

Social Dimensions of Disaster Recovery

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Introduction

The authors of papers for this meeting were asked to write about the disaster recovery process within the built, natural, and social environments, as well as institutions and economies. The logic behind this approach is quite reasonable. Through reviewing and critiquing the literature in these different domains, authors, discussants, and meeting participants should be better equipped to construct a general theory of recovery by identifying variables and processes that apply across the different domains. Moreover, as a practical matter, some sort of division of labor is required because the literature on recovery is quite vast.

Since disasters are brought about by the complex interaction of ecological, economic, cultural, social, institutional and political factors that produce a pattern of exposure and sensitivity that renders a society vulnerable to a hazard, recovery constitutes an equally complex challenge. Although to some degree it makes sense to talk in terms of differentiated recovery domains, in reality the various “environments” are interrelated in complex ways, and any general theory of recovery must take these interrelationships into account. Disasters exist as complex material events and, at the same time, as a multiplicity of interwoven and often conflicting, social and cultural constructions. Social recovery is therefore inextricably linked to the recovery of structures and infrastructural elements, ecosystems, organizations and institutions, economic activity and culture, making recovery a truly holistic process. Thus, some of the most crucial and interesting research challenges concern the interfaces among these different “environments.”

For purposes of this discussion, we conceptualize the recovery of the social environment as encompassing social entities existing at different levels of analysis (e.g., households, neighborhoods, communities); both the public and the private sector; and both civil society and government. In the way it is framed, implemented and experienced, recovery is fundamentally a socially-configured process. Using this definition, recovery processes within what this conference terms social, economic, and institutional

environments overlap to some degree. The processes associated with social recovery include activities centered on providing shelter and longer-term housing for disaster victims; arrangements involving other forms of aid, such as food and financial assistance; strategies for overcoming the psychological and psychosocial problems engendered by disasters; and processes through which those affected by disasters achieve desired levels of social well-being, quality of life, sense of place and belonging, and civic engagement.

Social recovery thus spans multiple entities and social sectors, multiple processes, and a variety of potential outcomes. The quality and success of social recovery along these multiple dimensions can be assessed on a continuum ranging from wholly inadequate to very successful. In other words, social recovery can succeed in some ways and at some scales and fail in others. Moreover, judgments concerning recovery processes and outcomes are themselves likely to be contested, based on the interests and perspectives of different stakeholders.

Paper authors were asked to review the literature on the various domains within which recovery takes place. This is a tall order for reports like this one that are intended to be brief and also expected to address a variety of other issues. Our task may be easier than that of other authors, because good reviews of the social recovery literature already exist (see, for example, Olshansky 2005; National Research Council 2006; Smith and Wenger 2006; Ritchie 2010), although these reviews are limited because they are generally U. S.-focused. Additionally, emerging perspectives from research elsewhere, particularly in Latin America, reveal that there are some recovery issues that are widely shared and others that are specific to different cultures and to the relative regional and structural positions of nations within the world system (Ensor 2010; Barrios 2010). Rather than summarizing material that is available in these and other sources, we will focus instead on areas in which the literature still falls short, or, put another way, on additional problems that must be addressed in the development of theories of disaster recovery.

A good deal of prior research has resulted in theoretical dead ends, and we begin our discussion by pointing out several shortcomings of previous efforts to frame and assess disaster recovery. We then discuss concepts that can be used in theorizing about processes and outcomes associated with social recovery. This discussion emphasizes the idea that recovery is affected by both macro-societal and even global factors, as well as by more local factors and, importantly, by their interconnections. Woven throughout the paper is an argument for a theory of social recovery that draws upon insights from political economy and social capital perspectives.

How *Not* to Think About Recovery: Conceptual Dead Ends

Social scientists have conducted research on post-disaster recovery for decades, as indicated in classic work on post-disaster reconstruction and household and community recovery (Haas, Kates, and Bowden 1977; Bolin 1976, 1982; Bolin and Trainer 1978; Drabek and Key 1984; Oliver-Smith 1986; Bates and Peacock 1993). As research on the topic accumulated, it became clear that many of the concepts put forth in earlier work

needed to be revisited in light of new theoretical and research advances. In the sections below, we discuss some earlier concepts that have given way to more empirically sound and nuanced framings of the social recovery process.

First and most obvious, some early research erred in too closely equating social recovery with post-disaster reconstruction of the physical environment. Reconstruction and the social recovery of affected populations are of course linked, in that some basic level of material reconstruction is a necessary pre-condition for social recovery. And conversely, social recovery in the form of restored social linkages can further the reconstruction process. In effect, the physical reconstruction and social recovery processes must be mutually reinforcing, but they clearly constitute conceptually and empirically distinctive foci for research. As the field has progressed, clearer distinctions began to be made between physical rebuilding and social recovery.

Second and in a related vein, earlier thinking regarding recovery was dominated by the notion that social units affected by disasters pass through various phases on the way to recovery, such as the four phases of housing recovery identified by Quarantelli (1982) or the disaster phases outlined by Drabek (1986) and others. Early research also implied that entire geographic areas stricken by disaster could be characterized as having reached a given stage in the recovery process at a given point in time. Such preconceived, uniform approaches, which do not take into account differences in local vulnerabilities and capabilities, can result in inappropriate relief and recovery strategies, with real and damaging repercussions for affected populations. It is now explicitly acknowledged that the so-called stages of recovery overlap with one another and that different groups and sub-regions within disaster-affected areas achieve (or fail to achieve) recovery milestones at different times and in different ways based on sets of conditions at different scales (local, regional, national) and variable responses to them (Berke, Kartez, and Wenger 1993; Neal 1996; Chang 2009).

Similarly, although earlier formulations implied that disaster recovery is a linear process, notions of recovery have evolved in ways that recognize the non-linear and often iterative character of recovery. For example, recovery can be interrupted or stalled for periods of time, as is now happening in Haiti. Families can be displaced, move through a series of different temporary housing arrangements, and then into housing that they consider permanent but that turns out to be temporary, as is occurring in the aftermath of Hurricane Katrina. Processes of psychosocial recovery are also unlikely to follow neat linear patterns.

New ways of thinking about recovery processes emphasize the extent to which axes of diversity and social inequality structure both recovery processes and their outcomes. These factors influence recovery at various levels of analysis: within affected populations, in terms of race, ethnicity, class, gender, and their intersections; across affected communities; and among different disaster-stricken societies. There is now wide recognition that multiple dimensions of diversity can have a profound effect on social recovery trajectories (see, for example, Tierney, Lindell, and Perry 2001; Tierney 2005; Barrios 2010, Oliver-Smith 2005, 2010, National Research Council 2006; Finch, Emrich,

and Cutter 2010; Phillips et al. 2010). One recent review, by Wenger and Smith, acknowledges this point explicitly by defining recovery as a “differential process” (2006: 237).

The literature has also tended to underemphasize the broader societal and global change processes that affect social recovery. Social recovery takes place within particular social contexts, but there has been a tendency to treat social units as existing outside history and as facing similar recovery challenges independent of national and global social forces. The influence of global economic structures and the political interests that sustain them affect conditions of vulnerability and the severity of disasters in many contexts. Even a cursory look at impacts and recovery following earthquakes in China, the U. S., Taiwan, Turkey, Japan, Haiti, and New Zealand and of hurricanes in the U. S. and the nations of Central America and the Caribbean reveals that recovery following disasters is strongly driven by global and societal-level factors such as economic strength and GDP; the relative power of societies to address recovery challenges; the nature and extent of involvement in recovery on the part of international agencies and non-governmental organizations and the outcomes of that involvement; and internal policies regarding what types of assistance can be provided to disaster victims and how to provide them. Research also reveals distinct challenges that are embedded in the framing of the recovery process within reigning development models essentially dictated by external interests (Ensor 2010). Any general theory of social recovery must consider these kinds of influences.

Disaster scholars have also wrestled with the question of how to characterize both social recovery and the notion of recovery in general. Conceptualizations have clearly shifted from viewing recovery as a return to the *status quo ante* to framing recovery as movement towards a “new normal” which may be framed as an adaptive process that negotiates the tensions between re-establishment of pre-disaster systems and significant alteration of those systems. The conceptualization of recovery toward “a new normal” is appropriate, both because major disasters inevitably result in changes of one kind or another within affected areas and because disasters themselves occur in the context of ongoing social changes at various scales. For example, damage to the Port of Kobe in the 1995 earthquake occurred at a time when shippers were already moving their business to other Asian ports—a trend that repairs to the port and post-earthquake efforts to improve port services could not completely overcome (Chang 2000). Prior to the earthquake, the Japanese economy had already begun to shift from a manufacturing to a service economy, and this change was reflected in Kobe City following the 1995 earthquake (Chang 2009). Independent of the levels of damage they sustain, businesses that were not doing well economically prior to disaster, or that are in economic sectors in which pre-disaster business turnover rates were high, tend to experience relatively poor recovery outcomes (Dahlhamer and Tierney 1998). As we discuss later in the paper, research is needed to explore interactions among recovery processes and larger changes that occur independent of disaster events. Disaggregating outcomes of exogenous variables from those of disaster recovery interventions also constitutes a substantial methodological challenge. Stephanie Chang’s recent work on the Kobe earthquake (Chang 2009) is an excellent example of how this can be done.

Finally, most U.S. research on disaster recovery has been quite U.S.-centric, in several senses. First, it has focused primarily on U.S. disasters, which seriously limits researchers' ability to develop a general theory of recovery. Second, the U.S. focus has necessarily excluded the study of recovery following catastrophic and near-catastrophic events, because those types of events have been so infrequent. Third, U.S.-centrism has limited emphasis on the link between recovery, vulnerability reduction and development that informs many reconstruction efforts in the developing world. Fourth, this limited focus has precluded the kinds of comparative analyses of disaster recovery that facilitate theory development. There have of course been a number of studies that compare specific dimensions or domains of recovery following similar events in (usually) two countries, or groups of communities within a particular society, but the type of work that has been done has made it very difficult to formulate general theories that are applicable across a range of societal types. Like individual case studies, smaller-scale comparative studies can and do make important contributions to the literature (see, for example Enarson and Fordham 2001; Wu and Lindell 2004 Leeman 2011; for a general discussion of cross-societal disaster research, see Peacock 2002), but comparisons involving larger numbers of cases are clearly needed

In the sections that follow, we propose a set of core variables and processes that are important to take into account in the study of social recovery. The concepts discussed are drawn from a variety of social science perspectives, including theories of social inequality, social capital theory, world-systems theory, entitlement theory, and perspectives that emphasize linkages that exist among macro-, meso-, and micro-levels of society, such as institutional theory. Like most other approaches to the study of social recovery, our discussions of these variables are organized according to time order, beginning with pre-disaster conditions and trends, moving on to disaster impacts themselves, and then taking into account variables and processes that assume significance after disasters occur, including those associated with disaster response activities.

Variables and Processes Affecting Social Recovery

Pre-disaster Conditions and Trends. Prior to disasters, social units occupy distinctive niches that expose them to forces that are “moving” them in either socially positive or negative directions (and sometimes both). Put another way, all units of analysis in the study of social recovery can be conceptualized as inhabiting particular locations in a social order (whether global, societal regional, or local), and also as being influenced by social trends of various types, such as trends toward higher levels of societal economic growth, education and prosperity, on the one hand, or higher levels of unemployment and poverty and more downward social mobility, on the other. Pre-disaster conditions and trends affect societies and regions within the world system, regions and states within nations, community institutions, households, firms, and other units of analysis. These socially-structured positions and structures of opportunity are associated with different quantities of resources of various kinds, including monetary resources, social capital, and political power and influence.

For nation-states, for example, a partial list of key variables influencing social recovery could include their position within the world system, GDP, per capita GDP, educational levels, health and development indicators, regime strength and quality of governance, internal and external conflicts, and the quality of their environmental protection regulations and disaster loss-reduction measures, including the existence and quality of post-event recovery plans. Relevant trends could include direction of movement within the world system, rates of economic growth, and rates of urbanization.

For households, key pre-disaster variables include household income and wealth, type of insurance coverage, home ownership, community tenure, measures of civic engagement, race/ethnicity of the head of the household, measures of household health and well-being (e.g., chronic illness of a household member), and the extent of the household's involvement in pre-disaster mitigation and preparedness activities. Trends or events affecting households include social mobility (upward or downward), job or income loss, and other stressful life events, such as the death of a member of the household.

Comparable sets of variables can be developed for other social units, such as geographic regions within societies, communities, community sectors, and businesses. Failure to understand regional or local realities almost inevitably results in poor articulation among national governments, local governments, non-governmental organizations, local organizations, churches, and other institutions involved in disaster recovery. Lack of factual understanding of regional context and poor articulation between various institutional levels frequently produces relief and recovery programs that are ineffective, insulting and damaging. Here again, the key idea is that different social units face impending disasters with particular types of assets and deficiencies and that their well-being is also influenced by ongoing social changes that may be positive, negative, or both, depending on the type of change in question. In addition, the relationships and linkages among social units at various levels may prove to be key in defining recovery options and accessing necessary resources.

Disaster Impacts. Disaster scholarship has always been concerned with various characteristics of disaster impacts, in part because impacts affect post-disaster recovery. Impact severity is one obvious variable of concern, as suggested by the distinction that is often made between emergencies, disasters, and catastrophes (Quarantelli 1996; Tierney 2008). As Katrina and Haiti, and now the earthquake-tsunami-nuclear disaster in Japan demonstrate, catastrophic disasters present special challenges for social recovery, including high death tolls, extremely severe damage, and widespread social dislocation. Societies and communities have less experience with catastrophes than they do with "ordinary" disasters, and less is known in general about strategies for recovering from truly catastrophic events, and thus there is a smaller knowledge base from which to draw in efforts to facilitate recovery. Put another way, there have simply been fewer opportunities for adaptive learning regarding catastrophic disaster recovery.

Some scholars argue that distinctions that exist between natural and technological disasters (Picou et al. 1992; Erikson 1994; Freudenburg 1997; Picou, Marshall, and Gill

2004; Button 2010) have an impact on social recovery processes and outcomes, especially those associated with psychosocial recovery. More severe and long-lasting effects are said to occur when the effects of technological disasters on affected communities are difficult to determine, leading to higher levels of stress, and when technological events are followed by community conflict, litigation, and other stressors that may interfere with recovery. Similarly, discourses and policies surrounding homeland security issues indicate special concern with disasters arising from terrorism, especially when nuclear, biological, and other “dread” agents are involved. Other research concludes that poor psychosocial outcomes are associated not so much with the natural/technological disaster distinction as with other factors such as overall impact severity, pre-existing social vulnerabilities, and the magnitude of impacts on individual victims (Norris et al. 2002).

In some cases, disaster impacts can drastically alter the physical and natural world and can damage the sense of attachment to place in ways that make social recovery difficult. The Chernobyl nuclear disaster made it necessary to completely abandon some communities, and it appears that the Fukushima nuclear disaster will also require the permanent relocation of affected populations. Some post-9/11 terrorism recovery plans envision having to move residents out of places that have been contaminated by nuclear/radiological devices. The Exxon Valdez oil spill made social recovery especially difficult for communities that depended on fishing for their livelihoods and that placed special value on fishing as a way of life. This is also what appears to be happening in some communities following the BP oil spill and the Japan earthquake-tsunami-nuclear plant catastrophe. Large wildfires can leave landscapes devoid of trees, other vegetation, and wildlife, depleting amenities that those living in such settings value highly.

Post-Disaster Variables and Processes. Scholars have long argued that recovery begins virtually at the time of disaster impact, and they now argue that recovery should begin even before disaster strikes, because pre-event planning can improve the pace and quality of the recovery process. For example, the city of Bogota, Colombia considers the consequences of defects and delays in poorly-conceived recovery processes as equivalent to the effects of the actual disaster event. Therefore, the city government, with the support of the United Nations Development Program, has passed an ordinance requiring the adoption of a projective "Post-Event Reconstruction and Sustainable Development Plan (2004). Focusing on the immediate post-event period, one key factor for social recovery is the effectiveness of initial activities undertaken to deal with disaster impacts and initiate the recovery process. Such activities can be carried out by various types of actors, including government agencies, non-governmental organizations, large and small businesses, and disaster victims themselves. Effective disaster responses are important for several reasons: they prevent further damage and contain disaster-induced problems such as fires and toxic pollution; they address safety, health, shelter, and other basic needs of survivors; they make it possible to transition more expeditiously to recovery-focused activities; and they engender trust and confidence within affected populations, thereby enhancing the process of social recovery. On the other hand, faulty design and service delivery in material reconstruction programs can also undermine the social recovery process.

In 2010 alone, the world has seen at least three glaring examples of the ways in which the failure to launch an effective initial disaster response can negatively affect the pace and quality of social recovery: the Haiti earthquake, the BP oil spill, and the Pakistan floods. In a different arena, efforts to prevent a global economic collapse in 2008, including bank bailouts and stimulus packages, likely averted a catastrophic financial meltdown, but their contribution to economic recovery is the subject of considerable debate, and the manner in which the measures were applied has been a deep source of anger, frustration, and public mistrust of government around the world

Within the economic sphere, Rose (2004) refers to this quality of responsiveness as “adaptive resilience,” which he associates with the ability to improvise and innovate (see also Rose 2007). Similarly, in their work on community resilience, Norris et al. (2008) emphasize the importance of community responsiveness and early post-disaster interventions that restore individual, group, and community functioning, thereby ensuring that social units do not simply stagnate at dysfunctional levels. The key point is that early action can at the very least aid the social recovery process by preventing conditions from getting worse, and can at best contribute in diverse ways to more rapid and positive recovery outcomes.

Social Factors Affecting Recovery Processes and Outcomes. Social recovery processes often extend over long periods of time, particularly after very severe disasters, and those time periods differ depending on factors such as scale, unit of analysis, and the differences in the vulnerability of various social units. Such differences present challenges for the study of social recovery, and also for efforts to achieve equitable recovery. For example, in New Orleans, one element of the city’s economic recovery following Katrina is that the availability of service-sector jobs is increasing. However, the workers now filling that particular economic niche are in general not the same workers who lost their jobs following Katrina. The economy at the community scale may be recovering, but what about the displaced workers and their families? Hurricane victims are returning to New Orleans, but return rates are lower for mid-income working class people than for both better-off and low-income victims (Finch, Emrich, and Cutter 2010). After Hurricane Andrew and the Kobe earthquake, some neighborhoods achieved better recovery outcomes than others—patterns that persisted over time. These examples again illustrate the “differential” nature of social recovery processes and outcomes.

In the section that follows, we argue that a series of conditions affect the likelihood that social recovery will proceed in ways that are socially acceptable in terms of the pace of recovery and positive movement toward a “new normal.” The idea of socially acceptable rates and outcomes for social recovery is an important one, because the perceptions and judgments of those affected by disasters are a key element in social recovery itself. A recovery process may be deemed acceptable even when it proceeds slowly, provided the process is perceived as procedurally fair and transparent. Following the 1989 Loma Prieta earthquake, for example, people in the city of Santa Cruz expressed frustration and joked about the recovery-related steering committee called Vision Santa Cruz, also known as the “gang of thirty-four,” a large, unwieldy group that struggled over

time to move recovery forward, especially in the city's badly-damaged downtown. Years later, Santa Cruz became known as a recovery success story.

Recovery takes place at different scales, and the factors that affect recovery also exist at different scales. Paralleling the section on pre-disaster conditions affecting recovery, we discuss both macro-level influences on recovery and the ways in which those broader influences are reflected at other scales. The quality of governance systems is clearly a key factor in social recovery. As discussed earlier, governance is influential in the pre-disaster context, and it remains especially important during the recovery process. At one end of the continuum, failed and failing states lack cohesive governance systems and are often unable to provide for even the most basic needs of the majority of their populations during non-disaster times. In many cases, these are also nations ruled by oligarchies and kleptocrats for their own benefit and characterized by extensive corruption and internal strife. This sort of "non-governance" renders social recovery highly problematic at all scales. Under such circumstances, even large-scale international aid may do little to bring about socially acceptable recovery processes and outcomes.

At the other end of the continuum are societies characterized by strong and stable systems of governance that have the ability to provide for their populations on an ongoing basis and retain that capacity (even if in a somewhat diminished form) following disaster. In those types of societies, governance mechanisms are in place to begin addressing recovery-related needs in a reasonably timely fashion. Unlike hollowed-out states, such societies possess viable systems of governance that engender at least some degree of trust on the part of victimized populations and are able to mobilize assistance and broker partnerships that facilitate recovery.

Institutional capacity, another key influence, is associated with governance capabilities to a large extent but can exist even in situations in which official governance regimes are weak, as in the cases of New Orleans, Haiti, and Nicaragua for example. Governments rely on institutions such as those associated with providing health care, financial assistance (grants, loans, etc.), and public safety services, to meet response and recovery needs. However, to function well, institutions have certain basic requirements, such as the need for appropriate legal and regulatory frameworks in which to operate; well-trained, competent, and committed personnel; and facilities and technologies that are well-suited to the tasks they are expected to perform. Institutions must be able to function despite disaster-induced disruptions and, important for recovery, they must be able to deliver appropriate services over time. Meeting such challenges is difficult for many disaster-stricken societies and communities.

Of course, the capacity to facilitate social recovery does not reside in government institutions alone. For example, religious institutions may supplement governmental ones, or even act as alternative conduits for disaster response and recovery services. In Klinenburg's study of the 1995 Chicago heat wave, for example, residents of one Hispanic neighborhood turned to their churches, which provided life-saving services (Klinenburg 2002.) After Hurricane Katrina, the parishioners of the Our Lady of

VietNam Catholic church looked to that institution for both response and recovery assistance, and that church served as the center for subsequent community mobilization.

The U.S. has an exceptionally rich array of civil society institutions that are capable of playing a role in the social recovery process, and the private sector has also become increasingly involved in social recovery programs. However, in some cases, the expanded role of the private sector in disaster relief and reconstruction has produced some questionable outcomes, both nationally and internationally (Gunewardena and Schuller 2008). In transferring relief and rebuilding to private interests, governments can also provide opportunities for corruption and profit taking to occur at the expense of those affected. For example, post-disaster rebuilding efforts focused on the growth of tourism in Honduras, Sri Lanka and Belize not only excluded local people from decision-making and profit sharing, but also failed to generate predicted positive outcomes for those national economies (Stonich 2008; Gunewardena 2008; Alexander 2008). In Sri Lanka, tourism development strategies undertaken in the aftermath of the 2004 Indian Ocean tsunami involved displacing fishing villages 100 meters back from the coast in order to allow beachfront access for resorts (Gunewardena 2008). In Mexico, on the Volcan de Colima, peasant farming communities are being displaced because of danger from the volcano, but a major tourist resort with the same exposure has not been asked to move and is seeking to expand its holdings. The peasants of La Becerrera and La Yerbabuena justifiably question such risk assessments and reject resettlement proposals because they see disaster risk reduction as a pretext for usurpation of their lands for tourism development (Cuevas & Seifoo-Lujan 2005; Gavilanes-Ruiz 2009).

Theories of social recovery must also recognize that some nations have strong civil society sectors, while in other nations civil society institutions can be nascent, weak, or unable to function openly. In many societies, governments consider strong civil society institutions a threat to their hegemony. Under such conditions, unless dramatic changes occur in the aftermath of disasters, for good or for ill, recovery-related activities will be significantly dependent on the resources and expertise of state-based institutions.

The forms of state and civil society activities that emerge following disasters are complex. For example, especially in the early days following Hurricane Katrina, a good deal of relief and recovery assistance was channeled through civil society institutions (Pipa 2006), and that continued to be the case as more official organizations got involved in relief and recovery activities. In Nicaragua, civil society has typically played a major role in recovery and reconstruction. Much the same can be said for Haiti more recently (Schuller 2010). The state had become such a powerful force in post-World War II Japan that officials were taken by surprise by the outpouring of volunteer activity and the emergence of numerous informal aid groups following the 1995 Kobe earthquake. Pro-social responses on the part of the public have persisted following other disasters, including the March, 2011 catastrophe. In contrast with this solidaristic civil society response, in Chile, which also has a powerful central state apparatus, when the governmental response to the 2010 earthquake appeared to fall short, some of those who were affected responded in an individualistic fashion, with looting and violence. In an analysis of public post-earthquake responses, one Chilean journalist suggested that the

lack of social solidarity and organizational capacity in the general population was a result of the corrosive effect of a political and ideological model that stresses individualist gain-seeking rather than collective responses to crisis (Sohr 2010).

Systems for the provision of post-disaster recovery assistance are linked to overall societal systems of provision. Where such systems are weak, disaster-stricken states will be highly dependent on international aid—again, for good or for ill. More generally, since all systems of provision reflect in one way or another the interests of powerful groups, such systems privilege some sectors of society over others. The same is the case for systems that provide for the recovery needs of disaster victims. For example, the U.S. has a distinctive social provision framework that has evolved over time and to which disaster recovery assistance is linked. For households and businesses, access to recovery assistance and to different forms of assistance varies according to factors such as race and class, citizenship and immigration status, home ownership, and business type and profitability.

As we discuss again later, the ability to achieve access to recovery resources is related in turn to factors such as social, cultural, and political capital, as well as experience with navigating within national bureaucratic systems. For communities, access to assistance is structured by the existence and requirements of recovery programs and other programs that can be repurposed to meet recovery needs; laws and regulations; and adherence to mitigation plan requirements. This is not to say that other factors, such as disaster experience, political and technical expertise, and the ability to improvise and innovate in the aftermath of disasters play are not important, because clearly they are (Rubin et al. 1985; Johnson 1999). Rather, the point is that expertise and know-how are exercised within and constrained by existing regimes of pre- and post-disaster social provision—regimes that vary across societies, across different localities and groups within societies, and over time.

Other factors that influence social recovery processes and outcomes include the appropriateness of the assistance provided; service coverage; equity; and the extent to which recovery activities effectively address the need to restore and strengthen capabilities and “capitals.” In many respects, these four factors are closely related. Regarding the question of whether assistance is appropriate, examples abound of “benefits” that are provided to disaster victims that have no effect on their ability to recover, such as donations that are out of line with actual victim needs, or that actually hamper the recovery process, such as programs that undermine the viability of local economies and livelihoods. For example, massive donor-driven shipments of rice to the rice growing region of the Alto Mayo in Peru, which was stricken by an earthquake in 1992, undermined the local economy and impaired the recovery process. The concept of appropriateness has several other elements, including the proper timing and duration of assistance; consistency with the values and preferences of recipients; and the manner in which aid is provided. On the last-mentioned point, aid given in a spirit of *noblesse oblige* and charity or assistances that dehumanizes and disempowers recipients fails the “appropriateness” test. This is why, hungry as they were, victims of the Haiti earthquake

were outraged when packages of food were dropped from hovering helicopters, and why they rightly asked “Are we animals?”

The related concept of service coverage refers to the extent to which resources that can facilitate social recovery are available for the entire population that needs them. The notion of coverage recognizes that full social recovery cannot take place if the needs of only some sectors of affected populations are addressed during the recovery process. Disparities in service coverage can be the result of a variety of factors: rural-urban differences; geographic conditions that complicate the provision of aid; institutional failures with respect to reaching diverse groups in need; outright efforts to disadvantage particular groups during the recovery process; corrupt institutions that re-channel resources for their own ends; and traditions, laws, and norms that direct recovery resources toward particular groups—and particular types of activities—and away from others.

Issues of coverage are closely related to issues of equity and fairness, conceptualized in terms of equal access to resources and the extent to which resources are fairly distributed, and also in terms of perceived fairness and transparency in decision making regarding recovery. Recovery activities that provide undue advantage to particular social entities—nations, regions, communities, social groups, firms and enterprises—while disadvantaging others with comparable needs fail the equity test

Gender is important in any discussion of equity during the recovery process (Enarson, Fothergill, and Peek 2006; Phillips et al. 2009). In societies in which women do the majority of both productive and emotion-based work, even though they may be subject to the will of their husbands, how equitable is it to direct disaster recovery assistance to male “heads of households”? To what extent are recovery entitlements provided to men at the expense of women? And to what extent do women have a voice in deciding what forms of aid should receive priority during the recovery process? Here again, to the extent that inequities like those associated with gender are woven into the social fabric and supported by existing institutions, and to the extent efforts are not made to overcome such inequities in the aftermath of disasters, social recovery will be uneven and incomplete.

Finally, some recent scholarship on disaster recovery (see, for example, Ritchie 2010) points to the importance of viewing recovery from a “capitals” or “capacities” perspective. Flora and Flora (2008; see Ritchie 2010) and others, see “capitals,” or resources, capacities and networks as existing within several conceptually distinct domains: natural, built or physical, financial, human, social, cultural, and political. Disasters can destroy, degrade, or threaten these forms of capital. Logically, then, recovery must necessarily include efforts directed at capital restoration. All forms of capital are significant for social recovery, and all activities centering on capital restoration should be examined in light of their potential impacts on social recovery. Tensions can exist, for example, between the provision of temporary housing (physical capital), victims’ embeddedness in social networks and need for social support (social and cultural capital), and their need to restore household livelihoods (financial capital).

Effective recovery strategies address these different needs, for example, through efforts to keep social networks intact in new housing arrangements and to locate housing near places where people can find work. Similarly, if the intention is to restore capitals and capacities in a holistic fashion, it makes no sense to “stovepipe” the provision of recovery assistance. The gerrymandering of victim and community needs, which is often done not with those needs in mind but rather in the interests of the organizations and institutions that claim to be assisting with recovery, constitutes a major barrier to social recovery.

Some researchers offer cautions about the use (and overuse) of the concept of social capital in all types of research. Portes (1998), who has conducted pioneering research on social capital, notes that it is not a particularly new concept, nor is it a panacea for the problems societies face. Applying the concept of capital to non-economic processes and relations can inadvertently lead to reducing them to their purely instrumental value, something that, among other distortions, could undermine both the social dimensions of the recovery process and our understanding of it. Smith and Kulynych (2002) object to the ideological baggage the term “capital” carries and argue for what they see as a more neutral term, “social capacity.” In their important paper on disaster resilience, Norris et al. use the term “networked capacities” to describe the factors that contribute to resilience.

Conceptualizing recovery as the restoration (and improvement) of diverse forms of capital points again to the need to consider social recovery in the context of the other domains of recovery under discussion at this conference. Earlier, for example, we referred to the ways in which people’s attachment to wildland places and the sense of well-being that attachment confers can be harmed by the occurrence of wildfires, as well as how environmental damage caused by disasters can also harm both place attachment and livelihoods. Disaster victims can mourn the loss of treasured landscapes and buildings just as they mourn the loss of loved ones. Indeed, the role of culture in disaster recovery has only just begun to be seriously researched. In addition to the material losses inflicted by disasters, severe losses are also inflicted on the cultural lives of survivors (Hoffman 1999; 2002). In the destruction of important cultural sites and elements disasters also engender the risk of loss of identity, community cohesion and cultural heritage.

Cultural heritage is constituted in objects, resources, and practices that locate communities in the world, giving them a sense of identity through time. The relationship between people and place is encoded in objects, culturally constructed places, and historically derived cultural practices. Places where events of historical or sacred importance have occurred; objects such as shrines, cemeteries, or ancient ruins that express local identity; and resources such as rivers, springs, lakes, forests, and mountains not only provide material sustenance, but also express and nurture the spiritual life of the community.

The destruction of important cultural sites, shrines, and religious objects and the interruption of important sacred and secular events and rituals undermine a community’s sense of itself. Survivors of serious disasters in which there is great loss of life and

prolonged devastation and displacement may also suffer a loss of personal identity that can be seen as a partial loss of the self. The losses of community, family and self compound one another to create another form of loss, the loss of meaning. Severe, devastating disasters endanger communities and individuals because they challenge the culturally-constructed vision of the world as a place in which logic and justice have a place—in short, the notion that life makes sense and has meaning and purpose.

The processes of recovery and reconstruction must address these losses, not only to reconstruct the community in a material sense, but to support the community's efforts to make itself whole again, to re-knit the fabric of life in some coherent fashion. The task is basically to reconstruct self, family and community in what may be radically changed circumstances. Cultural resources are essential to this process. It follows, then, that any coherent theory of recovery must include the role of culture and cultural heritage in the reconstitution of individual and community identity (Oliver-Smith 2005; 2011). In a related vein, the re-settlement of at-risk and affected communities is increasingly being considered as a viable option by national and international entities, both as a strategy of post-event recovery and as an approach to pre-disaster reconstruction planning (Correa 2011). Since disasters can reveal unacceptable degrees of exposure or render some locales uninhabitable, resettlement may become the only option in some cases. Under any circumstances, displacement and resettlement are totalizing phenomena, affecting virtually every aspect of life, including the cultural resources and social identities discussed above. Such an all-encompassing process therefore requires a holistic approach that addresses the major institutions (and their interactions) that enable a community to sustain itself. Resettlement entails a number of fundamental recovery issues, including questions of risk assessment and management, and also of economic, cultural social, and psychological risks and costs, administrative and legal complexities, citizen participation, gender concerns, and the need for vertical and horizontal inter-institutional collaboration to reduce negative impacts and achieve desired outcomes. Important for recovery more generally, such factors assume special significance when entire communities and large numbers of people are being resettled.

The fundamental issue at the heart of resettlement is that, in addition to its stated goal of reducing risk, resettlement must address issues like employment and capacity building, housing provision and distribution, and participation, implicitly establishing that it is also designed to address differential vulnerability as well as exposure. Resettlement is not just about physically relocating a community in its social, cultural and economic entirety in a new place. It is also about taking steps to avoid reproducing in another setting the same social, economic and physical arrangements that constrained the welfare of at-risk groups in the original site. As a recovery strategy, in addition to diminishing disaster risk, re-settlement should not amplify social and economic risk.

Not in a Vacuum: Events and Trends in the Aftermath of Disasters. In discussing how pre-disaster conditions affect post-disaster recovery outcomes, we emphasized the idea that all disasters occur within social contexts that have particular characteristics and that are continually being affected by events and ongoing trends. Applying this same logic to periods following disasters, recovery processes and outcomes can be shaped in

significant ways by post-event “system shocks” or “disjunctures” that are unrelated to disasters themselves. For example, as south Dade County was still reeling from the effects of Hurricane Andrew, an air force base that served as a key economic engine for disaster-stricken communities was shut down, which further complicated the recovery process. The Kobe earthquake was followed approximately two years later by the collapse of the Asian financial bubble. Few people today even remember the bubble years of the 1980s and 90’s, when Japan seemed poised on the brink of regional if not global hegemony. Although Japan remains one of the world’s largest economies, its current position in the global economic system constitutes a massive challenge as it struggles to recover from the largest catastrophe it has experienced since WWII.

As suggested in the earlier section of this paper on pre-disaster influences, wars, civil wars, terrorism, and inter-ethnic conflicts also influence the recovery process in significant ways. Their impact on dimensions of social recovery such as coverage and equity can be readily observed places like Aceh province following the 2004 earthquakes and tsunamis and Pakistan in the aftermath of the 2010 floods. After the Guatemalan earthquake in 1974, relief and recovery workers were victimized by the government which accused them of furthering radical social change through earthquake recovery. The idea that many societies experience “complex humanitarian emergencies” refers to the manner in which problems caused by such conflicts and by the occurrence of disasters reinforce one another, complicating the recovery process.

Prolonged engagement in wars and other conflicts also tends to privilege institutions associated with war, and as a consequence such institutions may exert undue influence over recovery decision making. For example, when a field team that included the first author of this chapter visited Iran five months after the 2003 Bam earthquake, we were told by national officials that because of its protracted and deadly war with Iraq, Iran possessed considerable know-how regarding how to rapidly rebuild entire towns and villages. From the point of view of the authorities, disaster recovery—defined as reconstruction—was nonproblematic. After all, the nation and its military had become quite accustomed to carrying out large-scale rebuilding projects. However, other groups did not share that view. More generally, “command-oriented” societies may succeed in directing and carrying out some recovery activities with great efficiency, but may fail to do so in ways that are acceptable to victim populations or that address the full range of recovery needs.

The global financial collapse of 2008 has affected virtually all of the nations of the world to one degree or another, and its effects on many U. S. communities have been profound. The effects of the economic meltdown include reductions in government services, even basic ones; shifts in public and private sector priorities toward an increasing focus only on functions defined as essential; large deficits at all levels of government; increased vulnerability for many households and businesses; decreased charitable giving; neighborhood blight and reduced tax revenues due to foreclosures; and a pervasive loss of trust and confidence in government and other institutions. These conditions do not bode well for the nation’s ability to mitigate, prepare for, respond to, and recover from disasters. That some parts of the country that have been hit hardest by

the recession are also highly vulnerable to disasters (e.g., Florida, California) also does not bode well. As the crisis continues to unfold, researchers should attend to the ways in which the financial debacle is directly or indirectly affecting post-disaster recovery.

Societies and communities can also fall victim to successive or repetitive disasters, as is currently the case for countries like Haiti and Indonesia, and also for communities in the U. S. Gulf region that have experienced both the Katrina catastrophe and the BP oil spill. The necessity to cope with the effects of multiple disaster events, particularly if those events occur in rapid succession, undoubtedly affects social recovery activities and outcomes. Indeed, as noted by archeologist Michael Moseley, who has explored culture change in pre-Columbian Peru, such "convergent catastrophes" resemble a debilitating illness that leaves the individual vulnerable to new infections. The long term droughts that plagued Andean societies left them vulnerable to sudden-onset disasters that led to significant cultural change (Moseley 2003). In the contemporary context, what does the research community know, and what does it need to know, concerning the cumulative effects at societal, community, and other scales, of repeated disaster victimization?

Concluding Comments

In this paper, we have tried to do several things. First, we have pointed to ways in which earlier formulations related to disaster recovery have fallen short. From a theory-building perspective, there is no reason to return to debates about the stages of disaster recovery or to the question of whether recovery constitutes a return to predisaster conditions or movements in the direction of pre-disaster trends.

Second, we have tried to move theorizing on disaster recovery beyond formulations that center on the U.S. experience. Although this country has endured many disasters and continues to experience them on an alarmingly regular basis, and although interest in recovery is increasing, these circumstances do not make the U.S. an appropriate case from which to formulate general theories of recovery. In fact, many conditions combine to make the U.S. atypical with respect to disasters, their impacts, and opportunities for disaster recovery: the geographic size of the country, combined with its large population and the enormous size of its economy; its wealth; the relative stability and capacity of its institutions; the extent to which its system of emergency management, including recovery management, is institutionalized within its system of governance; its relatively high exposure to hazards of various kinds, combined with an ability to learn to at least some degree from disaster experiences; its lack of dependency on foreign aid as a vehicle for disaster recovery; and its vibrant civil society sector and democratic form of government. The majority of societies around the globe lack this felicitous set of capabilities. As a corrective to U.S.-focused thinking concerning disaster recovery, we have intentionally incorporated examples of nations and communities that face far more severe recovery challenges with far fewer advantages.

Third, and in keeping with the need to move beyond conceptual dead ends, we have emphasized the idea that social recovery itself is a diverse and contested concept.

Disasters are both socially constructed and experienced differently by different groups and individuals, generating multiple interpretations of disaster-related phenomena. A single disaster can fragment into different and often conflicting sets of circumstances and interpretations, according to the experiences and identities of those affected. To speak of societal or community recovery ignores the empirical fact that societies and communities are comprised of diverse groups that can emerge as winners or losers in the recovery process. Assessing recovery in terms of aggregate or average gains only serves to obscure this point. Recovery indicators assessed as positive and optimistic at one level of analysis, such as the community, may appear very different when assessed at another analytic level, such as a displaced household or business.

Similarly, victims' judgments concerning the adequacy of post-disaster recovery can be expected to differ from those of both service providers and experts, and these divergences represent a useful topic for further investigation. In effect, the social relations of recovery, involving diverse victims and practitioners who may come from different social backgrounds and with different specialized knowledge and skill sets, become an arena in which both consensus and conflict can emerge around the concept of reconstruction and recovery. More than thirty years ago, Peter Rossi and his colleagues completed extensive research that showed that, based on aggregate-level data, U. S. disasters have no discernable effects on disaster-stricken communities (Wright et al. 1979)—a point that was subsequently disputed by other researchers. More recently, the economic impacts of the 9-11 terrorist attacks on the World Trade Center were assessed by economists as relatively small, even viewed in the context of the city of New York (Rose et al. 2009). However, studies focused on smaller units of analysis, such as households, neighborhoods, and business firms, might paint an entirely different picture of long-term disaster impacts, and the judgments of those who were directly affected might diverge radically from those of researchers. Whose assessments are accepted as valid and given more weight, and whose are downplayed?

We have also tried to situate post-disaster recovery within the context of broader global, social, historical and institutional dynamics that influence societies and their constituent social units on an ongoing basis. Such processes worked over time to create the nation of Haiti as it existed on January 12, 2010: a poverty-stricken, poorly-educated, poorly-governed country with a hollowed-out state apparatus, minimally functioning institutions, and a population at risk from a range of threats to life, health, and physical safety (Oliver-Smith 2010). In light of these factors, what is the potential for viable social recovery for vast numbers of earthquake victims in a society like Haiti, whose assets and capabilities were so severely degraded even before the earthquake struck? And what can be done to facilitate social recovery in other societies that, like Haiti, resemble chronically ill patients who are suddenly stricken by deadly acute illnesses (Moseley 2003)? Macro-level forces that operate before, during, and after disasters to both produce disaster vulnerability and influence post-disaster recovery at various scales have received relatively little attention in recovery-related research, but their significance for theories of disaster recovery is clear (Oliver-Smith 2009)

And finally, theory and practice should be closely connected. When policy and practice are not based on a solid understanding of human behavior in general and social and cultural behavior specifically, their chances of success are limited. Conversely, policy and its application can serve as an important proving ground for the relevance and predictive ability of theory. If policies and practices do not coordinate and do not produce successful results, it is the programs and their applications that are at fault, but it is always the people who suffer. Ultimately, disaster management can be viewed as a type of complex adaptive system that can learn from experience, processing information and adapting according to local principles and actions. In other words, complex adaptive systems do not merely react; they also attempt to take advantage of circumstances. This capacity renders disaster management substantially more unpredictable than planners and policy makers would like (Hilhorst 2004). Following this line of thinking, complexity in disaster recovery, as in involuntary resettlement, is inherent in “the interrelatedness of a range of factors of different orders: cultural, social, environmental, economic, institutional and political—all of which are taking place in the context of imposed space change and of local level responses and initiatives”(de Wet 2005: 190). Changes take place in an interlinked and mutually influential process of transformation, and are also influenced by and respond to both external sources of power and the initiative of local actors. Therefore, the post-disaster recovery process emerges out of the complex interaction of all these factors in ways that are not predictable and that do not seem readily amenable to a “rational planning” approach (de Wet 2005). Recovery must be based on research that explores and understands this complexity, and the criteria upon which the success or failure recovery projects is assessed clearly must include impacts on the social fabric of the community.

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