transformation, hereafter emphasis on contingent and contextualized nature of actions designed to foster Urban Regeneration has been presented for a local context. Even the assessment does not respond to comparative international study, the paper will explain a typical “path dependent” evolution of adaptive planning policy (Marshall, 2005) where a local Administration operates according to norms and priorities of national-regional context of law and needs.

First of all, it has been considered the territorial system of knowledge a milestone of assessment: sustainable and integrated urban rehabilitation must begin with a multidisciplinary diagnosis enabling the knowledge of area undergoing of rehabilitation process. That means more than the knowledge of buildings, infrastructure and public spaces, in order to involve different actors and people. Shortly, the goal of revitalization of degraded areas is the stopping of the deterioration process of urban tissue, strengthening

social cohesion, favoring the development of local economic activities (Rubio Del Val, 2011).

Secondly, a deeper analysis of what should be considered "Urban Regeneration" suggests that some pre-requisites have been so far completely unconsidered both in empirical practices and in the theoretical debate (van Bortel, 2012). Assuming that an overview of the international literature essentially points out some crucial questions concerning Urban Regeneration, such as the contemporary paradigm of planning-oriented policies for city redevelopment, in Italy only one point seems to have been achieved: Urban Regeneration is assessed through a "managerial" rather than a "dirigistic" approach to land transformation. More specifically, Public Private Partnership (PPP) is the paradigm of successful cases of re-use and requalification of abandoned, degraded or less-used land inside previously developed land: as such, it requires an horizontal partnership between public and private actors. Compared to the traditional governance approach, PPP requires a governance network characterized by pluriformity, interdependency, closeness, dynamism (van Bortel, 2012) and, above all, uncertainty.

But there are additional things to consider assessing the possible "innovation" of the case study: "Urban Regeneration" has to be assessed as a process, rather than a project; and this, in turns, imply that "Urban Regeneration" is a process managed over time rather than over space (Yu & Kwon, 2011).

Regeneration is mainly an urban policy designed answering to social instances which require a long-term vision and does not meet always the need to fix project rules for big land transformation. The process, in fact, is incremental, developed by way of smart adjustments and oriented to micro-adaptation rather than macro-transformation. It is managed by rules with the support of urban design tools as a masterplan (Nemeth & Langhorst, 2013), but this does not allows to fix spatial prefiguration.

The traditional approach to urban transformation retains the typical Italian need to control the physical design of space, fixing rules on the basis of a final state of the art represented by an urban design project. But processes of land use substitution aimed at regenerating the settlement system need to be controlled by temporal rather than spatial rules. No single masterplan can anticipate the varied and evolving needs of an increasingly diverse population or achieve the resiliency, responsiveness and flexibility of shorter-term, experimental endeavors.

In addition, at the local scale studying urban governance therefore involves considering not only the governing decisions and capacity of the formal institutions of the local state, but the ways in which these combine with the capacities to act and resources of other actors to deliver locally desired

policy goals (Couch, Sykes, & Borstinghaus, *Thirty years of urban regeneration in Britain, Germany and France: The importance of context and path dependency*, 2011).

The Senigallia case study

The Italian Region of Marche has recently promoted a legislative reform to plan the requalification of the built city. The law n. 22, passed on 23rd November 2011, launched a new operative tool called "Operative Program of Urban Requalification" (Programma Operativo di Riqualficazione Urbana - PORU). The PORU is an operative tool finalized at promoting urban requalification, stopping land take, upgrading hydrological safety and increasing the public city. PORU is an example of the above mentioned experiment of a regional planning reform aimed to directly face with the possibility to define local scale operative programs for managing urban transformation inside the built city. Even if the acronym PORU still focuses on the term "requalification" rather than "regeneration", the application of PORU in Senigallia is going to become a case study of introducing by law Urban Regeneration processes for the reasons that follow.

Senigallia is a middle city on the Adriatic coast, 30 km North-West from Ancona which, as other municipalities of the Marche Region, is suffering economic crisis, even if its economy is strongly sustained by tourism.

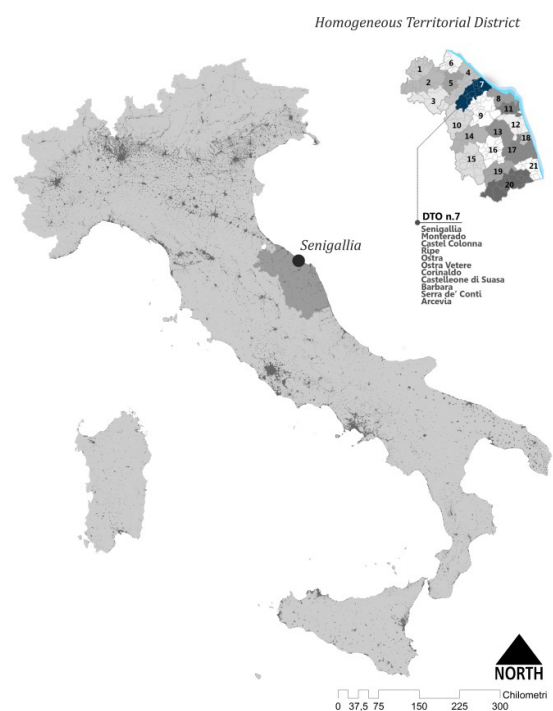


Figure 1 – Territorial contextualization of Senigallia.

The Real estate market of the city - one of the most flourishing

during recent years - is suffering credit crunch and some important central transformations of the past season of urban development have completely failed.

The crisis that present real estate economy for several years has deeply affected the construction industry and the housing market, stopping investments in public infrastructure and rising the unemployment. To overcome this difficult situations, it was necessary to think and adopt new strategies leading to the recovery of the existent city, improving the quality of environment and landscape and stopping land take.

In January 2012 the Major and the City Council of Senigallia decided to invest in the application of the recent law n. 22/2011 committing to the Department of Architecture and Urban Studies (Politecnico di Milano) the possibility to work within the technical office to analyze, support and research methodologies for the complete application of the law. Senigallia was the first municipality in the Marche Region to approve the PORU: this strategy was strongly promoted by the Major and the Council member because of their intention to steer the regional agreement on innovative local policies for Urban Regeneration. The coherence of the City Council mission with the intention of the law guaranteed a rapid agreement on the application of the law, even the law itself was premature.

The goals of the law were simple: to design rules for the construction of a program (that can be joined to one or more masterplans), which invites citizens to participate in the re-development of some degraded areas following few simple guidelines established by a public call. The aim of the law was to encourage transformations on the existent city by giving volumetric incentives and additional building permission for private investments on the built city. Nevertheless, after initial technical analysis and sharing with the political part the objective or re-development, in Senigallia other three targets were pursued: promoting a process of naturalization of brownfield sites in the hilly hinterland; stimulating an increase in social housing; and coordinating a participatory process.

PORU was anticipated by a document called "Atto di Indirizzo" (Notice of address) which sets the main guidelines to coordinate future transformations in the spatial dimension. Furthermore, the "Atto di indirizzo" defines the rules of potential participation to the final requalification program.

PORU should act on the degraded existent city and only in certain "dense" parts of the city itself (defined through specific parameters by the law);

- PORU should act in order to improve the deteriorating conditions of the rural landscape,
- PORU should increase the supply of social housing,

- PORU should capture the plusvalue⁷ of real estate transformation in order to increase the quantity and quality of the public city.

The "Atto di Indirizzo" was approved in 2013, 24th July by the City Council, and contains the public call for private operators. Its construction required a period of 7 month completely dedicated to handle an analytical framework: the settlement, infrastructural and environmental systems were analyzed through GIS analysis based on direct surveys and ancillary data based on existent catalogues. Additional information were collected by the state of implementation of the local land use plan: the quantity and quality of local services was mapped and the degree of imperviousness of the existent city was calculated. Within such information PORU should act only improving such parameters of quality: the level of public services and environmental quality was thus fixed in the "Atto di Indirizzo".

Tree main strategies were outlined: the re-qualification of the coastal environment; the re sew of the core city and its transversal connections between the hills and the coast; and the re-design of urban fringes and landscape city-borders.

Each territorial context was characterized by different strategies of regeneration, fixed and flexible parameters were assigned to steer the second phase of implementation which involved citizen's participation to PORU.

Even if the intention of the law was to be innovative, the oversimplification of the defined administrative procedures has raise some criticism. It is clear in fact such innovative planning procedures needs to be underpinned by citizens and technicians even if the procedures to approve PORU are still similar to the normal procedure for changing or adjusting the land use plan.

Despite these problems, a new modality of participation in urban transformation was being increasingly accepted and agreed upon by citizens, real estate operators and architects.

For example, PORU was soon perceived as an opportunity in the hand of private needs: the definition of urban design schemes was not directly imposed by public decisions but, at the same time, it was not open to the general expectations that normally generate mistakes and additional participatory procedures needed to explain the targets and possibilities offered by the general plan. Moreover, since the first phase of territorial analysis was launched, citizens were aware to

7. The problem of "land rent" is a dramatic and crucial issue for the Italian planning system. An effective urban reform, able to impact on the system of land rent levy (considered as a parasitic element for the economical system of the country as it represents an unearned income,) has never been approved since 1963, when the first and only other Italian attempt in this direction was promoted. Therefore it is important to underline the great effort made with the approval of law no. 22: the Marche Region was one of the first in Italy to codify within a legislative device the withdrawal and redistribution of land rent generated by urban transformations.

be part of a regional experimentation of law application: this has contributed to create a “cooperative” relations between technical and nontechnical instances in favor or against PORU.

The rule of participation

Integrated urban regeneration project keeps economic, social and political projects, which are produced by traditional urban actors, namely Public Administration and new players. Urban renewal is a multi-faceted and complex process which involves various interest groups. It is not merely a financial and physical proposition, since it relates to political, economic, technical and socio-cultural matters (Couch, 1990). This type of project makes that the urban development process to be more flexible, being encouraged debate among all those involved, in order to correlate different aspects of urban development.

Negotiations and collaborations to the formation of the program was necessary to change in perspective the attitude of private sector to perceive urban regeneration procedures as excessively complicated by administrative constrains and bureaucracy, whereas regeneration mechanisms should be based on simplified procedures with a clear vision for all actor groups (community, developers, investors, end-users) (Adair, Berry, McGreal, Deddis, & Suzanne, 2000).

Since 2012 Senigallia has decided to promote a cycle of seminars, called “Nuove Energie Urbane” (New Urban Energies), useful to introduce a new urban planning season for the city. The attention on PORU implementation was high since its first prefiguration (citizens, technicians and politicians where freely asked to share by themselves support unities and modalities to implement the recent regional reform), and when the “Atto di Indirizzo” was approved in July 2013, citizens and operators were invited to participate and work on a shared document which was dedicated to the technical prefiguration of PORU. This modality of participation progressively shifts the position of the Public Administration into the level of citizens’ needs, and it helps to create a collaboration agreement between the parts: if single’s instances of transformations are coordinated by a fixed target of public interest than PORU should adapt its contents to allow urban regeneration.

The rule of participation, in such case, was neither to share general strategies or to solve iper-local questions (eg. NIMBY⁸ syndrome) rather to bring interested people directly into pretty technical questions, regarding rules and urban design indexes. A change in perspective was adopted assuming people’s knowledge much more rooted on planning

questions, and bringing them even into the technical side of questions gives the general sensation to be a part of central innovation to normal planning processes.

For example, new specific technical elements for urban transformation are experimented within the PORU. These are mainly connected with the feasibility of “urban equalization⁹” on the existent city and have to do with how to:

- equally distribute economic advantages or disadvantages from urban transformation among operators in order to provide the public city with a new physical layout and quality (Galuzzi & Vitillo, *Rigenerare le città. La perequazione urbanistica come progetto*, 2008);
- calculate the amount of economic incomes necessary to implement the public city or to restore environmental quality in rural areas (Nespolo, 2012).

As written before, many of these technical elements introduced by the law have progressively been shared with technicians and private operators, and this is why innovations are gradually being understood and accepted. Once again, the real attitude to create a programmatic shared documents, according with private requests, which is strictly dedicated to find a “fit for use” proposal, has been perceived as an open collaborative way to define the vision for the future development of the city (Lombardi, et al., 2011; Lawless & Pearson, 2012; de Wilde, et al., 2014).

Such element of innovation was due to the fact that PORU’s aim is essentially programmatic, through a procedural framework aimed to create agreement between the parts in a complex system (Jones, 2014): the Public Administration and citizens (as real estate investors) interested on urban requalification. At the same time, as a program, it was different from the ones developed during the previous season of complex programs of the 90s because of its adaptability to the context and, moreover, to the needs of private operators which are the real promoter of urban regeneration.

This process of construction shared rules, even if not changing the “state of art” of the city, is introducing new rights to citizens for shaping the city of tomorrow and, by the point of view of procedural planning act, it fixes a point of no return. In addition to procedural innovations, PORU is not structured through a direct definition of land use zoning, but only by general target-rules for private involvement in participation.

As long as the phase of participation was launched, it was deemed necessary to insist on programming and temporarily defining procedures and people’s involvement, despite the

9. This term indicates an implementation mechanism, substantially renewed in methodology, already carried out in Italy because the equitable sharing, among operators, of development rights and obligations related to the transformations not based on the amount of areas they possess, but on the economic value those areas have in themselves.

8. Not In My Backyard

risk to stretch timing over a long period. By the way, the decision was finally met to extend and divide the temporal programming for the definition of the final project of transformation over one year of organized PPP. Within this decision, the technical and political message of emphasize the programming, and the process of shared construction of a new planning devices, was finally settled up (Huston, Rahimzad, & Parsa, 2015). The change in rules of the new planning tool was completely created by the negotiation between parts, and based on the public strategic document "Atto di Indirizzo".

The programmatic value of PORU, thought it increasing and shared definition over the time, has progressively emerged and been enforced: after the publication of the "Atto di Indirizzo" more than 50 requests came from citizens and operators. Both of them were invited to public conferences where the needs and requests of private participants could be expressed. With the support of the Politecnico di Milano this strategic phase between general requests and effective planning proposals became the essential framework for PORU construction. Since requests were submitted to Public Administration the process of PORU definition entered

abandoned lands (Nemeth & Langhorst, 2013), brownfields and contaminated sites, including the part of countryside where peri-urban agricultural land had fallen out of cultivation, or land hosting derelict structures. An high amount of requests came from underutilized plots (Nemeth & Langhorst, 2013), or lots that were working below the relative functional or capital-producing capacity of adjacent land uses. Generally, the proposals seem to fit enough with PORU aims. This trusted the Major and the City Council of Senigallia to go ahead with the final prefiguration of PORU which was dedicated allowing citizens with accepted proposal to deposit an official instance of participation: this final step was dedicated to negotiate and commonly agree the final masterplan of transformation. In such phase private operators face directly with the technical offices to commonly construct an urban design tool finalized to approve the urban transformation.

Even this approach has introduced innovations in the way to define strategic documents for the territorial development, some limitations and threats has to be outlined. Above all, even not depending by legislative innovations, the feasibility of PORU seems difficult to be achieved for different reasons.

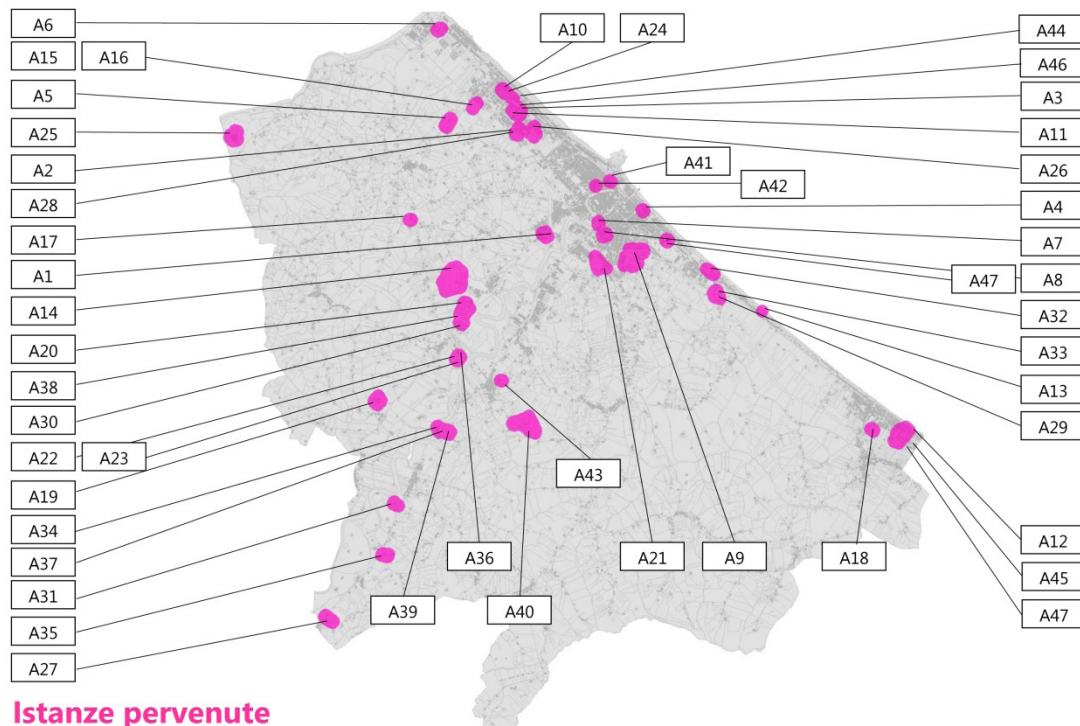


Figure 2 – Proposal to first call of participation to PORU.

on its central phase, the ones entirely dedicated to the transformations' programming, the selections of operators, and the evaluation of feasibility, according to the "Atto di Indirizzo". Requests of participation came mainly from disused or

Mainly because of real estate market is nowadays suffering credit crunch and, especially in this period, if the costs of transformation on existent city is higher than in the free land, operators did not proceed with investments. But also uncertainties arises when the high public profile of PORU

creates at the base of citizens a general “agreement” but a diffidence by the real estate operators: they always ask for free land to transform avoiding additional costs for land recovery (Adair, et al., 2000; Meyers & Wyatt, 2004), they still perceive negotiations as something bureaucratic and they don’t trust in the Public Power (Burkhalter & Castells, 2009). At least, the following aspects emerges as critical points for PORU feasibility:

- the price for land remediation, and in general for demolition and reconstruction, is normally higher than that required by a normal process of transformation on green-fields (IAEA, 2002);
- the culture of little real estate operators, and citizens in general, is still focused on the single transformation of their own “backyard” rather than on an articulation among different properties;
- even when acting as a managerial support for the private coordination, the Administration of Senigallia did not offer public areas for the transfer of building rights: thus it was impossible to give adequate space to all the received requests of transformation. In certain circumstances,

forward for the acceptance of such case of study. It clearly shows that within above mentioned limitations was possible to implement Regeneration. The masterplan in the south east coastal area, designed according with the “Atto di Indirizzo”, aimed to improve the general quality of a marginal piece of the city between the hill and the coast has been finalized yet. The transformation involved an ex industrial dismissed area, and the proposal was entirely dedicate to promote Social Housing program according with the needs of environmental quality requested.

Rather than determining the disposition of buildings, the masterplan draft fixes and design the public facilities and environmental contents of the project of land transformation: a green corridor between the hillside and the coast with an environmental compensation area directly linked with the urban transformation. The reorganization of secondary road network was commonly shared as an integrative part of the masterplan, even with the re-design of pedestrians.

Public Administration was greatly interested on such transformation because its own a minor part of the land, and since the first phases of such final prefiguration it was

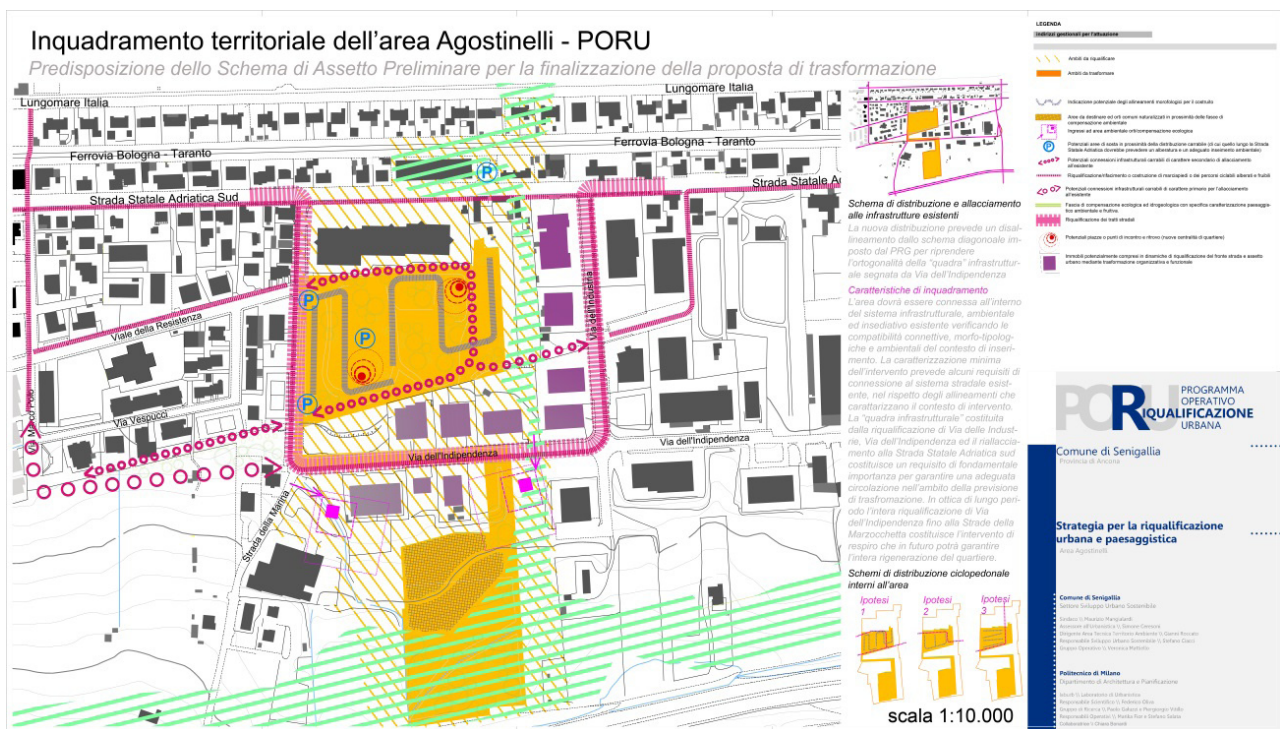


Figure 3 - Masterplan of Transformation area called “Agostinelli”.

particularly in the case of disjointed land ownership, or where there is a multiplicity of land ownership rights, the public sector or regeneration agency exploit their compulsory purchase in order to give more confidence to the private sector (Adair, Berry, McGreal, Deddis, & Suzanne, 2000).

Despite all, the first masterplan officially presented in an ex industrial area by operators represent an important step

necessary to define rules and missions for each land owner. The other two private owners agreed with transformation’s aim and commonly purpose to Offices their masterplan draft with the participation of a unique real estate operator especially designed for the implementation of Social Hosing projects.

Since everything was fitting with PORU aim, the masterplan was presented to City Council as a first output of a process

started by the Region Marche in 2012 and passed with the local agreement. Even expectative of transformation was initially higher (more than 50 official and unofficial request to participation were collected) the finalization of such proposal increased the common sense of feasibility of PORU.

The proposal ended with a closer work between the Public Administration and the private operator. In such phase, feasibility questions arise from technical meetings, and the real possibility to implement one of the PORU transformations was finally set up.

One of the key point of PORU operability was the economic balance between private investments and the public return to city. Nonetheless, it was important to find out common strategies to put in practice what the Regional Law fixed as one of the pillar goals of PORU: the re-distribution to the city of plusvalue generated by urban transformation.

Since Senigallia was suffering a credit crunch, the general value of land fallen down during recent years, thus urban rent values narrowed hugely by the effects of real estate market depression. Considering such background, the limit between operability and public return was reached, using the value of the municipal fee on real estate properties as the basevalue for urban rent calculation.

This methodology reduced the spread between pre and post values, thus it was feasible for private operator to correspond to Public Administration an amount of its rent without failing (the net plusvalue correspond to 547 thousand €). The decision of using parametric public values rather than private economic assessment of cash flows was commonly shared because the largest part of rent was already recovered using extra standard parameters for public facilities. The new street framework parking and accessibility, the public gardens and the forest equipment over the hill was guarantee at the net of the plusvalue, therefore the Public Administration was allowed to confirm the first masterplan of PORU implementation.

Table 1 – Economic feasibility of masterplan.

AREA	MQ
plot area	15.261,00
public space (10% of plot area)	1.526,10
gross floor area (gfa) for productive functions	13.734,90
existent building on plot (plus 20% of gfa)	2.746,98
total gfa (land use in force)	16.481,88
ECONOMIC VALUE PRE-PORU	

economic rent (€/mq, using IMU ¹⁰ tax base)	116,00
coefficient of position ¹¹	1,00
coefficient of morphology	1,00
coefficient of land use zone	1,05
TOTAL EX ANTE VALUE	€ 1.858.789,80
ECONOMIC VALUE POST-PORU (10%social housing)	
private area (50% of plot area)	7.630,50
economic rent (€/mq, using IMU tax base used for transformation areas)	400,00
public area	7.630,50
economic rent of social housing (€/mq, using IMU tax base used for public areas)	116,00
coefficient of position	1,00
coefficient of morphology	0,60
coefficient of land use zone	1,05
post value for social housing	€ 173.636,61
post value for private functions	€ 2.232.470,65
TOTAL POST VALUE	€ 2.406.107,25
PLUSVALUE (post value – ante value)	€ 547.317,45

Conclusions: new planning devices for new problems

PORU isn't a fully successful experience (the final materplan is still under adjustment), but some crucial aspects put in practice ways to implement Urban Regeneration in Italy:

- its mechanism involves local engagement, institutional strengthening, tight project screening and innovative regenerative funding. Its outcomes are inclusive, measured, and coordinated transformations which sweat existing assets, counter the long-tail of redevelopment failure, and catalyze productive local innovation;
- a smart response to multiple urban challenges begins with the articulation of purpose (to engineer resilience or foster creativity).

10. IMU (Imposta Municipale Unica, Municipal Property Tax) is a tax on buildings (houses) introduced by Italian Government in 2012; and the new tax has officially entered into force in 2015. For the calculation of surplus value, they used the economic parameters used to calculate the IMU because these parameters have been officially approved by the City Council. The amount is equal to the product of the tax rate and the tax base. The tax base is calculated by multiplying the cadastral income with a multiplier which is a function of the cadastral category.

11. Other different coefficients (position and morphology) are used to correct (specify) the area value.

- strategic leadership, governance, and institutional architecture help assure effective, efficient, inclusive, and transparent project management.
- institutional design and partnership management facilitate project delivery. Proper spatial, temporal and functional fit help configure institutional and network architecture to match operational requirements.

Far from being evaluated as a comparative study based on critical review of Critical Success Factors (Yu & Kwon, 2011), the case of PORU as an instrument for Urban Regeneration helps in better understanding some urban policy cause-effects (Tyler, Warnock, Provins, & Lanz, 2012).

PORU is too new, too recent, and maybe too local, for being evaluated as a “complete” case of study. This is why conclusions help in outline few elements for a further discussion.

The PORU experience is raising some crucial issues of the requested change of legislative and technical rules for the upgrade of urban regeneration in Italy. In fact, it is an innovative device not as an upgrade of the traditional planning tool, but as a procedure of negotiations between citizen and operators based on fixed public target for planning sustainability. Even in an oversimplified vision, if the planning approach will shift from rigid procedures to more negotiated ones, and the plan is not a precondition of agreement but the way to find agreement around complex system as urban transformations are (according with a strategically vision of sustainable development), then the experience is a pioneering approach useful to steer the national debate on planning reform.

First of all the nature of PORU is essentially programmatic, meaning that once the public rules of participation are established, then private operators are free to participate in the urban regeneration process (it is not a mandatory tool). This aspect distinguishes the new planning device from the previous season of complex programs, whereby the areas to be requalified were determined by the public operator (the selection of requalification sites is not pursued by Public Administration but by private operators). As the definition of areas on which to apply the PORU is totally left to the private operator, the rule of Public Administration is to control/steer if the proposals are fitting within the strategy of sustainable development (at least, to control if the private proposal follow the guidelines set by the “Atto di Indirizzo”).

Secondly, PORU is a process open to the city: this fosters the shift from the private agreement between operators to public ones (transparency). Even if PORU is going to define single projects for urban transformation, it pushes on a crucial phase of PPP and calls for the coordination between

different properties for being applied. It is a progressive and non-forced process proposing a governance network as the central PPP procedure. Furthermore, PORU is aimed to connect different smart adjustments on the built city rather than to design big urban transformations. These changes are the core of a typical PPP process, and puts the base for a redefinition of target rules of planning activity in Senigallia. Thirdly, the problem of the economic feasibility of the operation is substantially prevented, because only interested operators are involved. One of the requirements established by the Administration to participate in the PORU process is the approval of a business plan. Within this, the budget of the planning operation shall be clearly stated, including required additional public amenities, i.e. the plusvalue that must be transferred free of charge to the Administration and the costs of social housing construction. The opportunity given to operators is, eventually, to reinvest the plusvalue through the direct execution of naturalization interventions on the hilly landscape (which are some of the public investments that PORU dedicates to environmental sustainability and landscape requalification).

Undoubtedly, at least some weaknesses are just as important to be recognized, because they relate to the technical aspects through which the process of regeneration is applied to the city.

PORU is still too tied to the idea of requalification instead of regeneration (or even of “resilience”), and therefore does not take into account the idea of working on the existing city by promoting temporary uses and especially the reversibility of uses (Gaeta, 2011). Such approach is a paradigm of contemporary Urban Regeneration: it allows to work in continuity with the principle of temporal (and not just spatial) government of urban transformation, this latter aspect being intended to concretely mark the season of the Urban Regeneration in Italy. It is true that PORU, acting as a program rather than a project, uses time to negotiate as the central phase to construct agreement by parts, but time is also something which has to be hold on the rules of land use zoning, defining temporal thresholds, and temporary solutions for specific functions. Even innovative, PORU is far away for being a tool less dedicate to find out spatial rules of transformation.

Anyway, if Urban Regeneration is to become the major task for contemporary spatial policies, radical innovations on ongoing planning procedures are necessary, even with uncertain results: PORU seems to be one of the experimental projects that goes in the direction of such partial innovation, and it kept some of the innovations that international literature presents as crucial aspects of Urban Regeneration.

REFERENCES

- Adair, A., Berry, J., McGreal, S., Deddis, B., & Suzanne, H. (2000). *The financing of urban regeneration*. Land Use Policy, 17, 147-156.
- Aldem, J. (1996). *Urban Development Strategies: The Challenge of Global to Local Change for Strategic Responses*. Habitat International, 20 (4), 553-556.
- Alpopi, C., & Manole, C. (2013). *Integrated Urban Regeneration – Solution for Cities Revitalize*. International Economic Conference of Sibiu 2013 Post Crisis Economy: Challenges and. 6, p. 178-185. Procedia Economics and Finance.
- Antrop, M. (1998). *Landscape Change: plan or chaos?* Landscape Urban Planning (41), 155-161.
- Antrop, M. (2004). Landscape change and the urbanization process in Europe. Landscape and urban planning (67), 9-26.
- Arcidiacono, A., Oliva, F., & Salata, S. (2013). *Misure, politiche e proposte legislative. Priorità per governare il consumo di suolo. il Progetto Sostenibile* (33), 6-13.
- Artmann, M. (2014). *Institutional efficiency of urban soil sealing management - From raising awareness to better implementation of sustainable development in Germany*. Landscape and urban Planning (131), 83-95.
- Batty, M. (2011). *Urban Regeneration as Self-Organization. Forthcoming special issue of Architectural Design*. (D. Littlefield, A cura di) London.
- Benini, L., Bandini, V., Marazza, D., & Contin, A. (2010). *Assessment of land use changes through an indicator-based approach: A case study from the Lamone river basin in Northern Italy*. Ecological Indicators (10), 4-14.
- Bishop, P., & Williams, L. (2012). *The temporary city*. New York: Routledge.
- Brenner, N. (2013). *Implosions. Explosions. Towards A Study Of Planetary Urbanization*. Jovis.
- Breure, A. M., De Deyn, G. B., Dominati, E., Eglin, T., Hedlund, K., Van Orshoven, J., & Posthuma, L. (2012). *Ecosystem services: a useful concept for soil policy making!* Current Opinion in Environmental Sustainability (4), 578-585.
- Butler, T. (2009). *Regeneration to Renaissance*. In International Encyclopedia of Human Geography (p. 130-135). London: Elsevier.
- Calafati, A. (2010). *Economie in cerca di città. La questione urbana in Italia*. Roma: Donzelli Editore.
- Campos Venuti, G. (2010). *Un bolognese con accento trasteverino* (I ed.). Bologna: Pendragon.
- Campos Venuti, G., & Oliva, F. (1993). *Cinquant'anni di urbanistica in Italia. 1942-1992*. Roma-Bari: Laterza.
- Codecasa, G., & Ponzini, D. (2011). *Public-Private Partnershp: A Delion for Ura Regeneration? Evidence from Italy*. European Planning Studies, 19 (4), 647-667.
- Couch, C., & Dennemann, A. (2000). *Urban regeneration and sustainable development in Britain. The example of the Liverpool Ropewalks Partership*. Cities, 17 (2), 137-147.
- Couch, C., Sykes, O., & Borstinghaus, W. (2011). *Thirty years of urban regeneration in Britain, Germany and France: The importance of context and path dependency*. Progress in planning, 75, 1-52.
- CRCS. (2012). *Rapporto 2012*. Roma: Inu Edizioni.
- Dale, V. H., & Kline, K. L. (2013). *Issues in using landscape indicators to assess land changes*. Ecological Indicators (28), 91-99.
- de Wilde, M., Hurenkamp, M., & Tonkens, E. (2014). *Flexible relations, frail contacts and failing demands: How community groups and local institutions interact in local governance in the Netherlands*. Urban Studies, 16 (51), 3365-3382.
- EAA, European Austrian Agency. (2011). *Ovrview of best practicies for limiting soil sealing or mitigating its effects in EU – 27. European Communities*.
- EEA, European Environment Agency (2006). *Urban Sprawl in Europe. The Ignored Challenge*. Kobenhavn: EEA.
- Egan, M., Lawson, L., Kearns, A., Conway, E., & Neary, J. (2015). *Neighbourhood demolition, relocation and health. A qualitative longitudinal study of housing-led urban regeneration in Glasgow, UK*. Health & Place, 33, 101-108.

- European Commission. (2012). *Guidelines on best practices to limit, mitigate or compensate soil sealing*. Luxembourg: European Commission.
- Gabellini, P. (2013). *Rigenerazione e resilienza*. In M. Leoniru, & P. Testa (A cura di), *La città oltre lo sprawl* (p. 58-64). Roma: Edizioni Solaris.
- Gaeta, L. (2011). *La regolazione temporale dei suoli urbani*. Torino: Planum.
- Galuzzi, P., & Vitillo, P. (2008). *Il progetto della perequazione compensativa*. Santarcangelo di Romagna (RN): Maggioli Editore.
- Galuzzi, P., & Vitillo, P. (2008). *Rigenerare le città. La perequazione urbanistica come progetto*. Santarcangelo di Romagna: Maggioli Editore.
- Geddes, M. (2005). *Neoliberalism and local governance. Cross-national perspectives and speculations*. *Policy Studies*, 3-4 (23), 359-377.
- Geneletti, D. (2013). *Assessing the impact of alternative land-use zoning policies on future ecosystem services*. *Environmental Impact Assessment Review* (30), 25-35.
- Gennaio, M., Hersperger, A., & Buerger, M. (2009). *Containing urban sprawl-Evaluating effectiveness of urban growth boundaries set by the Swiss Land Use Plan*. *Land Use Policy*, 26 (2), 224-232.
- Hale, J. D., & Sadler, J. (2012). *Resilient ecological solutions for urban regeneration*. *Engineering Sustainability*, 165(ES1), 59-67.
- Huston, S., Rahimzad, R., & Parsa, A. (2015). *'Smart' sustainable urban regeneration: Institutions, quality and financial innovation*. *Cities* (48), 86-75.
- Indovina, F. (2009). *Dalla città diffusa all'arcipelago metropolitano* (1 ed.). Milano: Franco Angeli.
- Kort, M., & Klijn, E.-H. (2011, July-August). *Public-Private Partnership in Urban Regeneration Projects: Organizational Form or Managerial Capacity?* *Public Administration Review*, p. 618-626.
- Lawless, P., & Pearson, S. (2012). *Outcomes from Community Engagement in Urban Regeneration: Evidence from England's New Deal for Communities Programme*. *Planning Theory & Practice*, 4(13), 509-527.
- Lombardi, P. (1997). *Decision making in urban regeneration plans*. *Engineering, Construction and Architectural Management*, 4(2), 127-142.
- Lombardi, R. D., Porter, L., Barber, A., & Rogers, C. (2011). *Conceptualising Sustainability in UK Urban Regeneration: a Discursive Formation*. *Urban Studies*, 2(48), 273-296.
- Mak, A., & Stouten, P. (2014). *Urban regeneration in Rotterdam: economic and social values*. *European Spatial Research and Policy*, 21 (1), 101-122.
- Marshall, A. (2005). *Europeanisation at the urban level: Local actors, institutions and the dynamics of multi-level interaction*. *Journal of European Public Policy*, 4 (12), 668-686.
- Mazza, L. (1997). *Pubblico e privato nelle pratiche urbanistiche*. In L. Mazza (A cura di), *Trasformazioni del piano* (p. 102-126). Milano: Franco Angeli.
- Mazza, L. (2004). *Progettare gli squilibri*. Milano: Franco Angeli.
- Meyers, D., & Wyatt, P. (2004). *Rethinking urban capacity: identifying and appraising vacant buildings*. *Building Research & Information*, 32(4).
- Millward, H. (2006). *Urban containment strategies: A case study appraisal of plans and policies in Japanese, British and Canadian cities*. *Land Use Policy*(24).
- Montanarella, L. (2012, luglio 04). Luca Montanarella - Special session Soil: sealing and consumption, 7°EUREGEO 2012 . Tratto il giorno agosto 29, 2013 da <http://ambiente.regione.emilia-romagna.it/geologia-en/video/suoli/video-sessions-on-soil-euregeo-2012/luca-montanarella-special-session-soil-sealing-and-consumption-7b0euregeo-2012>
- Moore-Cherry, N., & Vinci, I. (2012). *Urban regeneration and the economic crisis: past development and future challenges in Dublin, Ireland*. *Centre for Advanced Spatial Analysis (CASA)*, 2 (25), 0-16.

- Munafò, M., & Tombolini, I. (2014). *Il consumo di suolo in Italia*. Istituto Superiore per la Protezione e la Ricerca Ambientale (ISPRA). Roma: ISPRA.
- Nemeth, J., & Langhorst, J. (2013). *Rethinking urban transformation: Temporary uses for vacant land*. Cities.
- Nespolo, L. (2012). *Rigenerazione urbana e recupero del plusvalore fondiario. Le esperienze di Barcellona e Monaco di Baviera*. Firenze: IRPET.
- Nuissl, H., & Schroeter-Schlaak, C. (2009). *On the economic approach to the containment of land consumption*. Environmental science & policy(12), 270-280.
- Otsuka, N., Dixon, T., & Abe, H. (2013). *Stock measurement and regeneration policy approaches to 'hardcore' brownfields sites: England and Japan compared*. Land Use Policy, 33, 36-41.
- Ove Arup & Partners International Limited . (2014, April). *City Resilience Framework*. Tratto il giorno June 10, 2015 da <https://www.rockefellerfoundation.org/app/uploads/City-Resilience-Framework1.pdf>
- Pares, M., Martí-Costa, M., & Blanco, I. (2014). *Geographies of governance: How place matters in urban regeneration policies*. Urban Studies, 51(15), 3250-3267.
- Raco, M., & Tunney, E. (2009). *Visibilities and Invisibilities in Urban Development: Small Business Communities and the London Olympics 2012*. Urban Studies, 10, 2069-2091.
- Rubio Del Val, J. (2011, April 13). *Zaragoza Vivienda, "Urban Rehabilitation in Zaragoza*.
Recent Experience. Tratto il giorno July 10, 2015 da http://www.five.es/descargas/archivos/Regenera/04_Juan_Rubio.pdf
- Salata, S. & Gardi, C. (2014). *From quantitative to qualitative analysis of Land-Take. The application of a Composite Indicator for targeted policies of Land Take reduction*. CSE - CITY SAFETY ENERGY, 1, 15-31.
- Sanyal, B. (2005). *Comparative planning cultures*. New York: Routledge.
- Savini, F. (2011). *The Endowment of Community Participation: Institutional Settings in Two Urban Regeneration Projects*. International Journal of Urban and Regional Research, 35 (5), 949-968.
- Sclappa, H., & Neill, W. J. (2013). *Cities of Tomorrow – Action Today. URBACT II Capitalisation. From crisis to choice: re-imagining the future in shrinking cities*. Saint-Denis (F): URBACT.
- Smith, M., Whitelegg, J., & Williams, N. (1998). *Greening the Built Environment*. London: Earthscan.
- Talen, E. (2005). *Land Use Zoning and Human Diversity: Exploring the Connection*. Journal of Urban Planning and Development, 131 (4), 214-232.
- Territorio e Paesaggio, R. (2012, June 22). *Un piano per la rigenerazione urbana sostenibile*. Tratto il giorno July 10, 2015 da <http://www.regionieambiente.it/territorio-e-paesaggio/urbanistica/363-un-piano-per-la-rigenerazione-urbana-sostenibile.html>
- Roberts, P. (1999). *The evolution, definition and purpose of urban regeneration*. In P. Roberts, & H. Sykes (A cura di), *Urban Regeneration. A Handbook*. Sage.
- Thornton, G., & Nathanail, P. (2005). *Are incentives for regeneration UK brownfield sites sustainable?* Land Contamination and Reclamation, 13 (4), 327-338.
- Tyler, P., Warnock, C., Provins, A., & Lanz, B. (2012). *Valuing the Benefits of Urban Regeneration*. Urban Studies, 1-22.
- United Nations, U. (1987). *Our Common Future*. Oslo: United Nations.
- Uysal, U. E. (2012). *An urban social movement challenging urban regeneration: The case of Sulukule, Istanbul*. Cities, 29, 12-22.
- van Bortel, G. (2012). *Institutions and Governance Networks in Housing and Urban Regeneration*. In International Encyclopedia of Housing and Home (p. 93-98). Elsevier.
- Weitz, J., & Moore, T. (1998). *Development inside urban growth boundaries. Oregon's empirical evidence of contiguous urban form*. American Planning Association, 4 (64), 425-440.
- Yu, J.-H., & Kwon, H.-R. (2011). *Critical success factors for urban regeneration projects in Korea*. Project Management, 29, 889-899.