

**Does the post-disaster resilient city really exist?  
A critical analysis of the heterogeneous transformative capacities of housing  
reconstruction “resilience cells”**

Angeliki Paidakaki and Frank Moulaert  
Department of Architecture, Research Unit Planning and Development,  
KU Leuven, Leuven, Belgium

**Abstract**

**Purpose** – The purpose of this paper is to advance the understanding of “resilience” by disentangling the contentious interactions of various parameters that define and guide resilience trajectories, such as the physical infrastructure, socio-spatial inequalities, path dependencies, power relationships, competing discourses and human agency. This socio-political reconstruction of “resilience” is needed for two reasons: the concept of resilience becomes more responsive to the complex realities on the ground, and the discussion moves toward the promotion of more dynamic recovery governance models that can promote socially just allocated redundancy in housing actions, which could be seen as a key to incubating resilience.

**Design/methodology/approach** – This is a conceptual paper that mobilizes theories of urban political ecology, social innovation and housing with the aim to examine the tensions between various discourses that steer housing production during post-disaster recovery processes, and put a spotlight on the heterogeneity in the transformative capacity of the various actors, institutions and visions of housing systems that preexist or emerge in the post-disaster city. This heterogeneity of actors (i.e. growth coalitions, neighborhood associations and housing cooperatives) consequently leads the discussion toward the investigation of “new” roles of the state in formulating relevant disaster governance models and housing (re)construction systems.

**Findings** – The initial stress produced by a natural event is often extended because of long-term unmet housing needs. The repercussion of this prolonged stress is a loss of social progress partly due to the reiterated oppression of alternative housing production propositions. In this paper, the authors conclude that an asset-based community development approach to recovery can provide an antidote to the vicious cycles of social stress by opening up diverse housing options. This means that the recovery destiny is not predetermined according to pre-set ideas but is molded by the various bottom-up dynamics that democratically sketch the final socially desirable reconstruction outcome(s).

**Originality/value** – The contribution of this paper is twofold. By using theoretical insights from urban political ecology, housing studies and social innovation, the paper first builds up onto the current reconstruction of the notion of disaster resilience. Second, by identifying a heterogeneity of “social resilience cells”, the paper leads the discussion toward the investigation of the “new” role of the state in formulating relevant recovery governance models. In this respect, the paper builds a narrative of social justice in terms of the redistribution of resources and the cultivation of empowerment across the various housing providers who struggle for their right to the reconstruction experiment.

**Keywords** Governance, Social Innovation, State, Resilience, Natural disasters, Post disaster housing reconstruction

## 1. Introduction

Disaster scholarship is a dynamic interdisciplinary research arena that has been preoccupying itself with natural hazards for at least six decades. Some of the questions that it strives to answer are as follows: How is risk perceived? What is the risk that natural hazards pose to (urban) communities/human settlements? Who will be responsible for dealing with this risk? With what means and toward what end? The concept that currently dominates the disaster discourse is that of resilience. Initially theorized in the 1970s by Holling as an ecological concept, resilience was later reformulated as a potentially useful tool to build, develop or reinforce capacities in organizations, local communities and entire systems to withstand future unexpected natural episodes (Kuhlicke, 2013). While first used to refer to the ability of an ecosystem to resist shock, today, the concept has evolved and encompasses a more thoughtful understanding of what resilience implies, taking into account the multi-dimensionality of urban, peri-urban and rural systems, including their physical infrastructure, social and spatial inequalities, path dependencies and complex governance systems, power relationships and competing discourses, human agency and political mobilization. However, this understanding is still at an embryonic level. Thus far, few studies have unpacked the contentious nexus between pro-equity and pro-growth rhetoric, resilience planning and disaster governance. Some of the questions that urgently need to be answered are the following: Resilience of what, to what and for whom? Who is benefiting from mobilizing and imposing a biased understanding of resilience and to what end? Whose interests are best promoted and accommodated by a post-disaster “dynamic transformation”? Who is in the decision-making room for post-disaster rehabilitation, which socio-spatial unit focus is chosen and whose knowledge and whose recovery is prioritized? (Kuhlicke, 2013; Wilkinson in Davoudi et al., 2012).

In this article, we argue that there are various social resilience cells (SRCs) within cities, namely, social groups of various kinds that have their own language and defend their discourses on the basis of their own common values, needs and aspirations and sometimes ideological foundations. Some SRCs are more powerful than others, in terms of recognition, access to resources, facilitation of their needs through policy orientations, legislative amendments and spatial planning. However, we assume that what makes a system resilient is a just redistribution in terms of resources and cultivation of empowerment of the various SRCs that preexist or emerge after a natural crisis and struggle for their right to resilience equity. We further assume that this redistribution can only be facilitated by the state, as a mediating body with legislative and executive powers, which interacts with the SRCs and provides the best possible conditions for all the SRCs to have their intrinsic quality of “resilience” enhanced as well to peacefully co-exist, survive and evolve. Our assumptions will be backed up with theoretical insights.

The theoretical insights feeding the argumentation of this paper derive from urban political ecology (Swyngedouw, 2005, 2006, 2009a, 2009b, 2010), housing studies (Turner, 1972, 1974, 1978, 1980) and socially innovative governance (Moulaert et al. 2005, 2007; Moulaert and Ailenei 2005; Moulaert 2010). To unpack the heterogeneous transformative potential of urban systems, according to which we will later reconceptualize the notion of resilience, we will narrow down the focus of the analysis on the post-disaster housing reconstruction period but with a historical retrospect when this is contextually relevant. This will provide disaster analysts with an analytically significant long-term chronological platform on which they can test how resilience is variously imagined and re-imagined, shaped and reshaped in terms of discourses, policy orientations, values and actions. The (a)symmetry of power relations among the agents who hold different understandings of resilience, we argue, further guides the implementation of a “city’s resilience” with a particular set of actions and initiatives, while alternative ones in terms of means, goals and aspirations are either wasted away or highly contained. The reason why we take a housing construction perspective is twofold:

- first, because it is a micro-urban system with its own discourses, governance and resources that reflects the wider urban socio-physical complexities; and
- second, because we believe that because of its multi-dimensionality, housing plays a key role in avoiding or overcoming disasters not only through replacing damaged or destroyed materiophysical assets but also because of its potential to enhance democratic redevelopment with an eye toward socioeconomic changes and the betterment of the life of communities.

The exploratory journey of this paper will take the following steps. In Section 2, we will embark on the investigation and critical analysis of the evolution of the concept of disaster resilience. After presenting the state of the art in the disaster resilience scientific discourse and identifying some of the current knowledge gaps in the disaster resilience problematic, we will be in a better position to suggest future research trajectories and perspectives that can fill the emerged lacuna in the literature. In Section 3.1, this lacuna will become the fuel to take off and examine disasters from a zoomed-out, urban political ecology perspective. After viewing the whole urban picture, in Sections 3.2 and 3.3, we will visit the micro-system of housing production, which to a great extent reflects the wider urban socio-physical complexities. By digging out different dynamics in the housing system (i.e. pro-growth regimes, social innovation, path dependencies, governance structures and the role of the state), as well as revealing the different political opportunities offered by housing production within the context of post-disaster reconstruction, we will be analytically more empowered in Section 4 to return to the notion of resilience and consider it with a fresh critical look. Section 5 seeks room for some concluding remarks regarding the importance of governing post-disaster SRCs.

## **2. Resilience: an overview of the scientific discourse and the state of the art**

In the 1970s, the disaster scholarship took the concept of resilience up in response to the inherent uncertainties embedded in the preexisting technocratic approach of “absolute protection” (Berkes 2007; Klein et al., 2003; Allenby and Fink, 2005; de Bruijn, 2004; Kuhlicke and Kruse, 2009; Merz et al., 2010 in Kuhlicke, 2013). Since then, the concept has developed different “facial” features, starting from strong ecological ones, that later developed into more complex socio-physical and which recently evolved into more socio-critical and political.

The ecological face of the disaster resilience concept was introduced by Holling in the 1970s. Trained as an ecologist, Holling understood resilience as a:

[. . .] measure of the persistence of systems and of their ability to absorb change and disturbance in a timely manner and still maintain its ongoing functions and controls as well as the same relationships between populations (Holling, 1996, p. 31 cited in Davoudi et al., 2012).

The characteristics he attributed to resilience were those of “efficiency, constancy and predictability”, all of which are desirable qualities for a “fail-safe” engineering design. The time dimension was another strong given characteristic, to test the systems’ resilience by how fast they re-establish their pre-disaster status of normality (Davoudi et al., 2012).

However, these characteristics could not perfectly adjust into the context of an urban environment. From an urban sociology perspective, the detachment of nature from society is fundamentally misleading. It leads to the social construction of hazards as disorders, and hence, the resilience focus is mainly on the urban spatial dimensions (disaster-prone regions) and not on the social dimensions (and primarily disaster-vulnerable groups and individuals) (Oliver-Smith, 2004; Few, 2003). The assumption of a return to the former state of equilibrium and the “resistance to change” perspective are also misjudgments that underestimate social complexity, the adaptive evolution and the ability for transformation of urban human systems (Lorenz, 2013). At the same time, this “bounce back” quality

is socially and politically undesirable when taking into consideration the perils of returning to pre-disaster structures and institutions that had given birth to vulnerability and the conditions that instigated the disaster in the first place (Manyena 2009 in the Editorial of Local Environment, 2011). While the ecological characteristics of resilience make better sense when applied to robust engineering structures able to withstand natural shocks in the short term, they are inadequate for tackling the underlying chronic social determinants of vulnerability as well as for reflecting the long-term social learning, institutional adaptation and social transformation triggered by the disaster and maintained across time-guiding future disaster planning trajectories.

To address this limitation, the disaster resilience discourse surpassed a nature–society dualism and placed its focus on adaptation, in the sense of “bouncing forward” and envisioning new imaginations of a safer city (Manyena 2009 in the Editorial of Local Environment, 2011). This focus on the adaptive capacity underpins the undiscovered evolutionary dimension of resilience, molding new, social features onto the face of resilience. Resilience from this perspective is understood not only as a fixed asset (in terms of engineering and ecological robustness) but also as a continually changing, socially transformative process (Davoudi, in Davoudi et al., 2012). This approach underscores the importance of developing a capacity to track down “the opportunities that always arise during a crisis to emerge stronger and better than before” (Seville, 2009, p. 10 cited in Davoudi et al., 2012). Strength and betterment are interpreted here mainly in social justice terms, manifested in a more just redistribution of social bads and goods that will allow the levels of vulnerability of the various social subpopulations embedded into spatially defined systems (cities and neighborhoods) to be less polarized (Cutter et al., 2008; Vale and Campanella, 2005 cited in Duval-Diop et al., 2010).

The “bounce forward” ability conceptualization of resilience has implications for disaster research and scholarship because it helps us to re-think the underlying philosophical arguments, particularly those around social engineering, structure and agency (Editorial of Local Environment, 2011). Various social groups and institutions will reorganize themselves to increase their capabilities to influence change, most of the times in a contentious way. While, on the one hand, the “bouncing forward” represents a more radical agenda and an attractive and plausible proposition (Shaw cited in Davoudi et al., 2012), on the other hand, the burning question is bouncing forward to what and for whom? (Porter and Davoudi in Davoudi et al., 2012) Whose knowledge and whose recovery are prioritized? (Kuhlicke, 2013; Editorial of Local Environment, 2011). In a nutshell, whose transformative ability will be enhanced and whose will be undermined? To respond to these critical questions, the resilience face has recently developed political features. The aim is to better theorize and operationalize the political movement in which disaster resilience can be institutionalized into urban planning (Swyngedouw, 2009a).

By placing emphasis on the unbalanced power relations embedded in human systems, commentators argue that the most powerful stakeholders sanction alternative opinions and actions by consolidating a position of superiority with reference to their own hegemonic social construction of “resilience” (also see Davoudi, 2012; Cannon and Müller-Mahn 2010, in Davoudi et al., 2012; Kuhlicke, 2013). From this perspective, resilience is clearly acknowledged to be a fundamentally debated and politically fraught discourse “enwrapped with power relations and enabling some effects while closing down others” (Leach, 2008, p. 13 cited in Davoudi et al., 2012). Similarly, we argue that protection measures should be focusing on not only how the cities relate to a natural hazard but also how different social systems form an environment for each other, posing risks to one another, in terms of unjust oppression of alternative meanings and capacities of resilience (see also Teigão dos Santos and Partidário, 2011). Through these lenses, the discursive call for resilience can never be apolitical or power-blind. However, there are notably few publications, if any, that address the socio-political

contention over the meanings of resilience, which then steers and gives shape to the pursued security actions in practice (see also Wilkinson in Davoudi et al., 2012).

The interactions between discursive hegemony (or antagonism), power relations, social innovation and recognition that ultimately drive governance models and steer resource trajectories need to be unpacked and investigated urgently. For this purpose, we will mobilize insights stemming from urban political ecology, and particularly, the concept of metabolic circulations, to take a zoomed-out perspective of how all the aforementioned parameters interplay with each other, sketching the complex socio-physical and political profile of a city. We will then zoom-in and dig into the mechanisms of the urban subsystem of housing production and allocation to dig out a heterogeneous transformative potential of post-disaster building processes, which ultimately define and operationalize resilience in a variety of ways.

### **3. Resilience revisited: a housing perspective**

#### **3.1 Urban political ecology of housing reconstruction**

An urban political ecology approach can be used as a theoretical tool for analyzing how decision-makers arbitrate the distribution of resources and in doing so, develop into leading agents in the governance and control of the populations of whom they are accountable (Smith and Ruiters, 2006). Cities are conceived as vehicles constituted in and through metabolic circulatory socio-ecological flows (Cook and Swyngedouw, 2012). The heterogeneous assemblages that emerge are central to a historical–geographical materialist ontology (Swyngedouw, 2006). To understand its meaning, we need to treat urban ecology not so much as a question of values, morals or ethics, but rather as a mode of “understanding the evolving material interrelations between human beings and nature” (Foster, 2000, pp. 10-11 cited in Swyngedouw, 2006). Swyngedouw and Heynen (2003, p. 905) explain that:

[. . .] under capitalist social relations, the metabolic production of use-values operates in and through specific social relations of control, ownership and appropriation and in the context of the mobilisation of both nature and labor produce commodities (as forms of metabolized socionatures) with an eye towards the realization of the embodied exchange value.

Metabolic circulations such as real estate trends and land speculation, changing economic and political landscape, changing population trends, changing housing demand, trends in private philanthropic activities, competing rebuilding interests within city boundaries, multi-state advocacy efforts and ongoing rebuilding efforts (Duval-Diop et al., 2010) are instilled by different levels of power and generate positions of empowerment and disempowerment (Cook and Swyngedouw, 2012), recognition and misrecognition.

This ultimately results in the establishment of such conditions under which particular trajectories of socio-environmental change weaken the socio-economic stability of some social groups or geographic spaces, while the sustainability of social groups and places elsewhere might be reinforced (Swyngedouw and Heynen, 2003). When digging deeper into the politics of socio-ecological transformations, we are in a better position to tease out:

- who (or what discourse) gains from and who pays for;
- who (or what discourse) benefits from and who suffers (and in what material and non-material ways) from particular processes of metabolic circulatory change; and
- what or who needs to be protected and sustained and how this can be supported and accomplished (hegemonic vs non-hegemonic narratives and actions) (Swyngedouw, 2010).



At the same time, urban trajectories are never stagnant. They are in a continuous, mostly slow flux. What tends to be witnessed in moments of crises is an accelerated renewal of the urban system. The mechanisms of crisis and recovery may both provoke and accelerate social innovation, in terms of satisfaction of specific needs (usually material-like housing as well as socio-cultural or political needs in terms of empowerment and cultivation of citizenship) and changes in social relations including governance relations by virtue of collective initiative (Moulaert, 2010; 2013). For example, associations, co-operatives and solidarity networks come into being amid conditions of deprivation of human needs and fill the gaps in institutional forms to carry forward alternatives (co-operative organization of the social firm, redistribution mechanisms and legal status of third-sector initiatives) (Moulaert et al., 2005). This emergence and re-emergence of social innovation is the response to the alienation and non-satisfaction of a variety of needs by the traditional sectors (private and public) in times of socioeconomic and natural crises (Moulaert and Ailenei, 2005). Dynamic, new trajectories have the potential to startlingly change the pre-crisis, urban metabolic profile.

To better illustrate the aforementioned intricate politico-urban dynamics and how they interact with socially innovative practices and processes, we focus on housing systems. In this study, we make the assumption that a post-disaster housing reconstruction period can be a relevant political moment in which we can start theorizing and operationalizing resilience into urban planning. We argue that housing, beyond its apparent socio-economic importance and its exoskeleton protective value for the human body (Erguden, 2001; Bullard and Wrigth, 2005, cited in Masozera et al., 2007; Gandy, 2005, p. 28 cited in Cook and Swyngedouw, 2012), is also an instrument for action by people, a potential paradigm for change depending on contextual factors, such as the relations between public authorities, civil organizations and developers; the amounts and sources of reconstruction funding; and the ability of people and communities to voice their needs and demands with the aim to rebuild damaged living conditions (Turner, 1978). On the one hand, housing reconstruction presents an opportunity for progress in the functioning of the community, starting from discussing housing alternatives to bringing up the questions of human rights and changes in socio-political relationships (Boano and Hunter, 2012; Johnson, 2011; Satterthwaite, 2011), while, on the other hand, it provides an opportunity for re-triggering processes of wealth accumulation. We argue that the ultimate design of reconstruction policies and the allocation of rights in the reconstruction “experiment” will depend on how the state best accommodates the various housing discourses advocated by various groups who envision development and mobilize actions in radically different ways.

To be more explicit, the housing system landscape could be characterized by the following provisional bipolar division: on the one hand, we witness the powerful pro-growth urban coalitions, consisting of powerful local actors and institutions (i.e. realtors, bankers and utility companies) working together with the pro-growth SRCs (i.e. for-profit developers) to generate and extract exchange values through ongoing land-use intensification (including hazard-prone areas, usually on the coast) (Bull-Kamanga et al., 2003). These agents define housing problems by material standards, and housing values are determined by the material quantity of the related products, such as profit or equity (Turner, 1980). Houses are, hence, treated as commodities subdivided into lots, ready to become the object of a profitable transaction in the free market (Pais and Elliot, 2008). On the other hand, we observe the, generally less powerful, pro-equity coalitions, consisting of individual homeowners and their associations, neighborhood associations and civic groups who work closely with the pro-equity SRCs (i.e. non-profit developers) to advocate use values and preserve and improve the local quality of life (ibid). It is also these groups who advocate a qualitatively richer housing market or a more just distribution of economic resources (Davoudi et al., 2012).

Between the pro-growth and the pro-equity coalitions, we further observe the pro-comaterializing SRCs. These are organizations of various kinds who place emphasis on housing production as a

collective activity and not as an end product. Either connected to ideological connotations or triggered by traditional housing market exclusion due to financial insolvency, these SRCs undertake the responsibility for their own social reproduction and housing reconstruction. Their mode of organization usually manifests itself through disaster-affected homeless people's cooperatives, community land trusts and grassroots rebuilding initiatives collectively erecting houses in the "solidarity" style (Biel, 2011; Satterthwaite, 2011).

What we contend is that all these three broadly grouped housing agents have their own transformation capacities. Their differentiation – across and among them – lies in the ways by which they understand and materialize transformation, and the answers that they give to questions such as the following: For whom are we rebuilding? How do we provide for the needs of all the people who were displaced by a natural disaster? Who should be sitting in the decision-making room? Who should rebuild? What civic principles and moral values are on the table that frame and push reconstruction processes forward? (Gutmann, 2006).

The symmetries or asymmetries in power relations among the social agents occupying different positions in the housing system(s) will respectively empower or dis-empower voices echoing alternative developmental values attached to housing (and the consequent manifestation in housing actions and programs), which will ultimately define the orientation of urban planning processes and future socio-environmental metabolic ontologies, and hence the trajectories of the disaster resilience scientific discourse.

### **3.2 Heterogeneous developmental potential of housing reconstruction**

The discussion on transformation inevitably leads us to ask an urgent question: Who steers the transformative process with an eye toward resilience and which direction is it heading in? An interesting way to unpack the transformative heterogeneity within housing systems is to embark on John Turner's (1972; 1974; 1980) influential idea of treating housing either as a verb or as a noun. This idea lies on the following distinction:

When (housing) is used as a noun, (it) describes a commodity. When used as a verb, it describes the process of housing. If housing is treated as a noun, then different kinds of agencies will plan for and provide for people's housing needs with the result that homeless people become consumers or passive beneficiaries. If housing is treated as a verb, decision-making power is equally distributed and homeless people may participate in directing the construction of their own houses or may even become involved in building them.

Both treatments share transformative potential. On the one hand, when housing is treated a noun, and hence as a commodity, the growth logic is celebrated, and the real estate use values are transformed into exchange values to cater for wealth accumulation. On the other hand, when housing is treated as a verb, the material aspect of the housing need is only met through the simultaneous activation of socio-political processes aiming for a more inclusive and democratic housing governance system (Boano and Hunter, 2012; Gonzalez et al., 2010).

**3.2.1 Housing as a noun: recommodifying housing.** When housing is seen in a materialistic manner, constructed as a top-down, profit-generating product (see also Boano and Hunter, 2012; Johnson, 2011), a "growth ethic" is promoted. The "bouncing back" reconstruction rhetoric in the aftermath of natural disasters is translated as a return to normal housing markets. Consequently, Davoudi et al. (2012, p. 332) argue, "the possibilities of transformation will conveniently suit the neoliberal urban growth, regeneration and renewal agendas that have persistently dominated planning discourses for the past 30 years". The "reconstruction project or experiment" provides a new set of opportunities for

the accumulation of capital in formerly public sectors of the disaster-affected region's political economy. Thus, disasters create a momentous occasion and basin of resources for the region's pro-growth coalition to accelerate and even expand long-established plans for transforming real estate use values into exchange values for private development (BondGraham, 2011). By voicing the need to return to "normality", the priority is not to meet the housing needs of the majority of the disaster-affected (neo)homeless citizens, but, rather, to invest in profit-generating sectors (Adams et al., 2009), resetting the "ground rules" for appropriate behavior in cities, generally defined by middle-class norms and with minimalist supply-side interventions (Peck, 2006).

However, what exactly does "normality" entail in housing systems? Davoudi et al. (2012) arguably criticize the depoliticized and normalized understanding of the housing markets' normality, when evidently over-inflated housing markets, predatory lending practices and gross wealth disparities are socially and spatially dysfunctional in a profound way. However, this post-disaster planning discourse remains hegemonic by promising growth that is good for everyone on the basis that it brings new jobs, taxes and stature to the area and reconstitutes citizens' pride and the collective psyche (Pais and Elliot, 2008). In this way, the post-disaster landscape provides the opportunity for capitalistic modes of housing production to renew themselves by entering new cycles of wealth accumulation (Biel, 2011). This local growth is also state-driven, as governments at different scales hold legal authority over zoning and land-use decisions, while at the same time, they are well positioned to leverage capital investments. This serves the "inherent" elite practices of producing space and built forms well (Pais and Elliot, 2008). Therefore, privatization goes hand in hand with state intervention in the form of rules, laws, policy tools and programs to stimulate private investment and benefit and empower private contractors (Gotham, 2012, 2014). At the same time, Seidman (2013) rightly reminds us that post-disaster neighborhood rebuilding is also about re-population, i.e. about bringing people back to reclaim a neighborhood as their home. As a reaction to unjust post-housing trajectories – which usually mirror the pre-disaster ones – we also observe examples of individuals and organizations rediscovering the values of solidarity and reciprocity, who organize themselves in various ways to cater to their housing needs (or fight for their housing rights), as well as groups imagining new modes of collective housing ownership or housing (re) building in a socially collective way.

**3.2.2 Housing as a verb.** When housing is treated as a verb, people (re)claim their right to determine and act upon their own specific housing needs and priorities (Turner, 1980). In social innovation terms, it is about meeting a material housing need through activating the capacity-building and governance dynamics of social movements and initiatives (Martinelli, 2010). In this case, buildings contain political essence due to their physical relation with specific social processes regarding empowerment, recognition of previously silent or housing excluded social groups, changes in the existing social – and power – relations toward a more inclusive and democratic housing governance system (Boano and Hunter, 2012; Gonzalez et al., 2010).

What is important to note is that post-disaster emerging and pre-disaster existing social mobilization regarding housing issues varies in terms of ideology, interest and agendas, modes of action, level of professionalism, cooperation with or against the state and/or in favor or against the socio-political status quo (Swyngedouw, 2009b; Johnson, 2011; Gonzalez et al., 2010).

Within this landscape of social movements, power imbalances are also found. According to Swyngedouw (2009b, p. 74), this ultimately determines:

[. . .] the rise and prominence of new social actors, the consolidation of the presence of others, the exclusion or diminished power position of groups that were present in earlier forms of government and the continuing exclusion of other social actors who have never been included.



The important question that we would like to pose here is the following: Wouldn't it be socially just as well as democratically correct if all the various actions were equally given a facilitating room (in terms of policies, regulatory frameworks and resources) to unfold their transformative capacity? If we assume that all initiatives (market-oriented, welfare-based, socially innovative and radical) arise out of the need to meet specific housing needs (i.e. profitable assets, quality of life, social and spatial inclusion, and alternative lifestyle) for specific groups of people (developers, banks, homeowners, neighborhood associations, affordable housing providers, community land trusts, housing cooperatives, activists, etc.), should we not then try to investigate new governance models that would respond to and cater to this pluralism? If a path-dependent narrow range of housing allocation models does not fit the needs (material, sociopolitical, citizenship, etc.) of various groups and neighborhoods on the ground, would it not be more resilient to open up this range and examine what works and what does not work in practice?

There are enormous pressures to figure out ways of controlling and imposing the narrative about what will and should happen. Different groups feel that they are allowed or not allowed to tell their story as the potentially dominant one. To a great extent, the sheer power of past dominant narratives together with the loss of memory of heroic struggles have steered and guided existing trajectories that work as constraints on innovation or radical rethinking of places and yield a much less transformative result than might be desirable (Vale, 2006). Because of the existence of power imbalances and contentious relationships between the various housing agents fighting for their lion's share of construction and reconstruction processes, we argue that it is the role of the state, as a mediating force and as an agent with legislative and executive powers over housing production and allocation, to:

- ensure that all voices are taken into account and that narratives are not misinterpreted or manipulated in various ways;
- pursue social justice in terms of power distribution across the various agents; and
- reorganize governance structures and institutions accordingly to make them more responsive and relevant to all the socio-spatial and economic realities and needs on the ground.

### **3.3 Imagining new housing governance models: role of the state**

Reconstruction governance is the long-term post-disaster response domain where society's housing priorities are defined and redefined by a diversity of concerned actors (Hilhorst, 2003). Natural disasters therefore bring an implicit breach of a social contract where the state is expected to facilitate the return of the disaster displaced and provide them with all the relevant means with which they can meet their ends in terms of housing. The aftermath of disaster, thus, affects state-society relations (Teigão dos Santos and Partidário, 2011) and how individuals and organizations institutionally relate to each other in their responses to environmental, safety and developmental issues. In this dialectical process, the state – in its double role of target and mediator of contention – is a central actor in the post-disaster context, as opportunities and threats, as well as outcomes for the future, socially optimal, urban risk-reduction trajectories, are conditioned by the permissive or repressive stance of local, regional and national authorities (Tilly, 1978 cited in Martinelli, 2010). The housing safety fractures caused by pre-disaster social-spatial segregation and disintegration, hence, cannot possibly be overcome without the transformation of institutions and practices of reconstruction governance through a redefinition of state-civil society relations (Garcia, 2006; LeGales, 2002 cited in Moulaert, 2010). Garcia (2006, p. 762) explains that:

[. . .] since social welfare builds on a conception of social justice and this is relative to social meaning, the extent to which the state performs as an enabling institution beyond its regulatory function depends on the sense of justice forged by institutional design and supported by citizens.

The state's promptitude to support a sense of justice may not be strong in the absence of citizens' commitments to defend equality and democracy (Garcia, 2006) and/or under hectic conditions inevitably following a post-disaster context.

What we argue is that governance structures are relational, conflictual and dynamic. Even the state itself can never be a neutral terrain among social forces and political projects, but any bias is always tendential and can be undermined or reinforced by appropriate strategies deriving from civil society actors (including the market) (Jessop, 1990). At the same time, the state is not a monolithic institution whose socially accepted function is to define and enforce collectively binding decisions on the members of a society in the name of their common interest or general will. This means that the state consists of various interscalar administrative bodies, institutions and organizations, which are affected in a different way by the various post-disaster reconstruction narratives and the articulation and aggregation of differential interests, opinions and values (Jessop, 1990). This provides plenty of room for maneuver to influence priorities and for the less vocal groups who have been traditionally absent from political and administrative systems on a local and other institutional/spatial scale (Moulaert et al., 2005).

The post-disaster reconstruction discussion would then move toward the symbiosis of two necessarily opposing but complementary societal images: that of the "planned society" and that of the "good society", in John Friedmann's terms (Turner, 1978). However, the governance framework emerging from this symbiosis can only make sense if civil society initiatives are:

- not "captured" by the state, thus weakening their innovative dynamics when they fall prey to the public-managerial logic in the bureaucratic apparatuses (the case of authoritarian planning and New Public Management policy implementation procedures); and
- not "cherry picked" to conveniently correspond to the state's conventional view of governance and delivery management (Swyngedouw and Moulaert, 2010; also Garcia, 2006).

City authorities have been encouraging local consensus politics and co-operation and, at the same time, have discouraged contestation. This type of governance may be falling short of democratic governance, particularly if the numbers of excluded citizens, namely, poor citizens and denizens in cities, are increasing (Garcia, 2006). This brings the post-Fordist, market-inspired models of governance into the spotlight. Few examples of these technologies are reflexive risk-calculation, accountancy rules and accountancy-based disciplining, quantitative evaluations of performance and superior accountability (Dean, 1999; Burchell 1993 cited in Swyngedouw, 2005; Lévesque, 2013), which call for audit activity as a central disciplining and controlling technology (Power 1997 cited in Swyngedouw, 2005). In this way, democratic values, identities and social relations along with public spaces, the common good and the obligations of civic responsibility are ultimately undermined (Giroux, 2006).

The search for socially innovative governance initiatives should therefore place the magnifying lenses closer to the capacity for experimentation and reflective learning (Gonzalez and Healey, 2005). Today, we cannot think of civil society as a homogeneous unity. Gerometta et al. (2007: 2018) aptly observed that:

[. . .] within fragmented cities with heterogeneous social groups as well as within distressed neighborhoods where often socially and ethnically diverse groups live together involuntarily, values and orientations are likely to be heterogeneous and conflicting.

The outcomes of actions can be assessed in different ways. For example, for some groups, a housing intervention can be considered successful because it fostered a public space for deliberation and achieved advances in the diffusion of true citizenship and the delivery of social and political rights to all, but for others, it could be considered a failure because it was not sufficiently radical when, for example, democratization of the state housing system was not systematically used as a step toward deepening social change (Novy and Leubolt, 2005). In disaster terms, this means that resilience is seen differently from different perspectives.

What we call for is for the state to become both a planner and a mediator between different civil society and market forces. The state is not only ideologically legitimized as the political expression of civil society, but it also has to sanction the private ownership of the means of production and guarantee the appropriation of surplus value in ways that support accumulation. Hence, the current challenge for the state that pursues a “developmentalist” agenda is not only to find a balance between market-organized economic growth and all other possible political objectives, but also to seek more socially just methods for dealing with competition and tensions concerning the conditions of accumulation and the mechanisms of appropriation and distribution of surplus value (Swyngedouw, 2009b).

From a normative perspective, we argue that it shall remain under the state’s mandate to guard against risk by fostering and maintaining diversity and conciliation. This mandate is translated into a provision by the state for an enabling institutional, regulatory and legal framework that will disallow pro-growth hegemonic discourses to dominate the reconstruction process, and instead invest in experimenting with a variety of possible housing providers. For example, in the post-disaster housing domain, to be able to cater to the urgent housing needs of disaster victims, a more pluralistic tenure system needs to be explored. A system that widens the array of possibilities to secure tenure by offering alternatives to individual, private property (Barnes and Riverstone, 2010) as well as having the potential to initiate a social process of learning and a rediscovery of political involvement. This necessitates a middle ground development pathway, building on current path dependencies, while exploring and materializing new paths. It is not about anathematizing neo-liberal policies all together, but about allowing other types of actions and alternatively institutionalized markets (i.e. housing cooperatives, community land trusts and incremental housing development by multiple developers) to be allocated a fair portion of resources to test their resilience. However, we argue that for the state to formulate a relevant enabling framework for a multiplicity of initiatives, it needs to implement transactive planning (Friedmann, 1987), implying that the planners should be in interpersonal and collective dialogue with grassroots movements, gain an improved understanding of the “practice field” of new political actions and movements on housing production and then facilitate innovative ideas validated through action.

#### **4. Resilience re-conceptualized**

When the concept of resilience is analytically tested from a post-disaster housing reconstruction perspective, a series of critical parameters emerge, which point toward an urgent need to re-clarify the concept to make it more pertinent to the realities on the ground.

These parameters revolve around power relations in development narratives that ultimately result in some housing tools being more accommodated than others. The problem with the hegemonic

resilience rhetoric lies in the fact that it may appeal on the grand level, but often makes less sense – at least in a comprehensive way – when applied to “real communities” in regions, cities and neighborhoods. When we take on board the socio-spatial dimension of resilience and focus on urban agents and metabolic trajectories, the realities are more complex and sensitive to path dependency and specific contexts as well as discourses – whether in terms of resistance to hegemonic restructuring or in terms of the construction of counter-hegemonic discourses and practices (Moulaert et al., 2007). An uncritical definition of resilience as the capacity of rapid recovery back to normality in a safe and better way, thus, can sanction alternative issue frames aspired and mobilized by less powerful groups, institutions and even individuals who have different needs, pursue different goals and, consequently, are not given equal attention in terms of time, resources and values (Roundtable Review, 2006; Pyles and Harding, 2012).

The contemporary housing system is designed to respond financially when disasters destroy property, not when they destroy homes and communities. This force for growth – material and symbolic – downplays pre-hurricane forces of opposition to pro-growth development and blurs the differentiation between use and exchange values, thus carrying forward the interests of pro-growth coalitions (Pais and Elliot, 2008). This results in a political reconstruction battle between the various housing building stakeholders who compete over both the main fantasy (narrative) imposed on the reconstruction planning (progrowth, pro-equity and pro-comaterializing) and the level entitlements for the right to reconstruction “experimentation”.

In this battle, we argue that the role of the state as “peacemaker” is of crucial importance. The promotion of dynamic governance models of reconstruction that promote socially just allocated redundancy – in both narratives and modes of actions – is the key to incubating resilience. This assumption can only be tested in specific contexts because natural hazards affect places that have their own historical development trajectories and specific institutional settings. It can also only be tested in a long period, during which:

- the power dynamics between discourses potentially change depending on the sustainability and stamina of their promoters; and
- new undiscovered housing actors are developed responding to the different needs based on different everyday experiences (*la diversité du quotidien*) (Moulaert, 2010).

From an urban political ecology perspective, we read resilience as a continuous struggle to alter the trajectories of metabolic circulations through a constant recombination of narratives, resources and institutional structures for the sake of imagining and materializing urban environments that respond to the various development aspirations of the citizens’ majority. Therefore, we finally argue that the resilient city cannot exist per se, but SRCs within the city struggling for their own right to experimentation, unfolding their own transformative capacities and upscaling successful experiments and experiences can.

The following section makes a preliminary effort to start theorizing the governance of these post-disaster SRCs, with insights stemming from the asset-based community development (ABCD) approach to social transformation.

## **5. Concluding remarks**

In the post-disaster city, the initial stress produced by the natural event is often extended because of long-term unmet housing needs. The repercussion of this prolonged stress is a loss of social progress partly due to the reiterated oppression or non-recognition of alternative housing production

propositions. One can argue that the core of the housing reconstruction deficit lies in the way in which traditional community development policies and practices stress deficiencies and problems instead of the potentials within the communities themselves. The ABCD approach can provide an antidote to the vicious cycles of social stress and open up diverse housing provision options (Kunnen et al., 2013). This can be achieved by giving an equal share to the virtuous cycle of solidarity, experimentation and reflexive learning, triggered by the crisis conditions and expressed through the (re) production of SRCs.

The ABCD approach is pertinent to the governance of SRCs because it mobilizes research leading to alternative, counter-hegemonic discourses that speak the multiple “truths from below”. In this way, various narratives are unfolded, the available assets (informal gathering spaces, partnerships and collaborative networks, associations, groups and organizations and culture/history/heritage) are revealed and comprehensively recorded and understood (Kunnen et al., 2013).

This model of governance premised on the asset-based approach shies away from traditional prescriptive ways of urban renewal strategies and underscores the process of effectuation (Moyersoen and Swyngedouw, 2013). This means that the post-disaster urban revitalization process does not predetermine the reconstruction destiny according to pre-set ideas and tools but mobilizes the plurality of assets available on the ground and lets the various bottom-up dynamics sketch the final socially desirable reconstruction outcome(s) (see also Sarasvathy 2001 cited in Moyersoen and Swyngedouw, 2013).

The challenge that lies in the ABCD approach is that assets within spatially bounded communities are heterogeneous and actions tend to be fragmentary and diverse. Because of the existence and overlapping of “multiple communities” of interest with potentially conflicting loyalties and orientations (Kunnen et al., 2013), we argue, in this paper, that the state should play the role of the tertius in the governance of SRCs. This translates into the need of the state to gain a deep understanding of the various conflictual forces played out in the city and exercise social justice in the allocation of rights to experimentation for all. The reconstruction project is thus treated as the long-term democratic provision of a complex good (Moyersoen and Swyngedouw, 2013) that is produced, co-produced and heteroproduced according to the divergent demands and qualities of the SRCs as monitored and negotiated by the state. In this respect, the paper shifts the debate away from a social justice approach to the allocation of housing. The new focus is moved toward building a narrative of a just redistribution in terms of resources and cultivation of empowerment of the various housing providers who struggle for their right to the reconstruction experiment, and hence to a resilience equity.

Future research on the long-term reconstruction governance processes in post-disaster cities around the globe will shed more light on the dynamics of SRCs, which this paper made the first effort to theoretically investigate.

## References

- Adams, V., Van Hattum, T. and English, D. (2009), “Chronic disaster syndrome: displacement, disaster capitalism, and the eviction of the poor from New Orleans”, *American Ethnologist*, Vol. 36 No. 4, pp. 615-636.
- Barnes, G. and Riverstone, J. (2010) “Exploring vulnerability and resilience in land tenure systems after Hurricanes Mitch and Ivan”, available at:



[http://siteresources.worldbank.org/INTIE/Resources/Paper\\_Barnes\\_Riverstone.pdf](http://siteresources.worldbank.org/INTIE/Resources/Paper_Barnes_Riverstone.pdf) (accessed 22 April 2014).

Biel, R. (2011), *The Entropy of Capitalism*, Brill, Leiden.

Boano, C. and Hunter, W. (2012), "Architecture at risk (?): the ambivalent nature of post-disaster practice", *Architectoni.ca*, Vol. 1 No. 1, pp. 1-13.

BondGraham, D. (2011), "Building the New Orleans: foundation and NGO power", *The Review of Black Political Economy*, Vol. 38, pp. 279-309.

Bull-Kamanga, L., Diagne, K., Lavell, A., Leon, E., Lerise, F., MacGregor, H., Maskrey, A., Meshack, M.,

Pelling, M., Reid, H., Satterthwaite, D., Songsore, J., Westgate, K. and Yitambe, A. (2003), "From everyday hazards to disasters: the accumulation of risk in urban areas", *Environment and Urbanization*, Vol. 15, pp. 193-204.

Cook, R.I. and Swyngedouw, E. (2012), "Cities, social cohesion and the environment: towards a future research agenda", *Urban Studies*, Vol. 49, pp. 1959-1979.

Cutter, L.S., Barnes, L., Berry, M., Burton, C., Evans, E., Tate, E. and Webb, J. (2008), "A place-based model for understanding community resilience to natural disasters", *Global Environmental Change*, Vol. 18, pp. 598-606.

Davoudi, S., Shaw, K., Haider, L.J., Quinlan, E.A., Peterson, D.G., Wilkinson, C., Fünfgeld, H., McEvoy, D., Porter, L. and Davoudi, S. (2012), "Resilience: a bridging concept or a dead end? 'Reframing' resilience: challenges for planning theory and practice interacting traps: resilience assessment of a pasture management system in Northern Afghanistan urban resilience: what does it mean in planning practice? resilience as a useful concept for climate change adaptation? The politics of resilience for planning: a cautionary note", *Planning Theory & Practice*, Vol. 13 No. 2, pp. 299-333.

Duval-Diop, D., Curtis, A. and Clark, A. (2010), "Enhancing equity with public participatory GIS in hurricane rebuilding: faith based organizations, community mapping, and policy advocacy", *Community Development*, Vol. 41 No. 1, pp. 32-49.

Editorial of *Local Environment* (2011), "Disaster resilience: a bounce back or bounce forward ability?", *Local Environment*, Vol. 16 No. 5, pp. 417-424.

Few, R. (2003), "Flooding, vulnerability and coping strategies: local responses to a global threat", *Progress in Development Studies*, Vol. 3 No. 1, pp. 43-58.

Friedmann, J. (1987), *Planning in the Public Domain*, Princeton University Press, West Sussex.

Garcia, M. (2006), "Citizenship practices and urban governance in European Cities", *Urban Studies*, Vol. 43 No. 4, pp. 745-765.

Gerometta, J., Haussermann, H. and Longo, G. (2007), "Social innovation and civil society in urban governance: Strategies for an inclusive city", *Urban Studies*, Vol. 42 No. 11, pp. 2007-2221.

- Giroux, A.H. (2006), "Reading Hurricane Katrina: race, class and the politics of disposability", *College Literature*, Vol. 33 No. 3, pp. 171-196.
- Gonzalez, S. and Healey, P. (2005), "A sociological institutionalist approach to the study of innovation in governance capacity", *Urban Studies*, Vol. 42 No. 11, pp. 2055-2269.
- Gonzalez, S., Moulaert, F. and Martinelli, F. (2010), ALMOLIN: How to analyse social innovation at the local level?, in Moulaert, F., Martinelli, F., Swyngedouw, E. and Gonzalez, E. (Eds), *Can Neighbourhoods Save the City?: Community Development and Social Innovation*, Routledge, New York, NY.
- Gotham, K.F. (2012), "Disaster, Inc.: privatization and post-Katrina rebuilding in New Orleans", *Perspectives on Politics*, Vol. 10 No. 3, pp. 633-646.
- Gotham, K.F. (2014), "Racialization and rescaling: post-Katrina rebuilding and the Louisiana road home program", *International Journal of Urban and Regional Research*, Vol. 38 No. 3, pp. 773-790.
- Gutmann, A. (2006), "Preface: 'the wound'", in Birch, E.L. and S.M. Wachter (Eds), *Rebuilding Urban Places After Disaster: Lessons from Hurricane Katrina*, University of Pennsylvania Press, Philadelphia.
- Hilhorst, D. (2003), "Unlocking disaster paradigms: an actor-oriented focus on disaster response" Dorothea Hilhorst, Abstract submitted for session 3 of the Disaster Research and Social Crisis Network panels of the 6th European Sociological Conference, 23-26 September, Murcia, available at: [http://ipcc-wg2.gov/njlite\\_download.php?id=6263](http://ipcc-wg2.gov/njlite_download.php?id=6263) (accessed 4 April 2011).
- Jessop, B. (1990), *State Theory; Putting Capitalist States in Their Place*, Polity Press, Cambridge.
- Johnson, C. (2011), "Kernels of change: civil society challenges to state-led strategies for recovery and risk reduction in Turkey", *Environment and Urbanization*, Vol. 23, pp. 415-430.
- Kuhlicke, C. (2013), "Resilience: a capacity and a myth: findings from an in-depth case study in disaster management research", *Natural Hazards*, Vol. 67 No. 1, pp. 61-67.
- Kunnen, N., MacCallum, D. and Young, S. (2013), Research strategies for assets and strengths based community development. in Moulaert, F., MacCallum, D., Mehmood, A., Hamdouch, A., Swyngedouw, E. and Gonzalez, S. (Eds), *The International Handbook on Social Innovation: Collective Action, Social Learning and Transdisciplinary Research*, Edward Elgar Publishing Limited.
- Lévesque, B. (2013), "Social innovation in governance and public management systems: toward a new paradigm?", in Moulaert, F., MacCallum, D., Mehmood, A., Hamdouch, A., Swyngedouw, E. and Gonzalez, S. (Eds), *The International Handbook on Social Innovation: Collective Action, Social Learning and Transdisciplinary Research*, Edward Elgar Publishing Limited.
- Lorenz, F.D. (2013), "The diversity of resilience: contributions from a social science perspective", *Natural Hazards*, Vol. 67 No. 1, pp. 7-24.

- Martinelli, F. (2010), "Historical roots of social change Philosophies and movements", in Moulaert, F., Martinelli, F., Swyngedouw, E. and Gonzalez, S. (Eds), *Can Neighbourhoods Save the City?: Community Development and Social Innovation*, Routledge, New York, NY.
- Masozera, M., Bailey, M. and Kerchner, C. (2007), "Distribution of impacts of natural disasters across income groups: a case study of New Orleans", *Ecological Economics*, Vol. 63, pp. 299-306.
- Moulaert, F. (Ed.). (2013). *The international handbook on social innovation: collective action, social learning and transdisciplinary research*. Edward Elgar Publishing.
- Moulaert, F. (2010), "Social innovation and community development Concepts, theories and challenges", in Moulaert, F., Martinelli, F., Swyngedouw, E. and Gonzalez, S. (Eds), *Can Neighbourhoods Save the City?: Community Development and Social Innovation*, Routledge, New York.
- Moulaert, F. and Ailenei, O. (2005), "Social economy, third sector and solidarity relations: a conceptual synthesis from history to present", *Urban Studies*, Vol. 42 No. 11, pp. 2037-2053.
- Moulaert, F., Martinelli, F., Gonzalez, S. and Swyngedouw, E. (2007), "Introduction: social innovation and governance in European cities: urban development between path dependency and radical innovation", *European Urban and Regional Studies*, Vol. 14 No. 3, pp. 195-209.
- Moulaert, F., Martinelli, F., Swyngedouw, E. and Gonzalez, S. (2005), "Towards alternative model(s) of local innovation", *Urban Studies*, Vol. 42 No. 11, pp. 1969-1990.
- Moyersoen, J. and Swyngedouw, E. (2013), "LimiteLimite: cracks in the city, brokering scales and pioneering a new urbanity", in Beaumont, J., Nicholls, W. and Miller, B. (Eds), *Spaces of Contention: Spatialities and Social Movements*, Ashgate Publishing, Farnham.
- Novy, A. and Leubolt, B. (2005), "Participatory budgeting in Porto Alegre: social innovation and the dialectical relationship of state and civil society", *Urban Studies*, Vol. 42 No. 11, pp. 2023-2036.
- Oliver-Smith, A. (2004), "Theorizing vulnerability in a globalized world: a political ecological perspective", in Bankoff, G., Frerks, G. and Hilhorst, D. (Eds), *Mapping Vulnerability: Disasters, Development and People*, Earthscan.
- Pais, F.J. and Elliot, R.J. (2008), "Places as recovery machines: vulnerability and neighborhood change after major hurricanes", *Social Forces*, Vol. 86 No. 4, pp. 1415-1453.
- Peck, J. (2006), "Liberating the city: between New York and New Orleans", *Urban Geography*, Vol. 27 No. 8, pp. 681-713.
- Pyles, L. and Harding, S. (2012), "Discourses of post-Katrina reconstruction: a frame analysis", *Community Development Journal*, Vol. 47 No. 3, pp. 335-352.
- Roundtable Review (2006), "Is New Orleans a resilient city?", *Journal of the American Planning Association*, Vol. 72 No. 2, pp. 245-257.
- Satterthwaite, D. (2011), "Editorial: Why is community action needed for disaster risk reduction and climate change adaptation?", *Environment and Urbanization*, Vol. 23, pp. 339-349.

- Seidman, K.F. (2013), *Coming Home to New Orleans; Neighborhood Rebuilding After Katrina*, Oxford University Press, New York, NY.
- Smith, L. and Ruiters, G. (2006), "The public/private conundrum of urban water: a view from South Africa", in Heynen, N., Kaika, M. and Swyngedouw, E. (Eds), *In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism*, Chapter 12, Routledge, New York, NY.
- Swyngedouw, E. (2005), "Governance innovation and the citizen: the Janus face of governance-beyondthe-state", *Urban Studies*, Vol. 42 No. 11, pp. 1991-2006.
- Swyngedouw, E. (2006), "Circulations and metabolisms: (hybrid) natures and (cyborg) cities", *Science as Culture*, Vol. 15 No. 2, pp. 105-121.
- Swyngedouw, E. (2009a), "The antinomies of the postpolitical city: in search of a democratic politics of environmental production", *International Journal of Urban and Regional Research*, Vol. 33 No. 3, pp. 601-620.
- Swyngedouw, E. (2009b), "Civil society, governmentality and the contradictions of governance-beyondthe-state: the Janus-face of social innovation", in MacCallum, D., Moulart, F., Hillier, J. and Vicari, S. (Eds), *Social Innovation and Territorial Development*, Chapter 4, Ashgate, Surrey.
- Swyngedouw, E. (2010), "Impossible sustainability and the post-political condition", in Cerreta, M., Grazia, C. and Monno, V. (Eds), *Making Strategies in Spatial Planning, Urban and Landscape Perspectives*, Chapter 11, Springer, Netherlands.
- Swyngedouw, E. and Heynen, C.N. (2003), "Urban political ecology, justice and the politics of scale", *Antipode*, Vol. 35 No. 5, pp. 898-918.
- Teigão dos Santos, F. and Partidário, M.R. (2011), "SPARK: strategic planning approach for resilience keeping", *European Planning Studies*, Vol. 19 No. 8, pp. 1517-1536.
- Turner, J. (1972), "The john turner archive: housing as a verb", in Turner, J. and Fichter, (Eds), *Freedom to Build, Dweller Control of the Housing Process*, Chapter 7, Collier Macmillan, New York, NY.
- Turner, J. (1974), "The john turner archive: the fits and misfits of people's housing, freedom to build", *RIBA Journal*, No. 2.
- Turner, J. (1978), "Housing in three dimensions: Terms of reference for the housing question redefined", *World Development*, Vol. 6 Nos 9/10, pp. 1135-1145.
- Turner, J. (1980), "What to do about housing – its part in another development", *Habitat International*, Vol. 5 No. 1, pp. 2203-2211.
- Vale, J.L. (2006), "Restoring urban viability", in Birch, E.L. and Wachter, S.M. (Eds), *Rebuilding Urban Places After Disaster: Lessons from Hurricane Katrina*, University of Pennsylvania Press, Philadelphia.

## Further reading

Aldrich, P.D. (2012), *Building Resilience; Social Capital in Post-Disaster Recovery*, The University of Chicago Press, Chicago, IL.

Archer, D. and Boonyabannga, S. (2011), “Seeing a disaster as an opportunity-harnessing the energy of disaster survivors for change”, *Environment and Urbanization*, Vol. 23, pp. 351-364.

Birch, L.E. and Wachter, M.S. (2006), “Introduction: rebuilding urban places after disaster”, in Birch, E. L. and Wachter, S.M. (Eds), *Rebuilding Urban Places After Disaster: Lessons from Hurricane Katrina*, University of Pennsylvania Press, Philadelphia.

Eizaguirre, S., Pradel, M., Terrones, A., Martinez-Cellorio, X. and Garcia, M. (2012), “Multilevel governance and social cohesion: bringing back conflict in citizenship practices”, *Urban Studies*, Vol. 49 No. 9, pp. 1999-2016.

Gotham, K.F. and Greenberg, M. (2008), “From 9/11 to 8/29: Post-disaster recovery and rebuilding in New York and New Orleans”, *Social Forces*, Vol. 87 No. 2, pp. 1039-1062.

Ingram, J.C., Franco, G., Rumbaitis-del-Rio, C. and Khazai, B. (2006), “Post- disaster recovery dilemmas: challenges in balancing short-term and long-term needs for vulnerability reduction”, *Environmental Science and Policy*, Vol. 9, pp. 607-613.

Katz, C. (2008), “Bad elements: Katrina and the scoured landscape of social reproduction”, *Gender, Place & Culture: A Journal of Feminist Geography*, Vol. 15 No. 1, pp. 15-29.

Pyles, L. (2011), “Neoliberalism, INGO practices and sustainable disaster recovery: a post-Katrina case study”, *Community Development Journal*, Vol. 46 No. 2, pp. 168-180.

Swyngedouw, E. and Moulaert, F. (2010), “Socially innovative projects, governance dynamics and urban change Between state and self-organisation”, in Moulaert, F., Martinelli, F., Swyngedouw, E. and Gonzalez, S. (Eds), *Can Neighbourhoods Save the City?: Community Development and Social Innovation*, Routledge, New York, NY.

This work was supported by the Fonds Wetenschappelijk Onderzoek – Vlaanderen (FWO) under Grant number 83682.