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Theorizing distributive justice and the practice of post-disaster housing recovery

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ABSTRACT

This paper examines the implications of contemporary conceptions of distributive justice for post-disaster recovery programmes. The question asked in this paper is essentially theoretical: what does a concern with distributive justice entail when developing and evaluating post-disaster recovery programmes? Housing recovery programmes are employed to provide a contextual grounding for the discussion. We present a review of the disaster recovery literature and recent programmes of post-disaster housing recovery to map the ways in which distributive justice have been theorized, interpreted, debated and put into practice. We reflect on what different principles of distributive justice imply for post-disaster recovery programmes in terms of their impact on opportunities for individuals and communities to recover from disasters, and also on their realizing possibilities of advancing justice in the post-disaster society. The paper concludes by outlining a number of dimensions of a pluralist account of distributive justice. Using these dimensions and taking into account tensions within and between them, we attempt to offer a framework for reflecting on and assessing distributive arrangements of disaster recovery programmes.

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distributive justice; post-disaster recovery programme; assistance distribution policies; housing recovery

This paper examines the implications of contemporary conceptions of distributive justice for post-disaster housing recovery programmes. Post-disaster recovery programmes are often criticized for their failure to develop explicit means for promoting justice (Fan, 2012; Olshansky & Johnson, 2014). In fact, as will be demonstrated, a growing body of literature reports the ways in which disaster recovery programmes exacerbate pre-disaster inequalities. Oliver-Smith (1990) posits that the least that can be expected from recovery programmes is that they do not accentuate inequalities. '[E]nsuring more attention to equity concerns remains part of the unfinished work in disaster recovery' (Kim & Olshansky, 2014, p. 289).

Distributive justice concerns the division of benefits and the allocation of burdens in a context where resources are scarce and there are competing claims and needs. Debates regarding distributive justice present conflicting views on what sort of division of benefits and allocation of burdens are more just. These debates, as will be shown in this paper,

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have rarely been explicitly used for developing or evaluating disaster recovery programmes.

The question asked in this paper is essentially theoretical: what does a concern with distributive justice entail when developing and evaluating post-disaster recovery programmes? Housing recovery programmes are employed to provide a contextual grounding for the discussion. We examine the implications of different conceptions of distributive justice for disaster recovery programmes, while drawing from contemporary examples of housing recovery programmes.

Conceptualizing recovery is elusive since it has neither a clear beginning nor end (Gotham, 2017). At the level of the individual or household, post-disaster recovery is better understood as the process of adjustment and adaptation to the post-disaster condition, through trajectories of decline, reaching a new equilibrium or accumulation (Fothergill & Peek, 2015). At the level of community and from a policy and programme perspective, recovery processes are situated in a continuum of relief, rehabilitation and development. They consist of continuous streams of activities, contestations, decisions and attitudes that inform and mediate the interplay of socio-spatial transformation, adaptation and persistence in disaster-affected communities.

Distributive justice is inextricably entangled with post-disaster recovery programmes at two levels. The first concerns the micro-level distributive implications of policies for the recovery opportunities of individuals. These policies determine who has access to resources, and how and where they can be used. They thus shape or mediate the recovery opportunities of those affected. The second link lies in the long-term impacts of post-disaster recovery programmes on realizing possibilities of advancing justice in post-disaster societies. Such policies, for instance, might accelerate pre-existing differences among neighbourhoods, or produce new ones, in terms of access to jobs and services.

We argue that a distributive justice lens is critical in examining disaster recovery policies and programmes because of their role in shaping differential recovery processes and, as will later be argued, their potential role in producing or perpetuating vulnerability to disasters. As Collins (2008) argues, the decisions and activities of different actors in determining rules of resource access directly mediate hazard vulnerability.

The paper proceeds as follows. We first present a review of the disaster recovery literature and map the ways in which distributive justice has been theorized, interpreted and debated. We then look at post-disaster housing recovery programmes to investigate their explicit or implicit engagement with the idea of distributive justice. In the final sections, we outline a number of dimensions of a pluralist account of distributive justice, which to some extent summarizes the debates discussed in the paper. By using these dimensions, we offer a framework for reflecting on and assessing distributive arrangements of disaster recovery programmes.

The paper is largely conceptual in nature and it has been developed through a broad-ranging literature review that was designed to identify issues related to distributive justice and disaster recovery. The paper also follows the earlier work of the authors on disaster recovery in developing countries (Tafti & Tomlinson, 2013, 2015, 2016).

The literature review first consisted of a survey of recent disaster recovery literature concerned with justice. This involved a systematic review of published materials in two major databases: Scopus (Elsevier) and Web of Science (Thomson Reuters), with search terms comprised different forms and combinations of words: ‘disaster’, ‘recovery’ OR 'reconstruction', 'equity' OR 'equality' OR 'inequality' OR 'justice' OR 'fairness' OR 'distributive justice'. Abstracts and keywords were searched and the results were documented. The overall result comprised of 116 journal articles or online book chapters, out of which 55 investigated long-term recovery after disasters. The literature review subsequently consisted of synthesizing a broader literature on post-disaster recovery, which included an investigation of earlier disaster studies as well as studies with findings that have some implications for justice. In this regard, we mainly focused on recovery from a housing perspective. We also focused solely on cases involving the distribution of some type of assistance for the purpose of long-term recovery, excluding cases where people were expected to entirely rely on market-tools (i.e. insurance) or self-help strategies for recovery.

From justice to distributive justice in disaster recovery literature

Disaster recovery scholarship has extensively exposed, questioned and criticized the intensification of inequalities in post-disaster recovery processes. These studies used different analytical lenses for reporting and analysing how inequalities are shaped, perpetuated or intensified during the recovery processes. Table 1 summarizes the most frequently used analytical frameworks that emerged from our review of these studies. This section of the paper is based on the analytical frameworks identified in Table 1.

Axes of inequality

The most common analytical framework for exposing inequalities in post-disaster recovery processes focuses on what Tierney (2006) calls 'axes of inequality'. These axes of inequality are based on race, gender, poverty and disability. They are contextual, and self-evidently can overlap. Race-based inequalities, in particular, came to the surface after the first major systematic study on disaster recovery by Hass et al. (1977). These axes of inequality often converge in socio-economic class and poverty (Fothergill & Peek, 2004). Tierney (2006, p. 116), for instance, posits that 'in the U.S. race and ethnicity are strongly correlated with social class'. Similarly, women are more likely to lack financial resources with which to cope with and recover from a disaster (Fothergill, 1998). This body of literature explains

Table 1. Main analytical frameworks for examining inequality in disaster recovery literature.

Analytical frameworks for examining inequality in disaster recovery	Examples of published studies
Axes of inequality	Race and ethnicity: Tierney (2006), Bolin (2006), Reid (2013), Weber and Peek (2012), Bolin and Stanford (1998), Gotham (2014) and many more; Gender: Enarson et al. (2006), Enarson and Chakrabarti (2009), Cupples (2007), Ariyabandu (2006) and many more; Poverty: Fothergill and Peek (2004); Disability: Priestley and Hemingway (2007) and more.
Spatiality of injustice and critical urban theory	Kamel and Loukaitou-Sideris (2004), Kamel (2012), Hirayama (2000), Zhang and Peacock (2009); Pais and Elliott (2008), Boyer (2014), Marcuse (2010)
Displacement	Levine et al. (2007), Weber and Peek (2012), Tafti and Tomlinson (2016), Pais and Elliott (2008)
Rights-based approach	Carver (2011), Finger and Luft (2011), Miller (2012)

how inequalities along these axes play out in shaping an uneven disaster impact, access to recovery assistance and disaster recovery trajectories and outcomes.

Spatiality of injustice

Spatial analysis of inequalities in recovery processes and outcomes illustrate the uneven geography of disaster impacts, access to assistance and their association with the uneven geography of recovery (Finch, Emrich, & Cutter, 2010). This unevenness is often shown by the spatially differentiated pace of recovery, measured by indicators such as the rate of housing reconstruction or abandonment, re-opening of businesses and a gain or loss of population (e.g. Hirayama, 2000; Peacock, Van Zandt, Zhang, & Highfield, 2014). These studies often report a lower recovery pace in areas with residents from lower income, or specific racial or ethnic backgrounds, and areas with lower cost rental units (Kamel & Loukaitou-Sideris, 2004). A number of these studies used critical urban theory (e.g. Boyer, 2014; Marcuse, 2010). While these studies do not explicitly conceptualize justice per se, they open up an analytical space to understand the contextual social and political dynamics that shape the uneven geography of recovery (Fan, 2012).

Displacement

Displacement refers to involuntary movement or resettlement of people during the recovery process (e.g. Levine, Esnard, & Sapat, 2007; Weber & Peek, 2012). Displacement and involuntary out-migration, or what Miller (2012) calls the expulsion of 'surplus people' from affected areas, is evident in 'the transformation of local neighborhoods through unequal and emergent processes of elite entrenchment, non-elite displacement and immigrant-labor influx' (Pais & Elliott, 2008, p. 1445).

Human rights

The human rights perspective (e.g. Carver, 2011; Finger & Luft, 2011; Miller, 2012) is increasingly gaining attention among both humanitarian and developmental practitioners and academics (Stoddard, 2009). As an analytical lens, it provides a powerful framework to expose acute discrimination in post-disaster recovery activities. However, it overlooks inequalities above the thresholds of rights. Furthermore, it is often humanitarian agencies who determine which needs should be given the status of rights (Cornwall & Nyamu-Musembi, 2004). For instance, access to income-earning opportunities essential for accessing food and water in cities is rarely given the status of a right in recovery programmes, while housing is often mentioned in rights-based discourses, partially because it produces tangible outcomes that are attractive to politicians and donors (Freeman, 2004).

Overall, the various analytical frameworks are aligned in the view that recovery processes typically exacerbate pre-existing inequalities. As Pais and Elliott (2008, p. 1448) conclude, disaster-affected areas often produce 'more socially divided versions of themselves as they rebuild and await the next major disasters'. The first reason for an uneven recovery is the unequal disaster impacts that arise from pre-disaster inequalities and vulnerabilities that, in turn, affect the abilities of the households and communities experiencing disaster to recover. In this respect, the link between inequality and vulnerability should be emphasized. Marginalized groups tend to live in locations exposed to hazards, buildings with lower quality materials and construction designs (Morrow, 1999) and hence suffer disproportionately higher level of loss in disasters (e.g. Blaikie, Cannon, Davis, & Wisner, 1994; Bolin & Stanford, 1998; Hirayama, 2000; Peacock, Killian, & Bates, 1987).

The second reason for uneven recovery arises from unequal access to resources, such as insurance, which affect the ability of people to cope with, and recover from, disaster impacts (Van Zandt et al., 2012). The third reason is social capital, which can play a role in unequal access to assistance and supplementary resources for recovery (Aldrich, 2012; Rahill, Ganapati, Clérismé, & Mukherji, 2014) and in navigating the bureaucratic process of recovery (Mulligan & Shaw, 2010). As Vale (2014, p. 196) argues 'what practitioners too easily call "recovery" is experienced in a highly differentiated way by different individuals and social groups'.

Finally, recovery programmes can play a decisive role in intensifying pre-disaster inequalities. The examination of this role needs to be situated in the context of the dominance of market-driven disaster recovery processes and neoliberal policies, particularly in, but not limited to, developed economies. Market-driven recovery policies often exacerbate pre-disaster inequalities because investors often seek less risky investment in affluent areas, while poorer neighbourhoods lack investment and experience a very slow supply of affordable housing (e.g. Kamel & Loukaitou-Sideris, 2004; Lowe, 2012; Pyles, 2011).

Although disaster scholars often consider the promotion of justice as a goal for recovery programmes (Kamel, 2012; Kim & Olshansky, 2014; Peacock et al., 2014), or as a measure of their success (e.g. Ganapati, 2013; Oliver-Smith, 1990; Rahill et al., 2014), except for rare instances (Brand, 2015), they fail to explicitly engage with the concept of justice and its application in disaster recovery policies. The consequence is a gap in the existing tools and frameworks for developing and evaluating post-disaster recovery programmes.

Distributive justice in contemporary housing recovery programmes

In the context of post-disaster recovery, distributive justice deals with the question of how societies or international institutions allocate scarce resources among individuals and communities with competing claims and needs. Among the few scholars who have reflected on this question, little consensus exists as to what a just distribution of assistance involves: Berke, Kartez, and Wenger (1993) argue for an 'equitable' distribution, without further elaboration on what comprises an equitable distribution. Comerio (1998) proposes that recovery policies should target affected population who, because of low income or some form of market failure, cannot afford to purchase private insurance. Kamel and Loukaitou-Sideris (2004) suggest a combination of loss-based and need-based targeting in allocating housing assistance to affected people. Peacock et al. (2014) advocate spatial targeting of low-income neighbourhoods, where a slow recovery process is expected. Like the scholarly literature, the international agencies' documents remain implicit in their approaches towards distributive justice in the post-disaster recovery context (Fan, 2012).

In order to tease out some of the implicit assumptions or conceptions of distributive justice embedded in disaster recovery policies, this section reviews distributive arrangements for assistance in recent post-disaster housing recovery programmes, in terms of three main topics:

- Their scope of distributive justice: i.e. who receives assistance?
- Their scope of allocation: i.e. how assistance is allocated?
- Their underlying claims for justice.

Table 2 lists the measures adopted under each topic for examining policies of assistance distribution for post-disaster recovery.

The scope of distributive justice

The question of who should receive assistance has been addressed variously in housing recovery programmes in different contexts. We identified three ways of dealing with this question: 'residual welfare targeting', 'loss-based targeting' and 'area-based targeting'.

Residual welfare targeting

Residual welfare targeting limits the scope of assistance distribution to a group of people considered to be unable to meet their needs from their own or their families' resources. In Kobe (Japan), after the 1995 earthquake, recovery policies adopted a 'residual welfare' approach (Hirayama, 2000, p. 111), whereby the distribution of assistance prioritized 'absolute needs' and focused on particular groups, like the elderly and the poor. The boundaries of justice included all Japanese people – regardless of their being affected by the disaster or not – considering that they should be treated equally in receiving public resources. The rationale was that 'taxpayer money could not and should not be used to reconstruct private properties unless there was a special and well-recognised need' (Edgington, 2010, p. 56). For the cases of 'well-recognized needs' a range of public and semi-public housing programmes were developed. Public housing projects, however, led to the spatial concentration and socio-spatial isolation of the target groups (Hirayama, 2000).

Residual welfare targeting has been increasingly adopted in developed economies, in particular, given the dominant tendency to transfer risk to individuals and the private sector. Adopting this targeting approach is also possible given the availability of data on households' income and insurance status in these countries. In developing economies, with inadequate insurance and little reliable data, this approach has been adopted by humanitarian organizations on a limited scale and in the context of scarce resources (e.g. cases of Durian in Philippines and Orissa in India in Jha, Barenstein, Phelps, Pittet, & Sena, 2010).

Two issues arise from adopting this kind of targeting; first, those experiencing transient vulnerability or poverty after disasters sometimes – in the absence of assistance – slide into

Table 2. The main themes adopted for examining policies of assistance distribution, with each row showing the corresponding facets between the columns.

The scope of distributive justice	The scope of allocative principle	Underlying Claims
Residual welfare targeting	Need-based (Differentiated allocation)	Need principle
Loss-based targeting	Compensation (Differentiated allocation)	Desert principle
Area-based targeting		
	Universal allocation	Equity principle
		Efficiency principle

a chronic condition of vulnerability or poverty (Kammerbauer & Wamsler, 2017). Second, the delivery of assistance to target groups – for instance, in the form of particular housing projects – is sometimes associated with their stigmatization and socio-spatial isolation (Foster & Kodama, 2004).

Loss-based targeting

Loss-based targeting limits the scope of assistance distribution to people who are considered to have incurred losses due to a disaster. Recent disaster recovery programmes often define the boundaries of justice based on material losses. In the USA, for instance, public assistance policies are primarily tailored to the priorities of homeowners (Tierney, 2006; Zhang & Peacock, 2009), while programmes open to renters are limited (Bolin & Stanford, 1998; Comerio, 1998; Peacock, Dash, & Zhang, 2006). At the same time, an insufficient allocation of resources for encouraging the supply of affordable rental housing to replace the lost stock results in rental properties often taking significantly longer time to rebuild and rarely being affordable (Peacock et al., 2006; Zhang & Peacock, 2009). As Wisner (1998) remarks, a loss-based perspective explains why renters, informal settlers and the homeless often receive no or less assistance. Likewise, in developing economies recent recovery programmes often allocated less, if any, assistance or support to non-homeowners, including renters, squatters and sharers (Arslan & Johnson, 2010; Mukherji, 2010; Steinberg, 2007; Tafti & Tomlinson, 2013).

Even more problematic is when the definition of losses is influenced by political situations. Boano (2009) and Kennedy, Ashmore, Babister, and Kelman (2008), for instance, reported that in Sri Lanka and Aceh, tsunami-affected populations were prioritized over conflict-affected people, even when the limitation of resources was not a constraint.

Area-based targeting

Area-based targeting limits the scope of assistance distribution to specific geographic areas, based on criteria such as poverty, vulnerability and disaster impacts. Area-based targeting is increasingly gaining attention among international organizations (Parker & Maynard, 2015). The rationale behind this approach is the difficulty in targeting people in highly dense urban areas with widespread poverty. In particular, following the Haitian earthquake and faced with difficulties of identifying disaster-affected groups, the Inter-Agency Standing Committee (IASC, 2010, p. 2) called for a 'paradigm shift' from targeting individuals to district or community-based targeting in urban areas. Area-based targeting presents a number of practical merits, such as faster targeting and a more effective use of resources. A drawback might be the creation of new boundaries of inequality between target areas and surrounding areas.

In addition to defining and identifying target groups, accessibility criteria embedded in assistance distribution policies also determine and further narrow down who within the target group can receive assistance. For instance, in the USA, income is a decisive factor for approval of low-interest loans of the Small Business Administration, available to disaster-affected populations. Low-income people including female-headed households, the unemployed and the homeless were often disqualified from receiving these loans (Childers, 1999; Fothergill & Peek, 2004; Peacock et al., 2006). Another important example, in developing economies, is establishing formal documentation of tenure – for homeowners or renters – as a criterion for accessing assistance, like the cases of Bhuj in Gujarat

(Mukherji, 2015; Tafti & Tomlinson, 2013) and Bam in Iran (Tafti, 2015). These practices send the majority of disaster-affected low-income people into a downward spiral of invisibility (Crawford, 2011; Fan, 2012) and create what Berke and Beatley (1997, pp. 187–188) called a 'polarised recovery process'.

The scope of allocative principles

The second question concerns choosing between a universal or differentiated model of assistance distribution among the target population. Three allocative approaches have emerged from our review of literature both in the context of developed and developing economies: universal, compensation and supplementary approaches.

Universal approach

The universal approach involves every member of the target group receiving a similar amount of assistance. The universal approach is predominantly adopted by international agencies involved in disaster recovery in developing economies. Examples of this approach are observed in their housing reconstruction projects, whereby every household receives a similar size house or similar package of material assistance. After large-scale disasters, however, and because of the involvement of multiple agencies, with different ideologies, resources and capacities, a universal distribution of assistance rarely occurs in practice (Barakat & Zyck, 2011; Chen, 2014; Ganapati, 2013). This raises the issue of perceived unfairness among nearby communities assisted by different agencies, or even creates or brings to the surface existing internal conflicts (De Silva, 2009; Ruwanpura, 2009).

A more prevalent form of universal distribution is defining a universal cap on assistance. In Bhuj in India and Muzaffarabad in Pakistan, post-earthquake housing recovery assistance was payable based on the built area of houses, with a cap for maximum assistance (Tafti, 2015; Tafti & Tomlinson, 2016). In these cases, for low-income homeowners, these arrangements directed them to start building houses in a way that would make them eligible to receive the maximum possible assistance; a decision that siphoned their own resources for finishing the construction of a large house and later thwarted their overall recovery.

Compensation approach

This approach involves compensating losses and therefore, the more an individual loses in a disaster, the higher the share of assistance she receives. The compensation approach inevitably advantages those sections of the society that hold more entitlements. After Hurricane Katrina, for instance, housing recovery assistance was calculated mainly based on the pre-storm value of damaged houses, which resulted in residents of neighborhoods with lower housing values receiving a lower amount of assistance (Green & Olshansky, 2012). Another example is the recovery policies in Bam in Iran, which allocated an assistance package for every affected residential unit, without any limitation on the number of packages each person could receive (Tafti, 2015).

Supplementary approach

The supplementary approach involves differentiated and additional assistance for specific social groups. In developed economies, these groups are often defined based on their income level. In post-Katrina recovery efforts, these additional provisions included an additional grant in the Road Home Recovery programme or HUD Section 8 vouchers for a limited number of lower income people (Green & Olshansky, 2012). The recovery policies of Chile and Japan following the 2010 and 2011 tsunamis, respectively, also demonstrate additional levels of assistance based on income level. In Chile, public resources were allocated to building condominiums for the lowest income quintile, and allocating universal assistance to the next three lowest quintiles (Comerio, 2014).

Underlying claims for distributive justice

The four commonly debated philosophical principles of efficiency, desert, need and equality, capture the essence of claims for distributive justice. Depending on which of these claims are being prioritized over the others in post-disaster recovery policies, the answers to the first two questions – who receives assistance and how is assistance allocated – would be different.

Efficiency principle

Efficiency-oriented perspectives are motivated by the idea that what is of primary moral importance is the maximization of the sum of utilities (e.g. happiness or welfare). Utilitarians consider the maximization of aggregate utilities as 'just'. Sen (1999, 2009) has criticized this conception of justice, mainly on the grounds that it overlooks the distributional differences within societies. A policy that results in higher aggregate utility, he argues, can be 'deeply unfair to those who are persistently deprived' (1999, p. 62). Nevertheless, many post-disaster recovery programmes are geared towards achieving higher aggregated results, for instance, in the form of quantity of the residential units built, or increases in tax revenue. This is a major characteristic of, for instance, the World Bank (the major funding agency for post-disaster recovery in developing countries) whose reports emphasize the aggregate number of housing units, as a criterion for a successful recovery programme. Tafti (2015), however, shows that a quanitative restoration of residential units does not necessarily imply the recovery of all the affected population.

Efficiency is a crucial feature of recovery programmes, but needs to be seen as one among several principles that guide policies and practices. A narrow interpretation of recovery through the frame of 'development as growth', often has a highly politicized agenda, which distorts the picture of who gets to bounce back first (Vale, 2014). The expected outcome of such views in recovery policies is the exacerbation of pre-existing inequalities in disaster-affected cities and communities.

Desert principle

'Desert' claims concern who deserves what and on what basis. This principle implies that a just distribution across individuals is proportionate to their inputs, and that people should be rewarded regarding their contribution and efforts, or be compensated based on their losses. While the application of this principle is limited in distributive justice (Walzer, 1983), it relates to our purpose because of its link to debates surrounding the compensation of losses.

In this regard, Dworkin (2000) distinguishes between 'option luck' as a result of deliberate gambles and 'brute luck', that is, a result of events out of our control, suggesting that only the latter should be compensated. Interestingly, he uses deciding to buy insurance or not as an example of a calculated gamble. If a person with access to knowledge and resources decides not to buy insurance and her house is damaged in a disaster, then she should not receive any compensation. If she lacks resources to buy insurance, however, her loss from a disaster will be the consequence of brute luck and should be compensated.

A major issue in desert principle is how to define and measure losses from disasters. Policies of assistance distribution often measure losses based on the level of damage to the formally documented physical assets, like housing. Furthermore and even assuming an ideal way of compensating both tangible and intangible losses, recovery policies that pursue this principle aim at returning to the status-quo. At best, they reproduce pre-disaster inequalities.

Need principle

The need principle implies that losers and winners are socially generated and contends that it is the responsibility of society to assist losers. This perspective resonates with the concept of social vulnerability as being socially generated. Vulnerable groups have lower capacity to cope with and recover from a disaster than others and hence need additional support for their recovery. Haddad (2015, p. 5) considers need-based approaches as an idealistic view. He nevertheless posits that 'focusing on the most vulnerable is not only a moral necessity; it seems like a practical approach to promoting development'. One challenge associated with this principle is the question of what needs are to be fulfilled. In practice, the identification of needs often depends on the socio-political position of those who define them (Hay, 1995).

Overall, the need principle is in line with the humanitarian dimension of disaster recovery activities. However, it seems that applying this principle at best avoids exacerbating pre-disaster inequalities, rather than having a lasting impact on advancing justice in the post-disaster society.

Equality principle

Egalitarians consider distributive equality as one value among other values. There is less consensus among egalitarians over what should be equal. A prominent figure in this category, John Rawls, in his book *Justice as fairness*, introduces two principles for his theory of justice. The first principle requires equality in rights, liberties and opportunities. The second principle, known as the difference principle, underscores that social and economic inequalities are to satisfy two conditions: (a) to the greatest benefit of the least advantaged and (b) attached to offices and positions open to all under conditions of fair equality of opportunity (Rawls, 1971, p. 83). Equality of opportunity is endorsed by other political philosophers like Dworkin (2000) and Sen (2009). The World Bank's World Development Report (2006) also emphasizes that 'equal opportunities combine with the avoidance of absolute deprivation'. This emphasis is grounded on the fact that our opportunities are partly shaped by factors that are not under our control and that a just arrangement allows people to begin with equal conditions while allowing the final outcome to be different according to the choices that people make.

For creating equality of opportunity, Rawls focuses on distribution of primary goods and Dworkin (2000) on resources. Sen (2009) and Nussbaum (2003) criticize these two views on the grounds that people have differing abilities to convert resources or primary goods to the ends they have reason to value. Given this heterogeneity among people, even an equal distribution of resources might lead to significant disparities. Instead, they suggest that the notion of capability offers a better informational basis than primary goods or resources for assessing social arrangements. Sen (2009) defines capabilities as a person's real or effective opportunity set to do or be what she values. He neither identifies these capabilities – leaving them to public reasoning – nor suggests equity in the space of capabilities across people. Nussbaum goes further by introducing some thresholds (core capabilities), arguing that 'a necessary condition of justice for a public political arrangement is that it delivers to citizens a certain basic level of capability' (2001, p. 71).

Overall, these principles reflect the broader interpretations of recovery and recovery policies; those aiming at growth, or a return to the status-quo, or as a humanitarian action aligned their policies with efficiency, desert and need principles respectively. Such objectives largely shape the nature of assistance distribution arrangements and create different sets of winners and losers.

The underlying claims to justice strongly influence the scope of the allocative principle (shown on corresponding rows in Table 2). For instance, desert and need principles by their nature imply differentiated allocation of assistance based on compensation (of losses) and needs, respectively. The equity principle, however, can imply a universal – with or without a supplementary – allocation of assistance to those in need. The first column represents the scope of distributive justice, which is influenced both by the underlying claims to justice and the practicality of targeting people. These different ways of targeting might be combined by any of the allocative arrangements mentioned. For instance, in area-based or loss-based targeting, it is possible to allocate assistance universally or differentially among the target population. Furthermore, these approaches are not necessarily mutually exclusive. For instance, after Hurricane Katrina, both compensation and supplementary approaches – albeit with significant differences in scale – were employed for different sections of society.

Plural accounts of justice

Previous sections discussed the tensions within and between different facets and claims to justice. There is no single distribution arrangement that can be considered as 'just', because of the plurality of actors, with their own perceptions of justice (Brand, 2015); different claims for justice; as well as a variety of disaster contexts and available resources. Such arrangements need to be analysed in their respective contexts and with respect to other – sometimes incompatible – goals of recovery policies, such as a fast reconstruction and boosting economic growth after disasters.

We, therefore, argue that a plural account of justice can provide a more practical view on employing theoretical debates on distributive justice in recovery programmes in different contexts. Such an account needs to acknowledge, respond to, and adequately engage with the tensions within and between different facets of, and claims to, justice, so it can inform the work of those involved with post-disaster recovery.

In this section, we outline six dimensions of a plural account of distributive justice adopted from Gewirtz and Cribb (2002), which to some extent summarizes the debates discussed so far in this paper. This is not a full account of such dimensions, nor does it represent a holistic model for examining policies. The object is to provide a framework to 'test' particular intuitive judgements embedded in recovery programmes against different dimensions of distributive justice and vice versa, and, as far as possible. This implies a continuous reflective back and forth adjustment between these dimensions and different decisions about assistance distribution, seeking to achieve the greatest possible coherence between them. Such a process, we argue, provides a more grounded understanding of the possibilities of enacting justice in the context of post-disaster recovery. In a broader sense, this process provides a framework for thinking of questions such as: Recovery of whom? From what? To what? These six interconnected dimensions consist of:

(1) The key concern of distribution of assistance
(2) Underlying claims of justice
(3) The scope of distributive justice
(4) The scope of allocative principle
(5) The kind of good/s included in distribution
(6) Agency and responsibility.

Key concern of distribution of assistance

Unlike disaster relief activities, whereby assistance distribution mainly concerns humanitarian intentions, post-disaster recovery entails programmes geared towards both humanitarian and developmental intentions (Christoplos, 2006). In both developed and developing economies, humanitarian intentions are heavily embedded in the formal discourses of state officials for justifying allocation of tax-based resources and humanitarian organizations for receiving larger donations. The main message is helping those who have difficulty in recovery from disaster impact (e.g. Kammerbauer & Wamsler, 2017).

The other key concern of assistance distribution, i.e. the developmental concern, is currently promoted under the tagline of 'Build Back Better'. 'Better', however, has been defined, operationalized and justified differently (Khasalamwa, 2009). As a result, Kennedy et al. (2008) suggest 'building back safer' as a preferable tagline, arguing that 'safer provides a clearer goal' and is a term on which it is often easier to build consensus.

But 'safer' is also interpreted differently. Current activities under this tagline mostly involve 'rebuilding' with engineering and planning measures. Not only does this predominant interpretation limit attention to root causes of vulnerability, it may be conducive to the production of new or perpetuated landscapes of risk (Khasalamwa, 2009). For instance, in Bhuj in Gujarat and Bam in Iran, those excluded from the housing assistance policies, e.g. low-income renters, sharers and squatters, were displaced from well-located urban areas and resettled in fragile built environments, in particular on the urban periphery (Tafti, 2017).

Integrating both humanitarian and developmental concerns, a plural perspective to distributive justice implies bringing everyone up to a minimum threshold (defined based on the context and available resources) both in terms of living conditions and vulnerability. This concern goes beyond providing a 'shelter' or even a 'safe dwelling' and takes into account issues of access to services and job opportunities as well as affordability.

Underlying claims for distributive justice

Instead of focusing on one principle, i.e. need, desert, equity or efficiency, a plural account of justice recognizes and takes into account a number of these – sometimes incompatible – principles. For example, efficiency can be pursued without taking into account those in acute need. But how can the balance between them address the key concern of assistance distribution?

Among these four principles, need and desert are mainly micro-level, while equity and efficiency are macro-level considerations. At the micro-level, the desert principle favors the restoration of the pre-existing condition, regardless of pre-disaster condition being below or above the defined threshold. The need principle, on its own, might not adequately address transient vulnerabilities. Therefore, and in line with Kamel and Loukaitou-Sideris (2004), we suggest that a combination of the two principles (in the case of availability of resources) can better address the key concern of distribution of assistance.

At the macro-level, the integration of equity principle, as suggested by Adger (2006, p. 277), should be an important element of decision-making for reducing vulnerability. By directing the greatest benefit towards the least advantaged, we can better address the uneven condition of recovery capacity and differential vulnerability among disaster-affected communities. While the efficiency principle ignores uneven recovery, we should not discount its role, in particular, when considering tensions between micro- and macro-level recovery considerations (Killing & Boano, 2016). Christoplos (2006) argues that one major constraint to considering such tension is that most humanitarian actors tend to perceive micro-level assistance distribution as more 'equitable', overlooking that 'assistance provided indirectly at a larger scale may be both efficient and even vital to the recovery of urban areas'. In the context of housing recovery, for instance, providing incentives to subsistence landlords or community-based organizations to build or rebuild affordable rental housing in accessible locations can produce longer term benefits compared to allocating cash grant assistance to renters. Different combinations of micro- and macro-level considerations may address the key concern of the assistance distribution in different contexts. Their outcomes in terms of the overall losers and winners, however, should not undermine the need principle.

The scope of distribution of assistance

Returning to the concern of reaching a minimum threshold of living conditions and vulnerability, a plural conception of distributive justice would consider those people and places that cannot reach the defined threshold on their own to be the main target of assistance distribution. Defining who is inside or outside this perimeter influences the production or reproduction of vulnerability, in particular whenever those located outside are the socially marginalized (Berke & Beatley, 1997).

These measures not only concern availability, but also accessibility of assistance. Gotham (2017) underscores a 'profound disconnect' between the two. A plural account of distributive justice moves towards converging the two, through revising complicated application processes or those stringent requirements that make available resources inaccessible to the disadvantaged.

The scope of the allocative principle

The decision on universal or differentiated approaches to distribution is also strongly connected to the underlying claims for justice. Given the pre-existing inequalities, a universal allocation of assistance does not necessarily address the key concern of assistance distribution. The differentiated distribution, when assistance allocation is skewed towards the marginalized groups, can compensate for the pre-existing uneven capacity to recover from disaster impact and differential vulnerabilities (Dow, Kasperson, & Bohn, 2006). Such arrangements can enhance the capacity of the marginalized groups to reach the defined threshold, provided that such differentiation does not create a sense of stigmatization or isolation.

Key distributed goods

Plural conceptions of distributive justice promote distribution of a 'different, possibly incommensurable kind of good' (Gewirtz & Cribb, 2002, p. 501). In developing economies, the position of national or international institutions is to set housing as the first priority of assistance distribution as opposed to other priorities like livelihood recovery (Tafti & Tomlinson, 2015). In the condition of scarcity of resources, however, poor households use their first instalment of housing assistance for other pressing needs and are no longer eligible to receive the remaining instalments (Tafti & Tomlinson, 2015). In a rare example, Davidson, Johnson, Lizarralde, Dikmen, and Sliwinski (2007) explain that recovery policies after the 1999 Colombian earthquake, allowed people to chose the type of project to invest their assistance in, which resulted in a range of different projects and recovery pathways beyond what local or international technomanagers could envisage in the first place. Agency freedom allows people to adapt to the post-disaster condition according to their perceptions and experiences of recovery and vulnerability.

Agency and responsibility

Plural accounts of distributive justice suggest adopting a combination of considerations for agency and sharing responsibility for meeting claims of distributive justice. While sharing responsibility and perceptions about distributive justice may differ slightly for different sources of funding, in the sense of being voluntarily or involuntarily and locally or internationally collected, they raise similar problems in practice. The major sources of funding for housing recovery comprise general taxation (and foreign borrowing), insurance, and local and international donations, with a much stronger role for taxation and insurance in developed economies.

Regarding general taxation, the public at large is prepared to pay to protect others (Penning-Rowsell & Pardoe, 2012). This is also the case when a major cross-subsidy exists in insurance between those inside and outside risk zones. However, concerns are raised about the creation of a disincentive to insure against future disasters (Penning-Rowsell & Pardoe, 2012), as well as the allocation of assistance to those who are completely capable of paying for their housing reconstruction.

When it comes to the issue of agency, raised in the previous section, one concern relates to the increasing application of conditionalities in housing recovery assistance policies (e.g. instalment-based payment in the owner-driven model of housing reconstruction). While this conditionality is universal in application, its punitive effect (i.e. not receiving the next instalment of assistance), will be felt mainly by the already worse off groups whose livelihood needs require the funds to be used for non-housing purposes (Tafti & Tomlinson, 2015). Conditionality is premised on there not being constraints to meeting the conditions (Standing, 2014). With problems like livelihood recovery, the costs of non-compliance would be considerable for low-income families. As a result, 'if there are any conditions – and it is not recommended that there should be – they should be minimal and costless to comply with' (Standing, 2014, p. 4).

Conclusion

This paper provided a broad review of the ways distributive justice has been conceptualized and debated in disaster recovery literature; and interpreted and applied in housing recovery programmes. Justice has remained under-theorized and less explicitly referred to in programmes of different actors in disaster recovery context. In addition to providing a brief account of distributive justice in disaster literature, we reflected on the implications of different principles of distributive justice, embedded in post-disaster recovery programmes in terms of their distributive impact on the opportunities of individuals and communities to recover from disasters.

Justice in assistance distribution for housing recovery is intrinsically linked to the question of 'recovery to what' and who gets to decide how to address this question. The answers to these questions are a reflection of political struggles, cultural norms and perceptions of how disaster recovery should be situated in broader development processes, and the importance of the role of the affected areas in these broader processes. International agencies, governmental and non-governmental organizations rarely design and develop post-disaster assistance distribution arrangements by seeking direct input from disaster-affected communities or wider society (who have their own perceptions of what compromises just distribution). Decisions are made under massive social, political and media pressure to act as swiftly as possible and there is a tendency to trade-off between distributive justice and other aims that produce more tangible outcomes such as a fast reconstruction. Due to the dual roles of housing as a social right and property (means of wealth) as well as its intrinsic link to 'land' and hence access to jobs and services, assistance distribution practices for housing reconstruction carry short and long-term distributive consequences for disaster-affected households, communities and the wider society. As a result, it is critical to explicitly discuss and examine disaster recovery policies and programmes in terms of distributive justice. What is in particularly important is the character of the overlooked people and, in particular, if their being overlooked in assistance distribution compounds an already unfavourable position, both in terms of living condition and vulnerability. Looking at residents of informal settlements, low-income renters and the like, this is a common result of seemingly neutral and rational policies of housing assistance distribution.

In this paper, we have only been able to briefly introduce a framework that sought to bring together both humanitarian and development concerns of housing recovery and ensure that both are respected and acted upon. This framework can present a direction for agencies involved in designing assistance distribution programmes, as well as activists and grass-root movements, to analyse, question and challenge post-disaster recovery programmes and advocate for the best interests of those whose recovery needs are undermined by apparently technical and neutral tools and practices of assistance distribution. Further research can extend this framework and test it in assessing disaster recovery programmes in different contexts.

Disclosure statement

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