

Housing as resourceful resilience: Lessons for Europe from Sri Lanka

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Abstract

Disasters triggered by natural hazards are becoming more frequent and threatening worldwide. Europe in particular is threatened by a series of natural hazards; Northern and Central Europe is more at risk of storms, floods and extreme temperature, while Southern Europe is mainly exposed to earthquakes and wildfires. Against this 'risky' background, Europe is threatened by a number of socioeconomic risks, such as lack of adequate and affordable accommodation, high unemployment rates and increased poverty, the extreme form of which is homelessness. Can these phenomena be interlinked? From a first reading, natural and social phenomena should be addressed separately. Indeed, natural causes are an inherent element of disaster phenomena, while homelessness has systemic, social and individual causes. However, untangling the links between homelessness and disaster vulnerability is an interesting exercise to test alternative approaches to treating the structural causes of both urban pathogens simultaneously. The conceptual analysis of this interlinkage is necessary before we start imagining and giving shape to holistic approaches to address them. This paper focuses on the notion of building resilience through political mobilization and social innovation in housing-led initiatives during the post-disaster rehabilitation period. The discursive platform of the paper will be provided by the vulnerability and resilience rhetoric within the political ecology and disaster scholarship. The working hypothesis of the paper argues that local community struggle for permanent housing provision during the rehabilitation period contributes significantly to building resilience to future hazards.

Key words: natural disasters, vulnerability, homelessness, resilience, social innovation, housing, commons

Introduction

Natural disasters are becoming more frequent and threatening worldwide. A survey on the topic (Degg, 1992, p. 203-204 in Delladetsimas, 2009) showed that 78 of the 100 most populated cities in the world are vulnerable to one or more natural hazards (earthquake, tsunami, volcanic eruption, extreme weather events), and 45 of them have been hit by a major disaster more than once. Europe, specifically, is threatened by a series of natural hazards; while Northern and Central Europe are more at risk of storms, floods and extreme temperatures, Southern Europe is mainly vulnerable to earthquakes and wildfires (EM-DAT, 2012). Against this background of risk, Europe is also threatened by a number of socioeconomic risks such as a lack of adequate and affordable accommodation, high unemployment rates and increased poverty, the extreme form of which is homelessness. Can these phenomena be interlinked?

At first glance it would seem that natural and social phenomena should be addressed separately. Indeed, natural causes are an inherent element of disaster phenomena, while homelessness has systemic, social and

individual causes. An integration of disaster knowledge and homelessness is not yet fully adopted or understood in all social policy debates. This can be partly explained by the fact that both phenomena are already individually complex and dynamic. However, untangling the links between poverty, homelessness and disaster vulnerability is an interesting exercise to test alternative approaches to treating the structural causes of both problems simultaneously. In this paper, I argue that a critical epistemology to generate information about vulnerability to natural hazards in order to assist crucial developmental problems such as homelessness is necessary to better conceptualize urban complexities and synergetically address some of its social pathogens. This is a politicized acknowledgement of the co-production of environmental knowledge and social values in ways that, albeit in a wavering manner, attempt to reconstruct environmental interpretations and interventions in favour of vulnerable people, including homeless people. The latter are, thus, empowered by political ecologists through careful participatory research or through building political arenas where they can speak and shape the future knowledge generation (Escobar, 1996, cited in Forsyth, 2008).

The structure of the paper will be as follows; In the first chapter, a short critical analysis of the disaster discourse will be attempted with the aim to better conceptualize the vulnerability/resilience rhetoric within which the analysis of the paper will be placed. Herein, homelessness is viewed as a manifestation of social vulnerability to natural risks. This provides the discussion on homelessness with new insights as to how the phenomenon can be conceptualized and addressed through the eyes of the ongoing disaster vulnerability/resilience paradigm. In the second chapter, the issue of housing will be further explored as a theoretical and practical approach that links homelessness with natural disasters specifically in the responses of community organizations. In particular, based on John Turner's ideas, the role of social innovation in housing production will be examined as a potential plug in to holistic disaster prevention and rehabilitation initiatives. In the third chapter, I will empirically test the preceding theoretical discussion by putting the magnifying lens closer to some socially innovative reconstruction approaches witnessed in Sri Lanka after the Asian Tsunami in 2004. These approaches were initiated by community organizations of homeless who have developed networks and mechanisms in order to address their lack of safe housing and security of tenure, before and after the Tsunami. Finally, in way of a conclusion, I will try to translate the experience of Sri Lanka into the European context and identify what messages could be transmitted to the homeless residing in the European cities and their affiliated social work organizations in their potential future effort to support networking and socially innovative initiatives in addressing social and housing exclusion and an inherent vulnerability to natural hazards.

Disaster Discourse; vulnerability and resilience in an urban context

Disaster discourse involves debates and interpretations of what disasters really are, how to measure their impact, and how to address the impact in an efficient and effective way. The dominant paradigm in disaster research is characterized by a straightforward acceptance of natural disaster as a result of extremes in

geophysical and atmospheric processes and a technocratic view that the only way to address the problematic is by public policy application of geophysical and engineering knowledge (i.e. construction of dams, reservoirs, levees, embankments) (Hewitt, 1983 in Delica-Willison and Willison, 2004). The main assumption is that natural and social domains are separate entities. Dividing the social from the natural has led to the construction of hazards as disorder, namely as interruptions of order by a natural world that is external to the human world (Oliver-Smith, 2004), or as indiscriminate 'acts of God' that affect communities in a random way (Fothergill and Peek, 2004).

According to Swyngedouw (2009), this paradigm has strong idealistic underpinnings. The dominant symbolization of nature is associated with the mobilization of apocalyptic warnings of pending catastrophes caused by climate change and environmental degradation and with the need to take urgent remedial action to engineer a retro-fitted 'balanced' climate and 'sustainable' environment. Therefore, the enemy is not identified in unevenly distributed power relations, of inequalities and networks of control, but is always externalized and objectified (Žižek, 2008b, p.279 in Swyngedouw, 2009).

This rhetoric ultimately leads to some perverse responses to disasters; first, it may lead to policies and practice that only address symptoms but are hesitant to target the structural causes of vulnerability to hazards (Oliver-Smith, 2004). In addition, we enter a vicious cycle where too much emphasis is put on natural processes, while the social framework within which these processes manifest themselves is neglected (Oliver-Smith, 2004; Masozera *et al.*, 2007). Consequently, this produces, as Swyngedouw (2006, p.117) eloquently describes it, "a spectacularized vision of the dystopian city whose fate is directly related to faith in the administrations, engineers and technicians who make sure the taps keeps flowing and land keeps being 'developed'".

However, the witness and experience of an increasing trend in disaster loss, even in the face of notable technological progress and its application, has incited communities concerned with risk and hazards at different levels (local, regional, national and international) to question the spirit of the prevailing paradigm (Hewitt 1983 in Delica-Willison and Willison, 2004). In the 1980s, new scholarship reoriented disaster discourse by increasingly analyzing disaster phenomena through the lens of coupled human-environmental systems. Consequently, disaster planning is being sketched not only by intervening in physical domains, but also by changing and modifying societal forces; in disaster terms, this means reducing vulnerability through strengthening resilience (Haque and Etkin, 2007).

This coupling of nature and society becomes more analytically evident when the metaphors of 'circulation' and 'metabolism' are mobilized to capture processes of socio-natural change. When mobilizing these twin vehicles from a historical materialist epistemological perspective, the binary construction of 'nature' and 'society' radically disappear. The city is then viewed as a process of environmental production, sustained by

particular sets of socio-metabolic interactions that construct the urban in distinct, historically unexpected ways (Swyngedouw, 2006). Therefore, the analysis is shifted from viewing nature as something external to the city, to analyzing how the urbanization of nature shapes socio-ecological relations. By doing so, the terrain of urban social pathogens is shifted both epistemologically and politically from considering the domains of nature and the city as separate, yet connected to viewing the contradictions of the urbanization processes as fundamentally socio-ecological ones (Cook and Swyngedouw, 2012). These processes are never socially or ecologically neutral. This results in conditions under which particular trajectories of socio-environmental change debilitate the stability of social and natural systems in some places, while elsewhere 'sustainability' might be enhanced. These trajectories are steered by particular social actors who, by exercising power, ultimately decide who will have access to or control over, and who will be excluded from access to or control over, resources or other components of the physical environment. Nature, therefore, is an integral element of the political ecology of the city; and it is crucial to recognize its political meaning if we aim at an urban development that returns the city and the city's environment to its citizens (Swyngedouw, 2006).

The newly emerged disaster paradigm introduces and examines the notions of vulnerability and resilience with the aim to show how disasters can be perceived within the broader patterns of society (Masozera *et al.*, 2007). The argument suggests that disasters occur when a natural hazard strikes vulnerable people; hence, it disentangles the link between the extent and types of vulnerability generated by people's conditions within political-economic systems and the manner in which society manages hazards in terms of prevention, preparedness, response and recovery (Haque and Etkin, 2007). A commonly accepted definition of vulnerability in the disaster context, produced by Blaikie *et al.* (2005), is a person's or group's lack of capacity to anticipate, cope with, resist and recover from the impact of a natural hazard. It involves a combination of determinants (social, economic and political) that define the level to which one's life and livelihood is put at risk by a discrete and identifiable natural process.

The vulnerability of a population in relation to a hazard can be best expressed in time and space through the unsafe settlement conditions in which people live (Blaikie *et al.*, 2005). People living certain types of housing (i.e. poor quality housing; insecure, hazardous and overcrowded housing; housing located on dangerous sites such as flood-plains, steep slopes and soft or unstable ground) are more vulnerable to disaster risk. Such housing is at greater risk from storms/high winds, earthquakes, landslides, floods and fires, and can also help facilitate disease transmission, which may lead to epidemics (Satterthwaite, 2010). The time parameter of the disaster circle also plays an important role in understanding vulnerability. Since damage to livelihood, and not just life and property, is an issue, the more vulnerable groups are those that also find it hardest to reconstruct their livelihoods following disaster (Blaikie *et al.*, 2005). Disasters thus produce even more homeless and vulnerable people. These are the ones who are unable to recover their livelihoods because they do not have access to safe and affordable housing, credits and insurance (Walker 1989, cited in Wisner and

Luke, 1993), and cannot afford the costs for repair, reconstruction, or relocation. The effect of a disaster may then persist to the next generations because people need years to recover from the aftermath of disasters precisely because of this lack of resources (Adger, 1996 in Masozera et al., 2007). Of course, access to resources varies between households; and those with better access to information, money, rights to the means of production, tools and equipment, and the social networks, are less vulnerable to hazards and may be in a position to avoid disaster (Blaikie et al., 2005), or few even to profit from it (Gunewardena and Schuller, 2008).

Vulnerability analysis, therefore, is a recent theoretical approach to investigating environmental hazards coupled with questions of social inequalities (Bolin, 2006), which also moves the focus of the disaster discourse from 'risky' regions, to individuals or social groups that are 'at risk' (e.g. Kaspersen *et al.*, 1995 in Forsyth, 2008). Traditional risk assessment focusing on magnitude face analytical limitations because they fail to account for the higher relative burden born by low income populations and those excluded from safe housing (Adger, 1996, cited in Masozera *et al.*, 2007). The policy, therefore, to reduce the vulnerability is not developed in conjunction with natural causes alone, but mainly with the socio-economic conditions of the system, adopting measures and planning arrangements (Delladetsimas, 2009). In order to overcome disaster vulnerability, we need to actively address its root causes. For this purpose, the notion of resilience is now taken on board.

Resilience can be broadly defined as the ability of people to withstand, prepare for, and bounce back from natural hazards (Colten and Sumpter, 2009). It is understood to be the degree of disturbance a socio-ecological system can absorb while maintaining its core structures and functions. Therefore, the key elements characterizing resilient systems are the ability to self-organize, learn and adapt (Folke et al., 2002; Berkes, 2003; Adger et al., 2005 in Baker and Refsgaard, 2007). A resilient community can be seen as one that will use what it learned from the disaster event to intentionally changed itself (Baker and Refsgaard, 2007). Human beings are indeed skilled innovators and adapters to changing contexts over which they have limited control, but yet are willing to co-shape. They learn as they act and from experience, and possess the potential to act as creative transformers (Gonzalez and Healey, 2005). The resilience analysis is, hence, a conceptual approach to examining how communities organize themselves by mobilizing social networks and immediate resources to address future hazards (Delica-Willison and Willison, 2004).

From an urban political ecological perspective, resilience can be understood as the manifestation of a political visioning to alter the trajectories of metabolic circulations for the sake of considering the future evolution of urban environments (Swyngedouw, 2006). As a result, political struggles are central in shaping alternative trajectories of socio-environmental change and the construction of new and emancipatory and resilient urban environmental geographies (Swyngedouw, 2009). Most often, the socio-economic means that poor people need in order to secure their livelihoods are rarely 'handed down' to them through hereditary

lines (Blaikie *et al.*, 2005). Quoting Swyngedouw (2009, p.606) “neither freedom nor equality are offered, granted or distributed. It can only be conquered. Real changes are born when those who are not equally included in the existing socio-political order, demand their right to equality”. This is especially relevant for the recovery/reconstruction era, during which people must not be assumed to be passive recipients of aid while also being constrained by an ambiguous political economy. On the contrary, as Blaikie *et al.* (2005) rightly highlight, the pattern of access in every society is the result of struggles over resources. The combined knowledge of a society about the risks it faces and the means to prepare for and respond to the distress often produced in the aftermath of a disaster are fundamental to understanding how resilient a group may be (McIntosh, 2000, cited in Colten and Sumpter, 2009).

However, the political activation of vulnerable groups and their affiliated third sector organisations in the governance of disaster intervention is currently being reduced. People's struggles and bottom-up strategies to cope with adverse conditions remain little noticed and understudied. Without a proper understanding of these struggles, policy- and -decision-makers are more likely to resort to stereotyped responses to disaster phenomena (Corbett, 1988 in Blaikie *et al.*, 2005) based on a hazard-centred paradigm, in which people are pictured as bare bodies exposed to a natural hazard.

How can then resilience-building be initiated, supported and sustained? There is now a gap in the political ecology and disaster literature in attempts to theorize and re-center the political as a pivotal moment in urban political-ecological processes. Re-centering the political is a necessary condition for tackling questions of urban environmental injustice and vulnerability and for creating egalibertarian socio-ecological urban assemblages (Swyngedouw, 2009). However, disasters do represent emblematic moments that shed light on socioeconomic dysfunctionalities. Moreover, any change that comes with the post-disaster reconstruction process is manifested in the long run as the intensification of pre-existing urban developmental trends. Therefore, the impacts of the disaster are not limited to their direct dimension, but equally importance should be placed in its long-term dimensions, such as the housing conditions of the affected households. Certain effects in this subcategory are the homeless, the housing deficit, the problems caused by the displacement of the people affected by the disaster and the separation of families (Delladetsimas, 2009).

Therefore, I argue that a progressive way to embark on institutional transformation to address these dysfunctionalities lies in the opportunities of the recovery period in connection to issues like housing. The creation of platforms for exchanging views on addressing immediate housing needs following a disaster is key in collectively learning how to deal with future risk and unpredictability. It also helps reorganize and bring into focus new paradigms based on a participatory understanding of the conditions generating the disaster, as well as new alternatives to disaster governance models aimed at building resilience.

Housing as resourceful resilience

Organizations and institutions have the potential to 'learn' as individuals do. In the resilience sense, learning refers to social and institutional learning, as in learning-by-doing in an adaptive manner (Lee 1993 in Berkes, 2007). The establishment of platforms for dialogue and innovation following a natural disaster is key to the stimulation of learning to deal with future uncertainties. The explanation is that it contributes to the reorganization of paradigms, based on a revised understanding of the conditions generating the crisis (Folke et al. 2005 in Berkes, 2007). For example, 'failure' in an apparent 'successful' top down housing initiative to meet the resettlement needs of the people displaced may inspire creative learning that may lead to more innovation in housing production. The search for socially innovative governance initiatives should therefore concentrate on the dynamics of experimentation, reflective learning and action; this would then destabilize existing relations by opening up the 'cracks' and contradictions of the path-dependent systems and introduce a new arena of actors, repertoires, policy ideas and practices (Gonzalez and Healey, 2005).

We focus on housing because it renders one of the most post-disaster challenges. Housing is inarguably of key significance in one's quality of life. Besides having wide economic, social, cultural and personal importance, housing construction techniques and location can also influence environmental sustainability and natural disaster prevention (Erguden, 2001; Bullard and Wriqth, 2005, in Masozera *et al.*, 2007). In the latter sense, housing can also be seen as a complex exoskeleton for the human body with a provision of water, warmth, light and other basic needs, as well as be conceived as a 'prosthesis and prophylactic' in which modernist distinctions between the organic and the inorganic become fogged (Gandy, 2005, p. 28 in Cook and Swyngedouw, 2012).

Despite the apparent importance of housing in people's lives, the issue of housing is becoming more and more problematic for low-income households around the world. These social groups often occupy mobile or poorly-constructed houses that are easily destroyed or readily incur damages from storms or other disasters (Pastor *et al.*, 2006, cited in Masozera *et al.*, 2007). Homeless people living in cardboard boxes, under express-ways or in inadequate hostels are also witnessed in nearly all cities. For homeless people, who constitute the poorest of the poor in an urban environment, not only are their lives in constant threat during a storm or flood, but they are also at risk of losing any possessions they may have accumulated (Phillips, 1996, cited in Morrow 1999). After a disaster, they are even less likely to find a place to settle and the numbers of those who are homeless can be expected to increase (Cherry and Cherry, 1996, cited in Morrow, 1999).

Newly homeless people run the risk of getting into the 'homeless system', which is largely centred around service provision consisting mainly of temporary accommodation and emergency interventions. This type of provision should serve only as a short-term gateway to a permanent accommodation solution within a reasonable time frame, wherein people are not left in a vicious circle of precarious conditions and insecurity. This logic could simultaneously apply both to a disaster mitigation strategy and to a homelessness prevention

tool. Hence, safe housing with security of tenure can be seen as the initial step for, and the gluing element between decreasing vulnerability and resolving situations of homelessness.

Still, any attempts to provide safe and affordable housing will inevitably be subject to two challenges: the first challenge is the official regulations governing the acquisition and use of land for housing, which often limit its availability and further increase its price; and the second challenge is the fact that housing, as Satterthwaite (2010) rightly points out, does not refer only to 'the home' but also to 'access to income' and 'access to services'. Therefore, for those with limited or unstable incomes, the location of the house in relation to where its dwellers work is often as important as the quality of the house and the security of tenure.

These challenges tend to be reproduced also in the post-disaster reconstruction responses; being likely organized and managed centrally, influenced by large actors' interests and executed by large actors, these responses bypass local participation and exclude small actors (Lyons, 2009), and are less effective in developing longer-term responses that allow the survivors to rebuild their homes and livelihoods. These housing programs focus on what they can do for the victims, not what needs to be done by them; yet any really effective disaster risk reduction intervention is not just what a local government does but also what it encourages and supports others to do (Hardoy *et al.*, 2010). Focusing on post-impact housing reconstruction, I herein aim to understand the implications for housing program 'beneficiaries' of the political economy of centralized versus decentralized approaches (Lyons, 2009) and explore opportunities in housing production alternatives to catalyse a change in the urbanization trajectories with longer-term benefits for the urban poor (Satterthwaite *et al.*, 2010). To achieve that, the framework of my exploration will mainly consist of John Turner's highly influential ideas on housing. The following ideas of him shall better serve this purpose:

1) Housing is given the status of an instrument, or at least of potential instrument, for action by people in the development process (Turner, 1978). In Turner's view can only be seen as a paradigm of change for society and as interdependent activity involving users, industry, commerce and the state. Therefore, housing renders a political as well as a physical, economic and social activity.

2) The word 'housing', as suggested by Turner (1972) can be used as a noun or a verb. When used as a noun, housing describes a commodity. When used as a verb, it describes the process of housing. Consequently, any housing measurement criterion will differ according to the meaning of the word adopted. In the first case, the measures of housing products are the physical standards commonly used, while from a verbal perspective, the vital aspects of housing are not quantifiable at all (like meeting the needs of people). In a disaster context, and especially against the background of disaster reconstruction, it is crucial to follow Turner's approach and distinguish between what things are, materially speaking, and what they can do in people's lives. This approach raises, however, an important question: who will decide how these needs will be satisfied? The answer is twofold and depends on what interpretation one gives to the word '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. On the other hand, 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 (ibid).

3) Housing is also given an environmental definition. This contains functional relationships between the habitat and the inhabitant. For any place to function as a dwelling, the following criteria must be met: accessible location, provision of secure, continued residence, and protection from hostile elements, whether climate or social (Turner, 1968). As we already know, for Turner the word housing signifies an activity. In this case, the produced environments are people's surroundings. We cannot talk about surroundings without referring to the people surrounded, not shall we talk about housing as a thing of intrinsic value separate from the people housed. Turner, hence, sees housing as an ecosystem which can be understood only through the interrelationships between people, their actions and their physical surrounding (Turner, 1974). From this analytical angle, housing can indeed be experimented as a plug in to a political programme of urban political ecology, with the aim to enhance more democratic trajectories towards an urban socioenvironmental construction.

According to Turner (1980), there are two conditions to achieve the alteration of the developmental trajectories: first, the reclaim by people of their own rights to determine and act upon their own needs and priorities; and second, the facilitation by government policies to increase personal and local access to resources so that people can cultivate the habit of direct action. This does not suggest the hegemonic imposition of any one building sector to the others, but the establishment of a new balance between community, market and the state.

However, post-disaster reconstruction plans tend to be dominated by centralized systems. These systems are inevitably and necessarily standardized with regard to their procedures and the end-products they provide. Consequently and unavoidably, peoples' needs and priorities for appropriate locations, dwelling types, and for suitable forms of tenure and payment are largely mismatched by the supply. Moreover, the larger the organization steering the reconstruction program, the less variety it can cope with, the larger the scale at which it must operate and therefore, the greater the dependence on scarce and non-renewable resource (such as fossil-fuel based technologies, professional and managerial skills, land, money, future money and credits) (Turner, 1978, 1976). Moreover, the numbers of people served in relation to public and private investments in centrally controlled housing projects are proportionally very low, which means that a mass supply for post-disaster housing must reverse anyconventional practices if the objective to settle all the (newly) deprived of housing shall be met (Turner, 1976).

On the other hand, in the decentralized systems, dwellers control the major decisions and are given the chance to contribute to the design, construction or management of their housing. This can lead to dwelling environments becoming the channels to personal fulfilment (Turner, 1974). Decentralization of housing production, in contrast to the centralized systems in which people are seen as passive beneficiaries, does not waste plentiful resources, such as people's imagination and initiative; skills, energies and time; in many cases, relatively many small plots of land or spaces in or upon existing buildings; plentiful material such as sand and gravel; savings of the people themselves etc.. The critical question is how open a system is in order to use these relatively inexpensive and plentiful resources (Turner, 1976). The question is indeed critical when one considers that a potential opening of the housing production systems will inevitably stumble upon closed modes of post-disaster reconstruction processes that commonly mobilize a metabolic circulation characterized by engineering narratives, economic discourses and practices, land speculation, geo-political tensions, and global money flows (Swyngedouw, 2006).

Some seeds of hope in opening up the housing production choices can nevertheless be found in the discourse of social economy; an economy in which the market plays a crucial role but has returned to its original social function of meeting needs (Gonzalez et al., 2010). Several authors argue that the (re-)emergence of the social economy is connected to periods of crisis and is a way to respond to the lack of needs satisfaction by the traditional private sector or the public sector in times of socio-economic crisis (Moulaert and Ailenei, 2005). During these times, associations, co-operatives, solidarity networks etc arise amidst situations of human needs deprivations and fill gaps in institutional forms to launch alternatives (Moulaert et al., 2005). The work of cooperatives and collective services are designed to satisfy needs in a different way; by favouring ecological and co-operative production: by establishing a collective well-being and by recreating social bonds between the people within their communities (Lipietz, 2003 in Moulaert and Ailenei, 2005).

This is extremely relevant to building resilience during post-disaster reconstruction, Entire neighbourhoods need to be rebuilt (Dreier, 2006). Housing would then be looked as a means for promoting and mobilizing savings, expanding employment and economic activity and a tool for poverty alleviation (Erguden, 2001). For example, the creation of a non-profit building-supplies-and-materials cooperative to negotiate with suppliers and purchase building materials (timber, cement, bricks, tools, home appliances) at a discount could be facilitated by the state. The cooperative would have great advantage over building suppliers, using the economies of scale of a purchase in bulk. It could then channel these discounted building supplies to designated developers for reconstruction. In the absence of such an entity, the competition for building materials could lead to enormous increases in costs. In this way, savings would focus on building supplies, not labour (ibid). The generation of jobs for the re-construction of the city is the demonstration of plentiful resources not being sacrificed at the altar of fast profiteering in a post-disaster bonanza.

Hence, we witness the potential of the emergence of the discussion on the commons during periods of crises (either natural or socio-economic), partly because it is seen as an antidote to market enclosure. The state can best facilitate the commons by supporting the establishment of new commons institutions that can be steered and managed by the commoners themselves. Such self-governance at the appropriate scale of the resource can also contribute to assuring better management and accountability (Bollier). Commoning expands the classic dichotomies of owners and non-owners to include the missing third element: the participants, the co-owners, and the citizens within their communities (Helfrich and Haas). Turner (1980) has also echoed the need to imagine new types of ownership, such as local community ownership or rather trusteeship.

There are many examples of commoning around the world, which demonstrate the resilience of homeless, especially in the less developed world. By putting the magnifying lens closer to social innovation as this was witnessed in some communities of the post-Tsunami Sri Lanka., the following part of the analysis will be an illustration of such commoning initiatives. First, in order for the reader to grasp the context within which the initiative was born and unfolded, a brief analysis of the disaster event will precede.

Vulnerability and Resilience in the post-Tsunami Sri Lanka

Sri Lanka is a country prone to natural disasters generally driven by floods, cyclones, landslides, droughts and coastal erosion with growing losses to life and property (Jayawardane, 2006 in Palliyaguru and Amaratunga, 2008). However, the most devastating loss occurred when the Asian Tsunami, caused by the third largest earthquake ever recorded in history (magnitude of 9.3 on the Richter scale) with an epicentre near the west coast of Northern Sumatra in 2004 (26th of December), washed over two-thirds of the coastline of Sri Lanka (Palliyaguru and Amaratunga, 2008, ADB et al., 2005). As of January 17, 2005, official figures suggested that more than 31.000 people lost their lives, nearly 6.300 remained missing, around 443.000 were estimated to be dislocated, while approximately 226.000 people had moved in with friends and relatives. Moreover, according to figures released by the Government, 130.000 were the damaged houses, of which more than 99.000 have been utterly destroyed (ADB et al., 2005). The Asian Development Bank (ADB) predicted that the Tsunami's instant and chronic impacts forced some 250.000 people below the poverty line, increasing the overall head-count rate of poverty from 22,7% to over 25% (Athukorala and Resosudarmo, 2005, p. 27 in Lyons, 2009).

Most of the entirely destroyed houses were one-story abodes occupied by low-income families. Poorly built with weak brick and mortar walls and no structural connection to the foundation, these houses were either swept from the ground or flattened. In contrast, stronger multi-storey high reinforced concrete buildings resisted the impact with solely minor non-structural damages (Khazau et al., 2006 in Ingram et al., 2006). On top of that, the short-lived 'non-construction' coastal buffer zone (which was established by the Government some days after the tsunami struck and prohibited repair or reconstruction of homes within a zone of 100m in the South and 200m in the East and North) initiated a process of gentrification in which the affluent owners

of the resorts, and the tourism industry in general, benefited from rapid expansion (40% structural damage was allowed to remain within the zone), while all the rest, predominantly the fishing communities, were pushed from the coast (Samarasinghe, 2005 Government of Sri Lanka and Development Partners, 2005, Rice, 2005, Ministry of Urban Development and Water Supply et al., 2005 in Ingram et al, 2006). This decision increased the existing socio-economic inequalities and put into question the government's dedication to accommodate the needs of poor families affected by the tsunami (Oxfam, 2005 and Shannugaratnam, 2005 in Ingram et al., 2006). For example, relocated fishermen in different resettlement camps were seriously worried about livelihood alternatives and the quality of habitat at the relocation sites (Shanmugaratnam, 2005 in Ingram et al, 2006).

Nevertheless, the reality in Sri Lanka after the Tsunami is like a coin with two sides. On the one side, one recognizes the manifestation of vulnerability to disaster by some members of the society but on the other side, one equally identifies the determination by some members of the affected communities to get their lives back on track (SDI, 2005). An illustrative example of this determination has been the Women Development Bank Federation (WDBF).

WDBF is a national network emerged out of a pilot project of women's mutual help groups in 1991, based on the traditional system of savings and credit. This practice has taught them how to mobilize the poor into support groups and try to find solutions to their poverty and to accommodate emergency needs (ibid). As of 2009, WDBF had 1.200 savings and credit groups in 450 urban and rural communities. It also partners with the NGO Janarukula, which means 'people working together' (ACHR, 2009).

WDBF is also a member of Slum Dwellers International (SDI), a confederation of national level organizations of urban poor groups throughout Africa, Asia and Latin America. Exchanges between these groups created the idea that poor urban dwellers need to have their local voice strengthened by international networking. The main tasks of these national federations are to negotiate rights to land, shelter and basic services within their cities and to support each other in influencing social policies and programs (D'Cruz et al., 2009). They are also involved in house modelling and developing life-size models of houses in order to test which design and which materials can produce the best low-cost housing. Finally, they support community profiling and surveys in order to mobilize those affected to get organized, gather necessary data about the disaster site and support them in showing their capabilities to local government (Satterthwaite et al., 2010).

Since the tsunami, WDBF has been supporting a people-driven process of housing reconstruction in several locations in the city of Moratuwa, on the south-eastern coast of Sri Lanka. Support came from collective housing loans managed by the women's savings groups (ACHR, 2009). The core aims were to rebuild communities and to work to safeguard the right to safe tenure (SDI, 2005). The latter was of particular

importance because there were worries for the increased risk of eviction for people without secure land rights before the disaster (D'Cruz et al., 2009).

An excellent example of their rebuilding initiatives was their intervention in the settlement in Moratuwa. The plan was for some members of the affected community to share the same multi-storey residence and own it as a cooperative. WDBF discussed and agreed with Janarukula and one architect that assisted them that half of the land would be transferred to the local authorities and that in return, three multi-storey houses would be built on the remaining land. The community also created a cooperative that with the assistance of WDBF and Janarukula that has been involved in negotiations with the architect, contractors and the bank with the aim to identify the most cost-effective ways to finance the construction costs. The project would be financed by the saving groups themselves and the Sanasa Development Bank. A subsidy from the Arunodaya housing programme of the Government of Sri Lanka was also expected. The core obstacle was the high cash guarantee required by the Bank (the loan provided was smaller than the cash guarantee to be deposited). For this reason, Janarukula and WDBF requested their first guarantee from SDI's Urban Poor Fund International (UPFI) to secure the loan for the cooperative society. The future challenges for Janarukula and WDBF in this settlement is how to find sustainable sources of income, how to facilitate negotiations between the cooperative society and the contractor and how to transform into an alternative model for other communities to learn from and pursue (ibid).

Organizing the urban poor into savings groups, forming federations, community-led upgrading or redevelopment and negotiating with the city for tenure security is creating strong dynamics for scaling up from housing and land tenure to finding solutions to other structural problems that contribute to disaster vulnerability and other urban pathogens. This can be true because involvement in socially innovative initiatives in the housing domain has the potential of a long-term effect of giving people the self-confidence and organization to demand more (D'Cruz, 2009, Blaikie et al., 2005). In the long term, sustainable recovery and development of coastal communities in Sri Lanka would require a systemic approach that will effectively reduce vulnerability and risk (Birkmann and Ferrando, 2007). The participatory urban planning and housing reconstruction that has been taking place in Sri Lanka is a starting point with high potential for moving on to an integrated coastal planning aiming at heightened conservation and restoration of coastal resources (which is an effective protective features against the waves and also reduce erosion and flooding) and increased technical assistance for developing livelihood alternatives. The formation of co-operatives and access to micro-finance can also scale up and cover other areas such as access to education, and diversifying fishing techniques. A holistic approach to addressing vulnerability, with the provision of housing as the building block for resilient urban edifices may ultimately support the long term overall development goals and well-being in coastal Sri Lanka (Ingram et al., 2006). The lessons learned from Sri Lanka can be translated into valuable teaching material for many countries in Europe. The next part of the analysis focuses on the potential residing in the European landscape to foster resilience dynamics.

Lessons from Sri Lanka to Europe

The Sri Lanka model differs in its political conception. In Europe, the main objective of policies in the public domain is the desire to increase economic efficiency, not to change political priorities and the correlation of power. Participation in decision-making is often replaced by mere consultation, which causes a crucial weakening of its empowering potential.

What is happening in Europe is that 'urban citizenship' lacks institutional grounding because it loses the link between the citizens' objectives (to improve their environment and housing condition, to gain recognition, and right to participation and co-production) and the institutions which have the power to grant those rights on a fixed basis (Garcia, 2006). One witnesses in most European cities a re-framing of discourses towards an emphasis on social cohesion policies. The problem is however that a sole focus on social cohesion often conceals the realities of conflict and unequal power structures within cities, and also empowers the entrepreneurial state to the detriment of the enabling state (Fainstein, 2001 in Garcia, 2006). This consensual mode of governing in combination with a whole post-Fordist restructuring of the welfare state have caused social inequalities and segregation in most European cities.

However, this state restructuring process has encouraged local authorities to develop new governance instruments in order to integrate many different actors, including mutual aid networks, social co-operatives and voluntary associations, into a multilevel , participatory framework (Eizaguirre et al., 2012). Since 2008, a combined financial and fiscal crisis has, inter alia, resulted, into a further deconstruction of the welfare state, an increased undermining of social policies and a relentless imposition of austerity measures. During this critical time of the European history, when different possible ways out of the deadlock reached by Europe are currently explored, co-production and the commons rhetoric can gain greater ground in the public policy discussion. Co-production further extends participatory democracy by granting to the most deprived groups not only the right to consult and influence decisions about priorities and the allocation of resources but also to facilitate their contribution in designing, implementing and managing responses. Particularly in the housing sector, co-production allows the development of solutions (house designs, building materials, plot layouts, infrastructure standards) that bridge the gap between what works for the lower-income groups and the formal rules and regulations governing land use, building and infrastructure (Satterthwaite, 2008).

This dynamic is fresh in the European housing market context, and needs further exploration. The Housing First approach, advocating stable housing provision as a priority, is incrementally gaining ground in several Europe member states. If this housing-led approach is coupled with the support of social innovation (i.e. support for housing cooperatives, community land trusts, housing trust funds) and applied in a background of post-disaster sustainable recovery or pre-disaster prevention and disaster risk reduction, then it is highly possible that Europeans will have at their disposal a wider array of choices and advocacy tools as to which can be the most economically, environmentally and socially sustainable way to rebuild a city, both physically

and socially. This does not mean that any discussion comparing top-down and bottom-up approaches should be halted, but it is more to discuss how the coexistence of various processes can produce the optimal social outcome.

However, the challenge for planners (i.e. NGOs, social workers, public authorities) to display who gets the benefits and who bears the costs from development projects and defend alternative trajectories in the name of vulnerability and needs alienation, is the requirement for support from some political base. In the context of representative democracy, planners need to be granted the authorization to imagine, articulate, pursue and actualize the vision of a socio-ecologically just and safe city. This necessitates a mobilized constituency that pressures for change (Throgmorton, 2006 in Fainstein, 2010). Hence, this would ultimately need a change of the limited framework within which professional social workers perform in Europe. Social workers have been excellent contributors in facilitating the reintegration of disadvantaged people into the society. Nevertheless, while struggling to fill the gaps for these people, social work misses the opportunity to capitalize on the potential and the positive aspects of people's personality and is often blind to systemic and structural causes. According to what we learned from Sri Lanka, incrementally change is possible. Sri Lanka's example teaches us that poor people are ready to fight their predicament by effective self-organized contributions that lead to their emancipation. Moving up on the participation ladder (Arnstein, 1969) for the people and the communities who would choose to shift from being simple beneficiaries to becoming more active partners could and should be more and better encouraged and supported in Europe. How can this be achieved?

NGOs on different scales (local, national, European) could support a paradigm shift on how social work operates. Social workers and other service providers should be appropriately trained in empowering homeless people as individuals (FEANTSA, 2010). They could support the homeless who want to co-own houses, set up their own organizations, become familiar with legal and political developments and assist them with lobbying activities while at the same time avoiding a paternalistic hierarchy from becoming entrenched. The homeless themselves will identify what are the issues at stake and what can be the best means to address them. NGOs can play the role of an important partner who will be able to consult these new entities and become the mediator in negotiations with local or national authorities and in the realm of funding opportunities. NGOs at the European level can support international exchange for sharing knowledge, provide a long-term European platform where the homeless learn by networking, and lobby European Union institutions to direct policies and funds into socially innovative initiatives which can contribute to social inclusion and disaster prevention. Finally, the European support and co-ordination could be very significant for the poor and homeless in order to advance their interests, especially when national and local governments will not respond to their needs.

Conclusions

Natural disasters put the social spotlight on affected communities, but also open a window of opportunity to address fundamental problems such as homelessness that during normal times seem impossible to address (Pomeroy *et al.*, 2006). There is thus a need for a better understanding of how social, economic and political structures construct urban risk. Following that, disaster prevention or recovery provides the best platforms on which pro-active and justice-based approaches can be adopted to address urban risk in the most integrated way.

In this article, I took on board a housing perspective, first because I assume that it is a very useful developmental vehicle and also because the access to permanent and housing is inarguably a shield both against natural risks and a vicious circle of poverty. Moreover, socially innovative initiatives in the housing domain have the empowering potential to give people the self-confidence and organization to demand more at a later stage of the disaster circle in relation to other spheres of their predicament (such as access to health care, livelihood opportunities etc.). Therefore, housing-led approaches could be considered the starting point for a circle of resilience in which different elements of development support and augment each other through improvement in the quality of life of the homeless community (Baker and Refsgaard, 2007).

Echoing Blaikie *et al.* (2005), representative democracy limiting voting every few years is a limited approach to satisfy everyday needs, especially for the most deprived groups of our societies. The sustainable reduction of disaster vulnerability, of which homelessness or risk of homelessness is a core parameter, requires a re-politicization of the disaster discourse, and the full, day-to-day involvement of ordinary people and their affiliated organizations, and an ongoing struggle to increase choice. Within this logic, the ongoing debate on the 'commons' needs further exploration because of the emancipatory potential of contemporary struggles for the defence and reclaim of common goods (including housing) in relation to the development of substantive citizenship (Castro).

Truly 'disaster-resistant communities' (Geis, 1997, cited in Morrow, 1999) depend on meaningful political activism. As a way of conclusion, I resonate with Swyngedouw (2009) to the fact that what is ultimately at stake in respect to every urban socio-environmental pathogen (name it poverty, social exclusion, homelessness, vulnerability to disasters etc), is the (re-) activation of the political activism; the practice of genuine democracy. To the extent that the current political-economic condition, which combines apocalyptic environmental visions with a hegemonic neoliberal view of social ordering, constitutes one particular fiction (one that actually forecloses the possibility of a different future), there is an urgent need to imagine, name and foreground socio-environmental futures, making the new and impossible (like the discussion on the commons) enter the realm of politics and recognizing conflict, difference and struggle over the naming and trajectories of these futures.

References

ACHR, 2009, News from groups around Asia about what's happening in the region; Asia Coalition for Housing Rights,

(<http://pubs.iied.org/pdfs/G02491.pdf>), accessed at May 2011

Arnstein, S.R., 1969, Ladder of citizen participation, *Journal of American Institute of Planners*, Vol. 35, pp. 216-224

Asian Development Bank (ADB), Japan Bank for International Cooperation (JBIC) and World Bank, 2005, Sri Lanka 2005 Post-Tsunami Recovery Program Preliminary Damage and Needs Assessment,

(<http://www.adb.org/Documents/Reports/Tsunami/sri-lanka-tsunami-assessment.pdf>), accessed at March 2011

Baker, D. and Refsgaard, K., 2007, Institutional Development and Scale Matching in Disaster Response Management, *Ecological Economics*, Vol. 63, pp.331-343

Berkes, Fikret, 2007, Understanding uncertainty and reducing vulnerability: lessons from resilience thinking, *Nat Hazards*, Vol. 41, pp. 283-295

Birkmann, Jörn and Fernando, Nishara, 2007, Measuring revealed and emergent vulnerabilities of coastal communities to tsunami in Sri Lanka, Blackwell Publishing, Oxford

Blaikie, P., Cannon, T., Davis, I. and Wisner, B., 2005, At Risk: Natural Hazards, People's Vulnerability, and Disasters, Routledge, London

Bolin, B., 2006, Race, Class, Ethnicity, and Disaster Vulnerability, in: H. Rodriguez, E.L. Quarantelli and R.R. Dynes (Eds.) *Handbook of Disaster Research*, pp. 113-129, Springer Science and Business Media, LLC, New York

Bollier, David, The Commons: A Neglected Sector of Wealth – Creation, Chapter for To Whom Does the World Belong? published by the Heinrich Boll Foundation book, (<http://bollier.org/sites/default/files/Boll%20Foundation%20book%20chapter.pdf>), accessed at June 2013

Castro, José Esteban, Commons and citizenship: The contradictions of an unfolding relationship, (http://www.boell.org/downloads/Castro_Commons_and_Citizenship.pdf), accessed at June 2013

Colten, E.G. and Sumpter, R.A., 2009, Social Memory and Resilience in New Orleans, *Nat Hazards*, Vol. 48, pp.355-364

Cook, Ian R. and Swyngedouw, Erik, 2012, Cities, Social Cohesion and the Environment: Towards a Future Research Agenda,, *Urban Studies*, Vol. 49, p.1959

D'Cruz, C., McGranahan, G. and Sumithre, U., 2009, The Efforts of a Federation of Slum and Shanty Dwellers to Secure Land and Improve Housing in Moratuwa: From Savings Groups to Citywide Strategies, *Environment and Urbanization*, Vol., 21, pp.367-388

Delica-Willison, Z, and Willison, R., 2004, Vulnerability Reduction: A Task for the Vulnerable People Themselves, in: G. Bankoff, G. Frerks and D. Hilhorst (Eds.) *Mapping Vulnerability: Disasters, Development and People*, pp.145-158, Earthscan, UK

Delladetsimas, A. Pavlos Marinos, 2009, Οι ασφαλείς πόλεις, Εξάντας, Athens

Dreier, Peter, 2006, Katrina and Power in America, *Urban Affairs Review*, Vol. 41, No. 4, pp. 1-22

Eizaguirre, Santiago, Pradel, Marc, Terrones, Albert, Martinez-Celorrio, Xavier and Garcia, Marisol, 2012, Multilevel Governance and Social Cohesion: Bringing Back Conflict in Citizenship Practices, *Urban Studies*, Vol. 49, Is. 9, pp. 1999–2016

EM-DAT (The International Disaster database), 2012, Country Profiles.

Erguden, S., 2001, Low-cost Housing: Policies and Constraints in Developing Countries, International Conference on Spatial Information for Sustainable Development, Nairobi, Kenya, 2-5 October, 2001.

Fainstein, S. Susan, 2010, *The Just City*, Cornell University Press, New York

FEANTSA, 2010, European Consensus Conference on Homelessness 9 - 10 December 2010, Brussels, (http://www.feantsa.org/files/freshstart/Consensus_Conference/Outcomes/2011_02_16_FINAL_Consensus_Conference_Jury_Recommendations_EN.pdf,), accessed at May 2012

Forsyth, T., 2008, Political Ecology and the Epistemology of Social Justice, *Geoforum*, Vol. 39 pp.756-764

Fothergill, A. and Peek, A.L., 2004, Poverty and Disasters in the United States: A Review of Recent Sociological Findings, *Natural Hazards*, Vol. 32, pp.89-110

Garcia, Marisol, 2006, Citizenship Practices and Urban Governance in European Cities, Marisol Garcia, *Urban Studies*, Vol. 43, p. 745

Gonzalez, Sara, Moulaert, Frank and Martinelli, Flavia, 2010 , ALMOLIN: How to analyse social innovation at the local level?, in Frank Moulaert, Flavia Martinelli, Erik Swyngedouw and Sara González (eds.) *Can Neighbourhoods Save the City? Community development and social innovation*, Routledge, New York

Gonzalez, Sara and Healey, Patsy, 2005, A Sociological Institutional Approach to the Study of Innovation in Governance Capacity, *Urban Studies*, Vol. 42, No. 11, 2055–2069

Gunewardena, Nandini and Schuller, Mark, 2008, Capitalizing on Catastrophe; Neoliberal Strategies in Disaster Reconstruction, AltaMira Press

Haque, C.E. and Etkin, D., 2007, People and Community as Constituent Parts of Hazards: The Significance of Societal Dimensions in Hazards Analysis, *Nat Hazards*, Vol. 41, pp.271-282

Hardoy, J., Roberts, D., Pelling, M., Argianto, D. and Marlina, S., 2010, Urban Governance and Disaster Risk Reduction, World Disasters Report 2010: Focus on Urban Risk (Geneva: IFRC)

Helfrich Silke and Haas, Jörg, The Commons: A New Narrative for Our Times, (http://www.boell.org/downloads/CommonsBook_Helfrich_-_Haas-neu.pdf), accessed online at June, 2013

Ingram, Jane C., Franco, Guillermo, Rumbaitis-del-Rio, Cristina and Khazai, Bjian, 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

Lyons, Michal, 2009, Building Back Better: The Large-Scale Impact of Small-Scale Approaches to Reconstruction, *World Development*, Vol. 37, No. 2, pp. 385-398

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

Morrow, B.H.,1999, Identifying and Mapping Community Vulnerability, *Disasters*, Vol. 23, Is. 1, pp.1-18

Moulaert, Frank and Ailenei, Oana, 2005, Social Economy, Third Sector and Solidarity Relations: A Conceptual Synthesis from History to Present Frank Moulaert and Oana Ailenei, *Urban Studies*, Vol. 42, No. 11, pp. 2037–2053

Frank Moulaert, Flavia Martinelli, Erik Swyngedouw and Sara Gonzalez, 2005, Towards Alternative Model(s) of Local Innovation, *Urban Studies*, Vol. 42, No. 11, 1969–1990

Oliver-Smith, A., 2004, Theorizing Vulnerability in a Globalized World: A Political Ecological Perspective, in: G. Bankoff, G. Frerks and D. Hilhorst (Eds.) *Mapping Vulnerability: Disasters, Development and People*, pp. 10-24, Earthscan, UK

Palliyaguru, Roshani and Amaratunga, Dilanthi, 2008, Managing disaster risks through quality infrastructure and vice versa, *Structural Survey*, Vol. 26 No. 5, pp. 426-434

Pomeroy, R.S., Ratner, B.D., Hall, S.J., Pimoljida, J. and Vivekanandan, V., 2006, Coping with Disaster: Rehabilitating Coastal Livelihoods and Communities, *Marine Policy*, Vol. 30, pp.786-793.

Satterthwaite, D., 2010, Avoiding the Urbanization of Disaster, *World Disasters Report 2010: Focus on Urban Risk* (Geneva: IFRC).

Satterthwaite, D., Patel, S., Boonyabanha, S., Kerr, T., Mitlin, D. and Leckie, S., 2010, Starting Over: Community Rights and Post-disaster Response, *World Disasters Report 2010: Focus on Urban Risk* (Geneva: IFRC).

Satterthwaite, David, 2008, Editorial: The social and political basis for citizen action on urban poverty reduction, *Environment and Urbanization*, Vol. 20, p.307

SDI, 2005, SDI RESPONSE TO TSUNAMI 3, (http://www.sdinet.org/static/upload/documents/sdi_response_to_tsunami_document_3.pdf), accessed at May 2011

Swyngedouw, E., 2009, The Antinomies of the Postpolitical City: In Search of a Democratic Politics of Environmental Production, *International Journal of Urban and Regional Research*, Vol. 33, Is. 3, pp.601-620

Swyngedouw, E., 2006, Circulations and Metabolisms: (Hybrid) Natures and (Cyborg) Cities, *Science as Culture*, Vol. 15, Is. 2, pp.105-121

Turner, FC John, 1980, What to do about Housing - its part in Another Development', *HABITATINTL*, Vol. 5. Nos. I/2, pp. 203-211

Turner, FC John, 1978, Housing in Three Dimensions: Terms of Reference for the Housing Question Redefined, *World Development*, Vol. 6, No. 9/10, pp. 1135-1145

Turner, FC John, 1976, The John Turner Archive: Approaches to government-sponsored housing, Reprinted from: *Ekistics*, Vol. 41, No. 242, January 1976

Turner, FC John, 1974, The John Turner Archive: The fits and misfits of people's housing, Freedom to Build, RIBA Journal, No. 2, February 1974

Turner, FC John, 1972, Housing as a Verb, in: J.F.C Turner and R. Fichter (Eds.) *Freedom to Build*, MacMillan, New York

Turner, FC John, 1968, Housing Priorities, Settlement Patterns, and Urban Development in Modernizing Countries, *Journal of the American Institute of Planners*, Vol. 34, Is. 6, pp. 354-363

Wisner, B. and Henry, R.Luke., 1993, Disaster Vulnerability: Scale, Power and Daily Life, *GeoJournal*, Vol. 30, Is. 2, pp.127-140