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Towards a co-creative recapitalization of territorial systems

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ABSTRACT

In European and national policies it is by now evident that the approach to spatial issues favours "economic reasons" over "territorial reasons". The recent emphasis on "cities as drivers of development", although an improvement over previous programming periods, remains fully situated within this logic. The reasons for this economic imperative are somewhat comprehensible, as the EU struggles to respond to the deep economic crisis, with its territories more vulnerable than ever to the negative consequences of globalization as a consequence of the single market and monetary union.

It is however less easy to understand the fact that any consideration of "urban assets" and their management is equally overshadowed in both the rhetoric and the practice of European – and even more, national and regional – spatial programming, especially considering the effective contribution to an understanding of economic and financial dynamics and potentials.

The thesis here is that the dichotomy between economic and territorial logics can be overcome if the framework of analysis shifts from "management of territorial impacts" to the "co-design of territorial visions", as the two become intimately intertwined in an approach of "territorial innovation". This in turn shifts the reading of territorial assets from a mere accounting of static value to a recapitalization of local contexts as a function of their innovation potential, allowing for the dynamics of development to reach self-sustainability in both territorial and economic-financial terms while evolving in concert with global flows.

Prerequisite for this co-evolutionary, self-sustainable recapitalization of local settings is the consideration of the human, cultural, and social dimensions as integral components of territorial capital, together with the need for co-creative approaches to the planning, implementation, and management of digital and urban agendas, seen as inseparable more than simply interconnected.

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¹ Although the paper is the result of the joint work of the authors, L. De Bonis wrote sections 1, 3 and 7, E. Leanza section 2, J. Marsh section 4, F. Trapani section 5.

KEYWORDS

territorial capital, territorial innovation, co- creativity

1 INTRODUCTION

As position paper of the "Smart Cities and Planning in a Living Lab Perspective" (Imput 2012)² some of we presented a paper with the same title (Concilio & DeBonis, 2012), aimed at outlining first of all a viable framework for a planning approach to the topic of Smart Cities, situated at the intersection of the research on Smart Cities with the theory and practice of the so called Urban/Territorial Living Labs.

In the same year we also contributed to IFKAD-KCWS with a paper (De Bonis, Concilio, Marsh & Trapani, 2012) highlighting the need of a much more deeper integration between socio-economic action and spatial planning, through the co-creative approach of Urban/Territorial Living Labs, able to focus not only on merely sectorial ICT R&D issues but rather on the transversal problems of cities and territories (Marsh, 2008), in order to pursuit objectives of territorial cohesion and development, directly by socio-economic actors self-organized in "living lab" environments.

As further development of a reflection on the co-creative relationship between socio-economic sphere and urban planning we present here first of all some basic considerations about economic links among monetary policy, urbanization processes and spatial changes in a globalized urban economy, to take carefully into account in planning processes aimed at fostering urban smartness. To this end it appears both possible and necessary to elaborate stringent "urban financial statements" through the effective use of new technologies, as a kind of implementation of a digital agenda for "functional urban systems", able to provide georeferenced economic indicators about structure, value and performance of available and optional urban capital, and therefore capable to serve as a guide in future allocative processes.

Moreover, as the above considerations about urban economic trends lead inter-alia to recognize the fundamental role played in the urban/territorial systems dynamics by a multiplicity of "stakeholders" (i.e. holders of some stake of urban/territorial capital), interacting each other through distributed and generally uncoordinated decision-making, we outline a radically immanent view of spatial planning. Such a view is also able to serve as strong reference to connect and integrate, in a single digital guidance framework, on the one hand the "expert" information layers aimed at building the above "urban financial statements", and on the other the expressions ("images") of the myriad of interacting entities in the urban/territorial context, from which the visions can emerge, able to orient and polarize, together with the mentioned statements, the multiple processes of molecular interaction.

As a possible form of governance consistent with an immanent view of planning, we hereinafter identify a "social" model of urban and territorial innovation in Living Lab environment, able to overcome the by now hackneyed dichotomy between top-down and bottom-up approaches, in that it is scalable and adaptable to different, appropriate levels of competence, including the institutional ones.

Finally, we illustrate some interpretations, convergent but not necessarily coincident, of the nature and the role that the above kinds of Living Lab environments could play in the dynamics of urban and territorial development.

2. SMART CITY AS CAPITAL ALLOCATION INSTRUMENT

² Session of Input 2012, Cagliari, Italy 10-12 may 2012: <u>http://www.input2012.it/</u>.

The patterns of transformation of urban systems over the past decades seems to have been influenced by monetary policy, with global urbanization being fuelled, to a large extent, by low interest-rates environment prevailing at the international level.

A particularly mild approach in money supply over three decades has delayed a debate on the rationalization of urban capital stock accumulation, particularly in less competitive systems. These, thanks to the continuous expansion of financial markets and easy money, have benefited from a growing capacity to pile up substantial amounts of debt, before being confronted with the need to enforce fiscal correction policies aimed at ensuring the systems' financial long term sustainability and avoiding painful municipal debt restructuring.

As a result of these monetary policy trends, urban investment - normally having a Keynesian "pull" role to stabilize the economic cycle during recessions – has assumed a "push" pro-cyclical economic mission, with urbanization processes being considered as an economic modernization objective "in their own merit".

A further potentially important, but often unnoticed, spatial effect produced by loose monetary policies seems to be the following: in a monetary union (and overall in the globalized economy) interest rates determine an acceleration of factor mobility and resource transfers from urban systems characterized by relative low productivity and higher (risk-factored) cost of capital towards those system which are enjoying an (often allegedly) higher productivity, employment conditions and relative lower cost of capital (Leanza & Carbonaro, 2013).

As a result of the growing impact of globalization correct investment strategies, urban financial performance and appropriate funding of investment, play a relevant role as a constraint (or boost) factor in shaping cities. The economics of single projects/firms (and even production factors) will increasingly be assessed with reference to the overall competitive structure/trends and overall financial features of the systems to which they belong (Moretti, 2012).

In urban areas – considered as dense job systems according to OECD (2009) - the performance of the a) human capital factor is deeply bundled with other four types of interconnected productive factors, namely: b) natural resources; c) housing, productive, logistic and infrastructure assets; d) financial capital; as well as e) economically relevant "land and spatial factors".

Urban systems – intended as above - are therefore characterized by a multiplicity of active operators (families and individuals, but also public sector, private enterprises, working unions, as well as not-for-profit entities, and legal entities) which interact through distributed and generally uncoordinated decision-making processes. Interestingly enough, urban stakeholders (as such as a normal citizen or a family located in the city) are potentially carriers of the five types of capital described above.

The lack of a well-defined, pyramidal control chain in an urban system does not preclude the possibility for the authorities to draw pro-form financial statements representing its consolidated structure and performance. Urban financial statements, accompanied by urban econometric models would cover areas with very large populations, above-average revenue-generating capacity and overall financial/taxation base.

In EU large economies, the launch of an innovative digital agenda program (spatially-customized to cover the features of the metropolitan job systems) can help understanding the "true economic performance" or structural indicators of metropolitan or large urban entities and drive the future economic recovery of most ailing systems through better capital-allocative processes.

This element appears to be a prerequisite for the realization of any successful smart city strategy based on capital allocation optimization and a strict financial discipline. The risk is a misallocation of urban capital and over-investment towards city systems which are "spatially" misplaced or obsolescent, therefore conducive to the destruction in the long term of valuable economic and financial resources.

The smart growth process requires a reassessment of the economic role and performance of the majority of the urban players, which represent a major share of the invested capital and debentures as well as of land holdings at city's scale.

The complexity of these processes will require innovative and "smarter" forms of city governance, organisation and controls in order to ensure an effective allocation of scarce capital resources to different urban systems, in order to maximize the productivity and efficiency of investments and the overall capital accumulation processes.

The smart city approach may result particularly useful in order to tackle the issue of "value creation" and of a correct "capital allocation" in urban systems facing a rapid evolution of their competitive environment. In particular, based on a value creation approach, a stronger emphasis should be attributed in the future to the capacity of the single metropolitan/urban areas to generate sustainable long term wealth growth (as compared to other types of more traditional indicators, as GDP).

By applying such an approach, researchers are confronted with an important issue: urban stakeholders and, more generally, individual urban systems (which remain highly differentiated in terms of: assets/liabilities structure and net debt/credit position) are supposed to be driven mostly by the ambition to increase the cumulative amount of wealth (or value) enjoyed by their stakeholders and citizens. This result would be achieved by maximizing the long-term return (i.e. the sum of "organic" and "speculative" components) on urban net worth (net of financial debentures and other liabilities).

The short-term perspective of most of the urban stakeholders' efforts and the overlapping of many uncoordinated objectives, actions, measures, approaches of the urban players, however, render particularly complex the achievement of the above-mentioned purpose due to lack of coherent approaches and information. The preparation of urban financial statements representing the five types of capital mentioned above and the accurate collection of critical data and information through the digital agenda appear as necessary steps to prepare diagnostic and prognostic scenarios which enable the public sector operators to operate forecasts on the likely evolution of the urban systems economies.

This information is necessary to facilitate the taking of correct investment decisions by urban stakeholders. In this context, a renewed investment in the "smart city" concept, can represent an important and effective "second best" capital allocation device, in order to compensate the lack of discipline and direction normally provided by the activity of central banks in an orthodox monetary context.

3. IMMANENCE , TERRITORIAL INNOVATION AND SPATIAL PLANNING

The interaction, multiple and dynamic as well potentially and co-creatively innovative, among a variety of urban and territorial stakeholders (i.e. holders of some stakes of urban/territorial capital), is fundamentally characterized by its social (and environmental) immanence. As such it necessarily requires a radical reconsideration of the assumptions implicit in most of theories and practices of spatial planning, conversely historically prone to transcendence, like indeed many other social and design sciences (Bateson, 1972a; De Bonis, 1999).

To retrieve an immanent horizon in planning research we can however refer to a relatively recent contribution of J. Hillier³ (2005), in which she first of all recognize that «Faced with conflicting and seemingly incommensurable decisional imperatives, organizations are under constant pressure to adapt or transform creatively» (Hillier, 2005: 272). More generally, i.e. referring not only to "conflicting and incommensurable decisional imperatives" and to "organizations", we could say that the creative transformation (innovation)

³ On this topic see also the contributions of De Bonis (1999, 2001), essentially based on the philosophical approach of P. Lévy (1994, 1995) to the general question of the immanence.

should always be thought as emerging from the interaction internal (immanent) to the some kind of "self" individual, infra-individual (part of the self) or inter-individual/trans-human (the social self and environmental), rather than separate instances and higher (transcendent), since there is no other chance to "adapt themselves".

On the contrary, «As planning theorists and practitioners we seem to have had a pervasive commitment to an ontology of being which privileges end-states and outcomes, rather than an ontology of becoming which emphasizes movement, process and emergence». Nevertheless, such a commitment «...may begin to be dissolved by referring to Deleuze and Guattari's concept of "becoming", in which ideas do not come to order from abstract and/or external notions, but develop as part of practical, creative experimentation played out within and between economic and socio-political institutions» (Hillier, 2005: 273).

With specific reference to the Deleuze-Guattari's key principle of "movement or change, immanence" Hillier also points out that in such a thought the "becoming" is bound «... to the unpredictable, indeterminate, never-accomplished actualization of virtualities» (Hillier, 2005: 281). This also means that the change «... incorporates "traces" of its genealogical past, which both constrain and also create potential opportunities for the future» (Hillier, 2005: 280). The conclusion is that «Planning's role is to make the virtual intelligible» (Hillier, 2005: 281), but perhaps we should say, with Levy (1994), that it is rather a question to make sensible the purely intelligible, letting this latter pass through the bodies and the behaviors. And we could also maintain that the "actual", intended as the creative and not predeterminable outcome of a virtual meant in turn as a potential (Levy, 1995), is implied and must be sought in the folds of the real, rather than in its utopian rejection, so typical of many planning theories and practices.

The waiver of any transcendental rationality is recognized by Mäntysalo, Balducci & Kangasoja (2011) in the (uncertain) revival of Lindblom's partisan mutual adjustment (PMA), which occurred with the advent of the theory of agonistic planning (Mouffe, 1999, 2005). According to the authors, an essential complement of this latter in the direction of a revaluation of Lindblom's PMA, it is the "trading zone" approach (TZ), particularly in the declension ("trading with the enemy") of P. Galison (2010).

We leave now aside an explanation of why we do not consider the approach TZ/PMA complementary to the agonistic one⁴, but rather potentially alternative and also more productive, to underline that, according to Mäntysalo et al. (2011: 267), the main contribution of Galison's TZ consists essentially in placing at the very center of attention, or rather of trading, the frameworks of exchange between the different systems of meaning of which the "enemies" are bearer rather than the systems themselves. Frameworks able as such to promote locally coordinated interactions even between enemies (or at least adversaries⁵), which may therefore be particularly pertinent also for "local" (or localized) planning practices, similarly interpretable as "exchange languages" through which "thin descriptions" of ideas, proposals and opinions can be communicated between different groups.

In this regard the cited authors point out - and we believe this is a fundamental notation - that the physical nature of the object of planning, i.e. its nature of place that connects the various stakeholders precisely as each of them "holds" a stake (Healey 1997)⁶, is a crucial component of this trading zone of planning.

⁴ For a slightly more in-depth critique of the agonistic theory see De Bonis (2013).

⁵ According to Mouffe (1999: 755) it can be said that the aim of democratic politics is precisely to transform antagonism between enemies into agonism between adversaries, this latter to be therefore considered as "legitimate enemies".

⁶ Let us note that it is not even necessary, for that purpose, to materially "hold" a stake of physical space if this latter is interpreted as a non-linguistic means of communication (medium), interconnecting anyway the different "urban entities", independently from the linguistic meanings (and "values") attributed to it by the same entities (McLuhan, 1964; De Bonis, 2001, 2009).

Nevertheless, it is worth highlighting that Galison's approach ("trading with the enemy"), to which Mäntysalo et al. (2011) refer, could be reformulated in much more general terms than those strictly related to an "enemy" (and "adversary" as well); as it could be assimilated to the conditions of contexts, by now inevitably "intercultural" although not necessarily multiethnic, in which planning processes ordinarily take place Bateson 1972b; De Bonis, 2004). Moreover, taking into account the theory of Trading Zones – and assimilating these latter to physical spaces - implies in our view the recognizing of the residual role, although not needless, of professional planners and institutional policy makers in the making of (urban/territorial) policies (Lindblom, 1990; Crosta, 1998).

A residual but not useless role that can be precisely associated with those exchange frameworks, to better interpret in our opinion as media rather than languages (McLuhan, 1964). And through which, anyway, they could inter alia be integrated and connected both the "expert" information layers aimed at building the above "urban financial statements" (see par. 2), and the expressions ("images") of the myriad of interacting entities in the urban/territorial context. Images from which, eventually, some visions can emerge able to orient and polarize, together with the mentioned statements, the multiple processes of molecular interaction. (Lévy, 1994; De Bonis, 2009).

4. LIVING LABS AND MODELS OF INNOVATION GOVERNANCE

European policy is currently undergoing a significant transformation from an emphasis on the "knowledge economy" and competitiveness to an approach in which innovation is the driving force for achieving social and territorial cohesion in a "smart, sustainable, and inclusive" society. In this metamorphosis from an essentially sector policy (research) to a transversal policy (societal transformation), innovation itself takes on a deeply spatial dimension. If technological innovation is based on research facilities and knowledge capital, non-technical, institutional, and social forms of innovation are based more on territorial capital (in the broadest sense), and their processes and outcomes are far more a function of territorial specificities.

In this context, the Living Lab model emerges as an operational framework for the governance of such territorial innovation processes, having itself undergone a significant transformation. Born in 2006 as a userdriven research methodology in Information and Communications Technologies (ICT), notably for mobile (now 'smartphone') applications, the Living Lab co-design approach has grown and developed through a range of variations in different settings. The methodology has thus been applied in universities (to promote student engagement), rural community action groups (to strengthen local development with technology innovation) and, more recently, as a tool for local and regional policy. This latter model, often referred to as a Territorial Living Lab, aims to promote territorial innovation as a shared objective in the public interest, capable of generating initiatives that both increase the yield on territorial capital and increase citizen well-being and quality of life as a result of engaging all stakeholders in co-designed innovation processes of value creation.

As Living Labs assume a quasi-institutional framework for the experimentation of new approaches to leveraging urban and territorial capital, transcending the episodic nature of bottom-up initiatives, the issue of governance emerges as a key for guaranteeing the sustainability of territorial innovation processes. From a Living Lab perspective, the rules and processes of governance itself can be seen as situated in a dialectic driven by differing stakeholder perspectives. In regional policy, this translates into the structural conflict between the need to monitor and control the use of public money on the one hand, as against the need to guarantee the openness and creativity of emergent innovation processes on the other.

This "trading zone" can essentially be seen to negotiate between three governance concepts related to territorial innovation. The first 'techno-commercial' model focuses on innovation as the development of new

products and services in a logic of efficiency as applied to market dynamics, standards formation, common methodologies and best practice, using rules and regulations, fiscal incentives or direct financing of research as the main policy instruments. This is primarily a top-down approach typical of industrial policy, as reflected in many EU and regional research policies and agendas. The second 'politico-institutional' model focuses on more ethical and spatial policy objectives, such as transparency, fairness, inclusion and cohesion, aiming to influence strategic policy processes in a multi-level model in which innovation is linked to the bottom-up approach. The third 'socio-emergent' model, derived from the Open Source movement, the 'hacker ethic', and emergent self-governance principles, holds innovation as a socially driven, organic process that becomes an ethical principle in itself, with governance embedded in scalable and resilient network ecosystems.

While these three governance models generally consider themselves to be mutually exclusive, the new policy approaches – for instance by requiring to include social innovation in regional innovation policies – leave little choice but to work towards a reconciliation (even a 'partisan mutual adjustment'). This is essentially the mandate of a Territorial Living Lab, for which governance is itself a matter for experimentation and innovation, within the objective of combining capital investments in urban regeneration with the need to attain an effective yield on such investments through diffused and citizen-based ownership of the urban innovation they aim to spark off.

5. CO-CREATIVITY, CITIES, TERRITORIES, INSTITUTIONS. THE ROLES OF LIVING LABS

Living Labs (LL) have been established for a long time as models of technological advancement urged by social needs and seen from different points of view. Among the definitions from which the LL draw inspiration those of user driven (Von Hippel, 2005) and social innovation (Murray, Caulier, Mulgan, 2010) are central, but especially the analogy between Living Labs and the word "ecosystem" (Pallott, 2009), which shifts the focus from the intangible dimension of social innovation, of new productive organization and co-creativity, to the spatial dimension of physical, environmental, organic contingencies.

From the concept of ecosystem to the instrumental meanings of smart city (Shaffers et al., 2011), the LL approach is included in various projects requiring partnerships of public and private agents open to innovation. Cities are the ideal but not exclusive Living Labs locations, as it is demonstrated by LL experiences in rural areas, with results to be deeply examined. LL could be part of the new European Union investment policies in the cities, considered, in a polycentric vision, as demographically concentrated territorial settlements and delimited areas where innovation is enhanced and contributes to raise the level of growth, development and increase of the quality of life of every region where they operate (CE, 2014). LL could interpret those territorial factors that allow to decide if innovation is effectively linked to specific places, or if it is mainly generated by the immaterial dynamics of knowledge and global financial strategies (Shearmur, 2012).

It is known that cities are the engines of innovation and thus of social and economic development of Europe. This is due not only to the world's population migration from countries to cities, but also to a new settlement trend according to which the places where goods are produced and the places where the entrepreneurial ideas and the social demand develop are no longer independent. Production is changing to face and overcome the crisis, the civil society faces by itself the problem of the survival of welfare and of quality of life, while policy doesn't manage to interpret the deep change taking place, and the same political cohesion of European Union is in jeopardy.

On the one hand, industry hasn't been a competitive agent for a long time and does not strongly influence the urban and territorial settlements as in the past. However, even if the industrial districts have gone into depression because of the global crisis, some of them have levels of growth and economic and social development in which multi-scalability and multidimensionality of processes of innovation and response to market trends, emerge because they prove to be able to withstand strong negative market trends. On the other hand, from the point of view of governments and control systems, cities, territories, regions, Member States and European Union are separated entities and more and more distant from each other. Governments find it difficult to give a reply to the disruptive tendency of positive and negative production phenomena, to substantial independence of entrepreneurial realities from any supporting policies, to production failures which do not create any entrepreneurial selection but, on the contrary, cause desertification of business and employment. Cities and regions where positive or negative processes are taking place, seem to be helpless in front of what is happening both inside (new leaderships and increase of situations of deprivation, degradation, and social marginalization) and outside them (contact/detachment from value constellations of global market). Thus, it's necessary to undertake new practices and above all integration policies that don't claim to drive the change of the social, economic, cultural and environmental structure presiding the cases of success, and which are based on successful models of interaction, either social and economic or infrastructural. Living Labs, a special type of manufacturing districts for goods and/or services to be considered as real ecosystems of agents that interact creatively, seem to be reference models for multi-scale integration of levels of government.

Thanks to the diffusion of information and communication technologies in the largest layers of population, despite the huge margins to upgrade the operating conditions of the Web, sharing a business idea or any issue is today the starting point for a start-up business or the birth of a community of interests which can achieve many goals without the help of any higher level institution.

The crisis has worsened the living conditions of the lower classes first and then gradually of the middle class across Europe starting from the decline in industrial production and the increase in unemployment. Citizens turn away from political participation as well as is growing a consensus for extremist movements against the economic policies of European Union. At the same time come out aggregation phenomena, which are fragmented and dispersed but present so as to generate the leadership of small interest groups and networks created through the social networks. This ferment of structural actions is confined to the virtual dimension of the Web, but it is encouraged by a large number of successful micro-level initiatives taken without the help of institutions and that suggest a sort of revival of politics outside the institutional channels (Leadbeater, 2008).

Many of these self-organized little communities do not have a physical proximity, but are held together by more or less serious problems of survival, or creation of autonomous jobs, and a mutual comfort on the Web: you look for solutions and find someone who listens and after some time you get an idea that satisfies and induces the various stakeholders to take some initiative. These communities arise locally to face and solve local problems, abandoning the idea that the institutions can intervene despite being the only ones who can do it for competence, responsibility and nominal allocation of resources. They don't have any character of social and political claim because they don't address their requests to the institutions but ask for a wider social consensus exploiting the social networks on the Web. More often it is the opposite: the institutions, moved by the severe crisis of the welfare state and not being able to draw on the public debt, decide to intervene considering the presence of self-organized networks and addressing to them to face and solve problems of city's administration and government.

The social space extends from the traditional public spaces (streets, squares, community buildings), to a type of communication that in the short term can be defined as a whole of ideas, visions, debates that brings to the solution of a critic situation or to an opportunity to be seized by forces in a given urban context. When the situation changes, the thrust is given by human and economic resources already available. Only

later the institutions give their contribution and make it possible the support of private capitals. However, these are changing urban realities very different from the great urban transformations based on large investments for major projects led by local and global trusts. The latter in few years create new urban landscapes made of skyscrapers and high-tech constructions, while the result in terms of urban spaces of the Living Labs can be appreciated as intangible, almost non-existent. Great events such as Olympic Games, Expos, etc., have nothing to do with the Living Labs, which are instead demonstrating to act on the social fabric despite their fragmentation, random location in cities and regions, distance from unitary institutional programmes (plans), and apparent lack of resources (economic planning).

We are not yet able to interpret and predict the potential of urban and regional transformation, if Living Labs were to be supported by institutional planning and programming. However, it's important to think about the possible relationship between these two heterogeneous entities: on the one hand, the prediction and programming of institutional actions, on the other the spontaneous and always unpredictable action of ecosystems where Living Labs' co-creativity is generated.

In the recent past of the programming of EU funds the centrality of the city has been recognized and documented by different types of policies, starting from the first and most famous called Urban. The Urban Agenda is now an important opportunity to reflect on the role of cities and regions where they extend their influence and from which they draw their vital energy. Cities live and develop despite the growing detachment of European citizens from politics, to which voters entrust less and less their hopes for a better future.

The crisis has generated forms of spontaneous and organizational resilience resting on the ability of amplification of the networks, overcoming the barriers of urban and economic marginality. The resistance of some groups to the economic decline creates informal social organization that sooner or later comes into contact with the institutions for various reasons. One of these is the request of recognition of own action without betraying the autonomous character of the transformation of urban areas that have lost their original equilibrium: guerrilla-gardening, urban vegetable gardens, gardening, squatters, occupation of theatres and abandoned places to produce a self-managed culture, micro health centres in urban suburbs, cultural activities by schools and parishes, debating groups on social, cultural and environmental issues, autonomous forms of support to fight against poverty, assistance to working women, afterschool organized by groups of parents, acceptance and social inclusion for immigrants, social canteens maintained by religious communities extended to lay volunteers, etc.

The free forces fighting against the urban decline ask the institutions the simple recognition of their existence and a kind of social agreement to keep on existing. In south Italy, but not only, there is a growing need to rationalize the use of the assets confiscated from organized crime. This is a clear example that shows how it is necessary the confrontation between institutions and self-organizations in a situation of possible disappearance of public financial capital. The social capital has no longer mobilized to ask for public financial resources but to get exceptions to current regulations regarding the use of public and/or private areas underused or abandoned. In return, the new urban social forces want to be recognized as worthy to exist and play a public role, claiming their own autonomy. However, the risk is to create new enclaves and barriers. The institutions cannot though look only at the large private capitals ready to buy at a very low price what has been made with the highest cost of human and economic public resources.

Other forms of self-organization and social groups in big cities are those of antagonist type, arising from the common need to solve social problems at different scales and guided by people without defined political representation (e.g., occupation of public or private spaces, abandoned within the urban area). In these informal environments spread across Europe there are the ideal co-creative working conditions. These

environments are completely different from the experiences of MIT, the original context where the LL concept arose and developed.

From episodes of urban antagonism (Harvey, 2012) and their prediction of the "revolutionary potentials" of the cities, as Lefebvre asserted, it is possible to see the directions of social innovation, not driven, this time, by the need of a generic improvement of life quality, but by the desperation of the new underclasses, who have to survive in a life now perceived as precarious and meaningless. Living Labs and antagonist forces should collaborate to create a new town arisen from a revolutionary employ of all urban resources (human and infrastructural), without the use of venture capitals responsible for the global crisis in 2008-2009, starting from the mortgages on the first houses. The antagonist forces mentioned by Harvey can be assimilated by the Living Labs seen, this time, as districts where the social and cultural component exceeds in importance the economic aspect, which depends directly on the social issues and not the opposite. Technology makes it possible the unification and organization of social entities physically distant, but united in achieving similar or complimentary goals. These dynamics are also applied to industrial production of medium and micro level. According to this point of view, it is difficult to consider the Living Labs as organizational models of innovative production of large-scale industries (industrial hubs). It is instead possible to exploit them for activities of high-level designing in the industrial production achievable in places and spaces with no environmental impact for cities and natural areas. This demonstrates the implicit connection between Living Labs and cities: environmental sustainability is an essential component for the evaluation of the cultural identity of citizens and liveability of residential areas. If industry has fled from western "industrial" cities, now it can get back in a completely different way: miniaturized, individual, simple, highly creative, thanks to the fab lab that use three-dimensional plots and self-construction of machine parts (or entire machines). No longer traditional banks, but crowdfunding as a financing tool that to some extent can be defined as "fair" because of its transparency and its mutual benefit (win win approach), conceived by stakeholders in search of innovation for new markets produced by the demand of a collective, anticonsumerist and solidary urban life style.

According to Harvey, the city has deeply changed since the global financial crisis and the growing social protest, which hasn't been truly revolutionary compared to the solid character of the established power. Another change is given by the success of information and communication technologies: they were sold as consumerist gadgets, useless but necessary devices for uncultivated masses with no true sense of life. Nevertheless, these technologies may become an unexpected resistance to wild consumerism and promote those relationships necessary to the creation of a new class consciousness on the part of underused workers or non-workers, who fear social exclusion for not being able to build a legacy of social guarantees and certainties. These simple, miniaturized and more and more "open" technologies (e.g., the fortunate Arduino's case), develop in the cities but spread also in those abandoned infrastructures that, provided with technologies, are recycled giving new value to neglected or underused areas.

Creativity is generated by the urban environments where citizens live their "active life", despite the few means available and counting on relational and supporting networks. So the new town appears as a body made of small, fragmented, scattered, but very strong elements. The quality of environments producing the co-creativity is important to cities, because the innovation required by companies facing the new challenges of markets of the global crisis cannot depend only on the networks with their exchange of information. If the web were turned off or were so expensive as to exclude the lower classes, not only the web communities would stop, but also the entire advanced world. There is an interdependence that hasn't been deeply studied yet. Web space and city space are linked by a new dialectic that explores positive (equity and sustainability) and negative (totalitarianism and poverty) potentialities. The relational potentialities of places of residence, work, leisure and mobility have been revised in consideration of their propulsive function on the social

capital. Living Labs seem to recognize this inside transformation of the traditional functions of the modern city. Being deeply linked to urban culture and to innovation research for production, they are a reply to the changed condition of post-modern and post-industrial city. The traditional separation of classes according to the different production units has enormously changed: experts in information and communication technologies collaborate with manufacturing industry and at the same time represent the connection with the social demand; other antagonist groups generate pressure to institutions, asking questions not receiving a reply. The city is changing in some of its constitutive parts, but we cannot say the same for its government. So, how is it possible to realign governments to the social changes occurring in the western city? Since in Europe politics is losing ground, and few become richer and richer while many become poorer, the danger is the definitive separation between dominating and subordinate classes, caused by the process of selforganization and resilience, to which Living Labs in some way belong. Governments are using systems of flexibility to try to avoid the social fight, but the risk is to weaken social rights and guarantees conquered in revolutionary times. Social innovation generated by global crisis causes tension between citizens and rulers now detached from real economy, and this makes any effort useless in terms of sustainable economies and resilience phenomena. The technologic development always remains the aim of hegemonic powers, but the experimentation in social self-organization cannot be stopped and will replace the centralized welfare. Living Labs are today a social model of work organization that can handle production and distribution processes of goods and services, and where each level is open to multiple communicative directions. Despite the possible separation between global finance and real economy, and thus between city-territory or space-time relationships and a financial engineering founded on risk and capital flows without a central (democratic) control, it is still possible for Living Labs or something more socially advanced to represent a form of democratic resilience to the relentless decline of the western model of development. Living Labs, not the Smart City that depends on the model of multinational corporations and on global finance, can contribute to connect the diverging and dichotomic parties of the post-industrial world. Living Labs should now respond to much more complex functions than those for which they were created, since they should act in a changed global context. There is a danger of a gradual, slow, and invisible separation between a social base that has nothing to ask to rulers, finding in itself the energies to go on, and a minority of nameless individuals without social roles and responsibilities, who have the total control of the planet's resources and are legitimated by the laws of market to buy each component of real economies, having the option to erase them a moment later.

The social guarantees and universal human rights will be though bulwarks for private agencies using industrial products, whose investments are more dangerous than those of government organizations (Krugman, 2011). If the Living Labs don't succeed in stopping this process of detachment between the executive parties (vertical) and the creative ones (horizontal), it will be necessary to think about something that may conceive a city capable of a trans-scale representation of its social groups with their roles and responsibilities.

The difference with the past is that now the social/local "level" doesn't ask for help to politicians who should be responsible for the solutions of problems considered as social needs and therefore as compulsory objectives to achieve.

Movements or simply cases of active citizenship, which use more or less the information and communication technologies, no longer ask to get something because, for most of the problems arising locally, it is known that decision-making levels cannot solve any problem, not only for lack or shortage of adequate economic resources, but because of inefficiency and ineffectiveness of public domain with respect to powerful private agents, who are not directly responsible for the distribution of public services.

Requests from the social base to the central government have changed because those who express a need, find satisfactory responses through autonomous forms of local organization, result of volunteering and free and spontaneous social cooperation. What is now needed is a recognition of this informal role in order not to pay the consequences of an unconventional action often in contrast with formal obligations defined by inadequate laws, which are distant from more and more frequent social changes.

In Living Labs production of goods and services involves a multi-actor, multi-scale and highly integrated action. In this case, compared to a social self-organization, the action aims at a scaling up of initiatives of local networks in order to come into touch with networks close to values chains. In the Living Labs social capital values are combined with relational capital values, the latter both horizontal (to maximize the complementarity of districts) and vertical (to be in contact with global markets).

The need of solving urgent problems autonomously, exploiting the few resources available (included those resulting from the synergies of social networks) gives new meanings to the direction followed by relational systems: the spontaneous ones of local networks of active citizenship and the formal ones of the institutions. After the failure of competitiveness goals and the affirmation of the principle of territorial cohesion, Europe has to face two emergencies: on the one hand guarantee the soundness of the domestic financial system and on the other assure the local and informal creative forces that is able to strengthen the connection between university research and entrepreneurial subjects, in the attempt of finding new markets opportunities for new emerging social needs. This will be possible only with new governances, where rights and social guarantees are regulated with respect to the strong power of the holders of the technologies. New connections between ecosystems of local co-creativity and global markets are to be attempted, tested, and capitalized.

Living Labs may have a structural function in solving complex spatial problems, if they find a precise role in the definition of the urban European agenda, considered as a network of creativity, linked to social problems, and as an autonomous response to the emerging issue of local sustainability in relation to needs of labour markets.

7. CONCLUSIONS

Whether with reference to an immanent view of planning and highlighting or to the links between monetary policy and spatial transformations resulting from urbanization produced by the global dynamics, it is easy to recognize the fundamental role played in the evolution of urban and territorial systems by a multiplicity of stakeholders interacting within distributed and generally uncoordinated processes.

The residual action of experts and public administrations should then focus on: i) defining some useful orientation frameworks aimed at enabling the aforementioned stakeholders to take appropriate decisions in terms of creation of urban well-being in the long term; ii) finding the suitable forms of interrelation, outside of any claim of exogenous control, with socio-economic entities related to the phenomena of co-creative innovation, such as the so-called Urban/Territorial Living Labs.

In both cases, it is not only to offer contributions to the coordination of socio-economic actions and of cocreative ferments, but also to overcome urban policies based on the one hand on economic policies of Keynesian-Fordist kind, potentially generating strong socio-economic instability, and on the other on transcendent conceptions of planning, by now unable to grasp the complexity of the co-construction processes of the contemporary urban phenomenon. Bateson G. (1972a), Social Planning and the Concept of Deutero-learning. In: Bateson G., *Steps to an Ecology of Mind*. San Francisco: Chandler Publishing.

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