

**“Contesting the Resilient City.
The Unequal Distribution of Vulnerability and the Role of Social
Ties”**

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Cities have always been risk areas that eventually become the stage for climate change related phenomena (Birkmann et al. 2014). In general, climate change will manifest itself increasingly in disasters, such as heavy rainfalls, storms, civil wars etc. (Voss 2008, 39). Besides the importance of considering the capability to resume 'normality' after a large-scale disaster, the capacity to adapt to it is unequally distributed and needs in-depth understanding. Disasters have a social root cause (Wisner et al. 2003). In this sense, contemporary understandings of disasters refer to them as being socially produced and are thus interested in the specific forms of social organization (see Smith 1999; Clausen 2003; Pelling 2003; Voss 2008; Tierney 2014). For cities, the residential segregation as the complex process of sorting and being sorted into places is thus an interesting field of inquiry (see Häußermann and Siebel 2004: 139). However, comparably independent from different national contexts, segregation and the concentration of residents from similar social backgrounds has been discussed with considerable concern (Musterd 2003). For German cities an increasing social polarization and residential segregation has been observed, which is said to produce negative effects for its residents (Häußermann et al. 2004). This resonates with the idea that comparably poor neighborhoods lack the right social ties for upward social mobility (see for a discussion Nieszery 2008; Blokland et al. forthcoming). Similarly, short-cut assumptions treat social capital as being an either preventive or supportive social attribute for adaptation processes to climate change (Pelling and High 2005). But is such a linear conclusion tenable (ibid.)? With regard to the internal dynamics of communities, we ask how social ties structure the access to social networks, which help mitigating the effects of disasters and dominate planning-processes. This short paper starts by discussing the resulting theoretical and methodological implications of researching social ties within vulnerable populations in cities for the process of adaptation. Pelling and High (2005) propose an approach to capture the capacities of cities to adapt, namely researching the social relations within and between organizations and local communities. The presentation thus engages with the theoretical question of how rather poor residents are said to live in the segregated city and which implications for the residents' resilience follow from this approach. On the

other hand we discuss how linking ties of institutions and organizations tasked with security increase or interfere with the residents' resilience. The argument will be substantiated by using empirical vignettes from ongoing research to make first empirical claims.

"Bonding for Survival"

The Role of Social Ties in 'Disadvantaged' Neighborhoods

Adapting or learning from external stresses has been defined as a specific quality of resilience (Voss 2008; Endreß and Rampp 2015, 40). Learning or adapting to social changes that are inherently linked to climate change is not confined to the availability of assets alone. Why some urban communities bounce back quickly after experiencing and processing a disaster while other communities struggle to resume 'normality' has gained attention (Adger 2003; Pelling 2003; Pelling and High 2005; Aldrich 2012). The endowment of (economic, cultural, social and symbolic) capital and its distribution in different social fields and spaces (see Bourdieu 1983) is apparently an important indicator for the resilience of a social unit, but this still leaves some unanswered points in explaining different paces and forms of recovery (Aldrich 2012). The research on social capital has gained attention as a key mechanism for collective action in rebuilding or, speaking more broadly, it is seen as crucial in negotiating the effects of external stresses and disasters, e.g. in terms of mitigating or adapting to climate change. As Pelling and High (2005, 314) suggest, social capital as a conceptual tool can offer access to the behavioral element in analyzing the adaptation process and thus give insights into the imposing question of whether or not, and if so how, adaption to climate change can be considered to be plannable. Instead of focusing on an agent-centered level of resilience that promotes a link between information and action which assumes that recipients of information automatically assimilate, comprehend and use the information delivered (Paton and Sohnston 2001), Pelling and High (2005, 308) propose a heuristic in analyzing the social relations within communities in distributing and processing information. The authors use the concept of social capital and differentiate between "communities of place" and "communities of action" in order to

refer to their specific adaptive choices and strategies (ibid.). Regarding these communities of place and action, inner dynamics are based on interpersonal relations. Interpersonal social capital can be subdivided into bonding, bridging, and linking (see Pelling and High 2005; Tierney 2014). Bonding ties are seen as the predominant type of social capital associated with poor neighborhoods and is equated with a strong quality relationship that leads to survival, while lacking the 'right' qualities that get people 'ahead' so that they become socially mobile for example (see Granovetter 1973; De Souza Briggs 1997; Farwick 2004). Bridging ties in contrast, are considered to connect individuals from different groups so that the 'advantageous' quality is seen in a diversity of information and resources that can get exchanged (ibid.). As it will be elaborated on below, a third type of interpersonal social relation is the linking tie that crosses the boundaries of groups vertically and links them with external communities such as organizations or institutions (Pelling and High 2005; Tierney 2014). Women, children, elderly, sick and poor people are said to be especially vulnerable to disasters (Voss 2008, 39). The short-cut assumption is that the capacities of the named groups do not hold up well in case of a disaster. While this might be the case in terms of physical ability and the resulting capacity to evacuate for example, or the financial capacities to rebuild a house after a storm strikes; there is nevertheless the tendency to devalue the social capacities of poor people. Socio-economically less advanced areas are often termed as 'disadvantaging', having a diametrically opposing impact on their residents. In short, segregation is generalized and perceived as obtrusive to the well-being of residents (see Massey and Denton 1993). In consequence, concentrated poverty in neighborhoods is then made responsible for various negative effects on health and education outcomes, family structures, deterioration of buildings, dilapidation of the public space or on crime rates (Farwick 2004; Häußermann et al. 2004; Innes and Jones 2006; Blasius et al. 2009; Oberwittler 2009). Similarly, studies that measure social vulnerability work with conceptions of "weak individuals" (Cutter et al. 2000, 726) thereby neglecting a methodological discussion. Concluding on this, poor residents are said to experience an additional negative effect of living in neighborhoods of concentrated poverty that underscore and perpetuate their state of

social vulnerability (see Musterd 2003). Eventually, there is doubt as to whether this approach regarding 'disadvantaged' neighborhoods and their independent and negative effects is tautological (Slater 2013). Research on the mitigation of disasters also criticizes the equating of poor areas with helplessness and lack of social capacities (see Aldrich 2012; Tierney 2014). The devaluation of the various forms of capital along with ties from one methodological angle causes a bias. As Tierney (2014, 4) contends: "The idea that high incomes automatically provide protection from danger, like most oversimplifications, is undercut by evidence of disasters that affect the rich as well as the poor. (...) even though the poor often suffer disproportionately when disasters strike, the notion that poor people are invariably helpless in the face of disaster is another simplifying trope that is invalidated by empirical findings." Reflecting on this, although the capital equipment of poor households differs from rich households, the capital structure of the poor households can still yield protection in the face of a disaster (Granovetter 1973). The assessment of resources such as social capital of poor households as 'disadvantaging' and its structural devaluation neglects the actual strength and impact it can have in a dangerous situation and beyond, e.g. for adaptive capacities (see Aldrich 2012; Tierney 2014). Aldrich (2012) contends that social capital, as a concept needs to be integrated in the study of social vulnerability and resilience to understand how poor communities recover differently, e.g. faster compared to affluent communities. On the other hand, we want to emphasize the importance and impact of state responsibilities and their linking ties to residents. A 'failure' in adapting and recovering from a disaster can thus lead into an argumentation that is 'blaming the victim' and neglects growing social and spatial inequalities. As a consequence, a 'utopian' idea for adaptive planning should address the debate on 'social justice' and a reduction of social vulnerability in the city. But nevertheless, the social relations that produce trust and bonding ties are relevant in order to understand how neglected social resources can be activated for participating in adaptive processes (see Voss 2008). In order to understand the actual context, in which social relations in "communities of place" work during emergencies, the linking ties to "communities of practice" need to be integrated (see Pelling and High 2005, 308).

Linking Ties 'tasked' with Security

Trust in organizations and institutions tasked with security as well as the trust in the general idea of 'security' and its potential management create a belief system in which people assume that risks are indeed tangible (Dombrowsky 2005). Epistemologically speaking, security is the basic reliability in the social and material environment (see Giddens 1990 cited in Dupuis and Thorns 1998, 27). Though practically, for the urban context we observe that an ontological understanding of the "security of being" (ibid.) is translated into tangible organizational responsibilities. The fire brigade is competent to put out a fire in a house or to take care of the flooded street in a neighborhood, while in case of a car accident an ambulance of a private firm or the fire brigade takes on the primary medical care. In a 'modern' and complex world, so the assumption, confidence and trust need to be externally organized by, and be dependent on the expertise of professionals (ibid.). The linking ties between residents and organizational members are expressed in a general idea of what can be expected from and delivered by "communities of practice" (Pelling and High 2005, 308) such as the police, fire brigade, or the Red Cross. The organizational structure for emergency situations that we find in Germany as well as in other countries is a historically grown reaction to disasters and as such is well integrated and part of the social figurations that constitute society (see Smith 1999; Elias 1978). Just as customs and belief systems, organizational structures are a means and a result for structurally adapting to disasters and climate change (see Smith 1999). Adaptation in this sense refers to strategies that social units apply to cope with cultural and physical changes of the social and environmental conditions with the intention to survive or to prosper (ibid.). But those organizational and institutional structures that intend to impart protection and increase the resilience by linking institutionalized capacities to residents might in fact lead to the contrary occurring. For example in the German context, a time frame for the emergency aid of 8 to 15 minutes (formal requirements depending on the federal states) has produced a formal support system that complements informal social support networks and

produces expectations and trust in its reliability (see Pelling and High 2005). How, then, is the informal support system influenced by the linking ties tasked with security? When talking about general expectations that fire fighters meet in the population, a fire brigade leader of a ‘disadvantaged’ area in the middle-scale city of Wuppertal¹ assessed a change in the quantity and type of operations:

“This adds to the demographical change. People are increasingly old. Thus the share of helpless people and sick people, and also the possibilities of treatment. This is all increasing. And on the other side the preparedness or the capability of people to help themselves in certain situations decreases. (...) So that you (dial) the telephone number 112 as a general legal liability for life. Yes, [when] I have a problem, my parents or I think how we can help ourselves. There are more and more people that don’t know [how] to help themselves when [they get] confronted with the smallest things.”

(Mr. Weiß, Fire brigade leader, Interview in May 2015)

When asked about his opinion concerning the aforementioned changes and the assumed reasons for which, he contends the following:

“This is probably a more general change in social values. Hm, I can’t explain this to myself. Maybe the post war generation was left more to its own devices. And now there is more a tendency to a fully comprehensive insurance society.”

(Mr. Weiß, Fire brigade leader, Interview in May 2015)

The fire brigade leader identifies a change in the demands and approaches of his clients in the ‘disadvantaged’ district of Wuppertal. The preparedness of residents decreases as they place their trust in the emergency service supplied by the fire brigade. This statement is also reflected in further interviews conducted with fire fighters involved in the emergency service and disaster management². They hint at the belief system and the conviction that the organizational emergency system will provide help for a general public, which work like suggestions and social images (Dombrowsky 2005). The actual extent to which organizations and institutions tasked with security can react in case of a disaster is not part of the public discourse. The question remains, does the trust in the emergency supply differ between residents of poor and more

¹ The interview is part of the research project “Vulnerability and Security in the Just City” of the Disaster Research Unit of Freie Universität Berlin, funded by Federal Ministry of Education and Research (Term: June 2014 – June 2017).

² More interview data will be included into the conference presentation.

affluent districts; and thus influence the state of vulnerability of the objectively most vulnerable residents? Referring to results from a survey that the Disaster Research Unit conducted in Berlin (see also Lorenz et al. 2014; Schulze et al. 2015)³, the majority of respondents considers the statement “I think that the disaster management in Germany is able to manage disasters well.” as being rather correct. When we differentiate between regions that are counted as rather poor and rather affluent,⁴ the results show that respondents in rather poor districts have more trust in the disaster management than those in rather affluent districts. Although this result is significant ($t(346)=2.48$, $p<.05$) the trust in the respondents’ own capabilities does not significantly differ between the regions. The statement about the self-evaluation of the capabilities for coping with disasters “I think that I can get along well with my capabilities in a disaster.” is supported by the majority of respondents of rather poor and rather affluent districts. Although the self-evaluation of the residents’ own capabilities may approximate the actual capabilities people can rely on in times of a disaster, it still does not tell us about the social capacities people can actually activate; and how this, in turn, relates to the trust in organizations. Social capacities of bonding and bridging ties might be working ‘latently’ behind such statements regarding the self-evaluation of capabilities to cope with disasters (see also Pelling and High 2005, 309). Furthermore, it leaves open the question as to whether or not residents estimate or evaluate their capabilities in relation to financial, material, or social resources. If there are similar approaches to evaluate capabilities, the question remains then as to how poor residents keep up with affluent residents. Is the disproportional material and financial impact of a disaster compensated by the supply of mutual aid in emergency

³ The survey is part of the research project Enablement of Urban Citizen Support for Crisis Response (ENSURE) of the Disaster Research Unit, Funded by Federal Ministry of Education and Research (Term August 2013 – July 2016). It is a representative study (N=1006) in Berlin intending to create in-depth understanding of human behavior and self-evaluation during the isolation-phase of a disaster.

⁴ For the purpose of this paper we assembled districts together in order to compare a relative poor area and a relative affluent urban area. It follows the logic of merging districts that have similar outcomes in an index measuring the “social and health exposure” (see Action-oriented Social Structure Atlas Berlin 2013; online resource <https://www.berlin.de/sen/gessoz/presse/pressemitteilungen/2014/pressemitteilung.150851.php> Accessed June 29th, 2015), whereas the rather poor area consists of the districts Kreuzberg, Neukölln, Wedding and Friedrichshain and the rather affluent area of Charlottenburg, Steglitz, Wilmersdorf and Zehlendorf. The presented findings have not yet been published.

situations (see Tierney 2014)? In contrast, is the linking capital from organizations and institutions tasked with security producing resilience for rather poor residents, or is it interfering with the existing bonding ties? Why do residents of the rather poor area in Berlin trust significantly more in the disaster management? A result that confirms the interview statements presented above. Do the respondents follow a positive social imagination of those organizations and institutions involved or have they had positive experiences that confirmed their expectations? What implications could be derived from here; or rather, which impact can social ties eventually have on resilience and adaptive capacities?

Conclusion

Adger (2003, 388) states that “Societies have inherent capacities to adapt to climate change.” The social relations that form the grid of society include, convey, and process information and values within networks (Granovetter 1973; Pelling and High 2005). While welfare regimes such as those found in Germany invest into the dimension of “communities of action” (Pelling and High 2005, 308) such as emergency organizations, they shed less light on social processes or evaluate actual social resources that can be found within vulnerable populations. Rather, in the urban context, the fear of segregation is accompanied by the devaluation of social capacities within poor neighborhoods (see Musterd 2003; Tierney 2014). In order to understand the inner dynamics of “communities of place” (Pelling and High 2005, 308) we also have to differentiate and identify, who are ‘the residents’ in these ‘poor’ and ‘affluent’ communities? For the ongoing project “Vulnerability and Security in the Just City” we will direct our focus onto the social capacities of vulnerable residents in the city and the ties they use in everyday life as well as in emergency situations. Against this background, we suggest the re-evaluation of the “latent” (Pelling and High 2005, 309) social capacities instead of presuming a “lack” of those capacities (Kuhlicke and Steinführer 2010, 8) within vulnerable neighborhoods. It will be our intention in the ongoing research project to differentiate relations within vulnerable populations that have been subsumed here as ‘poor’. While interviewed experts point out the social

isolation of elderly, single parents and unemployed persons in poor neighbourhoods, many ethnic-cultural and/or religious groups predominately show high densities and frequencies within their communities. 'News' is disseminated quickly and this capacity could prove to provide efficient in case of emergencies as well as in processes of adaptation to climate change. Adaptive planning can thus reflect (on) the social climate in urban communities (see Kraft [Seidelsohn] and Freiheit 2011). What is often discussed in nation-wide debates as a lack of integration or assimilation manifests as a shelter to ensure daily livelihood. However, at the same time, conducted interviews illustrate a low consciousness in social groups for those still intangible 'natural hazards' related to climate change, and thus they lack a practical preparedness for disastrous events. We conclude that the development of strategies to enhance participatory capacities in adaptive planning (Voss 2008) depends on the implementation of milieu-oriented (see Bourdieu 1987, Vester 2010) and ethnic-cultural sensitive approaches which could provide a productive linking of social ties with those institutions and organizations tasked with security; thereby re-evaluating social capacities in urban neighbourhoods.

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