Planning for urban and territorial resilience

(Article begins on next page)

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Workshop 5.A
Per città più resilienti: progetto urbano
per l'efficienza energetica e i cambiamenti climatici

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Discussants: Patrizia Gabellini, Valeria Scavone

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PER CITTÀ PIÙ RESILIENTI: PROGETTO URBANO PER L'EFFICIENZA ENERGETICA E I CAMBIAMENTI CLIMATICI

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La resilienza urbana implica la messa a punto di una forma progettuale diversa dal passato, più strategica, in grado di attraversare le scale e di considerare le molte variabili in gioco (non solo spaziali, ma anche sociali, ecologiche, economiche...). Perseguire un'idea di mitigazione e adattamento implica esplorare territori progettuali nuovi, dove l'azione si pregura come trasversale (capace di intercettare soggetti diversi), interscalare (dove anche l'azione sui piccoli spazi diventa rilevante e può incidere sul complessivo assetto urbano), dinamica e osmotica (potenzialmente mutevole nel tempo e capace di riverberare i propri effetti in diversi settori).

Questo workshop si propone di esplorare la dimensione progettuale della città resiliente attraverso la rilettura critica di esperienze di pianificazione e di progettazione dello spazio urbano, elaborate in ambito nazionale e internazionale, significative sia sul fronte della mitigazione che dell'adattamento, attraverso un repertorio di buone pratiche riferite a strumenti di pianicazione e progetti di spazi aperti nella duplice prospettiva della mitigazione ed adattamento ai cambiamenti climatici e all'efficienza energetica delle città. I grandi cambiamenti climatici e la ricerca per l'efficienza energetica, sono strettamente correlati e convergono con maggiore intensità nelle città dove, anche a seguito delle trasformazioni demograche e socioeconomiche, è necessaria la costruzione di nuovi scenari e modi per un progetto urbano resiliente. In particolare la sfida per l'effcienza energetica della città, che richiede di andare oltre la scala edilizia, obbliga ad uno sguardo olistico attento alla città come luogo dove integrare politiche di riduzione dei consumi energetici e di produzione di energia da fonti rinnovabili.

Obiettivo del workshop è quello di vericare questa impostazione indagando aspetti e pratiche di pianificazione e progetto che riguardano la mobilità, le infrastrutture verdi nonché forme di compensazione e di incentivazione che fanno leva sui meccanismi di mercato.

PAPER DISCUSSI

Microclimatologia urbana e pianificazione. Riflessioni sull'isola di calore urbana nell'area metropolitana di Napoli
Antonio Acierno, Alberto Fortelli, Ferdinando Maria Musto

Tecniche di Remote Sensing per l'individuazione dell'isola di calore urbano applicate alla progettazione di infrastrutture verdi
Sabrina Adelfio, Caterina Enea

Strategie di rigenerazione urbana clima adattiva: soluzioni progettuali per la resilienza degli spazi pubblici di Napoli
Eduardo Bassolino

Planning for urban and territorial resilience
Grazia Brunetta, Angioletta Voghera

Le aree di scarto della città come materia prima per la costruzione di resilienza urbana
Daniele Cannatella

Progetti urbani e territoriali strategici per città d'acqua più resilienti
Alessandra Casu, Guglielmo Ricciardi

La ri-generazione della bioregione urbana: misure, flussi, regole. Un'esperienza di pianificazione in Toscana
Michela Chiti

Un approccio integrato alla valutazione delle infrastrutture di trasporto e delle esternalità, degli impatti e degli effetti per una maggiore resilienza urbana
Valentina Colazzo

Nuove interfacce paesaggistiche per infrastrutture autostradali
Vincenzo Cribari

Planning for urban and territorial resilience[1]

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Abstract
According to the "evolutionary" approach (Davoudi & al., 2012), our idea of urban resilience implies that urban systems have capacity to react to several external disturbances - economic, social, environmental - regarding all components of urban governance and transforming itself in a new development model.
The inventive wave that has recently been displayed in contemporary cities has shown the limits of the traditional planning approach and revealed the need for urban policies that are more inclined to openness and adaptation, and are able to face the new demands of a more conscious and diversified society. This scenario has created the conditions for the spread of creative experiences oriented toward urban resilience, here intended as the innate capacity of an urban system to propose new approaches and practises that are understood and included within the consolidated institutional policies of spatial development.
From this theoretical framework, this paper intends to investigate the space for experimental practices on resilience as a driver of urban and territorial policy, for ordinary communities and landscapes, where the relationship between the sustainable use of territorial resources could led to new territorial strategies, as well as "promote managements synergies" at different levels of regional and local planning.

Keywords: resilience, planning, governance.

1 | Resilience and planning

Gaining consolidation primarily in ecology (e.g. White, 1949; Steward, 1955; Holling, 1973) related to the risk management (Kasperson, et al., 1995), the resilience concept refers to a multitude of meanings, permeate in anthropology, human geography, social science and planning, linked to process of structural change in response to external circumstances.

Risks, climate, socio-economic, environmental and landscape changes are taking place in the current global scenario, determining actions and transformations in the territorial systems, conceived as "complex, non-linear and self-organized, permitting by uncertainty and discontinuities" (Berkes & Folke, 1998, P.12). Within this framework, resilience refers to the capacity of the territorial systems and of their components to change, adapt and transform over time with or without external disturbance (Scheffer, 2009). According to the evolutionary approach (Davoudi et Al., 2012), resilience of a territorial system is the capacity to achieve a different state of being: territorial and landscape change, through non-linear transformation processes of their natural and anthropic characteristics, which invest the quality of the performance of the entire system (Voghera, 2014).

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[1] This paper is a contribution stemming from the research activity developed by the research group of the Politecnico di Torino that works on Urban Resilience (coordinators: Grazia Brunetta and Angioletta Voghera).

The "evolutionary" concept of resilience has been developed starting from the previous "socio-ecological" approach (Folke, 2006), intended not only as a respond to disturbances, but as a flexible strategies oriented to all the opportunities that changes open up in term of recombination of evolved structures and processes, renewal of the system and emergence of new trajectories. According to this, resilience is a planning challenge as a continuous process of adaptation, learning and development perspectives (Davoudi et Al., 2012).So mainly in the last decade, the concept of resilience has firmly entered in planning theory and practice debate. Urban systems and cities are open, adaptive and complex systems that use their capacity to adapt to the continuous changes in order to react and develop themselves linked the natural and cultural systems, as Communities and Institutions. In relation to spatial planning, therefore, resilience is generally interpreted "not as a fixed asset, but as a continually changing process" (Davoudi, 2012) This, because in urban systems and cities, as complex and self-organised systems, the parts are active and purposeful agents (Portugali, 2000). Assuming this perspective, defined evolutionary resilience (Davoudi, 2012), urban resilience is not simply the reaction to external disturbances but a new paradigm for spatial development that depends on the certain degree of self-organisation and creativity in urban systems

In fact connecting resilience and planning concepts, our idea focus on territories able to adapt and innovate themselves through planned and programmed strategies and through top-down and bottom-up actions, by overcoming difficulties, regenerating memories and heritage, and preserving functionalities and identity. Moreover, a bridging concept of resilience moves toward a comprehensive and holistic framework - less considered in urban resilience literature (Rockefeller Foundation, 2014) - that combines physical aspects of territorial system with less tangible aspects associated with human behaviour.

In this perspective, planning has a key role in order to define resilient territories, especially considering community aspects and the capacity to develop multi-scale actions and plans for territorial governance. Planning linked to resilience is a relatively new concept, although there are some parallels between the evolutionary concept of resilience and planning as a complex process and interconnected system of strategies and actions, which operate at multiple scales and timeframes, oriented to multiple trajectories. Both models emphasize "fluidity, reflexivity, contingency, connectivity, multiplicity and polyvocality" (Davoudi & Strange, 2009) and recognize the ubiquity of changes, inherent uncertainties, and the potential of novelty and surprise (Davoudi & al., 2012).

Planning process toward resilient territorial system are characterized by the following qualities, with which even evolutionary resilience is usually described:

- reflective as a capacity to bring continuously evolution of the system, resulting of people and institutions learning process, that consider the past as a challenge for future decision-making;
- flexibility as a capacity to generate systems able to change, evolve and adapt in response to modifying circumstances;
- resourcefulness and creativity as the ability of people and institutions to rapidly find different ways to achieve their quality goals or meet their needs;
- inclusion as a contribution in sharing visions for the future and for the management of the territory (building consensus, promoting participation and adding institutional and self-organization initiatives and top-down and bottom-up approaches);
- integration as a capacity to develop multi scale actions and plans for territorial governance and management;
- robustness that include well-conceived and managed territory, able to withstand the impacts of events without significant damage or loss of functions, quality and identity of territory, environment and landscape.
- In the planning framework, this proposal implies a new bent for territorial governance characterised by innovative features regarding in particular stakeholders and their roles and the tools for spatial government, as follows:
- Stakeholders. Communities could be stakeholders able to experiment and to propose new paradigms of development and planning practices, as the same as the Institutions;
- Roles. Communities could have a more central role in public action and, on the other hand, Institutions could innovate itself, learning from the bottom-up experiences. This means understanding the relevance of inclusive decision-making, social participation, and horizontal subsidiarity ;

- Tools. The proposals of Communities may have consequences for management and development tools (policies and practices). In particular, this means promoting more inclusive policies and practices, which also learn from bottom-up experiences.
- To sum up, resilience in spatial planning is a process able to promote a more conscious and diversified society, and in some conditions could suggest an innovative form of territorial governance in which all the stakeholders, Communities and Institutions, are actively involved in increasing reflexivity and innovation in the urban dynamics.

In this view we are discussing two experiences: River Agreement a governance tool able to integrate top-down and bottom-up approach developing institutional creativity and the Urban Gardens as a horizontal subsidiarity experience in order to innovate institutions.

2 | River Agreement. Experiences of territorial governance toward resilience

Inspired by international experiences (i.e. Belgium, France), unlike most territorial planning tools, in Italy the River Agreement (RA) is not based on an institutional law. It is more of an experience implemented and developed in the last ten years and constantly consolidated both methodologically and operationally (Carter, 2007; Eckerberg and Joas, 2004; Affeltranger and Lasserre, 2003; Antunesa et al., 2009; Kidd and Shaw, 2007).

River basins are considered an interesting space for experimental workshop on resilience, as a driver of territorial policy (Scott et Al., 2013), for ordinary communities and landscapes, where the relationship between the sustainable use of territorial resources could led to new territorial strategies, as well as "promote managements synergies" at different levels of regional and local planning.

RA appear as an innovative governance method which can help in the drafting of potential plans and practices for the development of resilience in fluvial territories. It is a form of negotiated planning, that helps to involve social actors in order to: improve people's knowledge of current territorial conditions and the effects of human activities; increase social awareness; include society in the identification and implementation of solutions; to encourage innovative changes in planning objectives and urban and architectural design, starting with the legal and planning framework of an Action Plan.

RA allows to build a convergence and coordination between bottom-up and top-down strategies and practices. Integration between multilevels and multiscales actions is carried by mains actors in resilient territorial system: the "resilient society" (institutions and stakeholders) and "resilient communities" (individuals or groups of people active in social and comunity projects). Actors are motived by shared needs, desire for development and wish to identity; all conditions that move communities in leading transition processes. It is a method based on participation governance oriented to support choices of minorities by transforming minor, punctual and discontinuous actions into a " systemic and organized model of development" in wich communities identify themselves. Moreover, it is an incremental process oriented to bottom-up approach, within local actors, starting from basin scale resources, promoting sustainability, development, valorization and protection of landscape and territory and focusing on local opportunities and shared strategies.

Reflective, flexible, resourceful, creative, inclusive, integrated and robust, the method of the RA is able to solve complex issues related to the management of a river basin area, more often characterized by uncertainty of the relationship between transformation actions and territorial/environment effects.

The transition from the current landscape toward resilient scenarios, managed by the decision-making process of the RA, is certainly a complex process, which is defined and designed over its implementation phases. In particular, the RA defines: large scale strategic scenarios and minor local projects, expressions of essential institutional and society's needs. The participatory process supports learning and development of shared scenarios, connecting institutional and spontaneous initiatives.

The general strategy, with vision and local projects, is able to connect the different components of the territorial system - environmental, social, economic and landscape - triggering a multitude of resilient experience with the community as main actor. The RA enables large scale projects, able to trigger innovation in all underutilized, disused, abandoned spaces, and simultaneously to build relations between urban, rural and perifluvial areas, connecting resources and contexts. Moreover it builds environmental innovation, reconstructing the environment and the natural landscape and designing actions toward specific problems related to hydro-geological risk (maintenance of territory, fruition, water quality, safety).

All these actions are activated through multilevel governance process among all the phases of the RA: a social resilience process that organizes territorial actors, based on collaboration between local and external actors, and brings together multiple environmental, landscape, social and economic resources, impacting

more to the entire territorial system. Empowerment and the ability to act with shared strategies improve the resilent process. It is a process of visions and scenarios able to influence the local government at different scales: the regional planning (e.g. Regional Territorial Plan, Regional Landscape Plan, Provincial Territorial and Coordination Plan), the local planning (PRGC) and minor and multiple projects. The RA is a method that defines a framework within actions emphasize intrinsic quality of the territory, regenerate goods, services and the quality of landscape and imply connections between spontauneous initiativies (e.g. gardens, public hortus, cleaning of river banks, agricolture) and institutional projects (e.g. greenways, ecological networks, parks, etc.).

2.1. | Sangone River Agreement

The RA of the Sangone river basin (2005-in progress), coordinated by the Province of Turin, has been the first participative planning and design experience in Piedmont Region (Italy). It is a negotiated programming tool for requalification of the river and its territory, based on a co-planning approach intended to build long-term and shared development scenarios.

The experience is recognized as an innovative and successful territorial governance tool used to define shared strategies, measures, rules and projects for the river basin. The requalification measures have involved the environmental, landscape, economic and social features of the river basin in accordance with the objectives of the Water Framework Directive No. 2000/60CE and the Water Protection Plan 2007 . It has been, therefore, a useful tool to establish new relationships between territorial and local policies and projects, and influence the experimentation of resilient strategies towards new resilient territory.

The Sangone RA is, therefore, a flexible tool, effective in mediating between local conflicts and interests through negotiated processes (Regione Piemonte & Ires, 2012). Moreover, it is consistent with specific territorial vocations and able to establish a dialogue not only between various socio-economic programming instruments and typical planning, territorial, urban and architectural design tools, but also with the actors who contribute to building the territory. Its measures are specifically directed towards the creation of ecological networks along the river, recovery of its natural conditions, and enhancement of areas of greatest environmental prestige and biodiversity. With this in mind, the RA influences local plans towards more suitable land use and promotes large scale and local area projects involving the enhancement of the territory and perifluvial landscape.

The Agreement helped to formulate large scale and local plans and projects based on a bottom-up approach with direct involvement of institutional and social stakeholders and the population at large. The latter's participation in forums, workshops and meetings has been intended to assist in establishing shared territorial development and landscape enhancement perspectives and in so doing influence the projects and defining general action frameworks whose principles and objectives are shared by institutional, and socio-economic actors, stakeholders and local communities.

A specific workshop was called to establish a Masterplan for the Action Plan of the Sangone River Basin River Agreement (Ingaramo & Voghera, 2009); and it has defined a set of design hypotheses involving the entire Sangone river basin area; in many ways it helped solve several interrelated problems: enhancement of overall biodiversity and the path network, promotion of fruition and accommodation facilities, establishment of new activities, and the redesign of urban boundaries.

The Masterplan initiates debate and defines several evolution scenarios for:

- development of a basin design strategy to sustain an enhancement system reinforcing the territory and landscape without overlooking specific local characteristics;
- definition of an overall strategy for the river ecosystem intended to promote water quality and redesign river banks, in particular their insertion in the landscape;
- design interaction between the environment and landscape system of the rural and natural territory of the Sangone basin and the system of fruition networks;
- identification of sets of functions and usage consistent with socio-economic and cultural development requirements;
- the definition of new settlement models and urban limits, with typological studies.

The Masterplan scenario has become the starting point for all the design choices at all scales, large and small, which lead to other participation phases, negotiation and responsibility for implementation. It is extremely flexible andapplicable to large areas of the territory; built and unbuilt areas, rural areas, public green spaces, private open spaces and buildings were all placed on the same hierarchical level. In fact it

defined new visions implimented at locale level (e.g. variance land use local plan, such as Bruino) and support the design of multiple punctual projects.

Besides the Variance of Bruino Local Plan Land Use (approved in July 2015) has been defined within the process of supporting and sensibilization of the local community related to the Sangone RA initiatives and the partecipate process had a central role to actualize some of the strategies defined in the Action Plan. The variance of the local plan of Bruino, in the south-west region of Turin, implements the RA Masterplan. It had innovated the local governance improving social and ecological resilience with multiple partecipate programms and environmental policies towards more awareness of local identity and towards more balance between green and water infrastructures, urban areas, rural and agricoltural landscape.

Moreover, many projects of empowerment, knowledge, sensibilization and partecipation have been organized by the local institutions, environment authorities and citizens capable to increase the resilient of the municipality and its planning strategies.

3 | The Community Gardens network in Milan

Community gardens are generally experiences of social sharing and urban regeneration that are mainly spread in areas with high urbanisation and in the peri-urban areas of large cities. In recent years, community gardens have gained attention and support because of a range of expected benefits and outcomes, as one of the many examples of transformations of underused spaces. Generally, the practise of community gardening is underpinned by the assumption that the gardens are on temporarily available land; from this perspective, community groups have developed strategies to address these constraints, primarily by engaging in supportive networks of relationships (Drake and Lawson, 2014; Ghose and Pettygrove, 2014; Eizenberg, 2012).

Today, Milano has 88 community gardens, which are generally located in underused spaces, owned by municipalities and managed by voluntary associations or individual citizens. The community gardens are mostly situated in zones 4 and 6, near the Parco Agricolo Sud Milano. In the north, however – where the benevolent effects of the Parco Nord Milano (zones 2, 8 and 9) should be noted – this number is continually growing.

From a procedural point of view, the assignment of the community gardens is voluntary. The municipality provides free areas to citizens and associations that request them, following the issuance of the announcement. The requirements, regarding both those who are eligible to apply and the interventions allowed, are wide. The permitted crops are manifold: it is only required that they are not produced for commercial purposes. The city is obligated to equip the areas with necessary equipment, including border trees or water for irrigation, while citizens are asked to take care of the garden, thanks to environmentally friendly management. The costs are represented by the connections to the water network and the construction of fences for the delimitation of the gardens, and citizens often pay an annual management fee. In addition to the environmental and cultural purposes, the Coltivami project includes the idea of social integration because the creation of community gardens involves not only the elderly, but also young people and families from different countries. The grant lasts for up to nine years, is free of charge and can be renewed for three years more, on payment of an annual rent.

Following the logic of community participation for managing rural and natural resources, in 2015 the city of Milano approved a regulation that expanded the idea of local involvement in community gardens to a more general approach towards formally recognising the social re-appropriation of underused municipal spaces, in order to stimulate urban renewal and the implementation of the existing urban services.

In this perspective, the city of Milano launched the Giardini Condivisi (Shared Gardens) programme. It represents an innovative way to promote the recovery and management of vacant public areas, as their return to local use is the result of collective activity. In the areas affected by this programme, gardening, farming activities and meetings between different generations and cultures are encouraged. In addition to the simple redevelopment of the areas, the project also pursues different aims of reinforcing communities in order to reach a common goal, mutual help and the desire to contribute to eco-sustainable management of underused and vacant areas.

The Giardino Nascosto (Hidden Garden) is an example of a project stemming from this programme. The area, which is owned by the municipality, is located in the southwest of the city in zone 6 (as is the via Chiodi community garden). In 2012, the residents started to redevelop this polluted area that had been disfigured by the illegal dumping of various materials, particularly plaster and cement. After the approval of the new regulation in 2015, the civic association signed a formal agreement with the city in order to recognise the *Giardino Nascosto* as a practise of social re-appropriation of underused and abandoned

municipal space. The aim of the project is primarily to give a different image to this space, from an abandoned and hidden area to a garden that is accessible to all citizens of Milano with horticultural activities, collective farming, workshops and cultural and social moments, including meetings.

4 | Conclusions

We can draw some first consideration about the quality features of resilience in spatial planning from the two cases discussed above. These are strictly related to a new balance between institutions and communities in a territorial governance related to:

- the reflective capacity, linked to the recognition and management of land resources;
- the flexibility of the process, that allows adaptation of decisions to the territorial needs and implementation of strategies over time;
- the creativity that gives space to individual initiatives and to the integration with institutional practices;
- the inclusion of stakeholders, local actors and self-organized protagonists in the decision-making process;
- the integration of different action scales and multiple policies, focus on river, rural and urban areas;
- the robustness, the ability to converge the society toward a common evolutionary perspective, widely shared, through the guarantee of quality and effectiveness of results.

Therefore, it is possible to affirm that the two cases are territorial governance approaches able to produce resilience in the territorial system. A social resilience (Pearce, 2003), related to local actors and their ability to build networks (multilevel social networks) and to define innovative solutions (collaborative planning and participation), launching a flexible and incremental territory-making process. A resilient governance process, open, over time, to all required transformations related to the changes of the socio-economic context. Strategic actions of innovation and transformation shall be selected by the local actors, within the learning process about local resources, opportunities and strengths, to maintain and enhance the identity or the territory, necessary to ensure the quality and functionality of the system over time.

Thanks to the RA and to community actions, the territorial system is renewed through a continuous synergy between long-term strategies and immediate actions, supported by top-down institutional resources and bottom-up initiatives. Even self-organized social groups are active in proposing minor projects, whose sharing and dissemination on the territory generate resilience.

In the RA, the methods gives a stable organization to a multitude of spontaneous processes of land use and land management and also to minor projects, creating coherency within a unique reference system.

Instead in the Urban gardens, approximately ten years from the first intervention, it is evident that the social re-appropriation of these spaces for a common use was a clear result of urban regeneration. The Community Garden Network has implemented a new type of spatial governance in which the community acts directly in response to ignored social needs, in relation to the provision of resources and services, while developing trust and empowerment, and transforming relations with the municipality. With this shift from government to shared governance, the local institution has promoted the expanding roles for no-state actors in service provision and management, and in the participation in planning activities. In particular, organised citizens can propose new ways of solving social demands, while the public sector can innovate within itself by promoting new forms of organisation and coordination, as well as more openness to the citizenship in the provision of services and resources.

In conclusion, for all the reasons above, these experiences can be associated to the concept of "evolutionary" resilience, on the one hand the RA as a tool for river basin management that combines recombination of evolved structures and processes, renewal of the system and emergence of new trajectories; and on the other the Community gardens initiative as Communities and Institutions start a direct and mutual relationship in which both learn and innovate, focusing on the management of the new social and territorial dynamics.

References

Affeltranger B., Lasserre F. (2003), "La gestion par bassin versant: du principe écologique à la contrainte politique – le cas du Mékong", in *Vertigo. La revue en sciences de l'environnement*, no. 14, vol. 3.

Antenesa P. et Al. (2009), "Participation and Evaluation for Sustainable River Basin Governance", in *Ecological Economics*, no. 68, vol. 4, pp. 931-939.

Barthel S., Parker J., Ernstson H. (2015), "Food and Green Space in Cities: A Resilience Lens on Gardens and Urban Environmental Movements", in *Urban Studies*, no. 52, vol. 7, pp. 1321-1338.

Berkes F., Folke C. (1998), *Linking Social and Ecological Systems: Management Practices and Social Mechanisms for Building Resilience*, Cambridge University Press, Cambridge.

Brunetta G. (2016), "The resilience concept and spatial planning in European protected areas development. Facing the challenges of change", in Hammer T., Mose I., Siegrist D., Weixlbaumer N. (eds), *Parks of the Future. Protected Areas in Europe Challenging Regional and Global Change*, Oekom, Munchen, pp. 25-36.

Brunetta G. (ed. 2015), *Smart Evaluation and Integrated Design in Regional Development. Territorial Scenarios in Trentino*, Ashgate, Aldershot.

Brunetta G. (2015), "The Contractual Communities' Contribution to Cultural and Natural Resource Management", in Gambino R., Peano A. (eds), *Nature Policies and Landscape Policies. Towards an Alliance*. Springer, Dordrect, pp. 233-241.

Carter J. G. (2007), "Spatial planning, water and the Water Framework Directive: insights from theory and practice", in *The Geographical Journal*, no. 173, vol. 4.

Davoudi S. et Al. (2012), "Applying the Resilience Perspective to Planning: Critical Thoughts from Theory to Practice" in *Planning Theory and Practice*, n. 13, vol. 2, pp. 299-333.

Davoudi S., Strange I. (2009), "Space and place in the twentieth century planning: An analytical framework and historical review", in Davoudi S., Strange I. (eds), *Conceptions of Space and Place in Strategic Spatial Planning*, Routledge, London, pp. 7-42.

Drake L., Lawson L.J. (2014), "Validating verdancy or vacancy? The relationship of community gardens and vacant lands in the U.S.", in *Cities*, vol. 40, pp. 133-142.

Eckerberg K., Joas M. (2004), "Multi-level Environmental Governance: a concept under stress?", in *Local Environment*, no. 9, vol. 5.

Eizeberg E. (2012), "Actually Existing Commons: Three Moments of Space of Community Gardens in New York City", in *Antipode*, no. 44, vol. 3, pp. 764-782.

Folke C. (2006), "Resilience: The emergence of a perspective for social-ecological systems analyses", in *Global Environmental Change*, vol. 16, pp. 253-267.

Garcia M., Eizaguirre S., Pradel M. (2015), "Social innovation and creativity in cities: A socially inclusive governance approach in two peripheral spaces of Barcelona", *City, Culture and Society*, vol. 6, pp. 93-100.

Ghose R., Pettygrove M. (2014), "Actors and networks in urban community garden development", in *Geoforum*, vol. 53, pp. 93-103.

Guimaraes Pereira A., Corral Quintanab S. (2009), "3 pillars and 1 beam: Quality of river basin governance processes", in *Ecological Economics*, n° 68, vol. 4, pp. 940-954.

Holling C. S. (1973), "Resilience and stability of ecological systems", in *Annual Review of Ecological Systems*, vol. 4, pp. 1-23.

Ingaramo R., Voghera A. (2009), "I Masterplan", in Provincia di Torino (a cura di), *Concorso di Progettazione. Contratto di Fiume del bacino del torrente Sangone Masterplan del piano d'azione*. Torino, pp. 9-10.

Ingaramo R., Voghera A. (2012), *Planning and Architecture. Searching for an approach,* Alinea International, Perugia.

Jobb J. (1979), *The complete book of community gardening*, William Morrow and Company, New York.

Kasperson J., Kasperson R., Turner B. (1995), *Regions at Risk: Comparisons of Threatened Environments,* United Nations University Press, New York.

Kidd S., Shaw D. (2007), "Integrated water re source management and institutional integration: realising the potential of spatial planning in England", in *The Geographical Journal*, no. 173, vol. 4.

Magnaghi R. (2011), "Contratti di fiume e pianificazione: uno strumento innovativo per il governo del territorio", in Bastiani M. (a cura di), *Contratti di fiume. Pianificazione strategica e partecipata dei bacini idrografici*, Dario Flaccovio Editore, Palermo, pp. 31-41.

Pearce J. (2003), *Social Enterprise in Anytown*, Calouste Gulbenkian Foundation, London.

Portugali J. (2000), *Self-organization and the City*, Springer, Berlin.

Rockfeller Foundation (2014), *City Resilience Index. City Resilience Framework*, Ove Arup & Partners International Limited, New York.

Scheffer M. (2009), *Critical Transitions in Nature and Society*, Princeton University Press, Princeton.

Scott A.J. et Al. (2013), "Disintegrated development at the rural-urban fringe: Re-connecting spatial planning theory and practice", in *Progress in Planning*, vol. 83, pp. 1-52.

Seyfang G., Smith A (2007), "Grassroots Innovations for Sustainable Development: towards a new research and policy agenda", in *Environmental Politics*, no. 16, vol. 4, pp. 584-603.

Steward J. (1955), *Theory of Culture Change*, Urbana: University of Illinois Press.

Voghera A. (2014), "Regional Planning for Linking Parks and Landscape: Innovative Issues", in Gambino R., Peano A. (eds), *Nature Policies and Landscape Policies. Nature Policies and Landscape Policies towards an Alliance*. Springer, Dordrect, pp. 137-144.