

PLANNING URBAN DISASTER RECOVERY



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Mark Kammerbauer

## **PLANNING URBAN DISASTER RECOVERY**

**Spatial, institutional, and social aspects of urban disaster recovery in  
the U.S.A. – New Orleans after Hurricane Katrina**

**VDG**

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## Editor´s foreword

The recovery of cities after natural disasters is a major challenge for actors in urban planning and spatial production in the context of changing institutional and economic boundary conditions. In this regard, Mark Kammerbauer's study comprises an essential contribution by reinforcing the researched propositions with a comprehensive qualitative and quantitative analysis. The study's groundwork is laid by defining the relevant terminology, by classifying the scope of scientific research, and by its comprehensive literature review.

The sections to follow discuss the characteristics of recovery according to different aspects of scale, including the neighborhood level. As result, weak spots of U.S. emergency management are identified and can be related to similar fields of inquiry, as the study demonstrates in terms of scientific transferability. In particular, the impact of the economic assistance and the related influences on newly emerging markets are illustrated on the level of urban neighborhoods. The insufficient volume of assistance contributed to 'buyouts' that, in return, led to social changes in the areas to be rehabilitated. Here, discussing aspects of the real estate market offers major potential in classifying the quantitative scale and order of magnitude of recovery.

What makes this study remarkable in regard to its different propositions and evidence-based observations are the multidimensional conclusions that serve to address similar questions and problems. Actors (politicians, investors, planners, etc.) who are characterized by their focus on particular fields of expertise are required to employ highly complex institutional and operative strategies in order to adequately address the tremendous degree of destruction resulting from disaster. A further and equally significant parameter is the targeted use of investments and structured opportunities for rentable housing and properties in order to support rebuilding of destroyed urban structures.

Mark Kammerbauer's publication offers a distinct, comprehensive, and well-founded contribution to dealing with destroyed urban spaces, particularly after natural disaster. The employed qualitative and quantitative analyses lead to relevant conclusions, and the case study conveys an excellent image of the challenging difficulties of recovery. The inferred conclusions are groundbreaking and decisive for disciplines of urban and spatial planning.

Weimar, November 2012

Prof. Dr.-Ing. Bernd Nentwig

## Foreword

At the time these words are written in appreciation of Mark Kammerbauer's study titled 'Planning Urban Disaster Recovery', the United States of America are once again hit by a tropical storm. 'Sandy' struck the East Coast and also impacted the global city of New York. Damages are estimated at \$ 20 to 50 billion. In these days and weeks, in the United States and across the globe as well, we are reminded of Hurricane Katrina. The destruction it triggered in New Orleans resulted in traces that are visible to this day in many different ways.

The fact that the experience of Katrina's crisis - in terms of administration, society, and urban planning - constitutes a turning point in the way how natural disasters of its kind are dealt with became clear in the emergency management before, during, and after 'Sandy'. In contrast to his predecessor Bush, and against the background of a Presidential election, President Obama, as commander-in-chief, gave top priority to emergency management. As a matter of course, this was also intended as a symbol for a changed or changing attitude. However, what in particular was about to change?

To receive answers to this question, reading Mark Kammerbauer's study proves exceptionally instructive and helpful. The reason for this is that the author describes and analyzes not only the preconditions or boundary conditions of emergency management, but also the struggle for reestablishing post-catastrophic normality in a multidimensional manner. This way, perspectives of sociology, planning theory, and urban planning and design are integrated in order to appropriately scrutinize an occasion that is multidimensional in empirical reality as well. On the one hand, comprehending the disaster calls for an understanding of asymmetries within both society and urban space related to the outcomes of the hurricane that are, among others, reflected in the sociological term 'vulnerability'. On the other hand, it requires knowledge on the codification of unequal opportunity within the institutional and formal framework of emergency management. In addition, the recognition of cultural factors within all of the above is equally necessary. As result, New Orleans is not only discussed as an impacted city, but as an *American* city devastated by 'Katrina'.

Mark Kammerbauer's interdisciplinary study demonstrates in an exemplary way how the interaction of these different dimensions forms a highly effective complex of interrelations. When this fact is ignored or underestimated, efforts for recovery are doomed to failure. The opposite becomes equally true: recognizing this circumstance is the precondition for successful emergency management in the sense of a sustainable improvement of the impacted city's



resilience. Planning that doesn't take the vulnerability of particular population groups and urban spaces into account or that doesn't reflect the cultural preconditions of spatial production inadvertently misses its goal.

Beyond that, Kammerbauer doesn't forget to point out the social, societal, and cultural conditionality of what we generally describe as 'natural disaster'. How, as the author asks in his initial question, can it be that a country as economically strong and technologically advanced as the U.S.A. couldn't offer its citizens in New Orleans better protection, and had such great difficulty in sustainably revitalizing urban areas destroyed by the hurricane? To these questions, this study offers answers that are in part surprising, in any instance illustrative or thought-provoking, and that convincingly emphasize the capacity of the author's multidimensional approach.

Zurich, November 2012

Prof. Dr. phil. habil. Dieter Hassenpflug

## **Author's Preface**

This preface to the first print edition of this book was originally intended as postscript. But as the journey seemingly ends, so it begins. Current developments as well as the question on 'how did it begin, how will it go on?' warrant a few words at this beginning of what is also a personal journey.

For one, the story of New Orleans is long from over, as well as stories of cities and hurricanes, not only in the United States. The Road Home rebuilding program, prominently discussed in this book, was subject to lawsuits relating to questions of equity. Just this very year, the northern Gulf Coast was impacted by Hurricane Isaac. The IHNC Lake Borgne Surge Barrier completed in 2011 was closed to protect New Orleans from the hurricane's storm surge. Briefly before writing these words in November 2012, Hurricane Sandy descended upon the East Coast of the U.S., wreaking havoc, also in my own native state of New Jersey.

In addition, it may be helpful for those readers not familiar with the way doctorate research takes place a German university to describe how my own work on this subject progressed. Six weeks before I was accepted at the Institute for European Urban Studies at the Bauhaus University in Weimar Katrina impacted New Orleans. In 2007 my actual research began

and was initially compiled that year in my postgraduate master thesis titled *The Making of Catastrophe*, a comparative study on social vulnerabilities of a population from the Lower Ninth Ward. The study received honors and was my 'entry ticket' to beginning my doctorate studies at the Bauhaus University, again under the mentorship of Prof. Dr. Dieter Hassenpflug. This became the point of origin for my dissertation with its integrated theoretical and methodological approach to researching not only the social, but also institutional and spatial aspects of urban disaster, with the intention of providing planners with an integrated research tool to develop planning recommendations aimed at reducing vulnerabilities.

The particular benefit I enjoyed and a fact that is expressly formulated by the regulations of the Bauhaus University Architecture Faculty is that the research conducted within the master thesis may be included within the dissertation - a fact particularly relevant when conducting research on the same subject. Therefore, I was able to rewrite and significantly expand paragraphs from the master thesis and embed these within the greater text of the dissertation, as well as include empirical research that was originally part of the master thesis. For purposes of clarity, this is noted within the dissertation submitted to the Bauhaus University in May 2011 as well as in the following book version, a very slightly edited and complete version of the dissertation and its integrated approach to urban disaster.

When urbanists, in their inspiring texts, describe the city, the question remains – what happens in urban disaster? When vulnerability and disaster researchers, in their highly relevant research and writings, continuously point out to policymakers the importance of reducing the reasons why populations are unevenly impacted by disaster, the question remains - how can an urban planner or architect adapt to these needs? With my humble work now in your hands, I hope to contribute to answering these questions in ways appropriate and sensible. And, with the particular subject being a city as astonishing and complex, welcoming and challenged as New Orleans, who can say when the story will end?

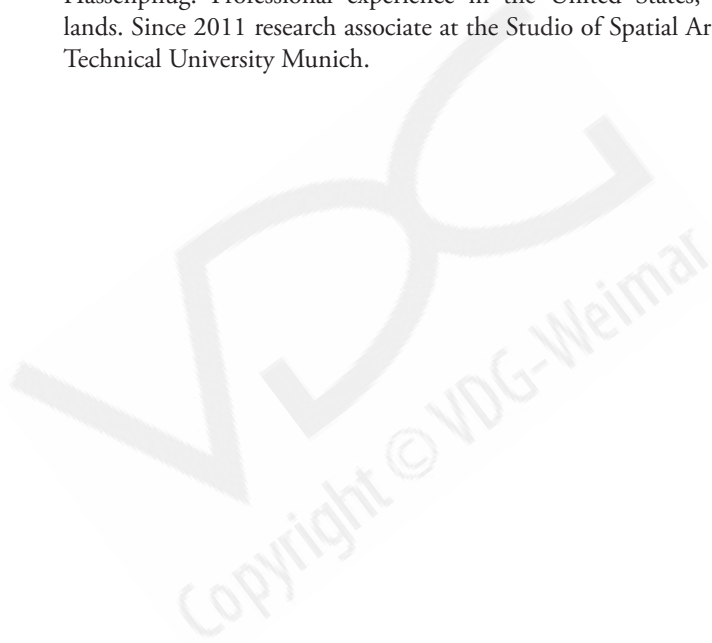
Munich, November 2012

Dr.-Ing. Mark Kammerbauer

## About the author

Mark Kammerbauer

German-American architect, urbanist, translator. Studies in architecture at the Technical University Munich (Diploma 1999). Postgraduate studies at the Institute for European Urban Studies at the Bauhaus University Weimar (Master of Science 2007). Doctorate studies at the Bauhaus University Weimar under the supervision of Prof. Dr. phil. habil. Dieter Hassenpflug. Professional experience in the United States, Germany, and the Netherlands. Since 2011 research associate at the Studio of Spatial Arts, Prof. Hannelore Deubzer, Technical University Munich.





## Abstract

In 2005 Hurricane Katrina devastated the city of New Orleans, resulting in human suffering, exacerbated by failures of institutions and protective structures. The (near-) complete evacuation of the city led to the nation-wide dislocation of vulnerable citizens. Today, city-wide reconstruction and recovery seems to be 'uneven'. Planning for urban disaster recovery appears to fall short of completing its goals. This raises the following central research questions: Which spatial, institutional, and social aspects influence urban disaster recovery in the United States? Why does uneven recovery occur? And, how can research indicate it?

Urban disaster recovery is based on the interaction of particular spatial, institutional, and social aspects. Uneven recovery occurs due to disconnects between these aspects, i.e. between planning for urban disaster recovery, impacted populations, and the places in the city they inhabit. This process encompasses heterogeneous cases of 'strong' or 'weak' recovery within the city and is indicated particularly by 'weak' recovery. In this context, planning urban disaster recovery is considered a particular case of planning in the American city as culturally distinct entity.

The intention of this dissertation is to better understand planning for urban disaster recovery of the American city and formulate resulting planning recommendations. The urbanist and disaster discourses, despite their synergetic socio-spatial potential, are relatively separate. To fill this gap, an integrated multidimensional theoretical and methodological framework is formulated as basis for empirical case study research in New Orleans' Lower Ninth Ward. Quantitative and qualitative mixed methods were used to collect empirical data in 2007 and 2009. By addressing the recovery of American cities, this dissertation contributes to future sustainable and just recovery paradigms in the context of recurring disaster events.

KEY WORDS: PLANNING URBAN RECOVERY DISASTER NEW ORLEANS  
KATRINA



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## Abbreviations used in the text

ABFE	Advisory Base Flood Elevation
ACORN	Association of Community Organizations for Reform Now
BFE	Base Flood Elevation
BNOB	Bring New Orleans Back Plan, Commission
CAEP	City Assisted Evacuation Plan
CBD	Central Business District
CDBG	Community Development Block Grant
DHS	Department of Homeland Security
DOD	Department of Defense
EMAC	Emergency Management Assistance Compact
EOC	Emergency Operations Center
ESF	Emergency Service Functions
HDLC	Historic District Landmarks Commission
FEMA	Federal Emergency Management Agency
GIWW	Gulf Intracoastal Waterway
GOHSEP	Governor's Office of Homeland Security and Emergency Preparation
HDLC	Historic District Landmarks Commission
HUD	Department of Housing and Urban Development
ICS	Incident Command System
INS	Incident of National Significance
KDHAP	Katrina Disaster Housing Assistance Program
LANG	Louisiana National Guard
LOHSEP	Louisiana Office of Homeland Security and Emergency Preparation
LRA	Louisiana Recovery Authority
MILCON	Military Construction Funding (DOD)
MRGO	Mississippi River Gulf Outlet
NAACP	National Association for the Advancement of Colored People
NEMA	National Emergency Management Association
NENA	Lower Ninth Ward Neighborhood Empowerment Network Association
NGO	Nongovernmental Organization
NIMS	National Incident Management System
NFIP	National Flood Insurance Program

## *Abbreviations*

NHC	National Hurricane Center
NOPD	New Orleans Police Department
NORA	New Orleans Redevelopment Authority
NRF	National Response Framework
NRP	National Response Plan
NRP-CIA	National Response Plan Catastrophic Incident Annex
NWS	National Weather Service
ORDA	Office of Recovery Development and Administration
ORM	Office of Recovery Management
PA	Public Assistance
PRC	Preservation Resource Center
RTA	New Orleans Regional Transit Authority
SBA	Small Business Authority
USACE	U.S. Army Corps of Engineers

