Expert Knowledge and the Ethnography of Disaster Reconstruction

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For social scientists, disasters are not natural, unavoidable, or discrete events (Bankoff and Hilhorst 2004; Oliver-Smith and Hoffman 1999). Disasters, instead, are processes that (a) extend in space and time beyond the perceived boundaries of an affected community, (b) are engendered through policies and everyday practices that enhance the destructive and socially disruptive capacities of geophysical phenomena, and (c) have effects that are inequitably distributed along socially produced race, class, and gender differentiations. In today's world, most disasters occur within the boundaries of nation-states and contemporary ideals of modern governance (Foucault 1991) uphold state governments as partly responsible for assisting disaster-affected populations recover from catastrophic events. In this context, people who live through disasters routinely find themselves interacting with representatives of state agencies that are charged with the task of implementing and monitoring reconstruction programs.

State organizations, however, are not the only agencies involved in post-disaster recovery. Disasters, by definition, overwhelm the capacity of a given community, population, or nation to respond to a catastrophe's conditions of social disruption, resulting in a situation where affected community members, civil society leaders, and elected officials request or welcome assistance from international relief agencies and nongovernmental organizations (NGOs). Whether it is the staff of governmental institutions, international aid agencies, or NGOs, disaster-affected communities often find themselves interacting with a number of institutional actors who claim expertise in disaster recovery (e.g., aid program managers, architects, urban planners, emergency managers). While the majority of these latter actors usually approach disaster-affected communities with the best

of intentions, the ways they define and operationalize best practices and recovery can articulate a number of inherent assumptions about the natures of people, communities, and well-being that are not shared by disaster survivors. Furthermore, the rigid imposition of these assumptions on the part of recovery experts can actually perpetuate a disaster's social effects, leading to a disaster after the disaster.

Over the course of sixteen years of ethnographic research on disaster reconstruction, I have documented how the assumptions about the natures of people and communities on the part of disaster recovery experts are products of unique cultural histories and therefore culturally subjective; on the other hand, recovery experts often uphold these assumptions as matters of fact, applicable and relevant anywhere regardless of cultural context. In this chapter I review a number of anthropological insights concerning the application and production of expert knowledge in disaster reconstruction. These insights are the result of two ethnographic studies I conducted in Honduras after Hurricane Mitch in 1998 and in New Orleans following Hurricane Katrina in 2005.

A number of anthropological studies of disaster have recognized that policies and practices associated with neoliberalism[1] on the part of government agencies and non-NGOs can contribute to environmental degradation and the creation of stark socioeconomic disparities, two key factors in the political-ecological production of disasters (Gunewardena and Schuller 2008). Other studies have also focused on the way expert knowledge and knowledge-making practices can function as means of exercising power over disaster-affected populations and the production of social inequities in post-disaster contexts (Barrios 2010; Button 2010; Fortun 2001). Gregory Button, for example, has shown how the work of scientists working for either liable corporations or government agencies sometimes mobilize the knowledge they produce to undermine demands on the part of disaster survivors for reparations and accountability. Button's work demonstrates how scientists, executives, and government officials mobilize scientific expertise to produce uncertainty in terms of toxic exposure, duration of impact, and spatial extension of affected areas.

In this chapter I will explore other ways in which the relationship between expert knowledge and governance (i.e., reconstruction policies, state-sanctioned planning) plays out in disaster reconstruction contexts. I will do this by summarizing two ethnographic studies I conducted in southern Honduras after Hurricane Mitch from 1999 to 2003, and in New Orleans after Hurricane Katrina from 2005 to 2014. These two studies show how disaster reconstruction is a moment when affected populations interact with government officials and aid program managers who attempt to assist them through techniques of governance such as bud-

gets, fiscal cost-benefit analysis, and modernist and neoliberal principles of urban planning. These studies also illustrate how policies on the part of governments, expert planners, and aid organizations that rigidly uphold technoscientific knowledge as a nonnegotiable foundation of reconstruction practice can actually perpetuate and enhance the deleterious social impacts of disasters. Finally, these cases also shed light on the kinds of practices among disaster-affected populations, aid program managers, and government officials that can help adapt reconstruction programs to the social and environmental particularities of disaster-affected localities. These practices include

1. Recognizing acts of resistance and political insubordination on the part of disaster-affected populations as critical elements in the adaptation of reconstruction aid to the social and environmental specificities of disaster-affected sites, and
2. The importance of flexibility on the part of aid program managers, government officials, and expert planners charged with the task of assisting disaster-affected populations, especially when using the techniques of governance listed above (i.e., budgets, modernist and neoliberal principles of disaster recovery, fiscal cost-benefit analysis) to devise or apply reconstruction policy.

The chapter concludes by emphasizing the importance of acts of resistance on the part of disaster survivors to policies and arrangements of disaster aid they find undesirable as critical actions that can help inform NGO program managers and government officials on how to adapt recovery aid to the cultural particularities of disaster-affected sites. As the case studies featured in this chapter will demonstrate, the negotiation of disaster aid and recovery policies in Honduras and New Orleans was routinely cut short by expert planners, NGO program managers, and government officials when they invoked fiscal cost-benefit analysis, principles of modernist and neoliberal urban planning, and budgets as nonnegotiable and self-evidently relevant mechanisms of disaster reconstruction governance. The case studies also demonstrate that, on occasions when NGO program managers were willing to demonstrate flexibility in their use of expert techniques of disaster governance, they were able to successfully negotiate reconstruction projects that were meaningful and useful to disaster-affected communities. Consequently, I argue that such flexibility does not threaten disaster reconstruction with chaos and inefficacy but is an important element of negotiating reconstruction assistance with those who are most affected by catastrophes and in greatest need of assistance following a devastating event.

Case 1: Honduras after Hurricane Mitch: Modern Urbanism and the Budget as Technologies of Governance

Two Communities, Two Outcomes

Hurricane Mitch struck Honduras in late October 1998, causing the deaths of at least six thousand people and the disappearance of eight thousand others, destroying more than 35,000 homes, and claiming 70 percent of the country's GDP. The disaster was the result of more than five hundred years of mining, logging, agricultural, and national development practices that resulted in the mismanaged growth of urban areas, widespread deforestation, and the alteration of the region's hydrology.

My research in Honduras focused on the construction of two housing resettlement sites: Limón de la Cerca and Marcelino Champagnat, which were located seven kilometers away from the city of Choluteca. What interested me about these two sites was that, despite the common origins and livelihoods of their residents before Mitch, the two resettlement communities demonstrated dramatic differences in their reconstruction outcomes three years after the storm. Limón (which was the largest housing reconstruction site in the country's southern region) was plagued with violence and social fragmentation. Over the course of its brief history, the site had become renown as a place of street-gang activity, where transnational gangs known as *maras* operated with impunity and victimized other residents. Limón also featured the construction of 1,200 homes whose spatial design and structural qualities did not suit the social and environmental particularities of the region. Homes featured a single 25-square-meter room design with no internal divisions. Displaced Cholutecans living in this site had a median household size of seven residents, and the small houses proved to be unsuitable for families with such numerous members. The structures were located on diminutive land parcels (120 square meters), which limited the possibility for future expansions. Houses lacked structural reinforcements like concrete columns on their corners or supporting cross-beams. The structures also featured haphazardly attached tin roofs that were repeatedly blown off during heavy thunderstorms. Over the course of ethnographic interviews, residents reported the severe injuries or deaths of family members and neighbors because of the housing structures' inadequate construction. Finally, Limón was plagued by the incompletion of important infrastructural projects including community electrification.

In Marcelino, in contrast, street-gang activity was curtailed by a robust network of grassroots community organizers. These community organizers also effectively negotiated housing and infrastructural reconstruction programs with donor organizations and representatives of foreign gov-

ernments. Two years after the storm, Marcelino featured the construction of 330 housing structures whose spatial and structural design residents found suitable to their daily habits and local environment. Homes had larger floor plans (40 square meters) with internal partitions separating sleeping, dining, and cooking areas; homes also had concrete columns and cross beams, which made the structures more resilient to environmental hazards like heavy thunderstorms and earthquakes. Homes were located on land parcels that were more than twice the size those of those in Limón, allowing for the planting of house gardens and fruit trees, and allowing for small-animal husbandry (pigs and chickens), which were common activities among working-class Cholutecans. The community also counted with the timely completion of infrastructural projects such as electrification, which residents boasted as being the best public lighting project in southern Honduras.

My ethnographic research revealed that the majority of residents who came to live in Limón and Marcelino lived in twenty-two different *barrios de clase obrera* (working-class neighborhoods) of Choluteca prior to the disaster. In the storm's immediate aftermath, these disaster survivors sought refuge in the city's schools and churches and remained living there for three months. Due to continued delays on the part of local officials, in January 1999 disaster survivors who had a history of participation in civil society organizations decided to take a proactive role in the recovery process and began an independent search for a resettlement site. This group of residents picked the locality of Limón de la Cerca due to the site's low land value, which would allow for the distribution of 297 square-meter land parcels, a size they considered adequate for the daily practices of displaced *clase obrera* Cholutecans. The city's mayor, however, perceived the proactive role of these disaster survivors as a political threat, and he proceeded to use reconstruction aid (houses, land parcels) as political gifts to secure the alliance of some grassroots organizers and alienate the most proactive leaders. The politicization of reconstruction aid led to a schism among disaster survivor organizers, with those who accepted the mayor's gifts remaining in Limón, and those who were ousted founding a new resettlement community, Marcelino Champagnat. From this point on, the two resettlement sites followed dramatically different paths, with one leading toward mitigation of the disaster's effects (Marcelino) and one leading toward prolonged vulnerability (Limón).

In Limón the cooptation of disaster survivor leadership created a relatively docile population whereas, in Marcelino, proactive grassroots organizers became renown for resisting or rejecting reconstruction projects they found unsuitable to their social and environmental needs. As we will see below, Limón's docile leadership translated into a social landscape

where recovery experts could implement reconstruction projects and project assessment instruments irrespective of the voices of disaster survivors who clamored for different arrangements of reconstruction aid. In Marcelino, in contrast, acts of insubordination and resistance on the part of disaster survivors became a key element in the negotiation of reconstruction projects into arrangements they found meaningful and useful.

Land Parcel Distribution: The Implicit Individualism of Modernist Planning

In Limón, land parcel distribution was organized by a municipality-appointed land committee. This committee invoked principles of modern governance such as equity and transparency in its distribution of land parcels among disaster survivors, and used a raffle as the mechanism for ensuring these principles. Numbers were assigned to each land parcel, and disaster survivors were given the right to purchase the land parcel whose number they drew. Through this distribution of reconstruction resources (land), the municipality land committee made a number of assumptions about the nature of people, communities, and social well-being that did not apply to Choluteca's displaced. Residents of Cholutecan working-class neighborhoods relied on each other for assistance with child care and household security. Working mothers were accustomed to leaving children to the care of trusted neighbors for periods as long as eight hours, and residents were known to keep an eye on each other's houses to prevent burglaries. What is more, knowledge of one's neighbors and one's neighborhood residents was a key strategy against delinquency and violence. As trusted interlocutors taught me, the most effective strategy against becoming a victim was to know the identities of gang members, who were less willing to assault someone who knew them. The land parcel raffle (which was selected as a means space distribution by the municipality-appointed land committee under the justification that it would ensure transparency), in contrast, ignored the importance of these relationships among disaster survivors in the creation of a sense of place, community, and recovery. The random land distribution spatially separated long-time neighbors and created conditions of anonymity among Choluteca's displaced. These conditions became a fertile ground for the proliferation of street-gang activity.

The municipality-appointed land committee also relied on a national engineering firm to devise a master plan for Limón de la Cerca. The master plan articulated a common convention of modern urbanism, the idea that the homogenous and standardized regimentation of space can produce socially normalized people (although the anthropological litera-

ture demonstrates that such attempts at normalization are never fully accomplished). The master plan for Limón regulated the reconstruction site's space through the meticulous division of land parcels along neat rows, which collectively created a diamond shape. At the center of the diamond-shaped community was a health center and an elementary school. Two years after the storm, municipality annual reports heralded photographs of neat rows of houses as definitive proof that Limón was following a predictable linear path toward development and mitigation. My ethnographic research, however, suggested the experiences of disaster survivors differed significantly from the municipality's representation of the reconstruction, and that the social and material conditions taking shape in Limón made it exceedingly difficult for the site's residents to experience a sense of recovery.

Housing Construction Programs in Limón and Marcelino

Once Limón residents were randomly assigned land parcels, they were assisted in home construction by one of several NGOs working at the site. In Limón, one of the primary aid organizations involved in housing reconstruction was Samaritan's Purse, a United States-based evangelical NGO that operated with funds partially provided by the United States Agency for International Development (USAID). Architects contracted by Samaritan's Purse proposed the construction of the structurally unsound, single-room, 25-square-meter structures described above. The minimal houses were justified under the logic that smaller houses would benefit a larger number of disaster survivors. What was interesting about the case of Limón was that construction work was the most frequently reported occupation among adult male residents (27.3%), meaning that a significant proportion of disaster survivors were familiar with construction techniques. These residents were quick to notice the design flaws of the proposed houses, and requested Samaritan's Purse architects to redraft their design to include concrete columns and cross-beams. Samaritan's Purse architects denied these requests, citing reasons of cost-benefit and claiming that such construction techniques were too costly to be accommodated within the project budget. Still, Limón residents insisted that the construction of columns and cross beams would not increase the costs in terms of materials, but would do so in terms of required labor, which was provided by the disaster survivors themselves. Nevertheless, the invocation of cost-benefit analysis by professional architects as a nonnegotiable technique of reconstruction governance prevailed and the requests on the part of disaster survivors for alternative construction techniques were denied. Hence, the negotiation of recovery resources into an arrange-

ment that made sense to disaster survivors was impeded, leading to the construction of housing conditions that prolonged the vulnerability of Limón's residents.

In Marcelino, in contrast, relationships between NGO project managers, architects, and disaster survivors took a dramatically different form. When presented with similar minimalist housing designs by the NGO CARE, proactive community organizers were quick to reject the plans, stating that they would rather remain living in tents than accept an aid package unsuitable to their living habits. In this instance, CARE project managers initially cited reasons of cost-benefit for proposing minimalist designs similar to those of Limón. The assertive stance of Marcelino residents, however, urged CARE program managers to reevaluate their project budget. In this case, the budget was not treated by project managers as a nonnegotiable element of disaster reconstruction, but rather as a tentative plan that could be modified to fit disaster survivor requests. CARE project managers decided to cut some of their costs by doing away with what they considered to be redundant expenses on highly paid personnel like architects and construction supervisors. Instead, CARE project managers borrowed a plan for larger houses with internal partitions and supporting columns that had already been drafted for the nearby community of Renacer Marcovia, and relied on qualified disaster survivors to fill in the construction supervisor positions. In this case, CARE project managers demonstrated flexibility in their use of disaster reconstruction management techniques (the willingness to redraft the budget and make accommodations to disaster survivor demands); their flexibility was key to achieving long-term disaster mitigation.

The Budget as an Instrument of Disaster Reconstruction Governance

Beyond these two reconstruction sites, budgets were also used by US-AID as an expert means of tracking and evaluating reconstruction projects. In this case, reconstruction programs were said to be successful if the allocated funds were spent on their designated purposes at specific points in time. This emphasis on the use of the budget as an instrument of assessment, however, marginalized other concerns, such as ensuring that housing reconstruction projects be relevant in cultural and environmental terms. According to USAID project evaluators, Limón de la Cerca was a shining example of successful reconstruction: Project funds were spent on time on those services and materials they were allocated for. Still, the voices and experiences of Limón residents argued otherwise. Unfortunately, this emphasis on fiscal accounting obscured rather than documented the politicized relationships between disaster survivors, local

government, and NGO program managers that shaped Limón de la Cerca and Marcelino Champagnat as dramatically different reconstruction communities. As Emel Ganapati and Sukumar Ganapati have shown (2009), this is not an isolated case of the use of budgets and financial cost benefit as a means of assessing development programs, but rather is an example of a more pervasive expert practice of disaster reconstruction.

Case Study 2: New Orleans after Hurricane Katrina

In 2005 the city of New Orleans suffered the flooding of 80 percent of its area. This flooding was caused by the failure of flood protection systems that were inadequately constructed or maintained by the U.S. Army Corps of Engineers and its subcontractors (Andersen et al. 2007). As an ethnographer of post-disaster reconstruction, my research has focused on the different ways government officials, expert planners, developers, and disaster survivors of various socioeconomic backgrounds defined and envisioned community, social well-being, and recovery; the ways these different social actors negotiated (or did not negotiate) these different positions; and the stakes of these differences for the city's long-term reconstruction.

When Hurricane Katrina struck the U.S. Gulf Coast, New Orleans was already facing a number of social challenges. During the four decades preceding the disaster, the city had experienced the loss of more than 200,000 residents, taking the population from nearly 650,000 residents in 1960 to 438,000 in 2000 (Campanella 2006). This demographic contraction began in the 1960s following the desegregation of public schools and public housing. Many residents who self-identified as white left New Orleans Parish for the suburban cities of Chalmette and Metairie to avoid living in contiguity with working-class African Americans. The racial motivations behind New Orleans' urban-suburban flight were also nuanced by the meanings of life in suburbia (the imagined escape from inner-city problems, the association of modernity with suburban life) and federal subsidy programs meant to encourage home ownership, which drew city residents to outlying suburban areas (Schuller and Thomas Houston 2006). At the same time, many college-educated middle-class African Americans left southeastern Louisiana in search of employment opportunities, as many still faced discrimination by would-be employers (Jackson 2011). In the mid-1980s the city also faced economic hardship as major oil companies moved their operations to nearby Texas, leaving tourism as one of the city's major sources of revenue and employment. The tourism economy, in turn, relied on low-wage labor, systematic underemployment, and public

services like housing subsidized by federal or city government to capitalize on its investments (Sorant et al. 1984).

Together, these economic and demographic trends had a number of impacts on the city. The diminished population translated into a lowered tax revenue. Louisiana is a state renowned for its high tax breaks and tax credits, meaning less money from industry is reinvested in essential public services like education, public health, and housing. The city of New Orleans also featured low property taxes. Additionally, the post-desegregation suburban flight meant many jobs and services were lost in the inner city while they increased in the suburbs. Finally, the exodus from the city left a high number of blighted and abandoned properties throughout central neighborhoods.

The result of these trends was the creation of a large underemployed and underpaid working -class population, a significant proportion of which self-identified as African American. These conditions of social and economic marginalization led to the growth of the informal drug economy in New Orleans. At the same time, city and federal housing agencies systematically neglected large public housing facilities, with the intention of letting these structures deteriorate to the point where demolition and redevelopment became necessary. In New Orleans and its suburbs, residents who remained ignorant of the structural impacts of racism and the capitalist tourism economy on working-class African Americans relied on racist explanations for making sense of the large underclass that had formed over the course of the city's history. When Katrina struck, many residents saw public housing projects as dens of violence and criminality, although others insisted on the importance of these structures as housing for the city's indispensable, yet historically exploited, African American working class.

Despite their socioeconomically marginalized status, working-class African Americans developed a number of rich practices for reshaping the city's urban space from a landscape of racialized difference into a landscape of identity-making. These practices included the African American carnivals of Uptown and Downtown Super Sunday and Second Line Parades that run from August to May (Breunlin and Regis 2006; Lewis and Breunlin 2009; Regis 1999). As George Lipsitz (2006) has noted, in the face of limited spatial and social mobility, working-class African Americans developed profound attachments to place, and produced the places they lived in through the cultivation of social relations with friends, relatives, and neighbors.

The mandatory evacuation of the city during Katrina's aftermath created a context in which local government officials, federal agencies, and gentrifying resident constituencies imagined New Orleans as a space

wiped clean of its pre-disaster social challenges and open for new imaginings of the city's future. Many of these visions of urban recovery, however, did not foreground the fundamental contradictions of the capitalist tourism economy, the state's tax-break system, or the racial dimensions of the city's urban-suburban flight as the root causes of New Orleans' social challenges. Instead, many of the recovery plans, policies, and practices on the part of city government proposed the conceptualization of the city's urban space as a mechanism for the investment, circulation, and reproduction of capital: a technoscientific solution for what was ultimately a sociopolitical problem. As we will see below, these visions of urban recovery articulated a number of implicit assumptions about the natures of people, community, and social well-being that clashed with the ways many New Orleanians envisioned recovery. Additionally, these assumptions were characterized by a number of contradictions that inhibited the addressing of New Orleans's principal social challenges before and after Katrina.

Spaces of Neoliberalism in Disaster Reconstruction

In the immediate aftermath of the disaster, Mayor C. Ray Nagin organized a panel of developers, planning experts, and local government officials and charged them with the task of devising a recovery plan for the city. This plan was eventually titled Bring New Orleans Back. As part of this initiative, local real estate developer Joe Canizaro and the Urban Land Institute, based in Washington, DC, were assigned the task of drawing a new land use plan for the city. The Urban Land Institute proposed that New Orleans should have a smaller footprint in its future and that there should be a moratorium on the reconstruction of the most heavily flooded areas (which should be allowed to revert into green space). This proposal met with widespread opposition on the part of residents from devastated neighborhoods like the Lower 9th Ward and Broadmoor and the greater New Orleans community at large because it ignored the importance to city residents of neighborhood identity and glossed over the fact that catastrophic damages were caused by the technological failure of the levee system and not because of residents' settlement patterns.

At the same time, the Housing Authority of New Orleans (HANO) and the United States Department of Housing and Urban Development (HUD) took advantage of the city's mandatory evacuation to expedite their plans for the demolition and redevelopment of major public housing projects (Breunlin and Regis 2006). In the immediate aftermath of Katrina, HANO and HUD ordered the closing of major public housing projects and planned for the demolition and redevelopment of 50 percent of these units, the majority of which had not been made uninhabitable by the storm's flood-

ing. The city and federal housing agencies assured the public that these redevelopments would feature a one-to-one unit replacement, but this replacement was also accompanied by privatization as individually owned mixed income housing. Only a fraction of total units were to remain as public housing, while the rest would be sold through various programs as mixed income housing. Residents of New Orleans had mixed opinions about the redevelopment of public housing. Some public housing residents and nonresidents saw this as a welcome change, while others worried that the redevelopment would lengthen the time many working-class New Orleanians remained displaced and that few pre-Katrina residents would be able to successfully navigate the bureaucracy of home ownership programs. These latter residents insisted on the immediate reopening of undamaged units and the facilitated return of public housing residents.

The debate over the future of the city's public housing would carry on to two recovery planning processes that superseded Mayor Nagin's Bring New Orleans Back plan: the Lambert-City Council and Unified New Orleans Planning initiatives. Critiques of the Bring New Orleans Back plan for lacking broad-based citizen participation resulted in the organization of these two planning processes, which were required to include a participatory element by the U.S. Congress prior to the disbursement of recovery funds. These planning initiatives were officially represented by local government officials and organizers from major philanthropic organizations as bottom-up processes in which all city residents, regardless of their socioeconomic backgrounds, could be the collective authors of the city's reconstruction directive. These planning processes, however, did not function in this way in practice.

Although many residents continued to insist on the importance of the expedited return of public housing residents, who they saw as an integral part of the city' human landscape, professional architects hired as expert planners defended HANO and HUD's decision as a fait accompli. Most importantly, professional planners beckoned residents to think about the city as a space of capital and energy investment, and not as a landscape of social relations among people who were shaped as unique persons over their histories of life experiences in New Orleans neighborhoods. During one of the Lambert-City Council planning meetings, for example, architect Bernard Zyscovich rejected residents' requests for the immediate reopening of undamaged public housing, saying, "Recovery plans need to be sold in terms of their investment potential, the federal government is much more willing to invest 5 dollars when it is going to get 25 dollars in return, than 5 dollars in mere social services." In this statement, Zyscovich articulated the implicit assumption that all elements of urban plans must uphold a logic of capital investment and reproduction (neoliberalism). In this in-

stance, Zyscovich mobilized a neoliberal principle of disaster recovery as a nonnegotiable tenet of disaster recovery and, in doing so, shut down an important negotiation of reconstruction policy with New Orleans's most affected population, effectively enhancing and prolonging their vulnerability through the continued closure of public housing.

It is also noteworthy that Bernard Zyscovich represented public housing as a "mere social service" that allegedly did not multiply capital and was therefore an unreasonable request on the part of city residents. Still, it could be argued that public housing was an integral part of the capitalist tourism economy of New Orleans, as the residents of public housing composed a significant proportion of the low-wage service sector from whose labor the entertainment and hotel industry derived its profits, and whose consumption of food, clothing, and basic commodities also supported local retail businesses.

Beyond public housing, New Orleans witnessed other disinvestments on the part of federal and city governments from the provision of public services that were so critical to the survival of low-income households. Charity Hospital, the city's single public hospital, has remained closed since the storm. While there are plans for a new Louisiana State University Veteran's Administration medical research complex, the new teaching hospital will not be a public facility open to all economically disadvantaged New Orleanians, as Charity was.

This pattern of disinvestment from public services was also followed by the staff of the Office of Recovery and Development Administration (ORDA), an office created during the administration of Mayor Nagin, initially directed by Ed Blakely, and charged with the implementation of recovery plans. Over the course of ethnographic interviews, ORDA staff insisted that the optimal way to help a city recover from a disaster was to use public funds to encourage out-of-state investment with the hopes of using generated tax revenue to one day provide the public services (e.g., schools, firehouses, hospitals) needed by the city's residents. This trickle-down economics/business-first approach, however, is limited in its efficacy to provide New Orleanians with much needed services due to the high tax-break system that encourages out-of-state investors to extract their financial gains from the state, the unwillingness of out-of-state investors to invest in New Orleans due to the quality of life limitations already present in the city, and the difficulties that offices like ORDA have found in identifying suitable investors.

To summarize, in the context of post-Katrina New Orleans, city planners and local government officials have prioritized the conceptualization of the city as a space of capital investment as a means of recovery. These conceptualizations have deprioritized the expedited provision of

much-needed publicly funded social services. Ten years after Katrina, this approach toward urban recovery seems to have taken a toll on the most socioeconomically vulnerable sector of the city's population. After the hurricane, the city has witnessed a substantial increase in the cost of housing (46%, Sayre 2015), a loss of more than 100,000 residents, and increased socioeconomic disparities between race and ethnic groups. The city also continues to see significant disparities in the provision of public services to highly devastated neighborhoods like the Lower 9th ward, which remains critically underserved in terms of public education, fire houses, and police presence. What is more, the demographic profile of a significant number of returning residents does not match that of pre-Katrina New Orleans, suggesting that many of Katrina's survivors have either decided not to return or have not been able to do so (Mack and Ortiz 2013). The decrease in the city's total population has put further strain on what was an already decimated tax base, leading to a rise in the cost of energy and property taxes. As one resident commented recently, "In New Orleans, you pay more for less."

Discussion and Conclusions

Although the cases of Choluteca and New Orleans feature significant differences, there are a number of common themes that must be noted. In both cases, disasters precipitated by relationships between policy, technologies, cultural values, and the agency of geophysical phenomena created contexts in which government officials and recovery experts (planners, architects, NGO project managers) saw disaster-devastated localities as spaces opened for social transformation. Recovery experts engaged these transformative processes from vantage points that were, in one way or another, influenced by neoliberal and modernist principles of disaster reconstruction management and governance. In southern Honduras, for example, the municipality-appointed land committee and professional architects envisioned recovery as being contingent on the random distribution of minimal land parcels, parcels that were themselves distributed on a grid that regularized spatial relations between disaster survivors. The random distribution of land parcels articulated an assumption about the nature of people and communities that is characteristic of modernist urban planning: the idea that people are entities unto themselves who can be predictably shaped through the regimentation of space. The case of Limón, in contrast, demonstrates that people in Choluteca were not such individualized entities, but were, instead, persons embedded within rich social relations with friends, relatives, and neighbors, and that it was

these relations that comprised the communities of Choluteca's *barrios de clase obrera.* As Henri Lefebvre (1996) once noted, cities are places of social production, and it is social relations among people that make a city. Limón's master plan, however, reiterated a fundamental principle of modernist planning: the idea that the regularization of space (the placing of disaster survivors in a meticulously organized grid of minimal land parcels) can produce social norms: the neat rows of houses were used in local government reports to demonstrate the restoration of normalcy after the disaster. In reality, however, the removal of disaster survivors from their social networks and their placement in the minimal land parcels of this grid did not produce conditions of predictable development. Instead, the conditions of social fragmentation created by the plan and the land parcel raffle emboldened street gangs who could then act with impunity under conditions of anonymity.

In addition to the modernist assumptions of Limón's master plan and land distribution, the emphasis on the part of assisting NGOs on the use of budgets as a mechanism of reconstruction project assessment both enabled the articulation of power by professional architects on disaster survivors (i.e., their ability to reject disaster survivor requests for alternative house construction practices) and hid the politicized relationships between disaster survivors and local government that shaped Limón and Marcelino as dramatically different resettlement sites.

In the case of post-Katrina New Orleans, we also see how the disaster was perceived by local government officials and urban planners as a space-clearing moment when the city could be transformed through the application of expert plans, policies, and practices conceived on the premises of neoliberal governance. Professional planners upheld the idea that urban spaces were, first and foremost, localities of capital investment, and that such investment logics were a self-evidently rational and fundamental practice for the production of social well-being. But some residents—specifically, displaced New Orleanians—differed in opinion, emphasizing that, to them, recovery meant the reinstatement of the city's human landscape. Once again, the voices of disaster survivors echoed Lefebvre's theorization of urban space as something made by and made up of social relations. Rather than emphasizing the immediate provision of those social services that could once again support New Orleans' pre-Katrina population, local government officials and the staff of the city's ORDA emphasized the use of public funds to encourage capital investment, upholding the logic that tax revenue would one day provide those much-needed services. The implications of this perspective on disaster recovery are becoming clear ten years after the storm. The emphasis on capital investment over the provision of public services has failed to address pre-Katrina social inequities,

which have actually grown after the storm, thus enhancing, rather than mitigating, social vulnerability.

In both the cases of southern Honduras and of New Orleans, we see how local government officials, architects, and expert planners engage in practices that reference assumptions about the natures of people, society, and social well-being that are associated with neoliberal and modernist urban planning and governance. In both cases, we also see how these social actors appeal to a sense of self-evident rationality when engaging in these practices (the unquestionable necessity of narratives of cost benefit and budgets as fundamental elements of reconstruction practice), especially when confronted with requests on the part of disaster survivors to consider alternative arrangements of reconstruction resources (the construction of homes with columns and cross beams, the use of reconstruction resources to expedite the reopening of public housing and hospitals and the expedited return of public housing residents). Inherent in these appeals to the self-evident rationality of budgets and neoliberal or modernist master plans is the idea that the knowledge of experts is readily applicable across space and time, anywhere, anytime. Both of these case studies, however, bring into question the relevance of these policies and practices to the social and environmental particularities of disaster-affected sites. In the case of Limón, we see master plans and land distribution practices that ignore the social relations of Hurricane flooded neighborhoods of Choluteca and the construction of housing structures whose roofs are repeatedly damaged during heavy thunderstorms. In New Orleans we see neoliberal urban plans and policies that ignore the ways many city residents prioritized the return of the city's pre-Katrina population and how these policies and plans have failed to address (and may have exacerbated) the social, political, and economic challenges confronted by the city before the storm.

At the same time, these two case studies also provide us with a number of recommendations for practice. These ethnographies of disaster reconstruction demonstrate that the practices (the use of budgets as an instrument of project assessment, and participatory recovery planning as a means of defining recovery) and policies of recovery experts need to be negotiated with disaster-affected populations. To engage in these negotiations, recovery experts must be able to recognize the variable, historically configured, and locality-contingent ways people meaningfully engage their environments and both define and experience well-being and reconstruction. Recovery experts must also recognize the cultural histories of those rubrics of disaster reconstruction they uphold as matters of fact (the self-evident and unquestionable logic of cost-benefit analysis, the conceptualization of urban space in terms of capitalist investment).

But what does such an approach to disaster reconstruction look like in practice? How do we apply this?

What is interesting about the case of southern Honduras is that the case of Marcelino Champagnat shows us exactly how some disaster survivors and NGO program managers engage in the dialectical acts of "epistemological flexibility"—a term I use to define the act of negotiating reconstruction policy and practice between recovery experts and disaster-affected populations—that are absolutely necessary to make reconstruction aid socially and environmentally relevant. While professional architects in Limón and New Orleans rigidly upheld narratives of cost-benefit analysis and capitalist investment as nonnegotiable elements of disaster reconstruction, CARE program managers in Marcelino saw their budget as having a greater degree of plasticity. CARE program managers had the flexibility to modify the individual items of their budget without exceeding total project costs, and were therefore able to provide Marcelino residents with the kinds of housing structures they preferred. In this case, the budget did not operate as an unquestionable mechanism of power/knowledge at the disposition of recovery experts, as it did in Limón. Instead, CARE program managers saw the budget as a malleable and adaptable institutional requirement that could be tailored to fit disaster survivor self-defined needs. Recovery experts, then, must begin to problematize financial cost-benefit analysis and neoliberal/modernist principles of urban planning as a fundamental and nonnegotiable tenet of disaster reconstruction, and must learn to listen to the variety of ways disaster-affected populations clamor for reconstruction assistance that suits their socioenvironmental circumstances. Finally, governmental officials, expert planners, and NGO program managers must learn to appreciate acts of resistance on the part of disaster survivors and to see these acts not as undesired deviation from their expected role as passive and grateful recipients of minimal and ineffective aid. Instead acts of resistance like the rejection of inadequate housing or neoliberal logics of urban planning must be seen as critically important moments for the negotiation of recovery aid and plans, moments that allow for an equitable conversation about what community, well-being, and recovery are to those most affected by disasters, and not an imposition by those who purport to help them.

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Note

1. Micaela di Leonardo (2008) defines neoliberalism as the idea that market deregulation is conducive to optimal social ends, while Elizabeth Povinelli (2010) understands neoliberalism as the expansion of capitalist logic of financial cost-benefit analysis to all facets of human life are best thought of in terms of financial cost-benefit.

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