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THE CONCEPT OF PLACE AND RELATED ISSUES IN POST-DISASTER RECONSTRUCTION: EXISTING KNOWLEDGE AND GAPS

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Abstract

Studies of post-disaster reconstruction (PDR) have grown in number and have largely tackled issues related to the rebuilding of the physical environment (such as rebuilding houses and infrastructure) and the displacement of populations affected by disaster. The literature lacks a systematic discussion of the concept of place and related issues (e.g. sense of place, place attachment, place identity). This paper examines how the concept of place, and related constructs, have been studied in post-disaster reconstruction. It also briefly discusses the role of on-line spaces created by disruptive digital technology within the community recovery process. This has relevant implications for the PDR process as physical spaces, once central for the maintenance of social relationships, may be destroyed or made inaccessible as a result of disasters.

Keywords: *Reconstruction, place, spatial settings, sense of place*

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Introduction

Whilst studies on post-disaster reconstruction (PDR) have grown in number in the last decades, reconstruction and recovery remain poorly understood areas of disaster management (Yang and Yi 2014). Recent literature (e.g. Zetter and Boano 2009, Cox and Perry 2011) recommends the adoption of a wide and nuanced approach in order to understand people's needs after a disaster. In this respect, the concept of "place" and all the related constructs - "sense of place" (Tuan 1980), "place attachment" (Altman and Low 1992), "place identity" (Proshansky 1978), "place dependence" (Stokols and Shumaker 1981) - provide a useful framework to understand what people seek to achieve (or regain) during the rebuilding process.

It is widely acknowledged that people create emotional bonds with the places they inhabit. Over the years, people start attaching a set of beliefs, memories, emotions, values, symbols and behaviours to certain localities and turning them into familiar environments where it is safe to move (Scannell and Gifford 2009). These places also are an integral part of the person's identity as they guarantee the continuity between the past, the present and the future. At the individual level, people also become attached to physical features because they symbolize the social bonds that

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of Red Cross and Red Crescent Societies

are created and enacted in them (Lalli 1992). At the intersection between the individual and collective level, the significance and the meaning of the spatial setting is dependent on the system of social, cultural and political values in which a person is immersed (Manzo 2003).

In this short paper, I review some of the literature that has addressed the concept of place in post-disaster reconstruction. This review has the scope of discussing constitutive elements of the concept of place – and of related constructs – in the PDR literature and identifying gaps of knowledge and new trends not yet explored.

“Placelessness” and reorientation after disasters: psychological and social dimensions

Survivors of disasters often describe their experience in terms of “before” and “after”. Suddenly familiar spaces where everyday life was conducted and social relationships were developed and maintained are swept away or irremediably altered. Zetter and Boano (2008) describe the condition that survivors experience as *placelessness* – the loss of sense of place and security caused by the disruption of familiar environments (Relph 1976). This loss has significant consequences on the psychological wellbeing of the people. Survivors report on feelings of sadness, isolation, anxiety, confusion, frustration and uprootedness (Carroll et al., 2009; Tapsell and Tunstall, 2008; Silver and Grek-Martin, 2015) – a sense of being violated in their own intimate settings. After a disaster, spaces once private and exclusive in the home can become public domain and lose their symbolic value as safe places (Carroll et al., 2009; Tapsell and Tunstall, 2008). Silver and Grek-Martin (2015) demonstrated that these psychological symptoms are frequent also in those who do not experience home loss. Indeed, abrupt changes in the physical landscape are enough to produce psychological trauma (Silver and Grek-Martin, 2015) and a sense of disorientation (Cox and Perry, 2011). The alteration of the physical environment threatens the definition of self and the memories of the past (Miller and Rivera, 2010). Likewise it endangers the possibility to maintain the social infrastructure once supported by the disrupted physical infrastructure (Miller and Rivera, 2010)

Beyond the individual level, the change in the physical environment also involves changes to the socio-cultural, socioeconomic and political landscapes (Miller and Rivera 2010). Cox and Perry (2011) use the term “reorientation” to describe the process of navigating the new frameworks created by the disaster and the adaptation of people affected by the new realities. This process may be easily impaired by the stress correlated with bureaucratic procedures during reconstruction (e.g. dealing with building contractors and insurance claims) (Silver and Grek-Martin 2015, Carroll et al. 2009, Merdjanoff 2013).

Displacement and relocation: new homes and settlements

The disruption of the physical environment implies that people who become homeless have to be temporarily accommodated in other locations. In most of these cases, the new accommodation is

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provided in a top-down manner (Zetter and Boano 2008, Felix et al. 2013). Research has demonstrated that a more participatory approach on the decisions regarding temporary shelters and housing is paramount if people's attachment to the new places is to be recreated (Kamani-Fard et al. 2012; Zetter and Boano, 2008). A participatory approach not only guarantees that people's needs are met from an economic point of view (for example ensuring that the new homes are located near livelihoods) but it also allows for the construction of culturally and socially adequate dwellings (Felix et al., 2013, Zetter & Boano, 2008). Restoring aesthetic and culturally relevant aspects of the landscape is essential for post-disaster recovery (Silver and Grek-Martin, 2015). Likewise it is important to recreate spaces for the development and maintenance of social relationships in the new settlements. Despite a recognised need for preserving the *genius loci* of the people affected (Alexander 2004), preservation of the identity of historic settlements in post-disaster reconstruction may be challenging due to a need for rebuilding in a safer manner and with new building codes (Alexander 1989).

A "place" in the cyberspace?

Evolving communication technology has profoundly modified the way in which people interact and social and spatial settings are being perceived, used, and socially constructed. Recent research advocates that social relationships nowadays take place in "hybrid spaces" (De Souza e Silva 2006) that encompass dimensions of both the physical and digital environments. Additionally this technology allows individuals to interact with each other regardless of their location in the world. Sociology studies (e.g. Hampton et al. 2011; Ellison et al. 2007) confirm the assertion that these tools are primarily useful in maintaining social capital when physical co-presence is impossible or impractical because of the inaccessibility of physical public locations, and to expand the diversity of the social ties. In this respect, new technologies seem to serve similar functions of supporting social bonds than the ones previously fulfilled by spatial settings. However the extent to which virtual environments are able to create a sense of place in their users is less clear and is still highly debated. According to Harrison and Dourish (1996, p.9) "*non-spatial environments exhibit placeness, too*". On the other hand, Relph (2007) argues that virtual environments are not able (or are not completely able) to reproduce the *genius loci*, the spirit of place that lies in natural landmarks or remarkable buildings and structures.

Implications of ubiquitous technology for PDR

It has been suggested that the disruption of the physical environment after a disaster engender the loss of the social network too (Miller & Rivera, 2010). Indeed physical spaces once conducive for the maintenance of social relationships are suddenly disrupted and in-person meetings can become difficult due to forced relocation. However recent literature (Lev-On 2010; Semaan and Mark 2012; Tagliacozzo and Arcidiacono 2015) on the use of social media after disasters and conflicts seems to challenge this assumption. In their study on an Iraqi community dispersed after the war in 2003, Semaan and Mark (2012) found that people used Facebook to maintain their social

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infrastructure and overcome the challenges caused by the disruption of the physical environment. Likewise Lev-on (2010) studied how a community in Israel dispersed after the disengagement from Gaza in 2005 used a website to keep their community alive by maintaining contacts with members of their previous social network, and mobilising cooperatively. More recently, Tagliacozzo and Arcidiacono (2015) reported on a study conducted in 2011 in L'Aquila through 13 semi-structured interviews to investigate the use of Information and Communication technologies after the earthquake that hit the city in 2009. Findings supported the assumption that people turn to virtual environments created by the social networking sites to compensate for the sudden disappearance of meeting points within the city and to maintain social ties once supported by physical settings. They also suggested that social networking sites facilitate the organization of offline meetings where the disruption of the physical and social environment caused by the earthquake has limited the opportunity to meet by chance.

Unsolved questions and new scenarios

Despite the increase of studies on PDR, many questions remain unsolved. In particular, the advent of new technologies has revealed new dynamics in the relationship between the physical features of the built environment and the development of the sense of place. If, as advocated by some (Lalli 1992), physical features of the landscape are relevant because they allow the maintenance of the social bonds, why couldn't virtual environments create the experience of place too? The new scenarios opened up by disruptive technology and virtual realities are particularly relevant for PDR research. During post-disaster reconstruction, familiar places are irremediably altered. This brings to prominence questions such as: to what extent can new media be used to maintain the relational dimension of the place after the spatial settings - once central for social relationships - are disrupted or severely damaged by natural or anthropogenic disasters? Which dimensions of the physical spaces can be transferred to the virtual environment? Also, how can new technologies be used to facilitate participatory planning during the PDR process?

Additionally, many questions regarding the tension between the old and the new in PDR remain unexplored. While maintaining people's sense of place is crucial, it is also vital to rebuild in a manner that increases resilience to future disasters. How can future studies contribute towards better understanding and resolving this tension? Beyond the psychological impact of the changes in the physical environment, future studies should also investigate how the new features of the physical landscape are elaborated by the people affected, and integrated in the new "mental map" of the neighborhood and city.

Understanding these elements would probably allow researchers to support and expedite the process of reorientation and adaptation to the new reality.

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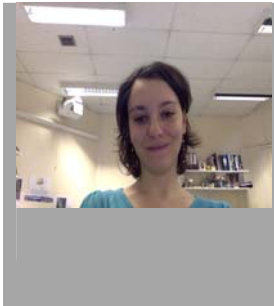
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