

# ID 1563 | SUPPORTING INNOVATION IN REHABILITATION INITIATIVES FOR DEPRIVED NEIGHBOURHOODS: A MULTI-LEVEL PERSPECTIVE

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## 1 INTRODUCTION

The rehabilitation of deprived urban neighbourhoods through area-based and integrated approach has assumed importance on the European and many national agendas for over thirty years (Berg et al., 1998; Couch et al., 2011). Such approach, rather than focusing on improving the social, economic, housing and urban condition of individuals or households with low incomes and specific needs with no regard where they live, pursues the same objectives by concentrating on specific (deprived) geographic areas.

In some countries the experience of area-based initiatives has been long and weighty in terms of resources allocated, and has anticipated European initiatives, namely the URBAN Community Initiative. In other member states, including Italy, vice versa, when introduced by the European Union's initiatives in a limited number of target cities and towns, this approach was considered an absolute novelty (Parkinson, 1998; Carpenter, 2006; Dühr et al., 2010; Seixas and Albet, 2012).

Area-based and integrated approach to urban rehabilitation assumes wide and variable meaning in different contexts according to different European, national and regional policies. Also the terms used change in relation to the specific problems to be emphasized but also to the political rhetoric aiming at stressing the novelty of urban policy undertaken. Regeneration, for example, is a term used recently at the EU (and Italian) level to indicate urban policies aiming at improving the "quality of life", in the broadest sense, in deprived areas (EU, 2015). But this term implies different approaches: while some consider local communities or neighbourhoods as the very object of regeneration, others use various policy instruments to improve the urban economy to the benefit of the inhabitants' economic well being (Cochrane, 2007). Some approaches are physical, property-led or business driven, some others focus on the urban form and design, on cultural industry or health and well-being, some others emphasize community-based, social economy (Colantonio and Dixon, 2010). In addition, the term urban regeneration in continental Europe appears to be rather indeterminate in its outcomes compared with the Anglo-American context in which this and related terms were originally coined (Rossi and Vanolo, 2013).

This paper will focus on area-based integrated initiatives aiming to rehabilitate deprived urban areas. Typically, these initiatives include 'hard' measures, such as physical restructuring or upgrading programmes in specific areas, and 'soft' measures, such as fostering skills, social capital, and building capacity of people (EU, 2015).

The evaluation of the impacts of these interventions on the areas where they were implemented highlights the difficulty to deal with the complex causes behind deprived areas, which relate to processes of differentiation, segmentation and urban segregation as structural elements of the social-spatial dynamics (Harvey, 2012). In many cases spatially targeted urban policies were unsuccessful to lessen poverty and improve neighbourhoods in the worst areas. Changes often implied that refurbished areas became gentrified; problems and people were shifted to other areas thus not the poorest people got the advantages (Atkinson, 2000; Uitermark and Loopmans, 2013). Property-led approach to urban rehabilitation, on which important urban programmes focused in the UK (Imrie and Thomas, 1994; Colenutt and Cutten, 1994; Turok, 1992) and elsewhere (Porter and Shaw, 2009), was unable to fight social exclusion and contributed to increased inequalities. Moreover, in the face of recession and economic crisis, such approach is likely to trouble mostly economically and financially marginal places, projects, and people (Parkinson, 2009).

However, denouncing distortion and rhetoric of area-based approach is not a request for terminating community capacity-building and local-level initiatives, as even critical literature argues (Swyngedouw et al., 2002). The dismantling of universalist social policies, which paralleled the shift to spatially targeted and place-focused approaches, has overburdened these policies with excessive expectations. The European experience of area-based initiatives suggests that there is a need for an approach that combines aid to

both 'people and places', that is mainstream economic and social protection policies which complement and reinforce more specific urban policies (Atkinson, 2001).

At the end of the first decade of 2000, the economic and financial crisis revived interest in place-based integrated policies for urban regeneration (Urbact, 2015). Increasing inequalities in European cities make it a crucial challenge to continue to experiment such policies in order to improve deprived neighbourhoods. This challenge is supported by the new European cohesion policy (Barca, 2009). Novel urban policies should be founded on area-based integrated policies that are able to link interventions coming from different government levels (supranational, national, regional and local) (Subirats, 2016). After decades of experimentation, there is a consciousness that this approach is still to be considered a very powerful and innovative method of public action, but it is not an easy one. It requires learning from experience and keeping channels open for innovation (Urbact, 2015).

From these findings comes the focus of this paper on how to trigger and support innovation in area-based integrated actions for rehabilitation of deprived neighbourhoods. This is a crucial issue for contexts that lack a long run experience in this field. But it is also important in countries where in the last decades a property-based approach to urban regeneration prevailed. Apart from the perverse results of such approach, the economic recession has significantly changed its feasibility margins.

The paper is divided into the following sections. Section 2 provides a summary of researches on frameworks for the analysis of innovation dynamics in spatial planning and urban governance. Section 3 describes the framework known as Multi-Level Perspective (MLP) for the analysis of innovations in socio-technical systems. The paper then proposes a revised MLP framework to investigate leverages and key resistance to change in the the design and implementation of an extensive integrated initiative promoted in 2006 by the Apulia region in Southern Italy<sup>1</sup> and implemented in deprived neighbourhoods at the local level (Section 4). The research on which the empirical analysis is based draws on systematic regional data on individual integrated programmes, on their implementation monitoring, on interviews with involved actors, and on the direct experience of one of the authors who has been a regional deputy president of Apulia regional government with responsibility for housing policies from 2005 to 2015.

## **2 FRAMEWORKS FOR THE ANALYSIS OF INNOVATION DYNAMICS IN SPATIAL PLANNING AND URBAN GOVERNANCE**

Social innovation scholars (Moulaert et al., 2005, 2007, 2013) have made extensive research on innovation processes in the planning field. Although there is not a single definition of social innovation, that concept is mainly associated with the improvement of the quality of life in neighbourhoods and local territories through renewed social relations at the community level. It has thus three main dimensions: a product dimension, i.e. the satisfaction of human needs as they are perceived by local communities; a process dimension, i.e. changes in social relations linked to governance issues; an empowerment dimension, i.e. an increase in the socio-political capability and access to resources by local people (Moulaert et al., 2005).

Within this literature, "agency" of innovation is usually considered to be at the local level, while the other levels are framed as path dependent flows of actions, with a rather passive role in the dynamics of innovation (Moulaert et al., 2007). This literature shows different possible interplays across levels. Several case studies show the mushrooming of innovations in the interstices of established institutional settings and their radical opposition to them, which often resulted in their incapacity to challenge hegemonic forces (Novy and Hammer, 2007). Other cases show a gradual withdrawal of the grassroots experiences from the initial radical perspective towards formalisation, professionalization and possibly co-optation within the institutional boundaries set by new public management models (Christiaens et al., 2007). Other cases finally show some forms of inclusion of partners from outside the local context, which sustained the operation of socially innovative initiatives in different ways (Moulaert et al., 2010).

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<sup>1</sup> Apulia is one of the fifteen ordinary-statute regions that together with five special-statute regions cover all Italy, with a population of 4.1 million people, an area of 19,347 sq. km, 258 municipalities, 8 municipalities with the role of provincial capitals.

In general, social innovation scholars maintain the need for specific innovation episodes to challenge established governance discourses to be able to produce wider alternative social action (Moulaert et al., 2007), and they recognise the need to connect episodes of social innovation to formal institutional systems to sustain them and increase their impact on higher scales (Moulaert et al., 2005; 2010). Nevertheless, a comprehensive framework to analyse evolutionary pathways of innovations is not developed.

An interesting discussion on innovation dynamics in urban governance is made by researchers from sociological institutionalism in planning (Healey, 1997, 1999, 2007; Vigar et al., 2000; Cars et al, 2002; Fainstein, 2000; Gualini, 2001), who have applied a social constructivist frame and a relational view of social action to understand institutional dynamics, thus contributing to connect the phenomenology of micro-practices to wider structuring forces. In this field, an interesting debate on innovation has been developed as a critique of state-centred interventions in promoting changes in the formalized way of “doing government” and of social engineering approaches to institutional design aimed at the creation of more efficient infrastructures for urban performance.

In particular, Healey et al. developed an interesting framework to analyse the institutional relations of governance dynamics (Coaffee and Healey, 2003, Gonzalez and Healey, 2005, Healey, 2006). This was built on a more dynamic conception of Luke’s three levels of power elaborated by Dryberg (1997) and on Giddens’ conception of the interaction of structure and agency (Bryson and Crosby, 1992; Giddens, 1984). The framework expresses the three levels in terms of: the level of specific episodes of interactions, which are characterized by power dynamics of interpersonal relations; the level of governance processes, with power relations embedded in organized institutional practices and deliberately manipulated by strategic actors; the level of governance culture, with a deeper level of taken-for-granted assumptions, culturally embedded habits and routines (Coaffee and Healey, 2003). According to this framework, transformation in urban governance cannot be claimed unless all three levels change significantly (Coaffee and Healey, 2003; Gonzalez and Healey, 2005).

Level	Dimension
Specific episodes	<i>Actors: key players—positions, roles, strategies and interests</i> <i>Arenas: institutional sites</i> <i>Ambiences (interactive practices): communicative repertoires</i>
Governance processes and 'mobilisation of bias'	<i>Networks and coalitions</i> <i>Stakeholder selection processes</i> <i>Discourses: framing issues, problems, solutions, interests, etc.</i> <i>Practices: routines and repertoires for acting</i>
Governance cultures	<i>Range of accepted modes of governance</i> <i>Range of embedded cultural values</i> <i>Formal and informal structures for policing discourses and practices</i>

Figure 1. Levels and dimensions involved in governance dynamics (source: Coaffee and Healey, 2003).

Transformative effects are thus produced only when governance innovations move from episodes to regulatory practices, i.e. when “the learning experiences, network-building and mobilisation capacity developed in these episodes of governance, and specifically those centred around place qualities, accumulate the power to shift ‘mainstream’ politics and administration” (Coaffee and Healey, 2003, p. 1980). To endure, specific episodes have to become institutionalized in the routines of governance practices and change governance culture (Coaffee and Healey, 2003; Gonzalez and Healey, 2005, Healey, 2006). The core question is thus: “What does it take for innovations in particular episodes to be translated into ‘mainstream’ practices, in ways which transform the mainstream rather than just incorporate new ideas and practices in ways which neutralise threats to established practices and the various power relations embedded in them?” (Coaffee and Healey, 2003, p. 1983). Put it in another way, how can specific innovation episodes have a “destabilizing role, creating challenges and opportunities across the landscape of urban governance through which quite different relations and power dynamics could emerge to shape the future governance culture”? (Coaffee and Healey, 2003, p. 1996).

Despite some cases observed by Healey et al. (see e.g. Coaffee and Healey, 2003) showed how local episodes of institutional changes were prompted jointly by top-down (national agenda aimed to modernize local governance) and bottom-up forces (local political pressures), the framework in its initial version only acknowledged the “agency” of innovation at the local level and disregarded the importance of wider “opportunity structures” in which episodes of innovations are situated and of exogenous forces to generate a pincer movement to force change in embedded urban governance cultures (Gonzalez and Healey,

2005). These are added in subsequent versions of the model, where Healey tried to combine more explicitly the initial conception of the levels of governance with the Geddesian relation between structure and agency by emphasising the reciprocal influence of each level with another through rules, norms, material resources and framing ideas (Healey, 2006). In this model, transformation initiatives are produced by the interplay of rules, resources and ideas coming from different levels and not only located at the local level. Figure 2 represents this refined model of governance dynamics.

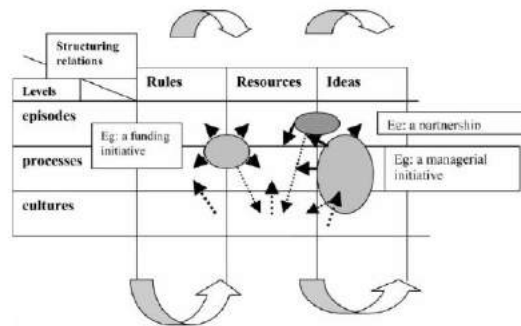


Figure 2. Transformation initiatives in governance dynamics. Note: Although laid out as separate levels and structuring dimensions, in any actual instance these all interact

Figure 2. Governance dynamics in transformation initiatives (Source: Healey, 2006).

For the purpose of our study, the interest for this framework comes from its capacity to adopt a multi-level approach to innovation dynamics, although it does not identify specific transition pathways across levels. A limitation of this framework is nevertheless its exclusive focus on institutional dynamics, thus its neglecting of the technical dimension of innovations, which, in the opinion of the authors of this paper, constitutes a core part of innovations in spatial planning and urban governance. The transitions to new approaches to urban rehabilitation include both an institutional and a technical dimension, that are worthy of consideration.

Next section will also show how the framework developed by Healey et al. can be included within a more general framework dealing with socio-technical innovations, which can be used to explain innovation dynamics as well as to identify catalysts and barriers for change.

### 3 A MULTI-LEVEL PERSPECTIVE ON INNOVATION

This section deals with the description of a framework known as Multi-Level Perspective for the analysis of innovations in socio-technical systems, which the authors maintain can be usefully applied to analyse innovation dynamics in the area of urban rehabilitation.

This framework has been developed in the broad field of innovation studies, on the basis of insights from evolutionary economics – in particular the concepts of regimes, technological trajectories, path dependency and niches (Nelson and Winter, 1977, 1982) – from sociology of technology – in particular the idea that technological innovations are socially constructed through interactions between engineers, firms, policy makers and consumers (Bijker et al., 1987; Hughes, 1987; Bijker, 1997) – and from neo-institutional theory – in particular the idea that actors do not act in a vacuum but are embedded in deep-structural rules, shared beliefs and norms that guide their perceptions and actions (Giddens, 1984). It addresses the study of innovations at the level of socio-technical systems, i.e. a system encompassing not only its technological dimension but also changes in user practices and cultural meanings, institutional structures, policy, markets, scientific knowledge and infrastructures (Kemp et al., 1998; Elzen et al., 2004; Geels, 2004). In these systems transitions are considered as co-evolutionary processes, which involve many actors and social groups and take place through complex dynamics among them.

The field of urban rehabilitation can be considered a socio-technical system; its technical dimension is made of different types of planning instruments at different scales (including strategic plans and programmes, regeneration initiatives, ...). Innovations in the technical tools used to develop rehabilitation

interventions interact with user practices and cultural meanings (how local communities frame rehabilitation interventions, which involvement is required from them in the development of such interventions, ...), institutional structures (which governance frameworks can enable new regeneration plans to be developed and carried out, how they interact with existing government structures, ...), policy (which regulatory, normative and strategic actions are developed to orient territorial transformations), markets (how private firms can be partners of the regeneration initiatives, ...), scientific and technical knowledge (which skills and competencies professionals involved in plan making have and how they can develop new scientific and technical competencies required by innovative rehabilitation interventions) and infrastructures (how changes at neighbourhood level interact with infrastructural networks at the urban scale e.g. in terms of utilities' connection, mobility, etc.).

The MLP specifically elaborates a framework to address transitions in socio-technical systems emphasising a co-evolutionary and non linear approach (Rip and Kemp, 1998; Geels, 2002, 2005). That framework distinguishes three levels at which and across which change dynamics take place during a transition.

The lower level is the level of niches, which act as “incubation rooms” for radical novelties and protect them from normal market selection (Schot, 1998). Niches may be R&D laboratories, small market niches whose users have special demands (e.g. the military) or subsidised demonstration projects (some area-based integrated initiatives mentioned in section 1 fall in this category). The literature on strategic niche management usually identifies three important niche-internal processes (see e.g. Kemp et al. 1998; Hoogma et al., 2002). In the first place, niches provide location for learning processes to happen in relation to various dimensions: technological components, organizational issues, market demand, user behaviour, infrastructure requirements, policy instruments, symbolic and cultural meanings, scientific and technical knowledge. Learning takes place through cycles of actions (experimentations), sensemaking and adjustment of cognitive frames like in the enactment-selection-retention model proposed by Weick (1995). According to this model, actors first do something in the world on the basis of existing cognitive frames, then they interpret outcomes of actions, and finally retain meaningful data within cognitive frames through data accumulation or frame alteration. Learning of this type thus happens during co-construction of niche-innovation experiments and is socially developed among different actors involved (Raven and Geels, 2010). Secondly, niches provide the locus for the articulation of expectations or visions, which give direction to internal innovation activities and to learning processes. Finally, niches are the places where social networks are built and strengthened to expand the social and resource base of niche-innovations and to increase their legitimacy (Kemp et al. 1998; Hoogma et al., 2002).

The meso level in MLP is the so-called “socio-technical regime”. This concept builds on Nelson and Winter’s notion of technological regime (Nelson and Winter, 1982), that refers to cognitive routines, beliefs, norms and heuristics shared by engineers and designers in a technical community. It is also similar to the concept of “technological paradigm” used by Dosi (1982) to explain why technological development is mainly channelled along technological trajectories through incremental innovations. In socio-technical regimes, the deep-structural rules that coordinate and guide actors’ perceptions and actions in a Giddensian manner (Giddens, 1984) do not belong to engineers only, but they also shape perceptions and actions of other social groups like users, policy makers, civil society, scientists, capital banks, public authorities, etc. In MLP the notion of regime thus introduces a structuralist element in the perspective, which is used to explain several lock-in and path dependence mechanisms of development trajectories (Geels, 2004). Because of the regimes, changes still occur, but they proceed almost predictably in certain directions, giving rise to stable trajectories. This also explains the dynamic stability of socio-technical systems.

The macro-level is then called “socio-technical landscape”. It represents the wider exogenous context, which influences niche and regime dynamics. It refers to several aspects like macro-economic trends, deep cultural patterns, macro-political development, etc., which may include physical aspects influencing the socio-technical system like physical infrastructure or smart grid development (Rip and Kemp, 1998). The socio-technical landscape represents the greatest degree of structuration, which is beyond the control of individual actors.

The core point made by MLP is that innovations in socio-technical systems come about through the interplay between dynamics at multiple levels. Figure 3 provides a description of the dynamics of each level and the way they interact dynamically in the development of socio-technical transitions. Although

each transition pathway is unique, MLP identifies key steps in the dynamic interaction among levels, which can explain transitions.

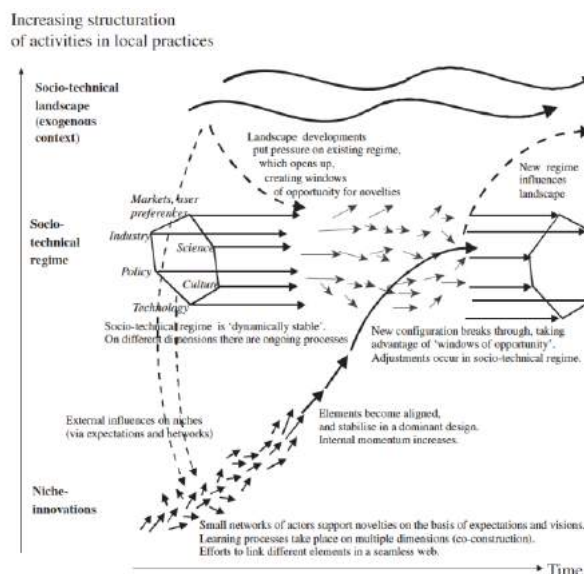


Figure 3. Dynamics of socio-technical transition according to MLP (source: Geels and Schot, 2007).

After a stage of experimentations of different designs in niches, which may be externally influenced by the meso- or by the macro-level through expectations and size of support networks (Geels and Schot, 2007), niche innovations may at some point build internal momentum, as rules and user preferences become stabilized in a dominant design. At this point, if “windows of opportunity” are opened up at the regime level thanks to pressures put by landscape development, new configurations emerging from niches may break through (Geels, 2002). This may create changes in the socio-technical regime, which may eventually influence landscape development. On the other hand, failures in transitions may occur when niche-innovations fail to build sufficient momentum or suffer setbacks, or when windows of opportunities for niche innovations do not materialise due to insufficient tension in existing regimes.

With this framework, the MLP thus tries to explain transitions in socio-technical systems doing away with simple causality and linear explanations. It employs a co-evolutionary and systemic approach based on the acknowledgement of processes on multiple dimensions, which link up and reinforce each other in a circular causality. Secondly, the MLP emphasises the importance of agency, as experimentations, trajectories and multi-level alignments are all enacted by different actors from different fields (market, industry, science, policy, culture, technology). In this way, the MLP is able to deal with the core analytical puzzle of transitions, namely the oscillation between stability (due to several lock-in and resistance mechanisms) and change. At the same time, it succeeds in identifying links among apparently disjointed dynamics happening at different levels, ranging from the micro-level where radical alternatives are developed and tried by pioneers, social movements and other actors outside the existing regime and landscape levels. One limitation for the application of this model to the field of urban rehabilitation is the under-theorization of the institutional and governance dynamics in the transitions. The six pillars highlighted in the socio-technical regime encompass markets/user preferences, industry, policy, technology, culture, science; thus the institutional and governance dimension of innovation is somehow restricted within the policy dimension. Because of this, the authors of this paper propose to enrich this model by adding a specific institutional/governance pillar, whose dynamics and specificities can be understood on the basis of the literature on innovation in urban governance discussed in section 2. The revised framework is shown in Figure 4.

The MLP framework has so far been applied to several fields, including water supply and sanitation (Geels, 2005), energy (Verbong and Geels, 2007), transportation (Geels, 2012), organic food and sustainable housing (Smith, 2007), urban infrastructures (Maassen, 2012). More recently the MLP has been applied to urban studies (Hodson and Marvin, 2010, 2012; Coenen and Truffer, 2012; Hansen and Coenen, 2015), in the attempt to highlight the influence of spatial dimensions and place specificities in sustainability transitions. These studies thus investigate transitions at the level of the city.

This paper proposes an application of a revised MLP framework to the field of urban studies as well, focusing on innovation in the area of urban rehabilitation.

## 4 THE TWISTED PATHS OF INNOVATION IN REHABILITATION INITIATIVES FOR DEPRIVED NEIGHBOURHOODS IN APULIA REGION

### 4.1 A VARIETY OF DISPERSED (AND MISSED) INITIATIVES

In Italy the initiatives for deprived neighbourhoods have developed along with the reduction of welfare and social services, the persistent lack of a national urban policy and even of a national housing policy, after the decentralisation of this responsibility to the regional governments at the end of the 1990s (Padovani, 2011). State investment in housing has been progressively decreasing since the late 1970s, and the limited available public funds were channelled almost entirely towards the so-called “complex programmes”. These are new planning instruments that include a wide variety of area-based initiatives funded by the Ministry of Infrastructures through competitive bids among the cities, adopting different terminology, approaches and methods, which produced an archipelago of isolated, episodic, uncoordinated local experiences<sup>1</sup>. The feature that all these programmes share and that differentiates them from other European experiences is that these new planning instruments with strong predominance of the physical aspects on social, economic, and cultural ones.

Thus, only partial convergences can be identified between such national programmes and the initiatives launched by the European Union: Urban Pilot Project (1990-1997) and URBAN programmes (1994-2000). Indeed, the prevalence of physical actions characterizes also the implementation of the URBAN Community Initiative in Italy<sup>2</sup>. The term “integrated action” has been interpreted in very different ways during the experimentation both of the “complex programmes” (Cremaschi, 2001; Padovani, 2002), and the URBAN Community Initiative (Tedesco, 2005). Many regional and local governments still show difficulty to promote integrated actions that move beyond the aims, methods, and achievement of urban renewal, considered as a process of essentially (more or less thorough) physical change (Couch, 1990, 2). The ability to develop new capacities for introducing integrated actions into the ordinary course of events appears limited (Lingua, 2007; Palermo and Ponzini, 2015).

Notwithstanding this, literature shows that URBAN led to significant results in terms of governance experiences and learning processes in the involved Italian cities (Frank et al., 2006), in line with the general trend of a more relevant impact on the Southern European countries lacking of long-standing national urban regeneration policies (Atkinson and Zimmermann, 2016). But the explicit objectives of such initiative, i.e. to promote innovative area-based strategies and reinforce and spread knowledge and experience greater research insight.

Before 2005 the Apulia regional government had never developed neither an urban rehabilitation initiative nor a programme for public housing. Some municipalities had experienced a number of area-based and integrated programmes promoted by the European Commission and the national government.

The Urban Pilot Projects and the two URBAN Community Initiatives involved a limited number of municipalities, mainly provincial capitals<sup>3</sup>. The national programmes initially involved few municipalities, again mostly provincial capitals. Later, in 2002, the Contratti di Quartiere II (Neighbourhood Contracts) involved 15 medium-small towns and only two provincial capitals (Barletta and Lecce). But this initiative started only in 2008. The implementation of all these programmes, which was entrusted jointly to

1 Programmi integrati di intervento and Programmi di riqualificazione urbana (1992), Programmi di Recupero Urbano (1993), Contratti di quartiere I (1997), Contratti di quartiere II (2002). On the evolution of urban renewal policies in Italy see Governa and Saccomanni (2004).

2 Physical/environmental regeneration accounted for 62 per cent of expenditure in Italy, as opposed to just 10 per cent in Denmark. Expenditure on employment and entrepreneurship ranged from 52 per cent in the Netherlands to just 18 per cent in Italy (Carpenter, 2006).

3 Brindisi was the only municipality that benefitted from the Urban Pilot Programme (Second Phase, 1997). URBAN I (1994-1999) was implemented in Bari, Foggia and Lecce, URBAN II (2000-2006) in Mola di Bari and Taranto. In Bitonto and Brindisi was developed Urban Italia, a special national initiative that funded the twenty municipalities that had been ranked after the ten admitted to the funding of URBAN II.

municipalities, regional government and the Ministry for Infrastructures, is varied. Some never started, others are still under way, and these include also initiatives that were funded in the early 1990s. Moreover, like in most parts of Italy and with the exception of some well-documented local experiences (Palermo, 2001; Governa and Saccomanni, 2004), these programmes were seen as a way to relax the rigidity of the traditional master plans. Thus, the judgment of failure of these programmes in Apulia does not seem to be too severe.

## 4.2 THE NEW REGIONAL INITIATIVE

The European integrated urban rehabilitation programmes and national “complex programmes” depicted above represent the regional background knowledge for the regional area-based integrated initiative launched in Apulia in 2006.

This initiative, defined as “Integrated programmes for the rehabilitation of peripheral neighbourhoods” (hereinafter referred to as the Italian acronym “PIRP”), aimed at spreading rehabilitation practices in deprived urban neighbourhoods through an area-based and integrated approach. It was an ambitious initiative in a context characterized by modest experience in this field, and a traditional regional housing policy incapable of meeting the needs of the most vulnerable social classes and assuring the right to housing, interpreted as the right to live somewhere in “security, peace and dignity”<sup>1</sup>. Funded with 93 million euros, the PIRP was part of a large regional programme for public housing<sup>2</sup>. This was a policy objective of great importance for the left wing government set up in 2005, for the first time (surprisingly) ruling Apulia Region after decades of centre and right governments, and strongly determined to radically change inter alia the spatial planning and urban governance practices that had consolidated for decades in the region. The term “peripheral” does not indicate the neighbourhoods’ topographic position and physical distance from the city centre, but their condition of deprivation and marginalisation. This is represented through significant indicators of disadvantaged socio-economic situation as well as the shortage or degradation of infrastructure and services. Therefore, the historic centres in such conditions were eligible areas.

Municipalities were to base their PIRP proposals on an idea of neighbourhood’s regeneration aimed at creating (or recreating) place attachment and social space. The regional call required that the programmes be developed with the active participation of the inhabitants, in order to meet people needs, desires and expectations, and improve their well-being. Integration was interpreted both in the physical dimension, in order to avoid urban mono-functionality and segregation, and in the socio-economic dimension, to activate effective actions against social exclusion. Finally, the PIRP call for proposals asked for projects that demonstrated to save environmental resources (energy, water and soil), reuse abandoned areas, reclaim polluted sites, restore soil permeability, enlarge and improve pedestrian and green areas in order to create “kid friendly neighbourhoods”.

The PIRP initiative encouraged 122 municipalities to experience 129 area-based integrated initiatives<sup>3</sup>. This high number of programmes was the result of intense supportive activities. The regional government directed, encouraged and accompanied local initiatives’ design through the promotion of thematic seminars and exchange of experiences on programme’s innovative key issues and an electronic forum aiming not only to provide answers to specific questions but also to foster the exchange of ideas and experiences among the participants. It defined in detail the evaluation criteria for selecting the initiatives in order to avoid the trivialisation and distortion of the innovative features of the programme. Precise points were assigned to each aspect of the programme, stressing those that were supposed to be more innovative in the local contexts (Tedesco, 2009). Notwithstanding this, both the design and implementation of local programmes show relevant differences among the various involved municipalities which deserve examination.

1 According to the definition of the UN Committee on Economic, Social and Cultural Rights.

2 This included also interventions for the rehabilitation of public housing, rehabilitation of vacant dwellings for rental housing, and social housing allowances, for a total of 207 million euros.

3 Provincial capital cities could apply for two programs.



### 4.3 GRASPING THE MULTI-DIRECTIONAL DYNAMICS OF INNOVATION DIFFUSION

This section uses the modified MLP framework in order to investigate the different performances of design and implementation of PIRPs in the light of the multi-directional dynamics of innovation diffusion linking this programme to the EU and national area-based and integrated initiatives (see figure 4). MLP will help to understand not only whether and to what extent these experiences left trace in the region, but also which kind of innovation has penetrated into the local contexts, if those directly involved in innovative programmes show differences from contexts that were not implicated, and what can be considered the major catalysts for innovation.

Innovation was the key-word for Urban Pilot Projects and an explicit goal included in the launching of URBAN Programme (CEC, 2002). In the intention of the European Commission both these initiatives had a clear demonstrative character. This implies that the URBAN 'core approach' should be 'transferable' from one context to another. These initiatives can thus be considered niche-innovations with respect to the design and implementation of the PIRP programme in Apulia region. They give direction to two flows of learning processes: vertical flows, which involve the different levels of government implicated in the initiative, and horizontal flows, which involve different actors at each level.

On the other hand, national "complex programmes" contributed, together with connected changes in national norms and regulations that had to be directly applied or transposed by the regional legislation, to strengthen the socio-technical regime that shape perceptions and actions of regional and local institutions and social groups. In Apulia, a region characterised by 'sclerotic' urban planning practices and a powerful construction sector, the local actors deeply involved in entrenched modes of urban governance (politicians, public and private planners, architects, engineers, construction companies) had perceived these programmes in an opportunistic way: as an additional source of funds not to be missed and an chance to force urban planning rules to make extra-profits.

The PIRP initiative was entrusted to the regional social housing department. This had managed various phases of the national "complex programmes" implemented in the Apulia municipalities, while had been completely excluded from EU initiatives. Their approach was based on the consideration of the private sector as largely coincident with power groups linked to the construction sector, while ignoring the involvement of local organizations, cultural, social and environmental associations and, above all, the inhabitants of deprived neighbourhoods. In order to remove probable obstacles to innovation due to the one-sided representation of private sector as well as to lock-in and resistance mechanisms typically affecting public organisations, the deputy president responsible for social housing enlarged the decision arena. She involved in the design of the PIRP objectives and call for proposals, the regional tenants' unions, social housing agencies, representatives of the national association of municipalities, and the most important environmental and welfare associations.

As a result, the PIRP was the first initiative in Apulia that involved extensively and consciously in area-based integrated programmes, alongside the municipal officials and the actors traditionally active in urban development, local organizations, cultural, social and environmental associations and, above all, the inhabitants of deprived neighbourhoods.

In the design of PIRP two learning flows triggered by the URBAN niche-innovation influenced the decisions at the regional level: one comes from the EU level and the other from the local level. On the one hand, the URBAN approach inspired an interpretation of area-based and integrated approach emphasising public participation and social-economic dimensions over the physical ones. On the other hand, what had been learned by the URBAN initiative implementation at the local level gave suggestions for improving the PIRP programme. In particular, in order to avoid opportunistic criteria guiding the choice of target areas, i.e. the selection of the most central and visible rather than the most disadvantaged ones, more than 30% of the PIRPs evaluation score (60/170) was assigned to area-based indicators of socio-economic and physical degradation and deprivation.

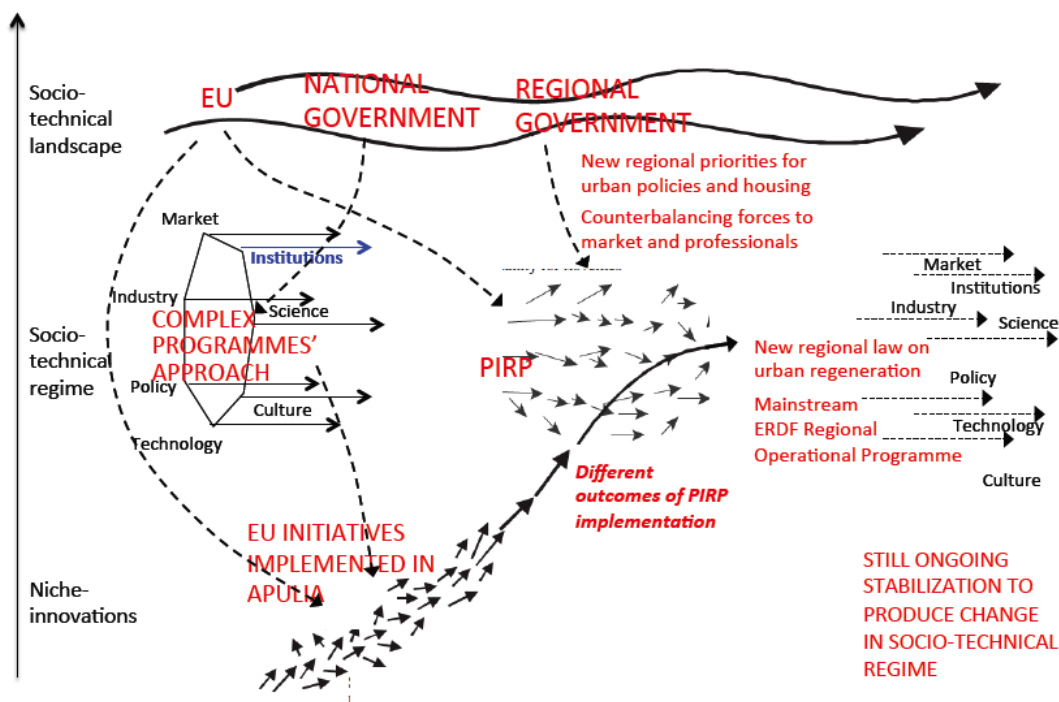


Figure 4. Dynamics of socio-technical transition in the case-study (modified Geels and Schot's MLP framework)

Moreover, a perverse effect of the implementation of the URBAN programme in Apulia historical centres was the rise in real estate values and the consequent eviction of inhabitants (Palermo and Savoldi, 2002). In order to prevent these undesirable processes, the regional programme included a specific financial support in favour of low-income inhabitants of the historical areas to be used to restore their houses or in favour of owners wishing to rent the vacant houses to low-income categories for 8-15 years. Such a focus on the protection of residential functions avoided the economic-functional specialization and consequent morphological segregation that impoverish many historical areas, and that make these areas renewed as neighbourhoods not for daily living but to be visited.

The examination of the PIRP implementation in the capital cities that experimented the URBAN programme highlights the failures in transitions that characterise such niche-innovation. The URBAN initiative was unable to build sufficient momentum to spread innovation within the municipalities that had been involved in the programme. Thus, one could expect some horizontal learning flows coming from the success of these experiences, at least in terms of organizational capacity and process innovation. On the contrary, these cities had great difficulty in starting and implementing the proposed programmes.

A deeper investigation of these PIRPs reveals that the existing socio-technical regimes dominating the major cities were an obstacle for innovation. The huge participation of construction companies, sometime competing for the leadership of the programme, some other assuming the guidance, caused a slowdown and recently even a stop in the implementation. Cognitive routines, beliefs, norms and heuristics shared by technical actors in unity with economic interests, supported or in any case not opposed by the local political power, gave rise to implementation processes that tended to replicate the opportunistic attitude assumed in the "complex programmes" experience. There is more. A landscape level event, namely the economic and financial crisis started in 2008 and still on going in the local housing market, has heavily affected these initiatives, to the point of vanishing some of them.

The systematic inquiry into the implementation of the PIRP programme brings to the fore that small and medium-sized towns were more able to grasp the potential of key innovations activated by the regional government. In most of these contexts we observe product innovation, i.e. the satisfaction of inhabitants needs; a process innovation, i.e. changes in social relations linked to governance issues; an empowerment dimension, i.e. an increase in the socio-political capability and access to resources by neighbourhood communities (Moulaert et al., 2005). The greater 'proximity' and more dense interactions between inhabitants and decision-makers allowed these communities to make their voice heard, to become an active part of the process, and to exercise control over the implementation of the programmes,

up to the technical construction site. This stimulated also engineers and architects to innovate their techniques, get out of their professional routines, and find low cost technical solutions aiming to help inhabitants to manage and maintain facilities and common areas. Contrary to what one might expect, the small towns were much more dynamic also in PIRP implementation. The smaller and simpler organizational structure avoided the problems of lack of coordination and cooperation that occurred in larger cities when the integrated approach made it necessary to combine skills and financial sources from various municipal departments.

The political discourse, which for the first time in Apulia attributed centrality to the rehabilitation of deprived neighbourhoods in connection to the right of the city, found greater spaces for penetration in contexts in small and medium towns. The main reasons for this surprising outcome seem to be the robustness of socio-political ties and the lack of strong economic interests able to direct rules, resources and ideas to their advantage (Healey, 2006) and to oppose resistance to change.

The regional government considered the PIRP programme as an important, extensive and long cycle of experimentations, which triggered learning processes that were not to dissipate, and that had to be exchanged with other experiences and helped to steadily penetrate into everyday practices. To this purpose various initiatives were undertaken: inter alia the approval of a regional law on urban regeneration (No. 21 of 2008), and the adoption of the approach and devices provided by this law in the mainstream ERDF Regional Operational Programme for 2007-2013, and then 2014-2020, as well as in regulations and guidelines that direct ordinary regional and local planning practices.

In developing these instruments, the regional government took into account both the positive and negative impacts of experimentation. Two aspects are worth mentioning for their importance in the Italian debate on area-based initiatives. In major cities, unlike in small towns, the choice of target areas was independent of any strategy to ensure the achievement of the overall objective of combating spatial inequalities and social exclusion in the most disadvantaged areas. Notwithstanding the high rank assigned to area-based degradation and deprivation indicators, interest groups succeeded in influencing the selection of target areas for the regional call for their own benefit. Thus, the regional law No. 21 of 2008 requires the selection of areas to be based on a city-wide "urban regeneration strategy", designed with the active citizens participation and approved by the City Council. The strategy must be based on a detailed examination of the conditions of deprivation and degradation in the different city districts, and must condition the choice of neighbourhoods where regeneration actions are to be developed. The approval of such strategy came to be a prerequisite for applying the priority axis for "urban development" included into Apulia ERDF Operational Programme 2007-2013 (320 million euro), which was entirely devoted to urban regeneration. This did not completely eradicate opportunistic attitudes, but induced municipal officials and local communities to understand that their old land use plans had deeper limitations than rigidity, and opened spaces for civic participation and increased awareness about urban degradation and deprivation problems. This approach is tending to stabilize at the regional level: the approval of the "urban regeneration strategy" according with law No. 21/2008 is an essential prerequisite for applying for funds under the 2014-2020 "urban development" priority axis, according to the call for proposals presented in 2017 by the regional government for partnership agreement. This is a way to obviate the excessive incrementalism characterising the area-based approach not only in Apulia region (Governa and Saccomanni, 2004)

## 5 CONCLUDING REMARKS

This paper has analysed innovation dynamics in urban rehabilitation of deprived neighbourhoods by combining existing frameworks developed in the field of social innovation and sociological institutionalism with the MLP framework developed in innovation studies, so far applied to several fields including urban infrastructures, food and housing, and sustainability.

The application of a revised MLP framework to the area of urban rehabilitation revealed two main advantages for the analysis of innovations compared to established models. First of all, it allowed to broaden the range of actors and processes involved in the innovation process as well as the levels to which they belong and act in transformative practice. This result was particularly important in the area of urban rehabilitation, where European, national, regional and local levels interact and influence each-others. Secondly, it helped to overcome a perception of innovation as proceeding from bottom-up,

grassroots practices to subvert higher level structures and governance systems. In this respect, the multi-level perspective employed in this paper showed the nested hierarchy of processes and the bi-directional influencing dynamics of change. Furthermore, this paper revealed the influence of place specificities on innovation dynamics and demonstrated the importance of investigating the specific places, where niche practices find barriers for their penetration, and the places where innovation unfolds.

The use of the above-mentioned analytical framework strengthened the investigation of the complex socio-technical processes of design and implementation of area-based and integrated actions for deprived neighbourhoods, and led to a wider conceptualization of drivers and barriers for innovation and change in such initiatives.

## BIBLIOGRAPHIC REFERENCES

- Atkinson, R. (2000). The hidden costs of gentrification, displacement in Central London. *Journal of Housing and the Built Environment*, 15, 307-326.
- Atkinson, R. (2001). The Emerging 'Urban Agenda' and the European Spatial Development Perspective: Towards an EU Urban Policy? *European Planning Studies*, 9 (3), 385-406.
- Atkinson, R., & Zimmermann, K. (2016). Cohesion policies and cities: an ambivalent relationship. In S. Piattoni, & L. Polverari (eds.) *Handbook on Cohesion Policy in the EU*. Cheltenham, UK: Edward Elgar, 475 -490.
- Barca, F. (2009) *An Agenda for a Reformed Cohesion Policy. A place-based approach to meeting European Union challenges and expectations*. Independent Report prepared at the request of Danuta Hübner, Commissioner for Regional Policy.
- Berg, L. van den, Braun, E., & Meer, J. van den (eds.) (1998). *National Urban Policies in the European Union: Responses to Urban Issues in the Fifteen Member States*. Aldershot: Ashgate. Bijker, W.E. (1997). *Of bicycles, bakelites, and bulbs: Toward a theory of sociotechnical change*. Cambridge, MA: The MIT Press.
- Bijker, W.E., Hughes, T.P., & Pinch, T.J. (eds.) (1987). *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*. Cambridge, MA: The MIT Press.
- Bryson, J. M., & Crosby, B. C. (1992). *Leadership for the Common Good: Tackling Public Problems in a Shared-Power World*. San Francisco, CA: Jossey Bass.
- Carpenter, J. (2006). Addressing Europe's Urban Challenges: Lessons from the EU URBAN Community Initiative. *Urban Studies*, 43(12), 2145–2162.
- Cars, G., Healey, P., Madanipour, A., & de Magalhães, C. (eds.) (2002). *Urban Governance, Institutional Capacity and Social Milieux*. Aldershot: Ashgate.
- CEC (2002) *Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the regions. The programming of the Structural Funds 2000-2006: an initial assessment of the Urban Initiative (COM(2002) 308 final)*.
- Christiaens, E., Moolaert, F., & Bosmans, B. (2007). The end of social innovation in urban development strategies?. The case of Antwerp and the Neighbourhood Development Association 'Bom'. *European Urban and Regional Studies*, 14, 238-251.
- Coaffee, J., & Healey, P. (2003). 'My voice: My place': Tracking transformations in urban governance. *Urban Studies*, 40(10), 1979-1999.
- Cochrane, A. (2007). *Understanding Urban Policy. A Critical Approach*. Oxford, UK: Blackwell.
- Coenen, L., & Truffer, B. (2012). Places and spaces of sustainability transitions: Geographical contributions to an emerging research and policy field. *European Planning Studies*, 20(3), 367-374.
- Colantonio, A., & Dixon, T. (2010). *Urban regeneration and social sustainability: best practice from European cities*. Oxford, UK: Wiley-Blackwell.
- Colenutt, R., & Cutten, A. (1994). Community empowerment in vogue or in vain? *Local Economy*, 9(3), 236– 250. Couch, C., Sykes, O., & Börstinghaus, 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.
- Cremonesi, M. (ed.) (2001). *I programmi integrati. Opportunità e vincoli*. Roma: Formez-Donzelli.
- Dosi, G. (1982). Technological paradigms and technological trajectories: A suggested interpretation of the determinants and directions of technical change. *Research Policy*, 6, 147-162.

- Dryberg, T.P. (1997). *The Circular Structure of Power*. London: Verso.
- Dühr, S., Colomb, C., & Nadin, V. (2010). *European Spatial Planning and Territorial Cooperation*. London and New York: Routledge.
- Elzen, B., Geels, F.W., & Green, K. (eds.) (2004). *System Innovation and the Transition to Sustainability: Theory, Evidence and Policy*. Cheltenham: Edward Elgar.
- EU (2015). *Integrated regeneration of deprived areas and the new cohesion policy approach An URBACT contribution to the European Urban Agenda*.
- Fainstein, S. (2000). New directions in planning theory. *Urban Affairs Review*, 34, 451-476.
- Frank, S., Holm, A., Kreinsen, H., & Birkholz, T. (2006). *The European URBAN experience—seen from the academic perspective*. Study Report. Study project funded by the URBACT programme. Berlin: Humboldt Study Team.
- Geels, F.W. (2002). Technological transitions as evolutionary reconfiguration processes: A multi level perspective and a case study. *Research Policy*, 31, 1257-1274.
- Geels, F.W. (2004). From sectoral systems of innovation to socio-technical systems: Insights about dynamics and change from sociology and institutional theory. *Research Policy*, 33 (6–7), 897–920.
- Geels, F.W. (2005). Co-evolution of technology and society: The transition in water supply and personal hygiene in the Netherlands (1850-1930) – a case study in multi-level perspective, *Technology in Society*, 27, 363-397.
- Geels, F.W. (2012). A socio-technical analysis of low-carbon transitions: Introducing the multi-level perspective into transport studies. *Journal of Transport Geography*, 24, 471-482.
- Geels, F.W., & Schot, J. (2007). Typology of sociotechnical transition pathways. *Research Policy*, 36, 399-417.
- Giddens, A. (1984). *The Constitution of Society: Outline of the Theory of Structuration*, Berkeley and Los Angeles: University of California Press.
- Gonzales, S., & Healey, P. (2005). A sociological Institutional Approach to the Study of Innovation in Governance Capacity. *Urban Studies*, 42(11), 2055-2069.
- Governa, F., & Saccomanni, S. (2004). From Urban renewal to local development. New conceptions and governance practices in the Italian peripheries. *Planning Theory & Practice*, 5(3), 327-348.
- Gualini, E. (2001). *Planning and the Intelligence of Institutions*. Aldershot: Ashgate.
- Hansen, T., & Coenen, L. (2015), The geography of sustainability transitions: Review, synthesis and reflections on an emergent research field. *Environmental Innovation and Societal Transitions*, 17, 92-109.
- Harvey, D. (2012). *Rebel Cities: from the right to the city to the urban revolution*. London, UK: Verso.
- Healey, P. (1997). *Collaborative Planning: Shaping Places in Fragmented Societies*. London: Macmillan.
- Healey, P. (1999). Institutional analysis, communicative planning and shaping places, *Journal of Planning and Environment Research*, 19(2), 111-122.
- Healey, P. (2004), Creativity and Urban Governance. *Policy Studies*, 25, 87-102
- Healey, P. (2006), Transforming governance: Challenges of institutional adaptation and a new politics of space. *European Planning Studies*, 14(3), 299-320.
- Healey, P. (2007), The new institutionalism and the transformative goals of planning. In N. Verma (ed.) *Institutions and Planning: Current research in Urban and Regional Studies*. Oxford: Elsevier, 61-87.
- Hodson, M., & Marvin, S. (2010), Can cities shape socio-technical transitions and how would we know if they were?. *Research Policy*, 39(4), 477-485.
- Hodson, M., & Marvin, S. (2012). Mediating Low-Carbon Urban Transitions? Forms of Organization, Knowledge and Action. *European Planning Studies*, 20(3), 421-439.
- Hoogma, R., Kemp, R., Schot, J., & Truffer, B. (2002). *Experimenting for sustainable transport: The approach of strategic niche management*. London and New York: Spon Press.
- Hughes, T.P. (1987). The evolution of large technological systems. In W. E. Bijker, T.P. Hughes, & T. Pinch (eds.) *The social construction of technological systems*. Cambridge, MA: MIT Press, 51-82.
- Imrie, R. F., & Thomas, H. (1994). The new partnership: the local state and the property development industry. In R. Ball, & C. Pratt (eds.) *Industrial property — policy and economic development*. London, UK: Routledge, 130–149.

- Kemp, R., Schot, J., & Hoogma, R. (1998). Regime shifts to sustainability through processes of niche formation: The approach of strategic niche management. *Technology Analysis and Strategic Management*, 10(2), 175-196.
- Lingua, V. (2007). *Riqualificazione urbana alla prova: Forme di innovazione nei programmi complessi dal quartiere all'area vasta*. Firenze: Alinea.
- Maassen, A. (2012). Heterogeneity of lock-in and the role of strategic technological interventions in urban infrastructural transformations. *European Planning Studies*, 20(3), 441-460.
- Moulaert, F., MacCallum, D., Mehmood, A., & Hamdouch, A. (eds.) (2013). *The international Handbook on Social Innovation. Collective Action, Social Learning and Transdisciplinary Research*. Cheltenham, UK: Edward Elgar.
- Moulaert, F., Martinelli, F., Gonzalez, S., & Swyngedouw, E. (2007). Introduction: Social innovation and governance in European cities. *Urban development between path dependency and radical innovation. European Urban and Regional Studies*, 14(3), 195-209.
- Moulaert, F., Martinelli, F., Swyngedouw, E., & Gonzalez, S. (eds.) (2010). *Can Neighbourhoods save the city? Community development and social innovation*. Abingdon and New York: Routledge.
- Nelson, R.R., & Winter, S.G. (1977). In search of useful theory of innovation. *Research Policy*, 6(1), 36-76.
- Nelson, R.R., & Winter, S.G. (1982). *An Evolutionary Theory of Economic Change*. Cambridge, MA: Cambridge University Press.
- Novy, A., & Hammer, E. (2007). Radical Innovation in the Era of Liberal Governance: The Case of Vienna. *European Urban and Regional Studies*, 14, 210-222.
- Pace, F. (2015). Le pratiche di rigenerazione in un sistema di pianificazione in rapido cambiamento: Il caso della Puglia. In R. D'Onofrio, & M. Talia (eds.) (2015). *La rigenerazione urbana alla prova*. Milano: FrancoAngeli.
- Padovani L. (2002). Il concetto di azione integrata. In P. C. Palermo (ed.) (2002), *Il programma Urban e l'innovazione delle politiche urbane. Il senso dell'esperienza: interpretazioni e proposte*. Milano: Franco Angeli, 66-87.
- Padovani, L. (2011). Politiche della casa in Italia, tra globalizzazione, un federalismo incerto e pratiche locali. Paper presented at the Conference "SIU Abitare l'Italia. Territori Economie Diseguaglianze", Turin 24-26 march.
- Palermo, P. C., & Savoldi, P. (eds) (2002). *Il programma Urban e l'innovazione delle politiche urbane. Esperienze locali: contesti, programmi, azioni*. Milano: FrancoAngeli.
- Palermo, P.C. (2001). *Prove d'innovazione. Nuove forme ed esperienze di governo del territorio in Italia*. Milano: FrancoAngeli.
- Parkinson, M. (1998). *Combating social exclusion; lessons from area-based programmes in Europe*. Bristol, UK: the Policy press.
- Porter, L., & Shaw, K. (eds.) (2009). *Whose Urban Renaissance? An international comparison of urban regeneration strategies*. New York: Routledge.
- Raven, R.P.J.M., & Geels, F.W. (2010). Socio-cognitive evolution in niche development: Comparative analysis of biogas development in Denmark and the Netherlands (1973-2004), *Technovation*, 30(2), 87-99.
- Rip A., & Kemp R. (1998). Technological Change. In S. Rayner & E.L. Malone (eds.) *Human choice and climate change. Resources and technology*. Columbus, Ohio: Battelle Press, 327--399.
- Roberts P. (2012). The evolution, definition and purpose of urban regeneration. In P. Roberts, H. Sykes, & . Granger (eds.), *Urban Regeneration*. London, UK: Sage.
- Rossi, U., & Vanolo, A. (2013). Regenerating what? The politics and geographies of actually existing regeneration. In M.E. Leary and J. McCarthy (eds.) *The Routledge Companion to Urban Regeneration*. London, UK: Routledge, 159-167.
- Saccomani, S. (2004). Programmi complessi: una rilettura delle esperienze. In: Regione Piemonte (ed.), *Valutare i programmi complessi*. Savigliano: L'artistica, 15-38.
- Schot, J.W. (1998). The usefulness of evolutionary models for explaining innovation. The case of the Netherlands in the nineteenth century. *History of Technology*, 14, 173-200.
- Seixas, J., & Albet, A. (eds.) (2012). *Urban Governance in Southern Europe*. Farnham, UK: Ashgate.
- Smith, A. (2007). Translating sustainabilities between green niches and socio-technical regimes. *Technology Analysis & Strategic Management*, 19(4), 427-450.

- Soja, E. W. (2009). The city and spatial justice. [La ville et la justice spatiale], justice spatiale [spatial justice] 1, September. <http://www.jssj.org>
- Subirats, J. (2016). Urban policies: towards new scenarios of innovation and governance. In Nello, O. and Mele, R. (eds.) *Cities in the 21st Century*. London and New York: Routledge.
- Swyngedouw, E., Moulaert, F., Rodriguez, A. (2002). Neoliberal Urbanization in Europe: Large-Scale Urban Development Projects and the New Urban Policy, *Antipode*, 34(3), 542-577.
- Tedesco C. (2005), *Una politica europea per la città? L'implementazione di Urban a Bari*, Bristol, Londra e Roma, Milano: FrancoAngeli.
- Tedesco, C. (2009) Innovation and 'resistance to change' in urban regeneration practices: A new area-based programme in southern Italy, *Journal of Urban Regeneration & Renewal*, 3(2), 128-140.
- Turok, I. (1992) Property-led urban regeneration: panacea or placebo? *Environment and Planning A*, 24(3), 361-379.
- Uitermark, J., & Loopmans, M. (2013). Urban renewal without displacement?. *Journal of Housing and the Built Environment*, 28, 157-166.
- Verbong, G., & Geels, F. (2007). The ongoing energy transition: lessons from a socio-technical, multi-level analysis of the Dutch electricity system (1960–2004). *Energy policy*, 35(2), 1025-1037.
- Vigar, G., Healey, P., Hull, A., & Davoudi, S. (2000). *Planning, Governance and Spatial Strategy in Britain*. London: Macmillan. Weick K.E. (1995). *Sensemaking in Organizations*, Thousand Oaks, CA: Sage Publications.

## **ID 1567 | INNOVATION MANAGEMENT TECHNOLOGY STANDARDS AS A TOOL FOR PARTICIPATORY STRATEGIES IN URBAN REGENERATION OF PREFABRICATED HOUSING ESTATES**

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### **1 INTRODUCTION**

The central goal of the project is to investigate the living environment of low quality in residential areas in the cities, which mutually need improvement and regeneration in the scope of future sustainable urban development. The most problematic questions are being raised during the last decades about the marginal and post-socialist prefabricated housing estates built during the 1950-80s in EU. However, the inhabitants as core users of these housing areas are not fully participating in the development initiatives for revitalization on one hand, and have not been given due attention by the city to express their needs and expectations on the other hand. The main documents which contextualize the research are EU Urban Agenda and, especially, the New Urban Agenda by United Nations Conference on Housing and Sustainable Urban Development (Habitat III), which give value to the citizens; recognize the importance and prioritize their participation in the city development, urban regeneration. The research is focused on the development of interoperable connections between urban environment of low liveability and the inhabitant through participation strategies, understanding the role of innovation (regenerative and participative) for efficient public participation. It is considered to narrow this focus to Poland as the case study country because Poland is one of the countries in Central Europe, which received post-socialist prefabricated large housing estates built between 1960 and 1990 with population of over 8 million people, flats in large housing estates are estimated as 35% of the overall number of dwellings in Poland.

In the context of the above documents by European Commission and Habitat III the research objectives are summarized in the following layers of the research: (a) prefabricated housing Estates and social housing policies; (b) development of public participation in urban development (regeneration of residential areas) in the framework of European Standards. These correlated layers are directed to achieve the main